A systematic monograph of the Recent Pentastomida, with a compilation of their hosts

M.L. Christoffersen & J.E. De Assis

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M.L. Christoffersen, Universidade Federal da Paraíba, Departamento de Sistemática e Ecologia, 50859-900, João Pessoa, Paraíba, Brazil (mlchrist@dse.ufpb.br).
J.E. De Assis, Programa de Pós-Graduação em Ciências Biológicas, (Zoologia), Universidade Federal da Paraíba, Departamento de Sistemática e Ecologia, 50859-900, João Pessoa, Paraíba, Brazil (eri.assis@gmail.com).

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We compile all published information on the Recent Pentastomida published to date, including complete synonyms, and species distributions. All host species are cited and their names updated. A taxonomical history of the group, a synthesis of phylogenetic information for the taxon, and a summary of the pentastomes by host groups, with accounts of the illneses they provoke, are also provided.

Introduction

In order to produce an overview on all aspects of the biology of the Recent Pentastomida, to be published in Treatise of Zoology (an update on Grassé's Traité de Zoologie) (Christoffersen & De Assis, *in preparation*), we have found it necessary to compile all published information on the Pentastomida to date.

As a result, we present below a complete list of species, with full synonyms and host information, updated in an appendix to presently used species names. The data complement and update a taxonomic list provided by Poore (2012a, b).

A summary of the implications of these results is published in the updated treatise mentioned above. Here we provide the monograph on which that synthesis is based.

Historical

Almeida & Christoffersen (1999) delineated five important periods in the systematic history of the Pentastomida. The first goes from the pioneer descriptions and efforts to understand the pentastomids (Frölich, 1789; Humboldt, 1812; Beneden, 1849a, b; Diesing, 1850) and culminates with the account of the *Linguatula* by Leuckart (1860). The name Linguatulidae first appeared in Haldeman (1851). The second period culminates with the system of Sambon (1922a, b). The third period encompasses the revisions of Heymons (1935, 1941a, b, c). The fourth period starts with the work of Fain (1961). Nicoli (1963), Nicoli & Nicoli (1966) and Self (1969) produced excellent syntheses on the systematics, taxonomy, and geographic distribution of the Pentastomida during this period. The last period consists of important taxonomic revisions of several families of Pentastomida (e.g., Riley et al., 1997), and the discovery and description of Paleozoic fossils by Andres (1989), Waloszek & Müller (1994) and Waloszek et al. (1994). Other

breakthroughs in this period are represented by the faunistic inventories of the Australian and African pentastomids (e.g., Riley & Spratt, 1987; Junker et al., 2000), the syntheses of general aspects of reproduction (e.g., Riley, 1992a), and advances in ultrastructural knowledge (Storch, 1993), and phylogeny (Almeida & Christoffersen, 1999). The account of the Australian fauna is now superseded by Poore & Spratt (2011), while the nomenclature of the group has been reviewed by Poore (2012a, b).

Detailed account of first period; The eminent French veterinarian Chabert (1787) was first to bring a pentastomid to notice. He discovered a "worm" in the depths of the nasal cavities of dogs and horses, which he took for the tapeworm *Ténia lancéolé*. Abilgaard (1789) in Denmark encountered *Taenia caprina* in the body-cavity of a goat and Meyer (1789) found the adult form of the same species (but named *Taenia rhinaria*) in a goat in Denmark. Frölich (1789) named a new genus and species of helminthes, *Linguatula serrata* from larvae in the lung of a hare (Alcock, 1923). Because all these forms are now considered to belong to *Linguatula serrata* (Nicoli, 1963), Frölich is traditionally considered the first descriptor of a linguatulid. Bosc (1811) later discovered a "worm" in the lung of a guinea-pig, *Tetragulus caviae*, though really it was also *L. serrata* (Alcock, 1923).

The famous Humboldt (1799) encountered a puzzling "worm" in South America, which he classed as *Echinorhynchus*, then *Distoma*, and finally named it *Porocephalus crotali* Humboldt, 1812 (Alcock, 1923; Hett, 1924; Nicoli, 1963). This same species was later redescribed by Rudolphi (1819) as *Pentastomum proboscideum* (Hett, 1924).

The influential Rudolphi (1812, 1819) finally deduced that all the afore-mentioned "worms" formed a single zoological group, although he failed to position this group. Taking the mouth and the four hooked-pockets for suckers, he eventually placed them under the subgeneric name *Pentastomum*, under the combination *Polystoma* (*Pentastoma*) Rudolphi (1812: 106). The type-species, *Polystoma proboscideum* Rudolphi, 1812 is an objective synonym of *Porocephalus crotali* Humboldt, 1812, by monotypy (Poore, 2012a: 226). *Pentastomum* was placed among the many-sucker flukes, between *Tristomum* and *Polystomum* (Alcock, 1923).

The genus/subgenus *Pentastomum* remained either among the trematodes or among the nematodes until 1831, when Mehlis (in an unpublished work made known by Nørdmann, 1832) recognized that it was something quite removed from any of the intestinal worms. But neither of these two authors or their immediate successors (Owen, Diesing) understood the true relations of *Pentastomum*. Diesing (1835) placed *Pentastomum* in a separate order, Acanthotheca, between the nematodes and trematodes (Alcock, 1923).

Dujardin (1845) showed that these Acanthotheca differed from every kind of parasitic worm, and approached the Arthropoda, for having striated muscles. Beneden (1949a, b) put *Pentastomum* in the Crustacea on embryological and anatomical grounds (Nicoli, 1963).

Prüner (1847) observed parasites, which he took for nematodes or for insect larvae, encysted in the liver of native populations in Cairo. Bilharz (1856), however, recognized what they were, and Siebold (1853) referred to them as a new species of *Pentastomum*. F. A. von Zenker (1854) found a different species of *Pentastomum* to be common in the liver of man also in Europe. The attention of more than one observer was directed to the fact that these human parasites were not sexually developed. Gurlt (1845) attached

these developmental stages to *Pentastomum*. Leuckart (1860) provided the experimental proof for the above hypothesis, and traced the Pentastomidae as a family of mites (Alcock, 1923).

The landmark in the history of the group remains the classical memoir of Leuckart (1860), who followed experimentally the life-cycle of a linguatulid, which resembled that of a tapeworm. This memoir contains a very complete account of the gradual elucidation of the nature and true relations of this aberrant group of parasites (Alcock, 1923). Leuckart (1860) remarked that Linguatulida became interesting as human parasites, and it was from this interest that their life-history seems to have been approached. This is the first comprehensive study of the morphology and life cycle of the pentastomes. He demonstrated that *Pentastomum denticulatum* is the larval stage of *P. taenioides*, and that both are identical to *Linguatula serrata* (Stunkard & Gandal, 1968). Unfortunately, he and other German investigators, influenced by the prestige of Rudolphi, assigned species to the genus *Pentastomum*, which is an objective synonym of *Porocephalus* (Poore, 2012a: 226). Leuckart (1860) ended by dividing *Pentastomum* into two subgenera: *Linguatula* and *Pentastomum* (Hett, 1924). Stunkard & Gandal's (1968) belief that *Pentastomum*, as used for the species known by Leuckart (1860), is a junior synonym of *Linguatula,* is incorrect, because they were discussing species other than the type material. Also the affirmation that *Linguatula serrata*, *Porocephalus crotali*, and *Pentastomum proboscideum* were apparently named on the basis of the same animal (Hett, 1924; Nicoli, 1963) is misleading, because *Linguatula serrata* came from a hare, while the other two species came from a caiman.

Summarizing the early literature, the tongue-worms were included in the family Linguatulidae Haldeman, 1851 and comprised three genera: *Linguatula, Porocephalus,* and *Pentastoma*.

Detailed account of second period; Stiles (1891b, c) recognized the priority of the name *Porocephalus* over that of *Pentastomum*, but proposed to retain the latter because of its widespread use (Hett, 1924). Thus although *Porocephalus crotali* and *Pentastomum proboscideum* are objective synonyms, Shipley (1898), in the first revision of the known species, placed these species among the two genera *Pentastomum* and *Porocephalus*. So *Porocephalus*, against the recommendations of the ICZN, still remains in use. On the other hand, Shipley (1898) regarded the distinctions between *Linguatula* and *Pentastomum* (= *Porocephalus*) as sufficiently important to establish their generic rank (Hett, 1924).

Ward (1899) established *Reighardia,* but included no species under this taxon. Subsequently Heymons & Vitzthum (1935a) designated *Pentastomum sternae* Diesing, 1863 as the type species for *Reighardia* (see Poore, 2012a: 219). Vaney & Sambon (1910) described the new genus *Raillietiella* (Hett, 1924).

Sambon (1922a, b) published a complete systematic review of the family Linguatulidae, adding several new genera (Hett, 1924). Morphology, hosts, and geographical distribution served to rearrange the Pentastomida into the subfamilies Raillietiellinae and Linguatulinae (Sambon, 1922a, b). Sambon (1922a, b) also established the main division between raillietiellids (uterus sacciform, female genital-opening at the anterior end of the abdomen, mouth anterior to the hooks, salivary glands moderately developed) and porocephalids (greatly-elongate, coiled, tubular uterus, female genital-opening at posterior end of body, mouth in line with or posterior to hooks, salivary glands

extending the whole length of body) (Alcock, 1923). We owe to Sambon (1922a, b) the dual system used until quite recently of a primitive Raillietiellinae and an advanced Porocephalinae. In later classifications (Heymons, 1935) these groups have been upgraded to the orders Cephalobaenida and Porocephalida.

Sambon transferred several species to *Raillietiella* and included the genus *Reighardia* in the subfamily Raillietiellinae. This concept was expanded to include *Cephalobaena* in the composite taxon Cephalobaenidae (Heymons, 1922).

On the other hand, Sambon (1922a, b) divided the Porocephalinae into three sections: 1. Sebekini, with the genera *Sebekia*; *Alofia*; and *Leiperia*; 2. Porocephalini, with the genera *Porocephalus*, *Kiricephalus*, *Armillifer*, and *Waddycephalus*; and 3. Linguatulini, with the genera *Linguatula* and *Subtriquetra* (Stunkard & Gandal, 1968). These taxa, now expanded in composition and upgraded herein to the Sebekidae, Porocephalidae, Subtriquetridae, and Linguatulidae, remain in use as valid monophyletic taxa. Sambon (1922a, b) had placed the genus *Linguatula* in the subfamily Porocephalinae, an obvious error, since it was the nomenclatural type of the family and should have been the type of the subfamily to which it was assigned.

Detailed account of third period; Haffner (1926a, b) provided an overview of the sense organs of pentastomids, which serves as a basis for Heymon's (1935) summary treatment. Even though Heymons (1935) recognized that if *Raillietiella* and *Cephalobaena* are in the same subfamily (Sambon, 1922a), the name of the family must be Raillietiellidae, he nevertheless created two families, Cephalobaenidae and Raillietiellidae.

Heymons (1935) also noted that Pentastomida and Linguatulida were equally available names for the tongue-worms; and although *Linguatula* antedates *Pentastoma*, he chose to follow Leuckart (1860) and adopted Pentastomida, accorded the new taxonomic status of a class, because Rudolphi (1809) had formulated a concept of the group, whereas Frölich (1789) had merely described a larva from the lungs of the hare. Linguatulida thus became a synonym of Pentastomida, but early references are equivocal, because authors referred to all pentastomids as linguatules, lingutulids, linguatulidans, etc. Rudolphi's (1809) concept of the Pentastomida was vague, since he included *Pentastomum* in the Trematoda, between *Polystomum* and *Tristomum*, on the mistaken belief that the hooks of the pentastomes were comparable to the suckers and hooks of the pectobothriid trematodes, which at the time were believed to be anterior in position.

The system of the Pentastomida is further elaborated in Heymons & Vitzhum (1935a) and finally in Heymons (1939a).

Detailed account of fourth period; Fain (1961) produced a monographic treatise based on extensive field studies from Africa. His classification of the Porocephalida revised Hemons'(1935) scheme and was adopted with minor modifications by Nicoli (1963) and Self (1969). Fain's subdivision of Porocephalida into two suborders (Porocephaloida and Linguatuloida) was initially not generally accepted. On the other hand, his suggestion that *Subtriquetra* (now Subtriquetridae) be separated from the Linguatulidae has been largely followed. He created the family Subtriquetridae for *Subtriquetra,* but placed it in the Porocephaloidea rather than in the Linguatuloidea, a relationship subsequently established by Almeida & Christoffersen (1999) with cladistic methods.

Nicoli (1963) furnished a vivid historical account of the Pentastomida. Osche's (1963) detailed treatment of embryos and eggs of *Reighardia sternae* suggested arthro-

pod affinities for the pentastomids. Doucet's (1965) comparative work of morphology, especially of the nervous system, indicated much in common among annelids, pentastomids, and arthropods. Legendre (1967) summarizes the morphology, histology and development of pentastomes. Haffner (1971, 1973, 1977), and Haffner et al. (1969) provide excellent contributions to the anatomy, development, and systematic placement of the Pentastomida. Mill & Riley (1972) account for the ultrastructure of the body wall musculature in *Reighardia*.

Detailed account of fifth period; Traditionally, two orders had been recognized on the basis of fundamentally different reproductive strategies. However, in the first cladistic analyses of the Pentastomida, Almeida & Christoffersen (1999) challenged several older ideas (Sambon, 1922a, b) and indicated that only the reproductive mode found in Porocephalida is apomorphic, while the plesiomorphic reproductive mode has been retained in the basal lineages Cephalobaenidae, Raillietiellidae, and Reighardiidae. The traditional composite taxon Cephalobaenida was thus recognized as being paraphyletic, despite Böckeler's (1990) excellent summary of the classical division into Cephalobaenida and Porocephalida. Almeida & Christoffersen (2002) summarised biological data of South American species and presented new hypotheses on the phylogenetic position of pentastomids (Waloszek et al., 2006).

Andres (1989) finally reported fossil pentastomids for the first time from the Lower Ordovician of the Isle of Öland, Sweden. Substantial Paleozoic fossil data was added by Waloszek and co- workers (Waloszek & Müller, 1994; Waloszek et al., 1994, 2006; Waloszek & Maas, 2005). With the discovery of an extended fossil record in the Paleozoic which extends into the Cambrian period it becomes evident that the great antiquity of the Pentastomida justifies the establishment of phylum rank to this zoological group. Castellani et al. (2011) present the last overview on fossil pentastomids, including insightful comparisons with the recent forms.

Important revisions were conducted during this period, including those of Porocephalidae (Riley & Walters, 1980), Armilliferidae (Riley & Self, 1981b, 1982), Raillietiellidae (Ali et al., 1981, 1982a, b, 1984a, b, 1985; Ali & Riley, 1983; Riley et al., 1988, 1991; McAllister et al., 1993; Riley & Heideman, 1998), Sebekidae (Self & Rego, 1985; Riley et al., 1990; Riley, 1994; Riley & Huchzermeyer, 1995a, b; Riley et al., 1997), and Linguatulidae (Riley et al., 1987). Other breakthroughs in this period are represented by the faunistic inventories of the African (Junker et al., 1998a, b, 1999, 2000) and Australian (Riley et al., 1985; Riley & Spratt, 1987; Poore & Spratt, 2011) pentastomids, the syntheses of general aspects of reproduction (Riley, 1983, 1986, 1988, 1992a), and advances in ultrastructural knowledge (Storch, 1993).

Because traditional criteria to distinguish the numerous species of *Raillietiella* were known to be unreliable (Self, 1969), Ali et al. (1981, 1982a, 1984a, b, 1985), Self & Rego (1985), and Riley et al. (1991) have attempted a revision based on the form of the male copulatory spicule. These papers have also provided a good summary on the known distribution of the sense organs in *Raillietiella*. Because morphological features used in pentastomid taxonomy change as the parasite transitions through developmental stages in the definitive host, Kelehear et al. (2011) have combined morphology, allometry and molecular approaches to identify species of *Raillietiella*. Important revisions have been attempted for the genera *Waddicephalus* (Riley & Self, 1981a), *Armillifer* (Riley & Self, 1981b) and *Parasambonia* (Riley & Self, 1982).

Böckeler (1984a) has provided new data on the embryogenesis and differentiation of the nervous system of the pentastomids and on ovary morphology and ovogenesis (Böckeler, 1984b). The ontogeny and ultrastructure of several gland systems of *Raillietiella* were studied by Stendel-Seidel (1995), Stendel-Seidel & Gabrielle (1977), and Stender-Seidel et al. (1997a, b, 1999, 2000).

The ultrastructure of the digestive system and the mechanism of digestion in *Reighardia* and *Raillietilla* were further explored by Thomas & Böckeler (1992a, b, 1994), Thomas & Stender-Seidel (1996), and Thomas et al. (1999b, c). General ultrastructural updates on the morphology of Pentastomida are provided by Storch (1984, 1993).

Our knowledge of the Sebekidae have been considerably advanced by the studies of Riley et al. (1990), Riley & Huchzermeyer (1995a, b, 1996), Junker (1996, 2002), Junker et al. (1998b, 1999, 2000, 2003), and Junker & Boomker (2002, 2006). The unpublished dissertation of Junker (2002) provides the first cladogram of the Sebekidae, although several taxa (Sebekidae, the *Selfia* group [*Selfia* + *Alofia* + *Disesingia*], *Selfia* + *Alofia, Leiperia, Sambonia, Selfia, Agema* and *Sebekia*) were not provided with apomorphies in the cladogram.

The free-living larval development of *Subtriquetra subtriquetra*, a parasite of South American crocodiles, was atudied by Winch & Riley (1986a). Junker et al. (1998a) and Luus-Powell et al. (2008) provide new data on parasites of fish from South Africa. Paré (2008) furnishes a useful overview of pentastomes occurring in vertebrates and the diseases they provoke.

Almeida & Christoffersen (1999) reconstructed the first phylogeny of the Pentastomida. Röhlig et al. (2010) provide an annotated catalogue based mainly on Heymon's material. Castellani et al. (2011) furnish the latest overview comparing fossil material with recent species. Poore (2012a) contributes a nomenclatural revision of the Recent Pentastomida and corrected authorship of the name Pentastomida (Poore, 2012b).

System of the Pentastomida

The following phylogenetic systematization of Pentastomida is based mainly on Almeida & Christoffersen (1999) and Junker (2002) (figs 1-4):

Phylum Pentastomida Huxley, 1869 (8 Paleozoic fossil species, 144 Recent species and subspecies)
- Pan-Pentastomida [stem-group fossil pentastomids + crown-group Recent pentastomids]
  - Stem-group pentastomids (8 Paleozoic fossil species)
  - Class Eupentastomida Waloszek, Repetski & Maas, 2006 [crown-group Recent pentastomids] (131 valid species and subspecies, 13 doubtful species)
    - Order Cephalobaenida Heymons, 1935 (1 valid species, 1 doubtful species)
      - Family Cephalobaenidae Heymons, 1922 (1 valid species, 1 doubtful species)
        - Genus *Cephalobaena* Heymons, 1922 (1 valid species)
        - Genus *Bothriopsiella* Cavalieri, 1967 (1 doubtful genus and species; genus omitted in Poore (2012a).
    - Order Raillietiellida Almeida & Christoffersen, 1999 (42 species and subspecies)
      - Family Raillietiellidae Sambon, 1922 (43 valid species and subspecies, 1 doubtful species)

Genus *Raillietiella* Sambon, in Vaney & Sambon, 1910 (43 valid species and subspecies, 1 doubtful species)
Genus *Yelirella* Spratt, 2010 (1 valid species)
Order Reighardiida Almeida & Christoffersen, 1999 (3 valid species)
Family Reighardiidae Heymons & Vitzhum, 1935 (3 valid species)
Genus *Hispania* J. Martínez, Criado-Fornelio, Lanzarot, Fernández-García, Rodríguez-Caabeiro & Merino, 2004 (1 valid species)
Genus *Reighardia* Ward, 1899 (2 valid species)
Order Porocephalida Heymons, 1935 (84 valid species and subspecies, 11 doubtful species)
Superfamily Linguatuloidea Haldeman, 1851 (10 valid species and subspecies)
Family Linguatulidae Leuckart, 1860a (6 valid species and subspecies)
Genus *Linguatula* Frölich, 1789 (5 valid species and subspecies]
Genus *Neolinguatula* Haffner (in Haffner, Rack & Sachs), 1969 (1 valid species)
Family Subtriquetridae Fain, 1961 (4 valid species)
Genus *Subtriquetra* Sambon, 1922 (4 valid species)
Superfamily Porocephaloidea Sambon, 1922 (74 valid species and subspecies, 11 doubtful species)
Family Sebekidae Sambon, 1922 (34 valid species, 7 doubtful species)
Subfamily Leiperiinae, **new subfamily** (3 valid species) [diagnostic apomorphies (same as for monotypic type genus *Leiperia*: hooks bifurcate in larvae, with single lamina in adult; females with spirally coiled abdomen, with comparatively large radius coils; parasites in the crocodilian tracheae, with an obligatory phase in circulatory system (Rego, 1984; Riley & Huchzermeyer, 1996; Junker et al., 2000).
Genus *Leiperia* Sambon, 1922 (3 valid species)
Subfamily Samboninae Heymons, 1935 (4 valid species, 1 doubtful species)
Genus *Sambonia* Noc & Giglioli, 1922 (4 valid species, 1 doubtful species)
Subfamily Diesingiinae Heymons, 1935 (10 valid species, 3 doubtful species)
Genus *Diesingia* Heymons, 1935 (2 valid species)
Genus *Alofia* Giglioli (in Sambon), 1922 (7 valid species, 3 doubtful species)
Genus *Selfia* Riley, 1994 (1 valid species)
Subfamily Sebekinae Sambon, 1922 (17 valid species, 4 doubtful species)
Genus *Agema* Riley, Hill & Huchzermeyer, 1997 (1 valid species)
Genus *Pelonia* Junker & Boomker, 2002 (1 valid species)
Genus *Sebekia* Sambon, 1922 (12 valid species, 3 doubtful species)
Family Porocephalidae Sambon, 1922 (40 valid species and subspecies, 4 doubtful species)
Subfamily Armilliferinae Kishida, 1928 (13 valid species and subspecies)
Genus *Armillifer* Sambon, 1922 (11 valid species and subspecies)
Genus *Cubirea* Kishida, 1928 (2 valid species)
Subfamily Porocephalinae Sambon, 1922 (27 valid species, 4 doubtful species)
Genus *Parasambonia* Stunkard & Gandal, 1968 (2 valid species)
Genus *Porocephalus* Humboldt, 1812 (9 valid species, 2 doubtful species)
Genus *Elenia* Heymons, 1932 (*incertae sedis*) (1 valid species, 1 doubtful species)

Genus *Gigliolella* Chabaud & Choquet, 1954 (*incertae sedis*) (1valid species)
Genus *Kiricephalus* Sambon, 1922 (*incertae sedis*) (5 valid species)
Genus *Waddycephalus* Sambon, 1922 (*incertae sedis*) (10 valid species)

Clades of the Pentastomida (apomorphies) (figs 1-4)

Although with practice it is not difficult to ascribe pentastomid species to genera, the general absence of good diagnostic criteria renders pentastomids frustratingly difficult animals to identify to species level (Riley & Self, 1981a). The characters below are taken from the only two phylogenetic analyses of the group (Almeida & Christoffersen,

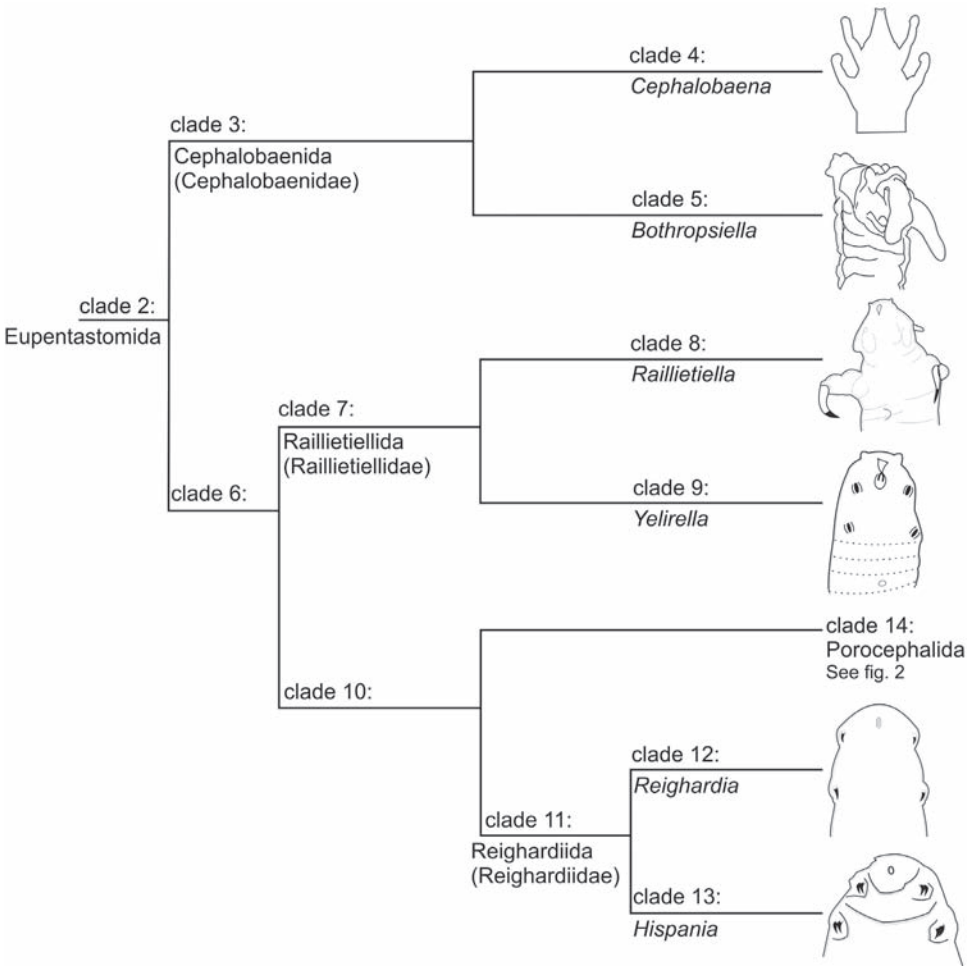

Fig. 1. Phylogenetic relationships among basal groups of Pentastomida: Cephalobaenida (*Cephalobaena* + *Bothropsiella*) + Raillietiellida (*Raillietiella* + *Yelirella*) + Porocephalida + Reighardiida (*Reighardia* + *Hispania*). The figures of *Cephalobaena, Raillietiella,* and *Reighardia* were adapted from Heymons (1935); that of *Bothropsiella* was adapted from Cavalieri (1967); the figure of *Yelirella* was adapted from Spratt (2003); and the figure of *Hispania* was adapted from Martínez et al. (2004).

1999; Junker, 2002) and tentatively selected from the traditional diagnoses provided in the available literature.

Clade 1: Pentastomida; Pan-Pentastomida (body divided into a head region with 4 somites, a trunk with three somites, and a caudal end; full number of somites at hatching; paired uniramous head limbs on head somites three and four developed as attachment devices, three-segmented; first trunk metamere lacking limbs; second and third trunk metameres possessing at most vestigial limbs with a distal tuft of setae and a medial pore on proximal segment of limb in the larvae; caudal trunk portion with a pair of outgrowths or papillae) (Almeida & Christoffersen, 1999; Waloszek & Müller, 1994; Waloszek et al., 2006).

Clade 2: Eupentastomida (head appendage 1 reduced in all stages, modified into dorsal papillae; head appendage 2 reduced in all stages, modified into frontal papillae; penetrating apparatus consisting of parallel accessory hooks on anterior head margin from larvae to nymphae; proximal podomere of head appendages 3-4 modified into U-shaped fulcrum from larva to adults; median podomere of appendages 3-4 in all stages modified into basal plate; trunk in larvae elongate, not segmented; anterior trunk metamere short, close to head; loss of two posteriormost trunk segments from somites 6-7;

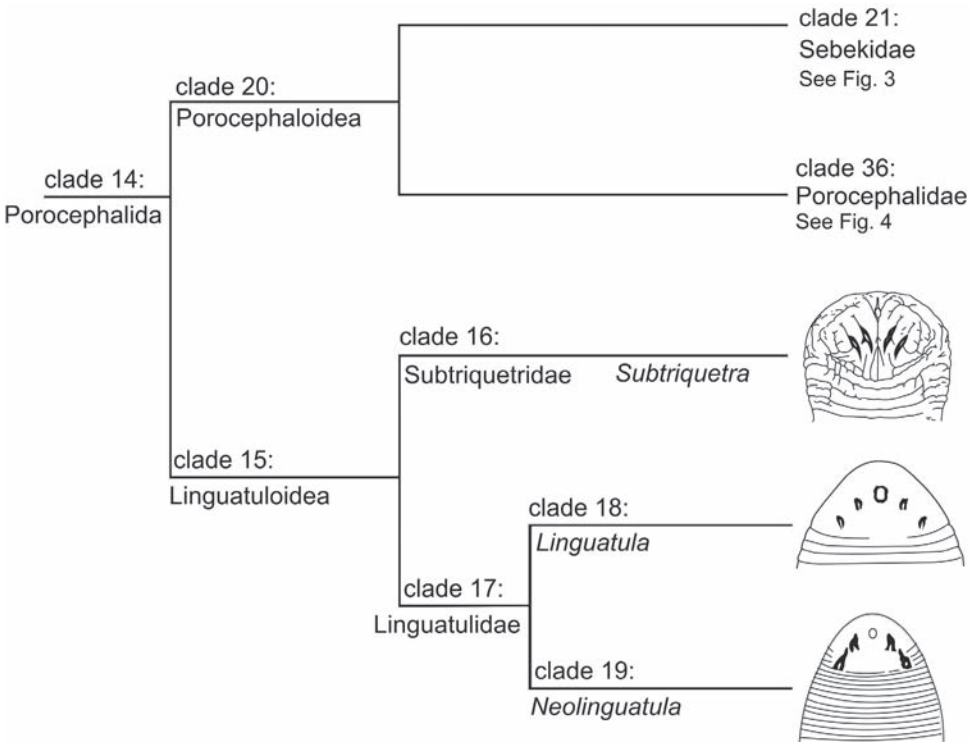

Fig. 2. Phylogenetic relationships within Porocephalida: Porocephaloidea (Sebekidae + Porocephalidae) + Linguatuloidea (Subtriquetridae [*Subtriquetra*] + Linguatulidae (*Linguatula* + *Neolinguatula*). All figures were adapted from Heymons (1935).

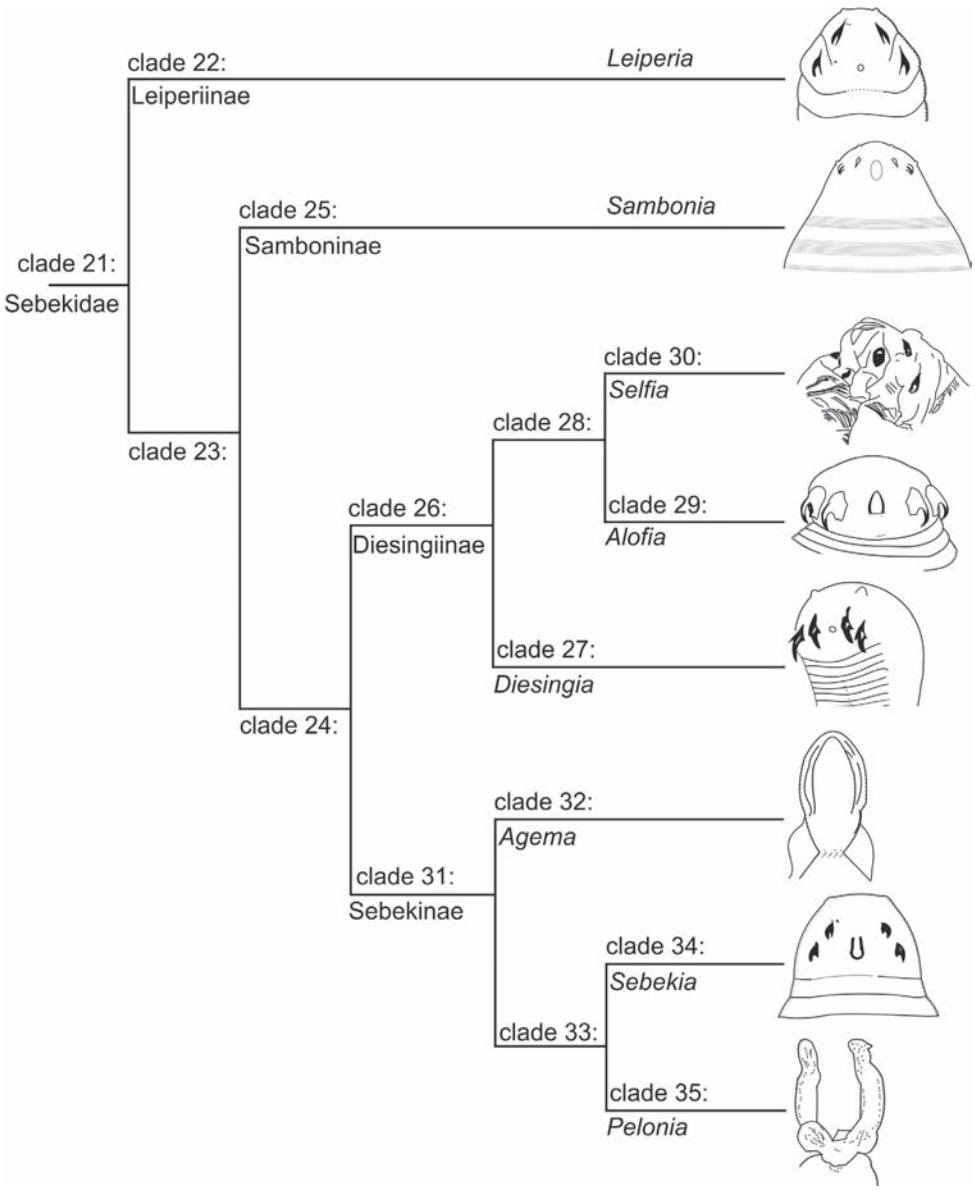

Fig. 3. Phylogenetic relationships within Sebekidae: *Leiperiinae* (*Leiperia*), + Samboninae (*Sambonia*) + Diesingiinae (Diesingiini (*Diesingia* + (*Alofia* + *Selfia*)) + Sebekiini (*Agema* + (*Sebekia* + *Pelonia*)). The figures of *Leiperia*, *Alofia*, *Diesingia,* and *Sebekia* were adapted from Heymons (1935); that of *Sambonia* was adapted from Fain & Mortelmans (1960); the figure of the buccal structure of *Agema* was adapted from Riley et al. (1997); and the figure of the buccal structure of *Pelonia* was adapted from Junker & Boomker (2002).

trunk of later larvae and adults made of caudal portion only, which becomes pseudoannulated; cuticular pores all over the body in larvae and adults) (Almeida & Christoffersen, 1999; Waloszek et al., 2006).

Clade 3: Cephalobaenida; Cephalobaenidae (podial lobes elongate, finger-like) (Poore & Spratt, 2011).

Clade 4: *Cephalobaena* (protrusion of mouth area into a proboscis) (Rego, 1984; Waloszek et al., 2006).

Clade 5: *Bothriopsella* (prosoma with a pair of long, unarmed, lateral projections) (Cavallieri, 1967).

Clade 6: Unnamed taxon Rallietiellida+ Reighardiida + Porocephalida (podial lobes in adults short and reduced to lobules; rostrum reduced in adults) (Almeida & Christoffersen, 1999).

Clade (?) 7: Raillietiellida; Raillietiellidae.

Clade 8: *Raillietiella* (body tapering at both ends; hooks unequal, posterior pair larger than anterior; three vesicular projections round each hook) (Brues & Melander, 1932; Hett, 1934; Rego, 1984).

Clade 9: *Yelirella* (size minute, direct life cycle in respiratory tract of mammal definitive host, glands of cephalothorax and copulatory spicules porocephalid-like) (Spratt, 2003).

Clade 10: Unnamed taxon Reighardiida+ Porocephalida (rostrum absent in adults; podial lobes and parapodia absent; terminal papillae absent in adults) (Rego, 1984; Almeida & Christoffersen, 1999).

Clade (?) 11: Reighardiidae.

Clade 12: *Reighardia* (loss of terminal papillae/caudal outgrowths in adults (Almeida & Christoffersen, 1999); mature females elongate [7-8 cm] and slender, devoid of clear annulations, and the cuticle possesses numerous tubercles which impart a distinctive knobby appearance to the surface) (Haffner & Rack, 1971; Dyck, 1975).

Clade (?) 13: *Hispania*.

Clade 14: Porocephalida (fulcrum campanulate in larvae and boat-shaped in adults; accessory hooks present and dorsal in position from larvae to nymphae; podial lobes absent in adults; hooks disposed in straight line or arc; nervous ganglia fused into single suboesophagic nerve mass in adults; median spine of penetrating apparatus simple in first larval stages; lateral spines of penetrating apparatus bifid in first larval stages; spines of annuli present in nymphae; ejaculatory bulbs present in adults; cirri long in adults; cirrus sac present in adults; copulatory spicule not club-shaped; uterus tubular in adults, greatly elongated and irregularly coiled; female gonopore ventral in adults, posterior, separated from anus by a few rings (heterogyne contidion) (Brues & Melander, 1932; Self, 1969; Almeida & Christoffersen, 1999; Poore & Spratt, 2011).

Clade 15: Linguatuloidea (body flattened and spatulate in adults) (Almeida & Christoffersen, 1999).

Clade 16: Subtriquetridae; *Subtriquetra* (egg envelopes reduced to a single, flexible membrane; primary larvae moves freely with a strongly hooked tail) (Vargas V., 1975; Riley, 1986).

Clade 17: Linguatulidae (body flattened, fluke-like) (Melander & Brues, 1932; Riley, 1986).

Clade 18: *Linguatula* (body spatulate, attenuated posteriorly; two pairs of double

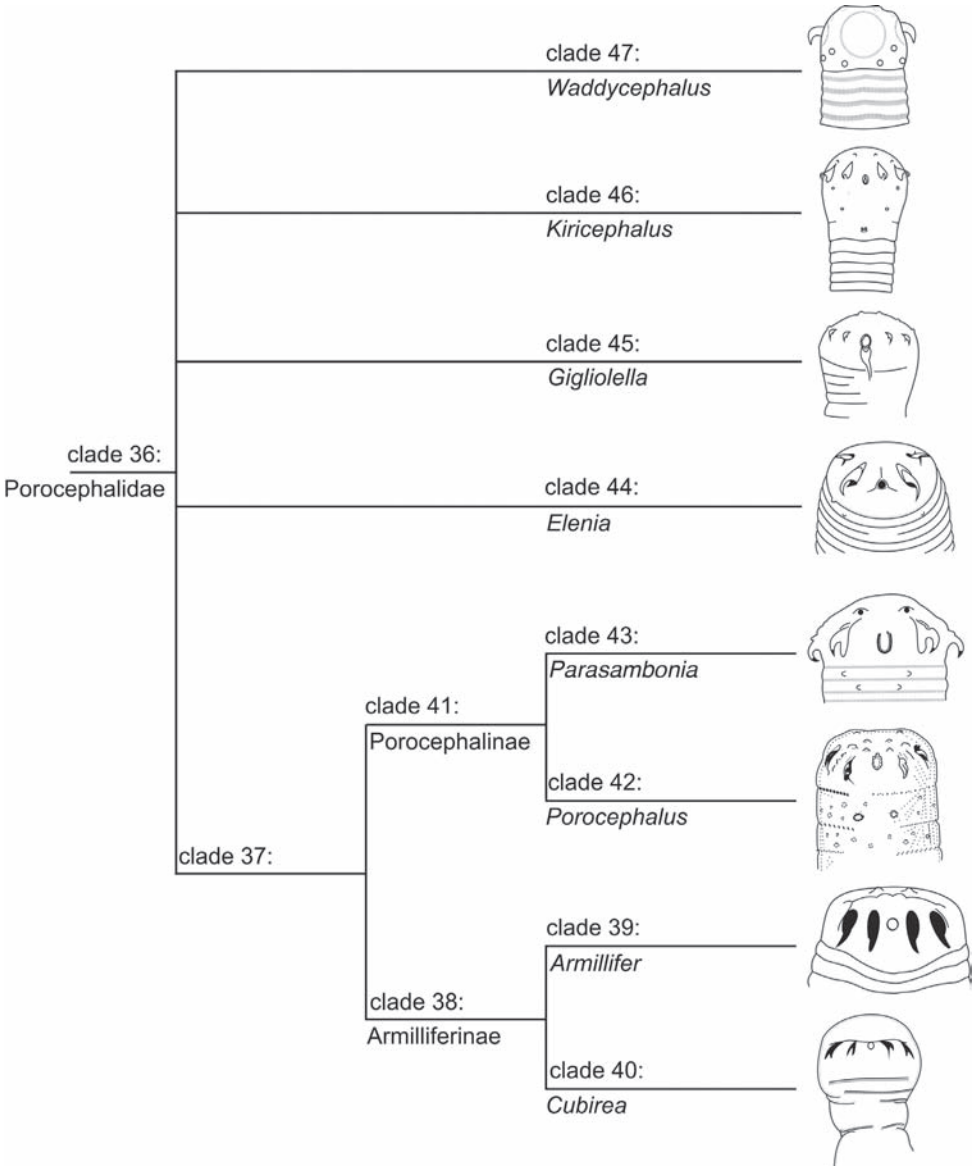

Fig. 4. Phylogenetic relationships within Porocephalidae: *Waddycephalus, Kiricephalus, Gigliolella, Elenia*, and the clade Porocephalinae (*Parasambonia* + *Porocephalus*) + Amilliferinae (*Amillifer* + *Cubirea*). The figures of *Waddycephalus, Kiricephalus, Elenia*, and *Amillifer* were adapted from Heymons (1935); that of *Gigliolella* was adapted from Chabaud & Choquet (1954); *Parasambonia* was adapted from Riley et al., Self (1982); the figure of *Porocephalus* was adapted from Riley & Walters (1980); and that of *Cubirea* was adapted from Sambon (1922).

claws; cuticle spinous; testes double; life cycles restricted to mammals) (Sambon, 1922a; Self, 1969, 1982; Rego, 1984).

Clade 19: *Neolinguatula* (with a cleft in caudal region) (Haffner et al., 1969).

Clade 20: Porocephaloidea (early larva ovoid; vulva opening in posterior region of body; hooks with fulcrum) (Rego, 1984; Almeida & Christoffersen, 1999).

Clade 21: Sebekidae (alimentary canal sinuous, longer than body; hooks distinctly convex, with spines large and proeminent; nymphal hooks double; all final hosts are amphibious reptiles (crocodilians, chelonians and monitor lizards, the later including a variety of foods such as carrion, fish, crabs, snails, snakes, terrapins, and eggs of waterbirds and crocodiles)) (Sambon, 1922a; Brues & Melander, 1932; Self, 1982; Patterson, 1991; Junker, 2002).

Clade 22: Leiperiinae; *Leiperia* (hooks bifurcate in larvae, with single lamina in adult; females with spirally coiled abdomen, with comparatively large radius coils; parasites in the crocodilian tracheae, with an obligatory phase in circulatory system) (Rego, 1984; Riley & Huchzermeyer, 1996; Junker et al., 2000).

Clade 23: Unnamed taxon Samboninae + Diesingiinae + Sebekinae (body shape short and massive (banana-shaped); anterior extension to fulcrum present on all fulcra or secondarily reduced in posterior and/or anterior fulcra) (Junker, 2002).

Clade 24: Unnamed taxon Diesingiinae + Sebekinae (a single row of chloride cell pores per annulus; cirrus tip in males reduced; patches of spines present on hooks) (Junker, 2002: 95).

Clade 25: Samboninae; *Sambonia* (vagina and anus of female separated by several annuli, the heterogynous condition; adults parasitize monitor lizards, *Varanus*) (Fain, 1961; Junker, 2002).

Clade 26: Diesingiinae (chloride cell pore distributed in a single row per annulus; cirrus tip in males reduced, simple; patches of spines on hooks present or partially reduced) (Junker, 2002).

Clade 27: *Diesingia* (copulatory spicules with tiller-like extension on collar) (Junker, 2002).

Clade 28: Unnamed taxon *Alofia* + *Selfia* (hooks from nymphae to adults with rows of very reduced spines; oral cadre of adults with oesophageal peg; copulatory spicules forming a double-hooked-collar) (Riley, 1994; Junker et al., 1999; Almeida & Christoffersen, 1999; Junker, 2002).

Clade 29: *Alofia* (Oral cadre U-shaped in profile; hooks bent through right angle) (Junker, 2002).

Clade (?) 30: *Selfia*.

Clade 31: Sebekinae (mouth ridge in adults incomplete anteriorly; copulatory spicules delicate, colar around anterior spatular extension weakly developed or absent; esophageal peg of oral cadre absent) (Hett, 1924; Junker, 2002).

Clade 32: *Agema* (copulation spines reduced during ontogenesis, smoothly curved and without spines, extensions to the fulcra being absent in adults) (Riley et al., 1997; Junker, 2002).

Clade 33: Unnamed taxon *Sebekia* + *Pelonia* (hooks distinctly convex) (Junker, 2002).

Clade 34: *Sebekia* (cephalothorax small, projecting nipple-like from abdomen; base of hooks with small spines in adult) (Sambon, 1922a; Rego, 1984; Riley et al., 1990).

Clade 35: *Pelonia* (spines absent from hooks; extension of fulcrum absent) (Junker, 2002).

Clade 36: Porocephalidae (hooks aligned in adults) (Almeida & Christoffersen, 1999).

Clade (?) 37: Unnamed clade Porocephalinae + Armilliferinae.

Clade 38: Armilliferinae (circular and parietal muscles arranged in thick bands, so that abdominal annuli become raised and distinct in adults) (Nicoli et al., 1965; Almeida & Christoffersen, 1999).

Clade (?) 39: *Armillifer.*

Clade (?) 40: *Cubirea*.

Clade (?) 41: Porocephalinae.

Clade 42: *Porocephalus* (accessory spines present on the hooks of adults) (Hett, 1924; Almeida & Christoffersen, 1999).

Clade 43: *Parasambonia* (presence of a chitinous extension of the funcrum, which overlies the outer hood) (Riley & Self, 1982).

Clade (?) 44: *Elenia.*

Clade (?) 45: *Gigliolella.*

Clade (?) 46: *Kiricephalus*.

Clade 47: *Waddycephalus* (cephalothorax separated from abdomen by a constriction involving seven or eight annuli) (Fain, 1961; Riley & Self, 1981a).

Detailed taxonomic account of Recent species

Phylum PENTASTOMIDA Shipley, 1905

Phylum PENTASTOMIDA Shipley, 1905: 249.

An extraordinary worm; Paisley, 1734: 333; 1742: 416; Nicoli et al., 1965: 513 ("Nettorhynche"; historical account).

Animalculis infusoriis satura; Wrisberg, 1765: 1787 (three worms observed in a dog).

Taenia lanceolé Chabert, 1782: 39 (as Cestoda).

Linguatula or tongue worms; Schrank, 1796: 1.

Pentastomata Rudolphi, 1809: 428 (as Trematoda).

Phylum, Class, or Subclass Pentastomida; Oken, 1815: 166; Rudolphi, 1819: 577; Nørdmann, 1832: 141 (as Nematoda); Beneden, 1848a: 161 (as Crustacea); Schubärt, 1853: 117 (as Acari); Railliet, 1883: 26 (confirmed as Acari); Sambon, 1910a: 134 (as Acarina); 1922: 417 (list of genera and species).

"Linguatule", "linguatella" Blainville, 1823: 509; E. Blanchard, 1850a: 188 (organization).

Linguatulidae Haldeman, 1851 (as a family of Helminthes); Vogt, 1851: 499 (referred to the family as Linguatulida); Weiss, 1927: 566 (new species named, but not described: *Porocephalus heterogenis*, *Reighardia carthaginensis*, and *R. elelae*).

Acanthotheca Diesing, 1836: 15.

Hypobothria Diesing, 1864: 200.

Linguatulida Claus, 1872: 519 (as an Order of Arachnoidea); Chatin, 1881: 66 (mode of locomotion and penetration of linguatulids); A. Castellani, 1919: 732 (general account); Rivas, 1920: 476 (human parasitology); Lahile, 1920 (taxonomy); Daiber, 1921: 784 (pentastomid morphology); Alcock, 1923: 265 (general account); Haffner, 1924a: 209 (affinities and classification); 1926a: 201 (sense organs, relationships to Annelida); 1926b: 136 (sense organs, relationships to Annelida); Lameere, 1930: 146 (linguatules);

Fischer, 1930: 705 (linguatulidans and linguatuliasis); Sprehn, 1930: 244 (important helminthes); Holl, 1932: 83 (linguatulid parasites of amphibians); Hill, 1935a: 117 (taxonomy and occurrence of linguatulids in pythons); 1948: 56 (annotated bibliography); Ball, 1948: 250 (systematic relationships); Gomes, 1979: 587 (Brazil: Rio de Janeiro; from marsupials in Instituto Oswaldo Cruz).

Linguatulozoa Lungu, Stoican & Newterov, 1961: 131 (in *Lepus* (*Lepus*) *timidus timidus* [as *Lepus timidus*]).

Pentastomata Self, 1982a: 726 (as single class of subphylum Pentastomida).

Unidentified pentastomids and general works on pentastomiasis in animals; Chabert, 1789: 39 (illnesses in house animals); Colin, 1824: 4 (worms in larynx and nasal cavities of dog); 1863a: 721 (tenioid pentastomes in nasal cavities of dog); 1864 (pentastome in nasal cavities of dog); Ganin, 1869: 441 (pentastomes in insects); Calandruccio, 1890: 8 (parasitology of lungs); Ostertag, 1892: 63 (pentasomes in lymph glands of cattle); 1927: 196 (pentastome notches in ox); Lungwitz, 1893: 218 (massive pentastome invasion of cattle); Storch, 1895: 135 (pentastome notches in lungs of ox); Tempel, 1898: 187 (larva in lungs of goat); Morgen, 1901: 416 (pentastomiasis in cattle); Alessandrini, 1908: 392 (parasitological disease in sheep); 1929 (parasitology in domestic animals); Sweet, 1909: 454 (Australia; endoparasites in native fauna); Cleland & Johnston, 1911: 119 (Australia; in cattle); Cleland, 1912: 120 (in endemic bovines); Boulenger, 1913: 107 (Europe; overview of parasites of snakes); Glage, 1915: 155 (in lungs of cattle); Wall, 1921: 47 (records of linguatulidans in snakes); Strong et al., 1926: 1 (unidentified pentastomid in pipe snake, *Anilius* [as *Ilsya*] *scytale*); Bugge 1927a: 124 (mesenteric pentastome lymph nodes in cattle); Faust, 1928: 107 (China); 1929: 27 (China; in dog and cat); Ivanov, 1933a: 157 (pentastomids in bovids and buffaloes); Walton, 1946: 18 (parasites in bufonid amphibians); 1947: 26 (parasites of raninid amphibians); Voblikova, 1961: 129 (adults in reindeer); Macko, 1964: 118 (Czekoslovakia; in sea swallows and sea gulls); Lavoipierre & Lavoipierre, 1966: 845 (arthropod intermediate host); Whitney & Kruckenb, 1967: 907 (pentastomid infection associated with peritonitis in mangabey monkeys); Senadhira, 1967: 39 (guide to animal parasites and arthropod pests); Nadakal & Nayar, 1968: 189 (transplantation from reptilian to amphibian hosts); Self & Costgrove, 1968: 969 (pentastome larvae in laboratory primates); 1972: 194 (pentastomids causing pathology of simian primates); Cosgrove et al., 1970: 354 (pentastomid infection in primates); Basson et al., 1970: 110 (South Africa: Kruger National Park; pentastomid parasitic diseases of African buffalo); Karstad, 1970: 8 (bibliography on infections and diseases of African wild animals); Horvath, 1971: 429 (experimental lizard hosts); Sweatman, 1971: 51 (pentastome diseases in wild animals); Thurston, 1972: 791 (heavy pentastomid infestation of nymphs in a bush genet); Deakins, 1972: 1 (pentastome pathology in captive reptiles); Lavoipierre & Rajamanickam, 1973: 301 (life cycle of a lizard pentastome); B.L. Lim & Yong, 1977: 59 (Malaysia: Sarawak; pentastomid infections in house geckos); Hirji, 1980a: 58 (Tanzania: Dar-Es-Salaan; in scincid lizard, *Trachylepis striata striata* [as *Mabuya striata*]); Kuntz, 1982: 185 (somatic infections resulting from larval pentastomiasis in various viscera in non-human primates); Riley & Winch, 1984: 5 (role of leaf-cutter ants in transmission of pentastomid parasite of worm-lizards); Beaver et al., 1984: 572 (parasitology of Crustacea); Rojers et al., 1985: 417 (aberrant nymphal pentastomiasis in a dog); Riley et al., 1986: 459 (life cycle of a pentastomid parasite of *Amphisbaena alba*, with ant and beetle inquilines); Chooi, 1986: 311 (pentastomiasis in a cat); Y. Zhang et al., 1988: 61 (China; pentastomia-

sis in lizard *Gekko gecko gecko* [as *Gecko gecko*]); Pineda-López & Garcia-Magaña, 1991: 97 (Tabasco: Balanán: Río San Pedro; nymphs in cypriniform fish, *Ictalurus meridionalis*); Horak et al., 1992: 259 (South Africa: eastern Transvaal Lowveld: Kruger National Park; ectoparasitic nymphs of domenstic and wild animals); Buenviaje et al., 1994: 165 (Australia: Northern Territory; diseases in farmed crocodiles); Brown et al., 1995: 317 (pentastomid infections of unisexual gecko, *Lepidodactylus lugubris*, and bisexual gecko, *Hemidactylus frenatus*, by most likely *Raillietiella hemidactyli*); Ladds et al., 1995: 121 (Iranian-Jaya; diseases in young farmed crocodiles); Wright, 1997: 5 (ivermectin for treatment of pentastomids in the standing's day gecko, *Phelsuma standingi*); Oakwood & Spratt, 2000: 79 (Australia: Northern Territory: Kakadu National Park; pentastome larvae in northern quoll, *Dasyurus hallucatus*); Muzaffar & I.L. Jones, 2004: 121 (parasites and diseases of auks); Miyasaki & Dieter, 2005: 1433 (New Guinea: in lung of gecko); Nash, 2005 (overview of respiratory parasites of reptiles); Radhakrishnan et al., 2009: 253 (India: Kerala; pentastomid ova in indigenous snake faeces); Ramollo et al., 2009: 121 (pentastomid infection in fish intermediate host); McAllister et al., 2010: 90 (Cameroon: Douala; a pentastomid in the herpetofauna); Goldberg et al., 2010: 447 (Papua- New Guinea; in skinks); Campos et al., 2010: 79 (Brazil: Mato Grosso do Sul: Aquidauana river; one species of pentastomid in siluriform fish, *Pseudoplatystoma fasciatum*); Barros et al., 2010: 228 (Brazil: Mato Grosso: Cuiabá river; in muscles, coelomic cavity, and air bladder of red piranha, *Pygocentrus nattereri*); H.I. Jones 2010: 69 (Australia: Gret Victoria desert; gastrointestinal parasites of dwarf varanid monitor lizard, *Varanus* (*Odaria*)).

Unidentified pentastomids and general works on pentastomiasis in man; Virey, 1823: 219 (vermifuge for human pentastome); Leuckart, 1863: 78 (pentastomids in man); 1979: 1 (parasites in man); Peterson, 1866: 1 (pentastome in man); Alessandrini, 1929: 1 (parasitology in man); Benedetti-Valentine, 1932: 1085 (splenic pentastomiasis); Weiser, 1942: 239 (lung disease: cysticercose – pentastomiasis); Anemaet, 1948: 366 (living pentastome in a dog); Christodouleu & Trarlatzis, 1951: 147 (pentastomiasis); Vrba & Marusiak, 1960: 297 (pentastomiasis); Fain, 1960a: 516 (pentastomosis); 1966a: 167 (pentastomids in snakes, parasitological role in man and animals); 1975: 59 (pentastomids parasitic in man); Salazar, 1965: 157 (Philippines and Taiwan: human pentastomiasis); Coster et al., 1967: 257 (cases of larval pentastomiasis discovered radiologically); Prathap et al., 1969: 20 (Malaysia; pentastomiasis in autopsied Malaysian aborigenes); Hopps et al., 1971: 970 (pentastomiasis); Ali-Kahn & Browner, 1972: 58 (Canada; pentastomiasis, host responses to larval and nymphal infections); Self, 1972: 2 (pentastomiasis, a response to larval and nymphal infections); Fontanel et al., 1972: 323 (a case of conjuntival pentastomosis); Coulibaly et al., 1972: 236 (Africa; pentastomosis, respiratory pathology); Amy et al., 1974: 273 (pentastomid infestation in man); Ong, 1974: 187 (pentastomiasis in fallopian tube in aboriginal woman); Discamps & Albert, 1974: 187 (four human cases); Smith et al., 1975: 503 (pentastomiasis and malignancy); Self et al., 1975: 1 (pentastomiasis in Africans); Meyers et al., 1976: 546 (pentastomiasis); Bygbjerg & Rask, 1978: 54 (pentastomiasis and cancer of the colon); Enyinihi, 1978: 183 (pentastomiasis); Couliboeuf & Frézil, 1978: 222 (Congo Republik; massive pentastoma infection); Prathap, 1981: 132 (pentastomiasis); Piéron et al., 1982: 1047 (France: Paris; pentastomiasis); Nozais et al., 1982: 497 (human pentastomiasis, serological inquire); Tiendrebeogo et al., 1982: 351 (Africa: Abidjan; human pentastomiasis); Herzog et al., 1985: 261 (pentastomiasis, acute abdominal emergency); Drabick, 1987: 1087 (review of pentastomiasis in humans); Lang et al., 1987: 391

(intraocular pentastomiasis, causing unilateral glaucoma); Roberts, 1988: 362 (parasitic infections of pleural space); Lloyd, 1998: 921 (human hosts of zoonotic parasites); Haugerud, 1988a: 28 (human pentastomiasis); Shin et al., 1990: 117 (Taiwan; pentastome infection in man; immune response of first human case of infection in Taiwan); Abadi et al., 1996: 169 (USA: Georgia; pentastomiasis in woman with AIDS, first example of heart involvement); M.H. Qiu & Chen, 1999: 188 (China; human pentastomiasis, misidentification); Coker et al., 2000: 59 (Nigeria; pentastomiasis); Xie et al., 2002: 31 (a case of pentastomiasis); H.Y. Chen, 2003: 619 (two cases of pentastomiasis); Acha & Szyfres, 2003: 345 (pentastomiasis in man and animals); Sellier et al., 2004: 1524 (thoracoabdominal calcifications in a healthy West African man); Machado et al., 2006: 1218 (Brazil: pentastomiasis mimicking liver tumor); M.H. Qiu & Jiang, 2006: 281 (human pentastomidosis); Dakubo et al., 2006: 166 (human pentastomiasis); 2008: 165 (totemism and transmission of human pentastomiasis); Lukmanova & Gumerov, 2007: 54 (Bashkortostan; nymphs causing hepatic lesion in human child); Leschnik et al., 2008: 59 (Austria; parasitic infectious disease); Büttner & Tappe, 2009: 320 (diagnosis of human visceral pentastomiasis); Dorny et al., 2009: 196 (pentastomids as causes of zoonotic infections in humans when consuming not properly cooked meet); Magnino et al., 2009: 163 (risks associated with consumption of reptile products); Mourra, 2010: 261 (liver pentastomiasis associated with rectal adenocarcinoma); Lai et al., 2010: 480 (Korea; pentastomiasis infection causing liver granuloma in 3-year-old girl).

Other general works on pentastomids and references of interest to pentastome biology; Leuckart, 1860a: 1 (anatomical and embryological evidence for placement with mites); Mehlis, 1860: 3 (development); Lindemann, 1870a: 436; 1870b: 36 (the pentastome); Owsjannikoff, 1870: 166 (a pentastome parasite); Balfour, 1880: 449 (embryology); Hahn & Lefèvre, 1885: 704 (pentastome or linguatule); Lohrmann, 1889: 308 (anatomy); Hahn, 1899: 316 (pentastome or linguatule); Ihle, 1899: 608 (systematic position); Shipley, 1905: 249; 1909: 488 (arthropod affininities); Rauther, 1909: 581 (systematic position); Gedoelst, 1911: 1 (parasites in man and domestic animals); Berlese, 1912: 5, figs (general account); Fantham et al., 1916: 523; Alcock, 1923: 272 (Linguatulida or Pentastomida); Hett, 1924a: 107 (review of families); Heymons, 1926a: 45 (revision); 1926b: 69 (general review); 1926c: 22 (dorsal organ); 1927: 22 (dorsal organ); 1928: 1 (general); 1930: 193 (Sunda Expedition); 1933 (in birds); 1935: 200 (diagnosis and classification); 1940a: 122 (Republic of the Congo); 1943: 3 (Republic of the Congo); Dallbert, 1928: 62 (Normandie); Sprehn, 1928a: 84 (tongue worms); 1928b: 853 (Arctic); Ginzburg & Koriazhnov, 1928: 58 (pentastomids); Dawydoff, 1928: 398 (embryology); Fischer, 1930: 705 (linguatulidans); Brues & Melander, 1932: 579 (general account); Chandler, 1936: 429 (general account); Heymons & Vitzhum, 1935a (monograph); 1939: 675 (in lacertilians); Korschelt & Heider, 1936: 565 (general); Cuénot, 1949: 61 (general account of pentastomids); Self, 1951a: 255 (relationships and bibliography); 1961: 748 (general account); 1969: 63 (relationships and bibliography); 1982a: 726 (classification of families); 1983: 478 (reproductive biology); 1990: 157 (development); Self & Kuntz, 1956: 33 (South Pacific: British Solomon Islands: Florida Island; from African reptiles and mammals); K.H. Rao & Jennings, 1959: 299 (alimentary system; in Indian water-snake, *Xenochrophis* [as *Natrix*] *piscator*); Doucet, 1961: 3; 1962: 115 (pentastomes); 1965: 1 (anatomy); 1966: 503 (anatomy and histology of pentastomes); Fain, 1961: 18 (classification and key to genera); Jacob, 1962: 213 (tongue worm, an interesting parasite); Osche, 1963: 573 (systematic position

and phylogeny); Nicoli, 1963: 483 (phylogeny and systematics); 1964: 622 (problems in general parasitology); Beklemishev, 1958: 56 (anatomy); 1964: 87 (anatomy); 1969: 157 (anatomy); Bernard, 1965: 39 (Tunis); Self & Kuntz, 1966a: 620 (review); Blazéjewski, 1965: 361 (systematic position, evidence against Pararthropoda); Nicoli & Nicoli, 1966: 255 (biology); Legendre, 1967: 337 (morphology); Kästner, 1968: 28 (general account of phylum); Haffner, 1971: 53 (tagmosis, metamery, classification, evolution, and systematic position); 1973: 241 (anatomy and evolution of extremities); 1974: 139 (parasitism); 1977: 353 (systematic position); Radchenko, 1971: 935 (new species); Chitwood & Lichtenfels, 1972: 407 (parasitic Metazoa in tissue sections); Nørrevang, 1972: 57 (oogenesis); 1983 (reproductive system); Wingstrand, 1972: 1 (spermatology and relationships); Riley, 1973a: 243 (glandular system); 1973b: 26 (phylogeny); 1974: 3 (ultrastructure of cuticle); 1978: 29 (host immune response); 1979: 20 (reproductive strategies); 1983: 59 (review of reproductive biology); 1986: 45 (biology and classification); 1988: 487 (reproductive biology); 1992a: 401 (reproductive biology); 1992b: 133 (immune response); 1993: 293 (reproductive biology); 1996: 1659 (pentastomids); Ranque, 1974: 22 (phylogenetic position); Banaja & Riley, 1976: 29 (tegumumental cuticle cells of osmoregulatory system); Banaja et al., 1977: 27 (osmoregulation system in pentastomids); Riley et al., 1978: 245 (phylogenetic relationships: a case for their inclusion in Crustacea); Karuppaswamy & Rajulu, 1978: 1 (phylogeny); Gyorkos & Kevan, 1979: 290 (Pentastomida); Rego et al., 1979: 1 (Brazil; list of holotypes, Oswaldo Cruz Institute); Riley & Ali, 1980: 24 (taxonomy); Pflugfelder, 1980: 95 (ontogenesis); Böckeler & Dreyer, 1982: 257 (functional morphology of parasite attachment); Olson & Cosgrove, 1982: 172 (overview of pentastomids from Mexico, Central America, and the West Indies); Moritz, 1982: 516 (Linguatulida as synonym); Zaman, 1983: 1 (scanning electron micrographs); Bosch, 1984: 409 (life cycles); Böckeler, 1984a: 333 (taxonomic position, divergent from base of Arthropoda); 1990: 103 (phylogeny and adaptations to parasitic life of host); Walldorf & Mehlhorn, 1984: 413 (fine structure); Bereiter-Hahn et al., 1984: 709 (biology of integument); Gilyarova & Pravdina, 1984: 123 (monograph); Storch, 1984: 709 (integument); 1993: 115 (microscopical anatomy); Sudhaus, 1985: 755 (systematics); Nieto Nafria & Mier Durante, 1985: 1 (systematics); Esslinger, 1985: 204 (arthropods as vectors); Barnes, 1987: 69 (number of species); Ambrose & Riley, 1988a: 381 (secretory process); 1988b: 721 (host-parasite interface); 1989: 699 (secretions of cuticle); Mehlhorn & Walldorf, 1988: 1 (evolutionary adaptations to parasitism); Mehlhorn et al., 1988: 161 (anatomy); Walldorf, 1988: 288 (parasitology); Haugerud, 1989: 126 (evolution); Andres, 1989: 9 (probable fossil ancestor); Abele et al., 1989: 685 (molecular evidence for inclusion in Crustacea); 1992: 373 (branchiuran crustaceans closely related to pentastomes; Maxillopoda not monophyletic); G. Thomas, 1991: 1 (intestine); C. Anderson, 1992: 40 (new classification); Martin & Laverack, 1992: 366 (embryonic dorsal organs appear in crustaceans, including pentastomids); Storch & Jamieson, 1992: 95 (further spermatological evidence for inclusion in Crustacea); Waloszek & Müller, 1993: 148 (marine Paleozoic fossils); Palmer, 1993: 214 (inclusion in Crustacea); Gould, 1995: 6 (tongue worms, velvet worms, and water bears); Malloch, 1995: 1334 (heteroxenous life-history); Boyko, 1996: 1 (catalogue of species from American Museum); Junker, 2002: 93 (cladistics of Sebekidae); Sharpilo et al., 1996: 3 (paratenic parasitism, evolutionary signal); Giribet et al., 1996: 76 (belongs to Hexapoda + Crustacea, but resolution far from clear); 2005: 307 (total evidence support for an *Argulus* relationship); 2007: 64 (DNA sequence data and

mitochondrial genes order corroborate the case of pentastomids as fish lice); Ikuta & Makioka, 1997: 29 (phylogenetic position of pentastomids; ovarian oogenesis similar with branchiuran crustaceans); 1999: 730 (ovarian structure similar to ostracodes, branchiurans and chelicerates); 2004: 72 (ovary and oogenesis compared with Ostracoda); Sergiev et al., 1998: 48 (pentastomids – a forgotten class of parasites); 2000: 53 (pentastomes in Russia); Cave et al., 1998: 22 (arguments against a relationship with Branchiura); Budd, 1998: 125 (possible stem group form from Upper Cambrian of Sweden); Min et al., 1998: 75 (molecular phylogeny of arthropods, pentastomids assumed to be primitive, but included in crustacean-insect lineage); Almeida & Christoffersen, 1999: 695 (cladistic analysis, phylogenetic systematization); Jamieson & Storch, 2000: 97 (reproductive biology); Martin & Davis, 2001: 24 (discussion of pentastomid affinities with Crustacea); Zrzavý, 2001: 81 (Ichthyostraca for Branchiura + Pentastomida); Maas & Waloszek, 2001: 451 (larval stages of stem lineage pentastomids from Upper Cambrian of Sweden); Tchesunov, 2002: 209 (phylogeny); Gorokhov, 2003: 33 (forgotten parasitic diseases); Waloszek, 2003: 71 (fossil parasitic larvae from Upper Cambrian of Sweden); Lavrov et al., 2004: 537 (mtDNA genes indicate unambiguously that Pentastomida are modified crustaceans, probably related to branchiurans); Almeida et al., 2005: 19 (diversity and abundance in a tropical arid region); Vitková et al., 2005: 145 (telomeric DNA repeats); Newmann, 2005: 1 (discussion of maxillopodan affinities: podocopine ostracods as sister-group to Branchiura-Pentastomida); Pouder et al., 2005: 1 (in freshwater fish); Waloszek & Maas, 2005: 515 (China: Chengjiang; fossil "head larvae" from Cambrian as evidence for euarthropod segmentation evolution); Lopes & Almeida, 2006: 96 (endoparasite diversity in arid tropical region); J.T. Lim & Hwang, 2006: 314 (mitochondrial genome evidence for monophyly of Oligostraca: Ostracoda + Branchiura + Pentastomida); Liu et al., 2006: 358 (Cambrian fossil, *Facivermis yunnanicus*, previously interpreted as related to lobopods, pentastomes, and lophophorates); Mallatt & Giribet, 2006: 772 (pentastomids as Pancrustacea, molecular evidence for Ostracoda + (Pentastomida + Branchiura)); Maas et al., 2007: 3385 (single gonopore as plesiomorphic for pentastomids); Poly, 2008: 209 (placed with either Branchiura or Ostracoda); Møller et al., 2008: 333 (sister-group to Branchiura confirmed with molecules); Almeida et al., 2008a: 87 (Mysopharyngea; phylogenetic position in Ecdysozoa); Møller, 2009: 44 (discussion of pentastomids as possible closest relative to Branchiura); Richter et al., 2009: 280 (pro Ichthyostraca); Edgecombe, 2010: 72 (total evidence cladistic analysis with fossil *Yicaris*, total evidence for sistergroup relationship *Raillietiella* – *Argulus*); Regier et al., 2010: 1079 (arthropod relationships based on nuclear protein-coding sequences; mystacocarids included in Oligostraca); Poore, 2012a: 214 (authorship used above to appear in corrigenda).

Class EUPENTASTOMIDA Waloszek, Repetski & Maas, 2006

Taxon Eupentastomida Waloszek et al., 2006: 163.

Order CEPHALOBAENIDA Heymons, 1935

Cephalobaenida Heymons, 1935: 203 (diagnosis); Heymons & Vitzhum, 1935a: 3 (diagnosis); Self, 1982a: 726 (for Cephalobaenidae and Reighardiidae); Storch et al.,

1990: 610 (comparison of male genital ultrastructure with Porocephalida); G. Thomas & Böckeler, 1992a: 587 (midgut epithelium); 1994: 420 (intestinal sphaerocrystals).

Cephalobaeniformis Motta, 1963a: 10 (for Cephalobaenidae, Reighardiidae, and Subtriquetridae).

Remarks: The traditional concept of the Cephalobaenida, to contain both Cephalobaeindae and Reighardiidae (Heymons, 1935; Self, 1982) results in a paraphyletic assemblage. The same is true of Cephalobaeniformis. Instead, we restrict Cephalobaenida to include only Cephalobaenidae.

CEPHALOBAENIDAE Heymons, 1922

Cephalobaenidae Heymons, 1922: 161; 1935: 203 (diagnosis); Heymons & Vitzhum, 1935a: 3 (diagnosis); Gretillat et al., 1962: 309 (key to genera); Motta & Gomes, 1968a: 9 (key to genera); Self, 1969: 63 (reprilian illnesses); Reichenbach-Klinke, 1977: 1 (diseases in reptiles); Rego, 1983a: 399 (revision); Richter-Okyere, 1993: 1 (experimental study); Poore, 2012a: 214 (discussion of resolution of priority of Cephalobaenidae over Raillietiellidae).

Cephalobaena Heymons, 1922

Cephalobaena Heymons, 1922: 159; 1935: 203 (diagnosis); Heymons & Vitzhum, 1935a: 103 (diagnosis); Rego, 1984a: 47 (diagnosis).

Type-species, by original designation: *Cephalobaena tetrapoda* Heymons, 1922.

Cephalobaena tetrapoda Heymons, 1922

Cephalobaena tetrapoda Heymons, 1922: 159, fig. 4 (types: Paraguay: Departamento de Cordillera: San Bernardino, in lungs of the pitviper, *Rhinocerophis* [as *Bothrops*] *alternatus*; syntypes in Museum für Naturkunde, Berlin); 1935: 204, fig. 115; Sambon, 1922b: 391, fig. 2 (Argentina; Uruguay; Paraguay; in snake, *Rhinocerophis* [as *Lachesis*] *alternatus*); Heymons & Vitzhum, 1935b: 158 (Argentina: Department Misiones: Loreto: near Santa Ana; in *Leptophis ahuetulla liocercus* [as *Leptophis liocercus*] and *Lachesis* sp.); 1936: 4, fig. 1 (type in Berliner Museum); Motta, 1963b: 7, fig. (Brazil; in snake, *Crotalus durissus terrificus* [as *Crotalus terrificus*], from Instituto Butantan, São Paulo, Brazil; female); Cavalieri, 1970: 291; Haffner & Rack, 1971: 505 (anatomy, development & phylogenetic position); Rego, 1983a: 400, figs 1-5 (*Cephalobaena recurvata* as new synonym); 1984a: 47, figs 1-2; Böckeler, 1986: 164 (Paraguay; central nervous system and body appendages); Böckeler & Böhme, 1987: 52 (Paraguay; in reptilian hosts); Böckeler & Storch, 1990: 270 (ultrastructure of reproductive system of males; in lungs of Paraguayan tree snake, *Philodryas baroni*; ultrastructure of male genital system); G. Thomas & Böckeler, 1992a: 587 (digestive system); Storch & Jamieson, 1992: 95 (sperm ultrastructure and evidence for relationship with Crustacea); Stendel-Seidel et al., 1999: 373 (ionical glands); Sielfeld, 2000: 1 (Chile; in lungs of serpents); Almeida et al., 2006a: 559 (Brazil: State Ceará: Mun. Crato: Floresta Nacional do Araripe, in respiratory tracts of colubrid snake, *Lygophis* [as *Liophis*] *lineatus*); 2007: 759 (Brazil: State of Ceará: Municipality of Crato, 7°14'S, 39°24'W, in snake *Philodryas nattereri*); 2008b: 193 (Brazil: State of Rio Grande do Norte: Municipality of

Serra Negra do Norte: Estação Ecológica do Seridó: 6°35'-40'S, 37°15-20'W, in two colubrid snakes, *Philodryas nattereri*, and *Oxybelis aeneus*); Röhlig et al., 2010: 137 (Argentina: Misiones Province: Loreto near Santa Ana, from Museum für Naturkunde, Berlin, in lungs of racer *Leptophis ahaetulla liocercus* [as *Leptophis liocercus*] and *Lachesis* sp.); Poore, 2012a: 215 (types: Paraguay, from the pitviper *Rhinocerophis* [as *Bothrops*] *alternatus*).

Raillietiella tetrapoda; Sambon, 1922b: 391; Brygoo, 1963: 198 (parasites of snakes, at least occasionally) (not *Raillietiella tetrapoda* (Gretillat, Brygoo & Domergue, 1962)).

Cephalobaena recurvocaudata Motta, 1963c: 13, figs (types from Instituto Butantan, São Paulo: Paraguay; in *Crotalus durissus terrificus* [as *Crotalus terrificus*]); Rego, 1983: 400 (synonymized with *C. tetrapoda*).

Raillietiella furcocercum; Motta, 1963d: 8, figs 1-11 (Brazil) (not *Raillietiella furcocercum* (Diesing, 1836)).

Distr.: South America. Primary hosts: snakes.

Bothropsiella Cavalieri, 1967, *genus inquirenda*

Bothropsiella Cavalieri, 1967: 68.

Type species: *Bothropsiella bicornuta* Cavalieri, 1967.

Bothropsiella bicornuta Cavalieri, 1967, *species inquirenda*

Bothropsiella bicornuta Cavalieri, 1967: 69, figs 1-10 (female holotype: Museo de Ciencias Naturales de La Plata, northeast Argentina; in lung of *Rhinocerophis alternatus* [as *Bothrops alternata*]); Rego, 1984a: 50 (as *species inquirenda*).

Distr.: South America. Primary host: snake.

Remarks: This genus and species name do not appear on Self's (1969) nor Poore's (2012a) lists nor on web-based catalogues. We follow Rego (1984a: 50) in considering them *taxa inquirenda*, because the original descriptions of these taxa (Cavalieri, 1967: 67) are unfortunately based on a single incomplete female specimen, in which part of the anterior region is missing, and what remains of this region is somewhat twisted and retracted.

Order RAILLIETIELLIDA Almeida & Christoffersen, 1999

Raillietiellida Almeida & Christoffersen, 1999: 702 (for Raillietiellidae).

RAILLIETIELLIDAE Sambon, 1922

Raillietieliidae Sambon, 1922a: 190; Almeida & Christoffersen, 1999: 702 (referred to new order Raillietiellida); Jeffery et al., 1985: 83 (cockroach as intermediate host of a house gecko raillietiellid); Poore, 2012a: 215 (priority of name).

Raillietiellinae Sambon, 1922b: 405 (as a subfamily of the Linguatulidae).

Raillietiella Sambon, in Vaney & Sambon, 1910

Raillietiella Sambon, in Vaney & Sambon, 1910: 140; Sambon, 1922a: 191; Hett, 1924a: 134; Heymons, 1926a: 45 (anatomy and embryology); 1932a: 429; 1935: 205 (diagnosis);

Heymons & Vitzhum, 1935a: 5 (*kochi*, *geckonis*, *orientalis*, *mediterranea*, and *furcocerca* groups); Gretillat et al., 1962: 310, figs 21-23 (larva); Fain, 1964: 1036; 1966b: 623 (evolutionary cycle); Deakins, 1973: 287 (encysted larval *Raillietiella* in adult female); Ali et al., 1981: 196 (diagnostic characters of blunt hooked taxa); 1985: 111 (review, with the recognition of six groups); Rego, 1983a: 410 (*Gretillatia* as new synonym); Mattei et al., 1985: 63 (Senegal; in ringed-walled gecko, *Tarentola annularis*); Simonsen & Sarda, 1985: 428 (Tanzania; in gecko, *Hemidactylus mabouia*); Bosch, 1986: 673; 1987 (biology); Böckeler, 1986: 164 (central nervous system and body appendages); Walldorf, 1987: 441 (in house gecko, *Hemidactylus brooksi*, imported from Togo); Storch & Jamieson, 1992: 95 (sperm, ultrastructural evidence for relationship with Crustacea).

Raillietiella (Heymonsia) Hett, 1934: 427 (the subgenus is a *nomen nudum*, erected without a nominated type-species, see Poore, 2012a: 215).

Heymonsia; Self, 1969: 78 (synonymized with *Raillietiella*).

Mahafaliella Gretilat, Brygoo & Domerge, 1962: 304 (type-species, by original designation: *Mahafaliella tetrapoda* Gretillat, Brygoo & Domerge, 1962; synonymized by Ali et al., 1985); Rego, 1984a: 47 (diagnosis).

Gretillatia Motta, 1965: 8 (type-species, by original designation: *Raillietiella ampanihyensis* Gretillat, Brygoo & Domergue, 1962; synonymized by Ali et al., 1985).

Travassostulida Motta & Gomes, 1968a: 7 (type, by monotypy: *Travassostulida freitasi*; synonymized by Ali et al., 1985).

Type-species, subsequent designation by Sambon, 1922: *Porocephalus boulengeri* Vaney & Sambon, 1910; Poore, 2012a: 215 (conflict over the type species resolved).

Remarks: Species of this genus are often not successfully identified to species level by pentastome workers. These references are provided below, in order to complement the information known for the taxon *Raillietiella*.

Unidentified species: *Pentastomum* sp.; Krefft, 1871: 214 (Australia; in gecko, *Diplodactylus vittatus*). *Raillietiella* sp.; Sambon, 1922b: 423 (in lizards, *Calotes versicolor*, and *Varanus exanthematicus* [as *Varanus exanthematicus exanthematicus*]); Larrousse, 1925: 101, figs (Tunisia; larval form, in *Amietophrynus* [as *Bufo*] *mauritanicus*); Fain, 1961: 48, figs (Central Africa); Gretillat et al., 1962: 310, figs 21-23 (Madagascar: Tsaramandroso: Ampijoroa; larvae in chameleon *Furcifer* [as *Chamaeleo*] *oustaleti*]); Cavalieri, 1967: 67 (Argentina; in snake, *Rhinocerophis alternatus* [as *Bothrops alternata*]); Stendel-Seidel & Gabrielle, 1977: 157 (ontogeny); Ali et al., 1982a: 174 (Nigeria: Nsukka; in gecko *Hemidactylus angulatus* [as *Hemidactylus brooksi angulatus*]); 1984a: 148 (Nigeria: Ondo State; in *Hemidactylus angulatus* [as *Hemidactylus brooksi angulatus*]; Puerto Rico: Rio das Pedras; in *Hemidactylus angulatus* [as *Hemidactylus brooksi angulatus*]; and Trinidad; in *Liophis reginae reginae* [as *Leimadophis reginae*] and *Hemidactylus mabouia*); 1984b: 92 (Seattle zoo; in *Bogertophis* [as *Elaphe*] *subocularis*); Riley & Spratt, 1987: 139 (Australia; in snakes, *Pseudechis australis* and *Pseudonaja textilis textilis* [as *Pseudonaja textilis*]); Storch & Jamieson, 1992: 98 (in *Vipera palaestinae*); Powell et al., 1993: 51 (Hispaniola; in gecko, *Hemidactylus* sp.); G. Thomas, 1995 (ontogeny); Stendel-Seidel, 1995 (ontogeny); G. Thomas & Steider-Seidel, 1996: 459 (digestive system); Jeffery et al., 1997: 145 (Malaysia; in *Gekko smithii*); Stender-Seidel & G. Thomas, 1997a: 157 (dorsal organ); Stender-Seidel et al., 1997a: 269 (dorsal organ, integumentary gland); 1997b: 264 (accessory glands); 1999: 373 (ionic glands); 2000: 385 (cephalic glands: suboral and frontal gland); G. Thomas et al., 1999a: 280 (life cycle, comparison with *R. sternae*); 1999b: 274 (excretory function of midgut); 1999c: 312 (midgut

nutrition and digestion); Aisien et al., 2001: 299 (south-western Nigeria; in the lungs of mangrove toad, *Amietophrynus* [as *Bufo*] *regularis*); Vrcibadick et al., 2002: 355 (southern Brazil: Praia das Neves and Grussai; in skinks, *Brasiliscincus* [as *Mabuya*] *agilis*, and *Psychosaura* [as *Mabuya*] *macrorhyncha*); Giribet et al., 2005: 326 (18S and 28S rRNA sequenced, accessed from GenBank, for total evidence cladistic analysis); Fredes & Raffo, 2005: 189 (Chile; in lungs of long tailed snake, *Philodryas chamissonis*); Barton, 2007: 254 (Australia: Northern Territory; in the native gecko, *Gehyra australis*); Almeida et al., 2007: 759 (Brazil: Ceará State: Crato; in caatinga coral snake, *Micrurus ibiboboca*); Adeoye & Ogunbanwo, 2007: 417 (Nigeria: Lagos: Oyingbo; infection of agamid rainbow lizard, *Agama agama*); Goldberg et al., 2009a: 509 (Papua New Guinea; nymph in tree-frog anuran, *Litoria* [as *Litoria* and *Nyctimystes*]); Röhlig et al., 2010: 139 (non-type material from Algeria deposited in Museum für Naturkunde, Berlin). *Raillietiella* sp. a and b Riley & Spratt, 1987: 139, fig. 1. *Raillietiella* n. sp.; McAllister et al., 1992: 492 (Madagascar: Tuléar: Fort Dauphin; in Malagasy chamaleon, *Furcifer* [as *Chamaeleo*] *verrucosus*). *Raillietiella* spp.; Riley et al., 1991: 47 (Puerto Rico; in geckos, *Hemidactylus mabouia*, *Hemidactylus angulatus* [as *H. brooki angulatus*], and *Hemidactylus angulatus* [as *H. brooksi haitianus*]); 2008: 290 (ova in Colombian toad, *Rhaebo* [as *Bufo*] *bombergi*); Reed, 2008: 1 (Australia; in Squamata); Brito et al., 2012: 394 (Brazil: State of Mato Grosso do Sul: Corumbá, in lung of snake *Liophis poecilogyrus* and a second species in lung of pitviper *Bothropoides mattogrossensis*).

Raillietiella aegypti Ali, Riley & Self, 1982

Raillietiella aegypti Ali et al., 1982a: 171, figs 2c, e, 3 (types: northern Egypt; in agamid reptilians, *Laudakia stellio stellio* [as *Agama stellio*], *Trapelus* [as *Agama*] *mutabilis*], *Uromastyx aegyptia aegyptia* [as *Uromastyx aegyptia*], and scincid reptilians, *Scincus scincus* [as *officinalis*], *Chalcides sepsoides*, and *Eumeces shneideri schneideri* [as *Eumeces shneiderii*]); Ali & Riley, 1985: 415 fig. 2a (cephalic sense organs, in geckos, *Laudakia stellio stellio* [as *Agama stellio*], and *Scincus scincus* [as *officinalis*]); Riehl & Walldorf, 1985a: 748 (mitochondria); 1985b: 125 (oogenesis); Walldorf & Riehl, 1985: 113 (oogenesis, ovary, ultrastructure).

Distr.: Egypt. Primary host: lizards.

Raillietiella affinis Bovien, 1927

Raillietiella affinis Bovien, 1927a: 5, figs 4-6 (types in Natural History Museum, London, and syntype in Museum für Naturkunde, Berlin: Indonesia: Java: Djombang: Pasoeroean; in lung of *Gekko gecko gecko* [as *Gecko verticillatus*]); Hett, 1934: 427 (this species considered a junior synonym of *Raillietiella indica* Gedoelst, 1921, in which case an amphibian and a saurian are also hosts); Heymons, 1935: 206, pl. 34, fig. 22; Heymons & Vitzhum, 1935a: 7, fig. 3 (*geckonis* group; distribution); Brygoo, 1963: 197 (Egypt: in starred lizard, *Laudakia stellio stellio* [as *Agama stellio*], and gold skink, *Eumeces shneideri scneideri* [as *Eumeces schneiderii*]); Self & Kuntz, 1957: 196 (Nile Delta; British Solomon Islands: Florida Island, in sad gecko, *Lepidodactylus lugubris*; Sudan; in Egyptian sand skinks, *Scincus scincus* [as *officinalis*]; and *Chalcides sepsoides*); Nicoli, 1963: 494 (in *Gehyra mutilata* [as *Peropus mutilatus*]); Haffner, 1964: 51 (India; in *Hemidactylus leschenaultii*; morphology of parapodial projection); Awachie, 1974: 1024 (Africa: Nigeria; pathogenic ef-

fects on house wall gecko, *Hemidactylus angulatus* [as *Hemidactylus brooksi angulatus*], and aetiology of human porocephalosis); Ali et al., 1982a: 171, figs 1b, c, 2a, b, d (Egypt; in *Gekko gecko gecko* [as *Gecko gecko*]; description, reassessment of taxonomic status); 1985: 116 (in *Trapelus* [as *Agama*] *mutabilis*], and *Gekko gecko gecko* [as *Gekko gecko*]); Eldredge, 2000: 5 (Hawaii; in cane toad, *Rhinella* [as *Bufo*] *marinus*); Matsuo et al., 2001: 35 (Japan; in reptile, *Gekko gecko gecko* [as *Gekko gecko*]).

Raillietiella geckonis; Sambon, 1928: 67 (not *Raillietiella geckonis* (Diesing, 1850).

Distr.: Africa, Indonesia, and Hawaii. Primary hosts: lizards and man. Intermediate host: marine toad.

Raillietiella agcoi Tubangui & Masiluñgan, 1936

Raillietiella agcoi Tubangui & Masiluñgan, 1936: 400, fig. (types: Philippines: Nueva Ecija: Cabanatuan, in cobra *Naja philippinensis* [as *Naja naja philippinensis*]); Brygoo, 1963: 198 (a parasite of snakes, at least occasionally); Ali et al., 1982c: 292 (redescription; China: Taiwan; Philippine Islands); 1985: 119 (in *Naja naja*); Ali & Riley, 1985: 415, fig. 3c (cephalic sense organs, in *Naja philippinensis* [as *Naja naja philippinensis*]).

Distr.: Philippines. Primary host: cobra.

Raillietiella ampanihyensis Gretillat, Brygoo & Domergue, 1962

Raillietiella ampanihyensis Gretillat et al., 1962: 296, figs 2-11 (types: Madagascar: Tongobory, in air sacs of cat-eyed snake *Madagascarophis colubrinus colubrinus* [as *Madagascarophis colubrina*]; Vohitsara, in lungs of hognose snake *Leioheterodon madagascariensis*); Brygoo, 1963: 196 (Madagascar; parasite of snakes, at least occasionally); Ali et al., 1985: 121.

Gretillatia ampanihyensis; Motta, 1965: 8 (type species of new genus).

Distr.: Madagascar. Primary hosts: snakes.

Raillietiella amphiboluri Mahon, 1954

Raillietiella amphiboluri Mahon, 1954: 509, figs 1-6 (types: Australia, type-specimens from London Zoo, in lungs of the Australian bearded dragon *Pogona barbata* [as *Amphibolurus barbatus*]); Ali et al., 1985: 113 (Australia: New South Wales: Sydney: Tarongsa zoo); Riley et al., 1985: 42; Bosch, 1986: 673 (in insect, the cochroach, *Periplaneta americana* and in reptile, *Pogona vitticeps* [as *Amphibolurus vitticeps*]); Riley, 1992a: 402 (sex differences).

Distr.: Australia. Primary host: bearded dragon.

Raillietiella belohaensis McAllister, Riley, Freed & Freed, 1993

Raillietiella belohaensis McAllister et al., 1993: 36, fig. 1 (types: Madagascar: Beloha, in lungs of big-eyed snake, *Mimophis mahfalensis*).

Distr.: Madagascar. Primary host: snake.

Raillietiella bicaudata Heymons & Vitzhum, 1935

Raillietiella bicaudata Heymons & Vitzhum, 1935b: 157, fig. 122 (types from Berlin Aquarium, syntype from Museum für Naturkunde, Berlin: North America: south of

New York; in *Drymarchon couperi* [as *Elaphe corais couperi*], and *Lampropeltis* [as *Ophibolus*] *getula*); 1935a: 21, fig. 15 (*furcocerca* group); Heymons, 1935: 213, fig. 122; Brygoo, 1963: 198 (a parasite of snakes, at least occasionally); Ali et al., 1984b: 90, fig. 1b (USA: New York, in snake, *Drymarchon couperi* [as *Drymarchon corais couperi*]); 1985: 119 (in *Pituophis melanoleucus melanoleucus* [as *Pituophis melanoleucus*], *Lampropeltis getula* [*as getulus*], and *Coluber constrictor constrictor* [as *Coluber constrictor*]).

Distr.: North America. Primary hosts: snakes.

Raillietiella boulengeri (Vaney & Sambon, 1910)

Porocephalus boulengeri Vaney & Sambon, 1910: 132, figs (types from Muséum National d'Histoire Naturelle, Paris: Gabon; in peritoneal cavity of snake *Bitis gabonica* and from London Zoo: Ethiopia, in trachaea of common puff adder *Bitis arietans*); Hett, 1915a: 115, figs (England: London gardens, in snakes, *Bitis nasicornis*, *Hemorrhois ravergieri ravergieri* [as *Coluber ravergieri*], *Psammophis sibilans*, *Hemachatus haemachatus* [as *Sepedon haemachates*], from Museum University of Oxford); Röhlig et al., 2010: 137, fig. 4a (non-type material deposited in Museum für Naturkunde, Berlin).

Raillietiella boulengeri; Vaney, 1910: 140 (placed species in *Raillietiella* as type species); Sambon, 1922a: 191, figs; Southwell, 1924: 515 (in snake, *Causus rhombeatus*); Hett, 1924a: 134, fig. 5 (England: London zoo; in elaphid snake, *Hemachatus haemachatus*); Heymons, 1935: 210, fig. 119; 1940c: 89 (Sudan; in colubrid, *Psammophis sibilans*); Heymons & Vitzhum, 1935a: 13, fig. 11 (*orientalis* group; distribution; in snake, *Naja nigricollis*); Fain, 1961: 39, figs (Congo; in colubrids, *Boaedon lineatus* [as *lineatus lineatus*], *Boaedon olivaceus*, *Crotaphopeltis hotamboeia* [as *Crotaphopeltis hotamboeia hotamboeia*], *Psammophis* [as *Dromophis*] *lineatus*, *Psammophis sibilans*, *Psammophylax rhombeatus* [also as *Psammophylax tritaeniatus rhombeatus*], *Psammophylax tritaeniatus tritaeniatus* [as *Psammophylax tritaeniatus*], *Psammophylax variabilis variabilis* [as *Psammophylax tritaeniatus variabilis*], *Thelotornis kirtlandi*, and *Thrasops jacksonii* [as *Thrasops jacksoni jacksoni*], in elaphids, *Dendroaspis jamesoni jamesoni* [as *Dendroaspis jamesoni*], and *Naja nigricollis*, and in boid, *Python regius*); Nicole, 1963: 483 (in elaphid, *Hemachatus haemachatus* [as *Sepedon haemachates*]; larvae in *Gonionotophis savorgnani* [as *Mehelya lamani*]); Nicole & Golvan, 1963: 141 (Angola; in viperid, *Bitis arietans*); Brygoo, 1963: 198 (Ethiopian region: Sudan; parasites snakes, at least occasionally; from Sammlungen der Institut und Veterinarschen-Medicinz Parasitologie und Zoologie, Universität Berlin, in *Hemorrhois ravergieri ravergieri* [as *Coluber ravergieri*]); Doucet, 1965: 1 (in colubrids, *Bothrophthalmus lineatus*, and *Psammophis phillipsi* [as *sibilans phillipsi*]); Legendre, 1967: 338, figs 1-3 (cerebral ganglions, pharyngeal pump, and cardiac valve); Awachie, 1974: 1024 (Nigeria, in colubrids *Lycophidion capense capense* [as *Lycophidion capense*] and *Gonionotophis poensis* [as *Mehelya poensis*]; Kenya; in viperid, *Bitis arietans*, and colubrids, *Lycophidion* [as *Lycophidium*] *capense capense*, and *Gonionotophis poensis* [as *Mehelya poensis*]); Haffner, 1973: 241 (Liberia; in elaphid, *Naja melanoleuca*, and viperids, *Bitis nasicornis*, *Bitis gabonica*, and *Atheris chlorechis*); Ali et al., 1982b: 292, pl. 5 figs 1a-c, 3, 4a (Ethiopia; in *Bitis arietans*, *Hemorrhois ravergieri ravergieri* [as *Coluber ravergieri*], *Naja melanoleuca*, *Naja nigricollis* [as *Naja nigricollis nigricollis*], *Atheris chlorechis* [as *chloroechis*], and *Python regius*); 1985: 119 (revision; in *Rhamphiophis* sp.); Ali & Riley, 1985: 415 (cephalic sense organs, in *Dendroaspis jamesoni jamesoni* [as *Dendraspis*

jamesoni], and *Rhamphiophis* sp.); Riley, 1992a: 402 (sex differences); G. Thomas & Böckeler, 1992a: 587 (digestive system).

Distr.: Africa. Primary host: snakes. Intermediate host: snake.

Remarks: The acceptance of the subspecies that follows requires the introduction of the nominal subspecies *Raillietiella boulengeri boulengeri* (Vaney & Sambon, 1910), a combination that never appears in the literature as such.

Raillietiella boulengeri spiralis Heymons, 1940

Raillietiella boulengeri forma *spiralis* Heymons, 1940b: 90, fig. (type: Sudan: Sobat; in snake); Brygoo, 1963: 199 (Sudan; in snake, *Psammophis sibilans*).

Distr.: Sudan. Primary host: snake.

Remarks: This available subspecies name is not listed in Poore (2012a). *Raillietiella boulengeri* forma *spiralis* Heymons, 1940 is therein considered a potential junior homonym of *Raillietiella spiralis* Hett, 1924 at the species level (Poore, 2012a: 216).

Raillietiella bufonis Ali, Riley & Self, 1982

Raillietiella bufonis Ali et al., 1982c: 282, fig. 1 (types: Puerto Rico, from the Puerto Rico crested toad *Peltophryne* [as *Bufo*] *lemur*); Krishnasamy et al., 1995: 31, figs 3i-l.

Distr.: Puerto Rico. Primary host: toad.

Raillietiella cartagenensis Ali, Riley & Self, 1985

Raillietiella cartagenensis Ali et al., 1985: 113, figs 1c, d (types: Colombia; in gecko *Hemidactylus* sp., and skink *Gonatodes* sp.); Anjos et al., 2007: 628 (Brazil: Ceará: Barbalha Municipality; in lungs of *Hemidactylus mabouia*).

Distr.: Colombia. Primary host: lizards.

Raillietiella chamaeleonis Gretillat & Brygoo, 1959

Raillietiella chamaeleonis Gretillat & Brygoo, 1959: 112, figs 1-12 (types: Madagascar: Maintirano; in pulmonary sacs of *Furcifer* [as *Chamaeleo*] *oustaleti*, and *Furcifer* [as *Chamaeleo*] *verrucosus*); Gretillat et al., 1962: 295 (Madagascar; in colubrid snake, *Leioheterodon modestus*); Brygoo, 1963: 199, figs (Madagascar: Majunga; Ejeda: Subprefecture of Bétioky; in *Leioheterodon modestus*); Ali et al., 1985: 116.

Gretillatia chamaeleonis; Motta, 1965: 8 (new combination).

Distr.: Madagascar. Primary hosts: reptiles.

Raillietiella colubrilineati (Leuckart, 1860)

Pentastomum taenioides; Schübart, 1853: 117 (larva in snake *Lygophis* [as *Coluber*] *lineatus*).

Pent[astomum] colubri lineati Leuckart, 1860a: 157 (type: description and figures of primary synonym by Schubärt, 1853: 117, locality not stated, from *Lygophis* [as *Coluber*] *lineatus*).

Pentastomum colubri Diesing, 1863: 338 (type: description and figures of junior synonym by Schübart, 1853, as above).

Pentastoma colubri lineati; Sambon, 1922b: 409.

Pentastomum colubri lineata; Rego, 1984a: 53 (in *Lygophis* [as *Coluber*] *lineatus;* listed as a synonym of *Raillietiella orientalis*).

Pentastomum colubrilineati; Poore, 2012a: 216 (discussion of name formation and potential synonyms).

Distr.: Distribution uncertain; the host, now *Lyophis lineatus*, is known from northern and central-western South America (Poore, 2012a).

Raillietiella congolensis Fain, 1961

Raillietiella congolensis Fain, 1961: 48, figs (types: 'Belgian Congo': Lukulu; in vine snake, *Thelotornis capensis oatesi*); Ali et al., 1985: 121 (Africa); Poore, 2012a: 216 (year of publication confirmed as 1961).

Distr.: Democratic Republic of the Congo. Primary host: snake.

Raillietiella crotali Ali, Riley & Self, 1984

Raillietiella crotali Ali et al., 1984b: 92, figs 1c, 2 (types: Mexico: Gulf of California: Pond Island; in rattlesnake *Crotalus ruber*); 1985: 119.

Distr.: Mexican Pacific. Primary host: snake.

Raillietiella freitasi (Motta & Gomes, 1968)

Travassostulida freitasi Motta & Gomes, 1968a: 7, figs 1-9 (types of primary synonym: Brazil: Fernando de Noronha Island, in Noronha skink, *Trachylepis atlantica* [as *Mabuya punctata*]).

Travassostulida acutiacanthus Gomes & Motta, 1968: 57, figs 1-9 (types of junior synonym: Brazil: Fernando de Noronha Island and State of Bahia; in toad *Rhinella schneideri* [as *Bufo paracnemis*], and lizards, *Trachylepis atlantica* and *Tropidurus torquatus*); Vicente, 1977: 71.

Cephalobaena freitasi; Rego, 1983a: 404, figs 6-8 (new combination, transferred from Travassostulida); 1984a: 47.

Raillietiella freitasi acutiacanthus Rego, 1983a: 404 (new combination, subspecies rank).

Raillietiella freitasi; Ali et al., 1984a: 154 (new combination, transferred from Travassostulida; Brazil: Ceará State: Barbalha Municipality; in *Trachylepis atlantica* [as *atlanticus*]); 1985: 117; Brito et al., 2012: 394 (Brazil: Fernando de Noronha Islands; in lung of lizard *Trachylepis atlantica*).

Distr.: South America. Primary hosts: lizards, amphisbaenids, and frogs.

Raillietiella furcocercum (Diesing, 1836)

Pentastoma furcocercum Diesing, 1836: 26, pl. 4 figs 24-32 (*partim*; types: Brazil: Cuiabá; in lung of snakes, *Boa constrictor*, *Coluber constrictor constrictor* [as *Coluber constrictor*],

Mastigodryas bifossatus bifossatus [as *Drymobius bifossatus*], and *Spilotes* sp.; juveniles in snake, *Mastigodryas bifossatus bifossatus* [as *Coluber lichtensteini*]).

Pentastomum bifurcatum Diesing, 1850: 609 (*partim*; in snake, *Boa constrictor*; juvenile in snake, *Coluber constrictor flaviventris* [as *Zamenis flaviventris*]; unnecessary replacement name).

Porocephalus bifurcatus; Shipley, 1898: 62, fig. 8 (in *Mastigodryas bifossatus bifossatus* [as *Drymobius bifossatus*], *Coluber constrictor constrictor* [as *Zamenis constrictor*], *Boa constrictor*, and *Amphisbaena alba*); Faria & Travassos, 1913a: 127 (Brazil: São Paulo: Itapurá); Hett, 1915a: 119, fig. 4a (London zoo; in snakes, *Boa constrictor imperator* [as *Boa imperator*], and *Pituophis melanoleucus melanoleucus* [as *Coluber melanoleucus*]).

Raillietiella furcocerca; Sambon, 1910a: 134; 1922: 191; Giglioli, 1923: 15 (redescribed; in freshwater specimens of *Amphisbaena*); Hett, 1924a: 135, fig. 6 (England: London; in lung of snakes, *Spilotes* sp., *Pituophis melanoleucus melanoleucus* [as *Pituophis melanoleucus* and *Elaphe melanoleucus*]); Heymons, 1935: 214, fig. 121; Heymons & Vitzhum, 1935a: 17, figs 13-14 (*furcocerca* group; distribution: South America: Paraguay; in *Liophis miliaris* [as *Rhadineae fusca*], and *Pseustes* [as *Phrynonax*] *sulphureus*; Australia; in lung of snakes *Pseustes* [as *Phrynonax*] *sulphureus*, from Natteresche Sammlung im Wiener Museum, *Lachesis* sp., from Berliner Museum, and *Liophis miliaris* [as *Rhadinaea fusca*], from Berliner Museum); Motta, 1963d: 8, fig.; Brygoo, 1963: 197 (South America; in *Amphisbaena alba* [as *flavescens*]; parasites of snakes at least occasionally); Esslinger, 1968: 411, figs 1-5 (Colombia: Meta: Barbascal; egg and larva in snake, *Clelia clelia*); Klauber, 1972 (Gulf of California: Tortuga Island; in strictly Nearctic *Crotalus atrox* [as *tortugensis*]); Rego, 1983a: 408 (Brazil; in snakes, *Drymarchon corais corais* [as *Drymarchon corais*], *Crotalus durissus terrificus* [as *Crotalus terrificus*]; syn. n.); 1984a: 47, figs 2-3 (in lungs of snakes, *Coluber constrictor flaviventris* [as *Coluber flaviventris*], *Spilotes* sp., *Drymarchon corais corais*); Ali et al., 1984b: 89 (Colombia: Gorgona Island; in *Mastigodryas boddaerti boddaerti* [= *Mastigodryas boddaerti*]; Paraguay; Mexico; in snake, *Drymarchon corais corais* [as *Drymarchon corais*]); 1985: 119 (in *Bothrops atrox, Crotalus atrox* [as *tortugensis*], *Mastigodryas boddaerti boddaerti* [= *Mastigodryas boddaerti*], *Conophis lineatus*, *Liophis miliaris, Mastigodryas bifossatus bifossatus* [as *Mastigodryas bifossatus*], and *Boa constrictor imperator*); Selcer, 1987: 4036 (in Mediterranean gecko, *Hemidactylus turcicus turcicus* [as *Hemidactylus turcicus*]); Böckeler & Böhme, 1987: 52 (Paraguay; in serpents); Almeida & Christoffersen, 2002: 201; Almeida et al., 2007: 759 (Brazil: Ceará State: Crato Municipality: 7°14'S 39°24'W, in snake, *Philodryas nattereri*); 2008c: 193 (Brazil: Rio Grande do Norte State: Serra Negra do Norte Municipality; Estação Ecológica do Seridó; 6°35-40'S, 37°15-20'W, in colubrid snakes, *Philodryas nattereri*, and *Oxybelis aeneus*); Röhlig et al., 2010: 139 (non-type material from San Bernardino, Uruguay, deposited in Museum für Naturkunde, Berlin); Brito et al., 2012: 394 (Brazil: São Paulo: Pirambóia; in stomach of snakes *Thamnodynastes chaquensis* and *Crotalus durissus durissus* [as *Crotalus durissus*]).

Pentastoma furcocercum; Dujardin, 1845: 308 (Brazil; in lungs of *Amphisbaena alba* [as *flavescens*], and mesenteries of *Mastigodryas bifossatus bifossatus* [as *Coluber lichtensteinii*]); Gedoelst, 1921: 26; Rego, 1983a: 408 (Brazil: São Paulo: Instituto Butantan; Mato Grosso: Salorta and Bodoquena; Pará: Taperinha).

Not *Raillietiella furcocerca*; Giglioli, 1923: 15 (redescription; p.p. = *Raillietiella gigliolii*); Sambon, 1922 (p.p. = *Cephalobaena gigliolii*).

Not *Raillietiella furcocerca*; Motta, 1963d: 8, figs 1-11 (Brazil; = *Cephalobaena tetrapoda*).

Raillietiella gomesi Motta, 1963e: 9, figs 1-2 (types from Instituto Butantan, São Paulo: Brazil: São Paulo: egg and larva in lung sac of *Xenodon merremii*) (synonymized by Rego, 1983).

Raillietiella aff. *furcocerca;* E.J.R. Dias et al., 2005: 133 (Brazil: Bahia State; in whiptail lizards, *Cnemidophorus abaetensis*, and *Cnemidophorus ocellifer*).

Raillietiella furcocercum; Poore, 2012a: 216 (the name appears to be a neuter noun in apposition to *Pentastoma*, not requiring change of its ending).

Distr.: South America and Mexican Pacific. Primary hosts: snakes and lizards.

Remarks: The record from Australia is not listed by Riley et al. (1985) or Poore & Spratt (2011), probably representing a misidentification.

Raillietiella geckonis (Diesing, 1850), *species dubiae*

Pentastome du Gecko de Siam"; Dujardin, 1845: 309 (type: record from Thailand; in lung of gecko of Siam, possibly *Gekko gecko gecko* [as *Gecko verticillatus*], according to Hett, 1924: 137).

Pentastomum geckonis Diesing, 1850: 617 (type: bibliographic reference to Dujardin's record [1845: 309] of specimens from Thailand, from 'gecko of Siam').

Porocephalus geckonis; Shipley, 1898: 67 (Siam; in lung of *Gekko* sp.).

Raillietiella geckonis; Sambon, 1910a: 134; 1922: 191; Gedoelst, 1921: 26; Hett, 1924a: 137 (England: London, in lungs of gecko, *Hemidactylus flaviviridis*); 1934: 430; Heymons, 1935: 205; 1939: 676, fig. 1 (India; in *Calotes versicolor*); Heymons & Vitzhum, 1935a: 7 (*geckonis* group; distribution: South-West Asia); Brygoo, 1963: 197 (India; at least occasionally, parasites of snakes); Ali et al., 1982a: 178 (Egypt; in lizards; reassessment of taxonomic status); Poore, 2012a: 217 (doubtful name attributable to any known species, but a potential senior synonym of several species from southeast Asia).

Not *Raillietiella geckonis*; Sambon, 1928: 67 (= *Raillietiella affinis*).

Distr.: South Asia and Africa. Primary hosts: snakes and lizards.

Remarks: Original description inadequate, host uncertain (Wikipedia, 2012).

Raillietiella gehyrae Bovien, 1927

Raillietiella gehyrae Bovien, 1927a: 7, fig. 7 (types: Indonesia: Bandung; Java: Djombang; in gecko, *Gehyra mutilata*); 1927b: 289 (Indonesia: Bandung; Java: Djombang; in hemidactylid, *Gehyra mutilata)*; Heymons, 1935: 206; Heymons & Vitzhum, 1935a: 9 (*geckoni* group); Self & Kunz, 1957: 194 (Egypt: Beheira Province: Ramleh; in *Laudakia stellio stellio* [as *Agama stellio*]; very difficult to separate *R. gehyrae* from *R. affinis*); Brygoo, 1963: 197; Ramachandran, 1977: 84 (India: Kerala; in *Calotes versicolor*, *Gekko* sp., and *Eutropis* [as *Mabuya*] *carinata*); Hirji, 1980b: 99 (in lungs of *Trachylepis striata striata* [as *Mabuya striata*]; evidence for direct life cycle); Ali et al., 1981: 199, figs 4, 9 (Indonesia: Java: Bandung; in *Gehyra mutilata*; emended diagnosis; Egypt, in *Laudakia stellio stellio* [as *Agama stellio*]); 1985: 117; Ali & Riley, 1983: 150, figs 1, 2, pl. 1, 2 (Malaysia: Kuala Lumpur and Kutching; Indonesia: Java: Bogor; in common house-gecko, *Hemidactylus frenatus*, four-clawed gecko *Gehyra mutilata*, flat-tailed gecko, *Hemidactylus* [as *Cosymbotus*] *platyurus*, and cockroach nymphs in intermediate host, *Blaberus discoidalis*); Dutta &

Manna, 1992: 99 (India: West Bengal; in lungs of reptile, *Calotes versicolor*); 1995: 79; Sathyanarayana & George, 1994: 71 (India: Tamil Nadu; rates of infection in reptilian host, *Calotes versicolor*); Matsuo & Oku, 2002: 53 (Indonesia: Lampung; in lungs of house geckos).

Raillietiella gephyrae Bovien, 1927a: 1 (incorrect original spelling; in *Fejervarya* [as *Rana*] *cancrivora*).

Not *Raillietiella gephyrae*; Pence & Canaris, 1973: 1 (= *Raillietiella mabuiae* Heymons, 1982, reassigned by Ali et al., 1981).

Distr.: Indonesia. Primary hosts: lizards. Intermediate host: cockroach.

Raillietiella gigliolii Hett, 1924

Pentastoma furcocercum; Diesing, 1836 (*partim*); Hett, 1924a: 107 (types from London Zoo: South America, in lizard worm, *Amphisbaena alba* [as *flavescens*]).

Pentastomum bifurcatum; Diesing, 1850 (*partim*) (p.p. = *Raillietiella furcocercum*).

Raillietiella furcocerca; Sambon, 1922 (*partim*); Giglioli, 1923: 15 (South America; in *Amphisbaena alba*).

Raillietiella gigliolii Hett, 1924a: 137; Heymons, 1935: 214; Heymons & Vitzhum, 1935a: 20, fig. 15 (*furcocerca* group); Brygoo, 1963: 199; Rego, 1983a: 406 (referred to *Cephalobaena*); 1984a: 47 (in lungs of amphisbaenids, *Amphisbaena alba* and *Amphisbaena* sp.); Ali et al., 1984b: 93, fig. 1d (Trinidad, from *Amphisbaena alba)*; Winch & Riley, 1985: 471 (Trinidad; in reptile host, *Amphisbaena alba*, orthopteran host, *Periplaneta americana*, and coleopteran host, *Microctecnochira* [as *Coelosis*] *bilobata*; life cycle, experimental study); Almeida et al., 2006b: 1137 (Brazil: Ceará State: Crato Municipality: Floresta Nacional do Araripe: 7°16'S 39°26'W; in *Amphisbaena alba*); 2009a: 1183 (Brazil: Ceará State: Crato and Cruz do Espírito Santo Municipalities: Floresta Nacional do Araripe; in *Amphisbaena vermicularis*).

Cephalobaena giglioli; Rego, 1983a: 406, figs 13-14 (Brazil; in amphisbaenid *Amphisbaena alba*; new combination, transferred from *Raillietiella*).

Distr.: South America. Primary hosts: worm lizards. Intermediate hosts: cockroach and beetle.

Raillietiella gowrii Rajalu & Rajendran, 1970

Raillietiella gowrii Rajalu & Rajendran, 1970: 130 (types: India, from the Asiatic watersnake, *Xenochrophis piscator*); Karuppaswamy, 1977: 735 (ß-chitin in cuticle); Gowri et al., 1982: 117 (neurosecretion); Ali et al., 1985: 121 (India; in *Xenochrophis piscator;* a potential junior synonym of *R. orientalis* Hett, 1915); Cave et al., 1998: 19.

Distr.: India. Primary host: snake.

Raillietiella hebitihamata Self & Kuntz, 1960

Raillietiella hebitihamata Self & Kunz, 1961: 885, figs 1-4 (types: Taiwan: Formosa: Lan Yü Island; in Asian house gecko *Hemidactylus frenatus*; other reptile hosts: *Japalura swinhornis, Mabuya longicaudata, Sphenomorphus indicus*, and *Gekko monarchus*); Self & Garcia-Diaz, 1961: 912 (synonymyzed with *R. hemidactyli*); Poore, 2012a: 217 (status of species, *R. frenata* and *R. indica* probable synonyms).

Raillietiella hemidactyli; Rajamanickam & Lavoipierre, 1965: 72 (larvae in cockroach, *Periplaneta americana*); Lavoipierre & Lavoirpierre, 1966: 845; Lavoipierre & Rajamanickam, 1973: 301 (non Hett, 1934).

Raillietiella frenatus Ali et al., 1981: 199, pl. 4, figs 1, 2, 5 (types: Malaysia: Sarawak; Kuching; Taiwan: Lan Yü; South Vietnam; Thailand; in Asian house gecko *Hemidactylus frenatus*); 1985: 117; Ali & Riley, 1983: 147 (in geckos; insects as intermediate hosts); 1985: 413, fig. 3a (Malaysia: Kuala Lumpur; Kutching; cephalic sense organs; Indonesia: Java: Bogor; cephalic sense organs, in house geckos, *Hemidactylus frenatus*, and in flat tailed gecko, *Hemidactylus* [as *Cosymbotus*] *platyurus*); Selcer, 1987: 4036 (USA: Texas; in Mediterranean gecko, *Hemidactylus turcicus turcicus* [as *Hemicactylus turcicus*]); Pence & Selcer, 1988: 565; Sulaiman et al., 1995: 177 (Malaysia: Jahore: Endau; in insect, *Periplaneta australasiae*, and reptilian, *Hemidactylus frenatus*); Goldberg & Bursey, 1997: 54 (Hawaii; in gecko, *Lepidodactylus lugubris*); 2000: 750 (Hawaii: Oahu; in the introduced brown anole, *Norops* [as *Anolis*] *sagrei*); Hanley et al., 1998: 201 (Hawaii: Oahu; in invasive gecko, *Hemidactylus frenatus*, and resident gecko, *Lepidodactylus lugubris*); Eldredge, 2000: 5; Matsuo & Oku, 2002: 53 (Indonesia: Lampung; in lungs of house geckos); Goldberg et al., 2002: 409; 2005: 88 (Philippine Islands; in lizards); 2010: 462 (Papua New Guinea; in skink, *Prasinohaema virens*); Barton, 2007: 254 Australia: Northern territory and Queensland; adults and nymphs infecting introduced Asian house gecko, *Hemidactylus frenatus*); Anjos et al., 2007: 628 (Brazil: Ceará State: Barbalha Municipality; in *Hemidactylus mabouia*); 2008: 611; Almeida et al., 2008b: 885 (Brazil: State of Paraíba: João Pessoa; in lizards of urban areas, *Hemidactylus mabouia*, and *Tropidurus hispidus*); Reed, 2008: 1 (Australia; in Squamata); Anjos & Rocha, 2008: 196; Kelehear et al., 2011 (genetic and morphological identity of specimens from cane toads and from *Hemidactylus frenatus* identified as *R. indica* and *R. frenatus*); 1912: 1596 (Australia; infection dynamics in cane toad *Rhinella marina*).

Distr.: Southeast Asia, Pacific Islands, Chritmas Island and Australia. Primary hosts: reptiles.

Remarks: Poore (2012a: 218) discusses the possibility that this species is a junior synonym of *R. indica* Gedoelst, 1921. Poore (2012a: 217) also shows that *R. frenata* Ali et al., 1981 automatically becomes a junior synonym of *R. hebitihamata* Self & Kuntz, 1960, because Ali et al. (1981) included the type-specimens of *R. hebitihamata* in the material of *R. frenata*.

Raillietiella hemidactyli Hett, 1934

Raillietiella (*Heymonsia*) *hemidactyli* Hett, 1934: 428, figs 1-4 (types: Burma; in lungs of *Hemidactylus gleadowi* [as *gleadovi*], and *Calotes versicolor*); Dollfus & Canet, 1954: 401 (Vietnam, in *Hemidactylus frenatus,* and *Gehyra mutilata*); Gretillat & Brygoo, 1961: 71 (copulation dilatator; Madagascar: Marovoay; in air sacs of *Hemidactylus frenatus*).

Raillietiella hemidactyli; Self & García-Diaz, 1961: 912 (Puerto Rico; in gecko, *Hemidactylus mabouia*; synonymy); Brygoo, 1963: 198 (Madagascar: Marovoay, in gecko, *Hemidactylus frenatus*; Tuléar, in *Furcifer* [as *Chamaeleo*] *verrucosus*; Antsalova, in *Furcifer* [as *Chamaeleo*] *oustaleti*); Fain, 1964: 1036 (Congo; in *Hemidactylus mabouia*); Wingstrand, 1972 (Thailand; in *Calotes versicolor*; comparative spermiology); Pence & Canaris, 1973: 1 (Kenya; in *Trachylepis* [as *Mabuya*] *homalocephala*); Ramachandran, 1977: 84 (India:

Andhui; Adras; in *Calotes versicolor*, *Gekko* sp., and *Eutropis* [as *Mabuya*] *carinata*); Storch, 1979: 637 (ultrastructural evidence for relationship with crustacean branchiuran, *Argulus foliaceus*); Ali et al., 1981: 199, figs 3a, 3b, 5 (emended diagnosis; Burma; India: Madras; West Pakistan; in *Calotes versicolor*); 1984a: 154, figs 2c, 3 (India; in *Calotes versicolor*); 1985: 117; Sinha & Nikhil, 1985: 175 (India; causing pulmonary pathology in reptilian, *Calotes versicolor*); G. Thomas & Böckeler, 1992a: 587 (digestive system); Goldberg et al., 2003: 52 (Pakistan; in lizards); Martínez Rivera et al., 2003: 321 (throughout the Caribbean and South America); Röhlig et al., 2010: 139 (non-type material deposited in Museum für Naturkunde, Berlin).

Non *Raillietiella hemidactyli*; Rajamanickam & Lavoipierre, 1965, Lavoipierre & Lavoipierre, 1966, Lavoipierre & Rajamanickam, 1973 (= *R. hebitihamata*).

Raillietiella cf. *hemidactyli*; Mallat & Giribet, 2006: 772 (18 and 28S rRNA GenBank sequences).

Distr.: Africa, South-east Asia, Caribbean and South America (?). Primary hosts: lizards.

Raillietiella indica Gedoelst, 1921

Raillietiella indica Gedoelst, 1921: 25 (type from Indian Museum, Calcutta: ? India; in lung of *Duttaphrynus* [as *Bufo*] *melanostictus*); Sambon, 1922a: 191; Hett, 1924a: 137, fig. 7; Heymons, 1935: 207; Heymons & Vitzhum, 1935a: 9 (*geckonis* group; distribution); Brygoo, 1963: 196 (India; only parasite of batrachian, *Duttaphrynus* [as *Bufo*] *melanostictus*); Ali et al., 1982a: 177 (Egypt; in lizards; status); 1982c: 282 (Taiwan, immature stages in definitive host, *Duttaphrynus* [as *Bufo*] *melanostictus*); 1985: 113 (Malaysia; in *Duttaphrynus* [as *Bufo*] *melanostictus*); Krishnasamy et al., 1995: 31, fig. 3e-h (Taiwan; reassessment of taxonomic status; immature forms in *Duttaphrynus* [as *Bufo*] *melanostictus*); Barton & Riley, 2004: 251 (USA: Hawaii; in lungs of the giant toad, *Rhinella marina* [as *Bufo*] *marinus*); Eldredge, 2006: 68 (Hawaii; in lungs of marine toad, *Rhinella marina* [as *Bufo*] *marinus*); Kelehear et al., 2011: figs 1-7 (tropical Australia: from lungs of the invasive cane toad *Rhinella marina*, the invasive Asian house gecko, *Hemidactyluys frenatus*, and a native tree frog, *Litoria caerulea*); Poore, 2012a: 217 (possible senior synonymy of this over *R. frenata* and synonym *R. hebitihamata* discussed).

Raillietiella (*Heymonsia*) *indica*; Hett, 1934: 428 (Java, India, Burma; in *Duttaphrynus* [as *Bufo*] *melanostictus,* and lung of *Gekko gecko gecko* [as *Gecko verticillatus*]).

Distr.: Africa, India, Malaysia, and Australia. Primary hosts: toads and lizards. Intermediate host: insects.

Raillietiella kochi Heymons, 1926

Porocephalus bifurcatus; Shipley, 1910: 275 (from Berlin Aquarium: Africa: Abissynia (now Ethiopia); in lungs of *Varanus exanthematicus*, and *Varanus griseus griseus* [as *Varanus griseus*]).

Raillietiella kochi Heymons, 1926a: 45, figs 1-2 (syntypes from Berlin Aquarium: Ethiopia (Röhlig et al., 2010), paratype from Hamburg Museum (Weidner, 1959): Abissynia (now Ethiopia); in lung of *Varanus exanthematicus* [as *ocellatus*], from Berliner Aquarium, in collection of Institutes für Veterinärmedizinische Parasitologie und Zoologie der

Universität Berlin); 1935: 207, fig. 116; Heymons & Vitzhum, 1935a: 9, figs 5-6 (*kochi* group; in gecko, *Varanus griseus griseus* [as *Varanus griseus*], from Berlin Aquarium); Brygoo, 1963: 197; Ali et al., 1985: 113, fig. 1a (Ethiopia; in *Varanus exanthematicus* [as *Varanus exanthematicus ocellatus*]); Cave et al., 1998: 19.

Raillietiella shipleyi Heymons, 1926a: 46, fig. 3 (syntypes in Museum für Naturkunde, Berlin (Röhlig et al., 2010): Southwest Asia; in lungs of *Varanus exanthematicus* [as *ocellatus*]); 1935: 208, fig. 117; Heymons & Vitzhum, 1935a: 10, fig. 7 (*kochi* group; distribution); Brygoo, 1963: 197; Ali et al., 1985: 113, fig. 1b (in *Varanus* sp.; as synonym of *R. kochi*).

Distr.: Africa and southwest Asia. Primary hosts: monitor lizards.

Raillietiella mabuiae Heymons, 1922

Raillietiella mabuiae Heymons, 1922: 157, fig. 3 (types from Museum für Naturkunde, Berlin, 3 syntypes from Museum für Naturkunde, Berlin (Röhlig et al., 2010): South West Africa: Namibia; in lungs of an African skink, *Trachylepis* [as *Mabuya*] *sulcata*); 1935: 206, fig. 9; Sambon, 1922b: 391, fig. 1; Heymons & Vitzhum, 1935a: 8, fig. 4 (*geckonis* group); Brygoo, 1963: 197; Ali et al., 1981: 196 (emended diagnosis; South West Africa; in *Trachylepis* [as *Mabuya*] *sulcata*); 1984a: 149, fig. 1a (Namibia; in *Trachylepis* [as *Mabuya*] *sulcata*); 1985: 117; McAllister et al., 2011: 148 (Namibia: Lüderitz District, in lungs of *Chamaeleo namaquensis*).

Raillietiella (*Heymonsia*) *mabuiae*; Hett, 1934: 428 (German south west Africa; in lung of scinid, *Trachylepis* [as *Mabuya*] *sulcata*, from Berliner Museum).

Raillietiella gehyrae; Pence & Canaris, 1973: 1 (Kenya; in *Trachylepis* [as *Mabuya*] *homalocephala*).

Distr.: South west Africa (Kenya and Namibia). Primary host: lizards.

Raillietiella maculatus S.R. Rao & Hiregaudar, 1962

Raillietiella maculatus S.R. Rao & Hiregaudar, 1962: 42 (types: India: Mumbai; male in *Hemidactylus maculatus, H. leschenaulti*, and *Eutropis* [as *Mabuya*] *carinata*); Ali et al., 1982a: 177 (Egypt; status); 1984a: 154, figs 1c, 3; 1985: 117.

Distr.: India. Primary hosts: lizards.

Raillietiella maculilabris Ali, Riley & Self, 1984

Raillietiella maculilabris Ali et al., 1984a: 149, figs 1d, 4 (types: Tanzania: Dar es Salaam; in speckle-lipped mabuya *Trachylepis* [as *Mabuya*] *maculilabris*, and African striped skink *Trachylepis* [as *Mabuya*] *striata*); 1985: 117.

Distr.: Africa. Primary hosts: lizards.

Raillietiella madagascariensis McAllister, Riley Freed & Freed, 1993

Raillietiella madagascariensis McAllister et al., 1993: 40, figs 2-4 (types: Madagascar: Beloha; in lungs of colubrid snake, *Liophidium vaillanti*).

Distr.: Madagascar. Primary host: snake.

Raillietiella mediterranea (Hett, 1915)

Porocephalus bifurcatus var. *mediterranea* Hett, 1915a: 121, fig. 4e, f (type from London Gardens: England; in snake, *Hierophis* [as *Coluber*] *gemonensis*).

Raillietiella bifurcata var. *mediterranea*; Gedoelst, 1921: 26 (in *Hierophis* [as *Zamenis*] *gemonensis*).

Raillietiella mediterranea; Sambon, 1922a: 192; Hett, 1924a: 138, fig. 8; Heymons, 1935: 211, fig. 120; Heymons & Vitzhum, 1935a: 15, fig. 12 (*mediterranea* group; distribution in lung of aglyphid, *Platyceps najadum* [as *Coluber dahli*]); Nicoli, 1963: 496 (larvae in *Amietophrynus* [as *Bufo*] *mauritanicus*); Brygoo, 1963: 198 (parasites snakes, at least occasionally); Ali et al., 1985: 121 (Mediterranean region?); Röhlig et al., 2010: 139 (non-type material deposited in Museum für Naturkunde, Berlin).

Distr.: Europe. Primary hosts: snakes.

Raillietiella monarchus Ali, Riley & Self, 1984

Raillietiella monarchus Ali et al., 1984a: 154, figs 1b, 4 (types: Malaysia: Kuala Lumpur; Taiwan; in monarch gecko, *Gekko monarchus*); 1985: 117.

Distr.: South-west Asia. Primary host: lizard.

Raillietiella morenoi Abreu-Acosta, Foronda, Rodriguez, Valladares & Casanova, 2006

Raillietiella morenoi Abreu-Acosta et al., 2006: 426, figs 1-2 (types: Canary Islands: Alegranza Island; in lungs of lizard, *Gallotia atlantica atlantica* [as *Gallotia atlantica*]); Salvador, 2009: 5.

Distr.: Canary Islands. Primary host: lizard.

Raillietiella mottae Almeida, Freire & Lopes, 2008

Raillietiella mottae Almeida et al., 2008d: 200, figs 1-4 (types: Brazil: Ceará State: Farias Brito Municipality; caatinga: 6°59'S, 39°31'W; from *Tropidurus hispidus*); 2008e: 427, fig. 1 (Brazil: Paraíba State: Estação Experimental São José do Cariri, caatinga; in lizards, *Tropidurus hispidus*, *Tropidurus semitaeniatus*, *Phyllopezus periosus*, and *Phyllopezus pollicarpis*); 2009b: 963 (Brazil: Ceará State: Chapada do Araripe; in lungs of lizard, *Tropidurus hispidus*, *Tropidurus semitaeniatus*, *Phyllopezus periosus*, and *Phyllopezus pollicaris*); 2009c: 197 (Brazil: Paraíba State: Mataraca Municipality: Mataraca; in lungs of gymnophthalmid lizard from Restinga habitat, *Micrablepharus maximiliani*); Anjos et al., 2007: 611 (Brazil: Ceará State: Barbalha Municipality infecting an invader lizard, *Hemidactylus mabouia*); Anjos & Rocha, 2008: 196; Ribeiro et al., 2012: 929 (Brazil: Ceará: Chapada do Araripe; in lungs of lizard *Mabuya arajara*).

Distr.: Northeast Brazil. Primary hosts: lizards.

Raillietiella namibiensis Riley & Heideman, 1998

Raillietiella namibiensis Riley & Heideman, 1998: 43, fig. 1 (types: Namibia: Wind-

hoek; in lungs of agamid lizards, *Agama aculeata aculeata*, and *Agama planiceps* [as *Agama planiceps planiceps*]); Heideman, 2002: 37.

Distr.: Namibia. Primary hosts: lizards.

Raillietiella orientalis (Hett, 1915)

Porocephalus bifurcatus var. *orientalis* Hett, 1915a: 120, fig. 4c, d (types from London gardens: India; in the ratsnake *Ptyas mucosa* [as *Zamenis mucosus*], and Indian cobra *Naja naja* [as *Naia tripudians*]).

Raillietiella bifurcata var. *orientalis*; Gedoelst, 1921: 26 (larvae encysted in liver and lung of *Xenochrophis* [as *Tropidonotus*] *piscator*, in connective tissue of back and lung of *Bungarus multicinctus*; in body wall of *Ptyas mucosa* [as *Zamenis mucosus*], in connective tissue of *Naja naja* [*as tripudians*], and in fat-body of *Bungarus fasciatus*); Hett, 1921: 163 (India: Calcutta; in coelom of cobra, *Naja naja* [*as tripudians*], and rat-snake).

Raillietiella orientalis; Sambon, 1922a: 192; Hett, 1924a: 138; 1934: 430 (Burma; adult in colubrid, *Xenochrophis* [as *Tropidonotus*] *piscator,* in liver and lungs of *Ptyas mucosa* [as *Zamenis mucosus*], and in elaphid, *Bungarus multicinctus* [as *Bungarus candidus multicinctus*]; in young snake, *Ptyas mucosa* [as *Coluber mucosus*], from Institut für Veterinarien Parasitologie und Zoologie der Universität Berlin; larva in body cavity of *Naja naja* [as *Naja tripudians* and *Naja haje*], from Sammlungen der Institut Veterinarien Medicine und Parasitologie, Berlin); Heymons, 1935: 209, fig. 118 (South Italy; in colubrid, *Elaphe quatuorlineata quatuorlineata* [as *Elaphe quatuorlineata*]; China: Nanking; in viperid, *Gloydius brevicaudus brevicaudus* [as *Ancistrodon blomhoffi* var. *brevicaudus*]; *Pentastomum colubrilineati* Leuckart, 1860, a younger name, listed in the synonymy of *R. orientalis*); 1939 : 675 (Iran; in viperid, *Daboia* [as *Vipera*] *russelii,* and boid, *Python molurus*); Heymons & Vitzhum, 1935a: 12, figs 8-10 (*orientalis* group; distribution: Africa, South Italy, south and west Asia; South Italy; from Berliner Aquarium; Nanking; from Wiener Museum; in snake, *Naja naja* [as *Naia haie*]); Pujatti, 1951: 23, fig. (female redescribed; South India: Bangalore: near Jalihalli; in *Coelognathus* [as *Coluber*] *helena*); Brygoo, 1963: 198 (Ethiopian region; parasites snakes, at least occasionally); Salazar, 1964: 171, figs (Philippines; in lungs and body cavity of boid snake, *Broghammerus* [as *Python*] *reticulatus*]); Deakins, 1969: 1 (hyperinfection in serpent, *Naja philippinensis* [as *Naja naja philippinensis*]); Keegan et al., 1969: 147, figs (South East Asia: Taiwan; in viperid, *Daboia* [as *Vipera*] *russelii,* and elaphid, *Naja atra* [as *Naja naja atra*]; Japan; in viperid, *Protobothrops flavoviridis* [as *Trimeresurus flavoviridis flavoviridis*]; Malaysia; female in viperid, *Calloselasma* [as *Agkistrodon*] *rhodostoma*); Kagei, 1973: 141 (Japan; in elaphids, *Naja kaouthia* [as *Naja naja kaouthia*], and *Naja atra* [as *Naja naja atra*]); Yamamoto et al., 1978: 143 (Japan; in viperids, *Protobothrops* [as *Trimeresurus*] *flavoviridis, Ovophis* [as *Trimeresurus*] *okinavensis,* and *Daboia siamensis* [as *Vipera russelii formosensis*]); Ali et al., 1982b: 292, pl. 6 figs 2a-c, 3, 4b (revision; China: Hong Kong; Taiwan; Malaysia: Sabah; Indonesia: Tie Polonga; Komodo Islands; India: Calcutta zoo; Pakistan; in *Ptyas mucosa* [as *mucosus*], *Xenochrophis piscator*, *Coelognathus* [as *Elaphe*] *helena*, *Elaphe carinata carinata* [as *Elaphe carinata*], *Psammodynastes pulverulentus pulverulentus* [as *Psammodynactes pulverulentus*], *Dinodon semicarinatum* [as *semicarinatus*], *Amphiesma pryeri*, *Bungarus multicinctus*, *Deinagkistrodon* [as *Ancistrodon*] *acutus, Trimeresurus gramineus*, and *Daboia* [as *Vipera*] *russelii*); 1985: 115 (in *Deinagkistrodon* [as *Agkistrodon*] *acutus, Echis carinatus carinatus* [as *Echis carinatus*], *Elaphe*

carinata carinata [as *Elaphe carinata*], *Protobothrops flavoviridis* [as *Trimerosurus mucrosquamatus*], *Trimeresurus gramineus*, *Xenochrophis piscator*, *Dendrelaphis pictus pictus* [as *Dendrophis pictus*], and *Broghammerus* [as *Python*] *reticulatus*]); Hasegawa, 1985: 1 (Japan: Okinawa; in reptilian); Dang, 2000: 27 (life cycle); 2001: 11 (Vietnam; description); Röhlig et al., 2010: 139, fig. 4b (non-type material deposited in Museum für Naturkunde, Berlin).

Distr.: Italy (?), Africa, and Asia. Primary hosts: snakes and man.

Remarks: If the synonym of *R. colubrilineati* (Leuckart, 1860) with *R. orientalis* Hett, 1915, proposed by Heymons (1935: 209), were accepted, the former would become the valid name for this species.

Raillietiella piscator Nair, 1967

Raillietiella piscator Nair, 1967: 463, fig. (types: India: Kerala: Irinjalakuda; in lungs of water snake, *Xenochrophis* [as *Tropidonotus*] *piscator*); Ali et al., 1985: 121 (in *Xenocrophis piscator;* possibly a synonym of *R. orientalis*).

Distr.: India. Primary hosts: snakes.

Raillietiella rileyi Krishnasamy, Jeffery, Inder, Singh & Oothuman, 1995

Raillietiella rileyi Krishnasamy et al., 1995: 33, figs 1, 2, 3a-d (types: Malaysia: Kuala Lumpur, in lung of *Duttaphrynus* [as *Bufo*] *melanostictus*).

Distr.: Malaysia. Primary host: toad.

Raillietiella schoutedeni Fain, 1960

Raillietiella schoutedeni Fain, 1960b: 117 (type: female; 'Belgian Congo': Bolobo; in lung of *Monopeltis schoutedeni;* types from Congo Museum, in Tervuren); 1961: 47, figs (Central Africa).

Distr.: Democratic Republic of the Congo. Primary host: worm lizard.

Raillietiella scincoides Ali, Riley & Self, 1984

Raillietiella scincoides Ali et al., 1984a: 155, figs 2a, 4 (types: South Australia: Murray River; in blue-tongued skink, *Tiliqua scincoides scincoides* [as *Tiliqua scincoides*]); 1985: 117; Bursey & Goldberg, 1999: 176 (Australia: Western Australia; in gecko, *Nephrurus laevissimus*).

Distr.: Australia. Primary hosts: lizards.

Raillietiella spiralis Hett, 1924

Raillietiella spiralis Hett, 1924c: 301 (types: Palestine; in lung of opisthoglyph colubrid, *Malpolon* [as *Coelopeltis*] *monspessulana*); 1924a: 139, fig. 9; Heymons, 1935: 211, figs; 1940b: 92, fig. (as a form of *R. mediterranea*); Heymons & Vitzhum, 1935a: 16 (*mediterranea* group); Brygoo, 1963: 198 (parasites in snakes, at least occasionally); Ali et al., 1985: 12 (Israel).

Raillietiella orientalis spiralis; Heymons, 1940a: 91, fig.

Distr.: Israel. Primary host: snake.

Remarks: This species was described as new in both the Hett (1923) and Hett (1924) papers, so that the former year becomes the correct publication date.

Raillietiella teagueselfi Riley, McAllister & Freed, 1988

Raillietiella teagueselfi Riley et al., 1988: 483, figs 1-3 (types: USA: Texas: Harris County: Houston zoo; in Mediterranean gecko, *Hemidactylus turcicus turcicus* [as *Hemidactylus turcicus*]).

? *Raillietiella teagueselfi*; Riley et al., 1991: 50, fig. 2 (Nigeria: Lagos; in the gecko, *Hemidactylus angulatus* [as *Hemidactylus brookii angulatus*]).

Distr.: North America and Africa. Primary hosts: lizards.

Remarks: This species was not included in Poore's (2012a) list.

Raillietiella tetrapoda (Gretillat, Brygoo & Domergue, 1962)

Mahafaliella tetrapoda Gretillat et al., 1962: 304, figs 13-20 (type: male; Madagascar: Egogy: Subprefecture of Ampanihy; in *Acrantophis dumerili*).

Distr.: Madagascar. Primary host: Madagascar boa.

Raillietiella trachea Riley, Oaks & Gilbert, 2003

Raillietiella trachea Riley et al., 2003: 156, fig. 1 (types: Pakistan: Punjab Province; in vulture, *Gyps bengalensis*).

Distr.: Pakistan. Primary host: white-backed vulture; autoinfection?

Raillietiella venteli (Motta, 1965), *nomen dubium*

Mahafaliella venteli Motta, 1965: 7, figs 1-4 (types: Brazil: State of Mato Grosso: Porto Esperança, in stomach of snake, *Bothrops atrox*); Rego, 1983a: 410, figs 15-16 (Brazil: São Paulo: Instituto Butantan; as a *nomen dubium*); 1984a: 47, fig. 4.

Distr.: Brazil. Primary host: snake.

Yelirella Spratt, 2010

Rileyella Spratt, 2003: 236 (type-species: *Rileyella petauri* Spratt, 2003).

Yelirella Spratt, 2010: 319 (replacement name for *Rileyella* Spratt, 2003, a junior homonym of *Rileyella* Townsend, 1909 (Diptera: Tachinidae)).

Type-species, by monotypy: *Rileyella petauri* Spratt, 2003.

Yelirella petauri (Spratt, 2003)

Rileyella petauri Spratt, 2003: 236 (types: Australia: New South Wales and Queensland; in lungs and nasal sinus of the petaurid marsupial, *Petaurus breviceps breviceps* [as *Petaurus breviceps*]).

Yelirella petauri; Spratt, 2010: 319.
Distr.: Australia. Primary host: marsupial.

Order REIGHARDIIDA Almeida & Christoffersen, 1999

Reighardiida Almeida & Christoffersen, 1999: 702 (erected for one family, Rheighardiidae).

REIGHARDIIDAE Heymons, 1926

Reighardinae Heymons, 1926b: 128 (diagnosis).
Reighardiidae Heymons, 1935: 213 (diagnosis); Heymons & Vitzhum, 1935a: 23 (diagnosis); Self, 1969: 63; Almeida & Christoffersen, 1999: 702 (referred to new order Reighardiida); Poore, 2012a: 219 (spelling of name).

Hispania J. Martínez, Criado-Fornelio, Lanzarot, Fernández-García, Rodrigues-Caabeiro & Merino, 2004

Hispania J. Martínez et al., 2004: 1103.
Type-species, by original designation: *Hispania vulturis* J. Martínez, Criado-Fornelio, Lanzarot, Fernández-García, Rodrigues-Caabeiro & Merino, 2004.

Hispania vulturis J. Martínez, Criado-Fornelio, Lanzarot, Fernández-García, Rodrigues-Caabeiro & Merino, 2004

Hispania vulturis J. Martínez et al., 2004: 1103, figs 1-2 (type: Central Spain: Madrid: Colinda Del Cuadrón: Garganta de los Montes; in abdominal sacs of black vulture, *Aegypius monachus*).
Distr.: Spain. Primary host: black vulture.

Reighardia Ward, 1899

Reighardia Ward, 1899: 254 (erected without included species); Sambon, 1922a: 192; Heymons, 1935: 213 (diagnosis); Heymons & Vitzhum, 1935a: 23 (diagnosis); Rego, 1984a: 47 (diagnosis); Böckeler, 1986: 164 (central nervous system and body appendages); Borgesteede, 1997: 91 (genus exclusive of birds); Poore, 2012a: 219 (discussion of authorship of name and designation of type species).
Type-species, subsequent designation by Heymons & Vitzhum, 1935a: *Pentastomum sternae* Diesing, 1863.

Reighardia lomviae Dyck, 1975

Reighardia lomviae Dyck, 1975: 98, fig. (type: Denmark: Faroes: Vestmanna; from avian host, the guillemot); Møller et al., 2008: 335 (Faeroer Islands: Nólsoy; from the common guillemot, *Uria aalge*; 16S and 18S sequences).
Distr.: northern Europe. Primary host: guillermot.

Reighardia sternae (Diesing, 1864)

"Linguatula delle rondini di mare" Leuckart, 1860a: 150; Filippi, 1861: 18 (Italy: Turin; in air sacs of *Sterna hirundo*).

Pentastomum sternae hirundinis Diesing, 1864: 339 (type: Turin, from the tern *Sterna hirundo*).

Reihgardia sternae; Vaney & Sambon, 1910: 129; Sambon, 1922a: 192 (in glaucous gull, *Larus canus* [as *glaucus*], Bonaparte's gull, *Chroicocephalus philadelphia* [as *Larus*] *philadelphia,* and common tern, *Sterna hirundo* [as *fluviatilis*]); Faust, 1927a: 318, pl. 21 figs 10-14 (China: Gulf of Peischili; nymphs in lung and hepatic portal blood of *Sterna hirundo* [as *fluviatilis*]; more recently discovered in *Larus dominicanus,* from the Neotropical region and in *Chroicocephalus* [as *Larus*] *philadelphia,* from the Nearctic region); Sprehn, 1928a: 84 (Arctic Ocean; in fish); Heymons, 1935: 213, fig. 7; Heymons & Vitzhum, 1935a: 23, fig. 16 (Greenland; in *Pagophila eburnea,* from Kopenhagen Museum; Germany: near Kurische; in *Sterna paradisaea* [as *macrura*]); Dubinina & Smogorzhevskaya, 1956: 213, figs (described as nematode, *Squamofilaria*); Michelson, 1959: 335 (Latvia); Osche, 1959: 169, figs (embryology); 1963: 487, figs (anatomy); Buchvarov, 1963: 145 (in silver sea gull, *Larus argentatus*); Blazéjewski, 1965: 362, figs 1-3 (embryo); Haffner & Rack, 1965: 419, figs (larva, adult); Slais, 1967: 205, fig. 1; Haffner, 1967: 1, figs (anatomy); Legendre, 1967: 341, figs 4-10 (development and morphology of larva); Riley, 1969: 6 (ultrastructure); 1972a: 307 (life cycle); 1972b: 49; 1973a: 243 (redescription); 1973c: 149, figs 1-7 (in air sacs and buccal cavity of herring gulls, *Larus argentatus*); 1976: 81 (egg production, parasite of herring gull); 1992a: 402 (sex differences); Mill & Riley, 1972: 12 (ultrastructure of body wall muscles); Bakke, 1972: 273 (Norway; in gull, *Larus canus*); Pence, 1973: 164 (USA: Louisiana; in gulls); Banaja & Riley, 1974: 75 (ultrastructure of muscle attachments); Banaja, 1975 (biology); Riley & Banaja, 1975: 33, figs 1-22 (from airsacs of the herring gull; cuticle; ecdysis); Banaja et al., 1975: 493 (direct life cycle; Scotland: Yorkshire, in hering gull); 1976: 81 (egg production and autorenfection); Riley et al., 1979: 53 (cephalic glands, possible role); Storch & Böckeler, 1979: 77 (chemoreceptor organs); 1982: 103 (sensory receptor of larva); Böckeler & Vauk-Hentzel, 1979: 95 (West Germany; in airsacs of *Larus marinus*); Böckeler, 1979: 135 (Germany: Kiel and Helgoland Island; in avian host, Laridae); 1980: 330 (developemtal biology); 1982a: 1 (electron microscopy and parasitology); 1982b: 301 (ontogenesis of central nervous system); 1983a: 270 (embryology); 1983b: 264 (ontogeny); 1984a: 297 (embryology of central nervous system); 1984b: 175 (oogenesis: phylogenetic implications); 1984c: 409 (development and ultrastructure); 1984d: 374 (development in avian host, Laridae); Ooi & Ohbayashi, 1982: 112 (Japan: Hokkaido; in slaty-backed gull, *Larus schistisagus*); Hassett & McCarthy, 1983: 172 (Republic of Ireland; in avian host, *Larus*); Rego, 1984a: 47 (Brazil; inair sacs of *Larus dominicanus*); Hoberg, 1987: 1289 (Antarctica; in seabirds); Tischler, 1988: 97 (West Germany; description); G. Thomas & Böckeler, 1992b: 1 (feeding); Brosens et al., 1996: 254 (Belgium and Germany; in porpoise, *Phacoena phacoena phacoena* [as *Phacoena phacoena*], and common guillermot, *Uria aalge*); G. Thomas et al., 1999a: 280 (life cycle, comparison with *Raillietiella*); Sielfeld, 2000: 1 (Chile; in air sacs of Laridae); Röhlig et al., 2010: 140 (non-type material from near Kalingrad, Russia, in *Sterna paradisaea,* and northern Greenland, in seagull, deposited in Museum für Naturkunde, Berlin); Poore, 2012a: 220 (*Reighardia sternae*, valid name, is in

prevailing usage, being deemed either a justified emendation or a correct original spelling).

Pentastoma laponica Mégnin "1881" (*nomen nudum*, cited in Vaney & Sambon, 1910: 139).

Pentastoma lari Mégnin, 1883: 153, pl. 7 (type: Norway: Vadsö: Lapland; in *Larus hyperboreus*; Polar Sea; in *Larus canus* [as *glaucus*]).

Porocephalus lari; Shipley, 1898: 69, fig. 14 (Polar Sea; air sacs of *Larus canus* [as *glaucus*]); Faria & Travassos, 1913a: 127 (Rio de Janeiro: Baía do Rio de Janeiro; in air sacs of gull, *Larus dominicanus*; São Paulo: Santos).

Reighardia (without species name); Ward, 1899: 254 (North America: Eriesee; in *Chroicocephalus* [as *Larus*] *philadelphia*).

Pentastomum lari; Sambon, 1922b: 404; Travassos, 1924: 239 (in *Larus dominicanus*).

Squamofilaria macroovata Serkowa, 1948 (Nematoda), *apud* Dubinina & Smogorzhevskaya, 1956: 213, figs (attributed to *Reighardia sternae*; original reference and information on type material for this name not found).

Distr.: Widespread in Palearctic region, but also found in North and South America. Primary hosts: seabirds. No intermediate host (autoinfection).

Order POROCEPHALIDA Heymons, 1935

Linguatulina Hayek, 1881: 131.

Porocephalida Heymons, 1935: 214 (diagnosis); Heymons & Vitzhum, 1935a: 25; Self, 1969: 63; Reichenbach-Klinke, 1977 (illnesses in reptiles); Rego, 1984a: 47 (diagnosis); Storch et al., 1990: 610 (comparison of ultrastructure of male genitalia with Cephalobaenida); Poore, 2012a: 220 (discussion of rank and authorship of name).

Porocephaloidea Fain, 1961: 24 (as a suborder); Nicoli, 1963: 496.

Porocephaliformis Motta, 1963a: 10 (for Porocephalidae, Linguatulidae, Sebekidae, Samboniidae and Armilliferidae).

Biology: Unidentified porocephalids and porocephaliasis in animals; Neumann, 1899: 356 (porocephalosis in dogs and other mammals); Schouten, 1930: 109 (porocephalosis in serpents); 1933: 40 (porocephalosis); Bouckaert & Fain, 1959: 793 (nymphal porocephalosis in pidgeon); Self et al., 1972: 117 (porocephaliasis in man and in experimental mice). Unidentified porocephalids and porocephaliasis in man; Sambon, 1912: 258; 1913: 98; 1918: 321 (polycephaliasis in man); Lohlein, 1912: 58 (porocephaliasis in newborn infected in Cameroon); Mouchet, 1913: 657 (Congo; human infection); MacFie & Johnston, 1913: 1387 (southern Nigeria; five cases of porocephaliasis in man); H. Gros, 1919: 92 (West Africa; frequency of porocephalans in blacks); Noc & Nogue, 1919: 6 (porocephalosis); 1920: 284 (a new case of human porocephalosis); Noc, 1922: 621 (Senegal; massive infestation of porocephalan larvae); Pons & Noc, 1922: 951 (ganglionar porocephaliasis); Giglioli, 1927a: 33 (human porocephalosis in tropical America); Manuwa, 1928: 109 (porocephalosis); 1935: 15 (porocephalosis); 1947: 507 (porocephalosis); Mendy, 1930: 387 (Argentina: Buenos Aires; porocephaliasis, threat to public health); Peruzzi, 1932: 213 (pathological anatomy of porocephalosis); Schilling & Kuhlmann, 1937: 321 (porocephalosis); Ellis, 1937: 41 (a case of porocephalosis); Goss, 1939: 178 (snake porocephalids in man); Stock, 1946: 101 (porocephalosis, collapse of the lung); Ponthus & Boutstany, 1951: 255 (multiple calcified cysts in peritoneum due to

human porocephalosis); Wymeersch & Wanson, 1954: 517 (radiological image of nymphal porocephalosis); 1955: 22 (nymphal porocephalosis and its radiological image); Woithelet, 1956: 379 (porocephalosis and radiology); Gorecki, 1958: 1516 (nymphal porocephalosis); Hunter & Higgins, 1960: 68 (an unusual case of porocephaliasis in man); W.B. Anderson & Roberts, 1962a: 138 (an unusual case of porocephaliasis); 1962b: 96; Gonzalez de Vega et al., 1962: 213 (porocephalosis or pentastomiasis); Laluque & Fillandeau, 1965: 258 (porocephalosis); Lindner, 1965: 155 (porocephalosis, X-ray survey); Buchanan, 1967: 746 (surgical aspects of porocephalosis); Rail, 1967: 715 (Sabah; cases of porocephaliasis); Godeau et al., 1982: 2195 (porocephalosis); Fisch et al., 1985: 263 (human pentastomiasis or porocephalosis); Gentilini & Duflo, 1988: 628 (porocephalosis); Ancelle et al., 1988: 437 (a case of porocephaliasis in man revealed by ultrasonography); Mulder, 1989: 1921 (porocephalosis); Obafunwa et al., 1992: 43 (sudden death by porocephaliasis in man); Pons & Noc, 1992: 951 (Senegal: human ganglionar porocephaliasis and tuberculosis); Faisy et al., 1995: 258 (porocephalosis, a little known parasitosis); Itakura, 1995: 1283 (porocephalosis, diseases in the tropics); Obengui et al., 1999: 357 (porocephalosis diagnosis).

LINGUATULOIDEA Haldeman, 1851

Linguatuloidea Haldeman, 1851: 253 (as a superfamily); Leuckart, 1860a; Fain, 1961: 35 (as a suborder); Poore, 2012a: 220 (authorship of name).

Biology: Unidentified linguatulids and linguatulosis in animals; Colin, 1861a: 676 (linguatules in mesenteric ganglia of lamb); 1861b: 275 (linguatules in mesenteric ganglia of lamb); 1862a: 342 (linguatules in mesenteric glands); 1862b: 127 (linguatule in mesenteric glands of dromedarian and goats); 1863b: 22 (linguatule in mesenteric glands); Jacquart, 1866: 383 (retraction of ungui of linguatulids in lungs of serpents); Chauvrat, 1890: 489 (taenioid linguatulids in nasal cavities of animals); Morgen, 1901: 416 (in cattle); Tartakovskii, 1901: 1049 (linguatulosis in pigs); Moussu, 1910: 153 (mortal linguatulosis in goat); Velu, 1914: 137 (Marrocos; nodular linguatulosis in bulls); Solov'ev, 1929: 29 (linguatulosis in nasal cavities of dogs); Ivanov, 1933b: 203; 1937a: 79 (Bulgaria; linguatulosis); 1937b: 445 (linguatulosis); 1938a: 157 (linguatulosis); 1938b: 291 (linguatulosis); Dikmans, 1936a: 1; 1936b: 3 (linguatulid infestation of bovine livers and mesenteric nymph glands); Ivanov & Emanuilov, 1938: 119 (linguatulosis); Iwanoff, 1939: 40 (Bulgaria: goat linguatulosis); Taborda-Duarte & Lino de Sousa, 1952: 14 (linguatulosis in Açorian bovids); Deschiens et al., 1954: 840 (nymphal linguatulosis in Guinea pig); Cristi, 1957: 83 (Uruguay; nasal linguatulosis in animals); Farid-e-Tonekaboni, 1966: 1 (linguatulosis in dog); Choudhary & Dewan, 1967: 73 (immature linguatulosis in a murrah buffalo); Blagburn et al., 1983: 54 (canine linguatulosis); Alsadi & Rihda, 1994: 167 (nymphal linguatulosis); Tafti & Rashidi, 2000: 487 (Iran: Fars Province; linguatulosis in goats); Tavassoli et al., 2000: 528 (Iran: West Azarbaidjan: Urnia; canine linguatulosis). Unidentified linguatuloids and linguatulosis (including halzoun disease and marrara syndrome) in man; Küchenmeister, 1855a: 127 (linguatule parasites in liver of man); Khouri, 1905: 78 (halzoun); Saling, 1925: 149 (linguatulids, knowledge regarding hygiene); Sonobe, 1927a: 1 (linguatulid larva in men); 1927b: 753 (pentastome notches in liver of man caused by linguatulid larvae); Cannon, 1942: 160 (linguatulid infestation of man); Witenberg, 1944: 191 (Near East; parasitic laryngopharyngitis, halzoun);

Chieffi, 1951: 212 (a case of human linguatulosis); Boavida, 1954: 131 (Madeira: linguatulosis); Watson & Abdel-Kerim, 1956: 147 (Middle East; parasitic pharyngitis known as "halzoun"); Kirk, 1958: 6 (Middle east; halzoun pharyngitis); Drury, 1962: 293 (linguatulid larvae causing granulomata in liver); Azar, 1964: 582 (unsuccessful trial to produce human parasitic pharyngitis, halzoun in human volunteeres); Schacher et al., 1965: 226 (Lebanon; halzoun, or parasitic pharyngitis); Mendeloff, 1965: 433 (tongued worm infection, healed granulomas of liver); Chartres, 1965: 503 (radiological manifestations of tongue worms in the tropics); González, 1970: 283 (a human case of lung linguatulosis); Buslau et al., 1990: 327 (Halzoun, marrara syndrome); Molina & Cordero, 1995: 239 (linguatulid in patient with gastric adenocarcinoma); Siavashi et al., 2002: 191 (nasopharyngeal pentastomiasis, or halzoun).

LINGUATULIDAE Haldeman, 1851

Order Onchocephales Blainville, 1824: 517.

Linguatulidae Haldeman, 1851: 253 (also numbered 49); Leuckart, 1860a: 1; Stiles, 1891a: 348 (biology); Shipley, 1900: 563; Sweet, 1907: 391 (Australia); Bertolini, 1908: 385 (larvae in cattle and sheep); Braun & Lühe, 1910: 182 (parasitology); Sambon, 1910a: 134 (new species of tongue worms); 1922: 417 (genera and species of Linguatulidae); Anonymous, 1922: 389 (as parasites of man); Noc, 1923: 340 (acariform embryo and larval stages); Hett, 1924a: 109 (review); Haffner, 1926a: 201 (most closely related to Annelida); 1926b: 136; Faust, 1927b: 285 (China; nymphs of four species in man); Heymons, 1935: 244 (diagnosis); Hill, 1937: 11 (taxonomy and morphology); Yutuc, 1954: 119 (nymphal linguatulid in lungs of a domestic cat); Salman & Mahdi, 1955: 1 (Abu-Deleig; marrara syndrome); Haffner et al., 1969: 96 (anatomy, systematics, and biology); Self, 1982a: 727; Poore, 2012a: 220 (authorship of name and applicaton of Article 24.2 (Determination by the First Reviser) in selecting Linguatulidae Haldeman, 1851 to have precedence over Linguatulida Vogt, 1851).

Linguatulida Vogt, 1851: 499 (used as a family).

Hypobothria Diesing, 1864: 200.

Pentastomidae Leunis, 1886: 620; Sambon, 1922b: 426; Manson-Bahr, 1931: 799 (tropical diseases); Doucet, 1960a: 3.

Linguatulini Sambon, 1922a: 192; Hett, 1924a: 151 (type-genus: *Linguatula* Frölich, 1789; as section).

Remarks: Blainville (1828) was the first to place the tongue-worms into a separate order or group, under the name Onchocephales (Sambon, 1922b: 425).

Linguatula Frölich, 1789

Linguatula Frölich, 1789: 148; Schrank, 1796; Siebold & Rolando, 1845: 254; Beneden, 1848b: 161 (linguatules); 1848c: 348 (organization and development); Wyman, 1861: 278; Colin, 1861a: 682 (in mesenteric glands of sheep causing malady); 1861d: 682 (in mesenteric glands of sheep, causing malady); Filippi, 1862: 52 (embryos); Lesse, 1911: 268 (larva and peritonitis); Butler, 1924: 544 (in dogs and cattle); Lameere, 1930: 146 (linguatula); Schulze, 1932: 459; Heymons, 1935: 244 (diagnosis); 1940c: 84, figs (larvae); Heymons & Vitzhum, 1935a: 95; Ivanov, 1938a: 157 (larva); Ragab & Samuel, 1955: 229

(Egypt; human infection); Enigk & Düwell, 1957: 401 (infestation in dog); Slais, 1960: 200 (history); Rego, 1980: 783 (in mammalian hosts; from Oswaldo Cruz Institute); 1984a: 49 (diagnosis); Mones & Martinez, 1982: 297 (Neotropical region; in rodent, *Hydrochoerus*); Self, 1982b: 269 (life cycle, nymphal infection and pathology); Faveaux, 1984: 1 (Ethiopian region; in Chiroptera); Doby et al., 1985: 85 (Brittany; nymph in pulmonary nodule of man); Coy et al., 1998: 8 (Cuba; in reptile, *Anolis porcatus porcatus* [as *Anolis porcatus*]); Tafti et al., 2001: 213 (Iran; larva in camels); Rokni, 2008: 283 (Iran; nine cases of human pentastomiasis).

Not *Cochlus* Zeder, 1803: 230 (= *Goezia* Zader, 1800, an anisakid nematode; see Gaevskaya 2005: 26).

Prionoderma Cuvier, 1817: 35 (type-species: *Linguatula serrata*, selected by Poore, 2012a: 221, so making it an objective synonym) (not *Prioderma* Rudolphi, 1808 = *Goezia* Zader, 1800, an anisakid nematode; see Gaevskaya 2005: 26).

Pentastomum; Humboldt & Bonpland, 1818: 301; Diesing, 1836; 1856: 31; Wagner, 1856: 581 (in kidney); Küchenmeister, 1857a: 29 (metamorphosis); Spencer, 1889: 110 (parasitic in lung of the copperhead snake, *Austrelaps* [as *Hoplocephalus*] *superbus*); Weinberg, 1906: 534 (in chimpanzee); Agerth, 1907: 391 (in liver of a pig); Sambon, 1922b: 399 (many species described and figured) *(partim* = *Sebekia*); Pivetaud, 1977: 958 (parasitosis).

Pentastoma; Diesing, 1836: 1 (general account); Dujardin, 1845: 299; Beneden, 1848a: 89 (organization and development); 1848d: 71 (in mandrill); 1848e: 188 (in abdominal cavity of mandrill); 1849a: 313 (new species from abdominal cavity of mandrill); 1857a: 250 (pentastomes); Colin, 1861c: 37 (in glands of sheep); Slaughter et al., 1974: 711 (larvae in a squirrel-monkey).

Linguatule, Linguatella; Blainville, 1823: 509.

Pentastomes; Beneden, 1857a: 250; 1857b: 29.

Echinorhynchus; Welch, 1872: 703 (encysted in man) (*non Echinorhynchus* Zoega, 1776 (Acanthocephala)).

Fissilinguatula Heymons, 1942a: 621 (a *nomen nudum* for *L. nuttali* and *L. recurvata*).

Hololinguatula Heymons, 1942a: 621 (a *nomen nudum* for *L. dingophila* and *L. serrata*).

Type-species, by monotypy: *Linguatula serrata* Frölich, 1789: 148.

Unidentified species: *Linguatula* sp.; Dollfuss, 1959: 517, figs (Sudan: Bamako; in frugivorous bat, *Eidolon helvum helvum* [as *Eidolon helvum*]); Young, 1975: 335 (South Africa: Kruger National Park; causing pentastomiasis in wild animals).

Remarks: The genus *Prioderma* was established for a parasite discovered by Göetz in the stomach of *Silurus glanis* and later adopted by Cuvier (1817) for *Linguatula* (Sambon, 1922b: 427).

Linguatula arctica Riley, Haugerud & Nilssen, 1987

Linguatula arctica Riley et al., 1987: 710, figs 1-3 (types: northern Norway: Finnmark and Troms Districts; in nasal passages of the reindeer, *Rangifer tarandus tarandus* [as *Rangifer tarandus*]); Haugerud, 1987: 80; 1988a: 28 (human pentastomiasis); 1988b (parasite-host interaction); Halvorsen, 1986: 334; Haugerud & Nilssen, 1987: 1 (life cycle in reindeer sinus gland); Haugerud et al., 1993: 157 (ivermectin effective in killing deer-sinus pentastomid); Folstad et al., 1996: 556 (Norway; parasite infection effects on *Rangifer tarandus tarandus*); Arneberg et al., 1996: 213 (Norway; effects of food

intake in *Rangifer tarandus tarandus*); Nilssen et al., 1998: 273.

Linguatula sp.; Haugerud & Nilssen, 1985: 51 (a new species with direct development in reindeer).

Distr.: northern Norway. Primary host: reindeer.

Remarks: Species omitted from Poore's (2012a) list.

Linguatula multiannulata Haffner, Sachs & Rack, 1967

Linguatula multiannulata Haffner et al., 1967: 333, figs (East Africa; nymphs in *Connochaetes taurinus taurinus, Alcelaphus buselaphus cokii, Syncerus caffer caffer, Damaliscus korrigum korrigum,* adults in hyenas); 1969: 96, figs 1-30 (Serengeti: parasite of hyena, *Crocuta crocuta* [as *Crocuta crocuta crocuta*]).

Distr.: Africa. Primary host: hyena. Intermediate hosts: ungulates.

Linguatula recurvata (Diesing, 1850)

Pentastoma denticulatum; Creplin, 1829: 76 (larvae in *Hystrix* (*Hystrix*) *cristata* [as *Hystrix cristata*]); Diesing, 1836 (*partim*; larva in *Pecari tajacu tajacu* [as *Pecari tajacu*]).

Pentastomum recurvatum Diesing, 1850: 610; 1856: 31, pl. 5 figs 1-5 (types: Brazil; adults in frontal sinus and tracheae of jaguar, *Panthera onca onca* [as *Felis onca*]).

Pentastomum denticulatum; Diesing, 1850: 609 (*partim*; larva).

Linguatula recurvata; Railliet, 1883: 26; Shipley, 1898: 56, fig. 2; Faria & Travassos, 1913a: 125 (Brazil: São Paulo: Itapurá; in *Tayassu pecari pecari* [as *Dicotyles labiatus*]); 1913b: 31; Sambon, 1922a: 204 (Brazil; in frontal sinuses and trachea of jaguar, *Panthera onca onca* [as *Panthera onca*]); Heymons, 1935: 247, fig. 146 (diagnosis; larvae in *Pecari tajacu tajacu* [as *Pecari tajacu*], in heart of *Tayassu pecari pecari* [as *Tayassu pecari*], and *Callicebus* (*Callicebus*) *caligatus* [as *Callicebus caligatus*]); 1940a: 88, figs; 1942a: 621; Heymons & Vitzhum, 1935a: 98, fig. 36; Nicoli, 1963: 501 (larvae in *Tragelaphus scriptus scriptus* [as *Tragelaphus scriptus*]); Pinto, 1938: 50, figs; Rego, 1984a: 49; Arroyo et al., 1986: 157 (Costa Rica; pentastomiasis; differentiation from *L. serrata*); Röhlig et al., 2010: 140 (non-type material from "Dutch Guyana" in *Tayassu pecari pecari* [as *Tayassu pecari*] deposited in Museum für Naturkunde, Berlin).

Linguatula sp.; Strong et al., 1926: 1.

Distr.: South America. Primary host: jaguar; intermediate hosts: mammals.

Linguatula serrata Frölich, 1789

Ténia lancéolé Chabert, 1782: 39 (description); 1787: 39 (material from nose of a horse *Equus caballus caballus* [as *Equus caballus*] and dog *Canis lupus familiaris*).

Tetragulus rhinaris Chabert, 1787: 39 (no types; synonymyzed by Diesing, 1850).

Taenia rhinaris; Meyer, 1789 (translation of Chabert, 1787).

Linguatula serrata Frölich, 1789: 148, figs 11-15 (type: probably Germany; juvenile in hare, *Lepus (Eulagos) europaeus europaeus* [*as Lepus europaeus*]); 1791: 101; Beneden, 1855: 4; Shipley, 1898: 57, fig. 4 (synonym); Koch, 1906: 288, figs (parasitism); Agerth, 1907: 391; Johnston & Cleland, 1912: 199 (Australia; in cattle); Darling, 1912: 118 (Central America; in man); Darling & Clark, 1912a: 401 (larva in a native Central American);

1912b: 11; Faria & Travassos, 1913a: 123, pl. 11 (Brazil; larva in intestine and stools of man); 1913b: 31; Johnston, 1916: 96 (in dingo, *Canis lupus dingo* [as *Canis dingo*]); Migone, 1916: 573 (in *Chrysocyon brachyurus* [as *Canis jubatus*] and *Procyon cancrivorus cancrivorus* [as *Procyon cancrivorus*]); Thompson, 1922 (New Zealand); Sambon, 1922a: 204, figs (hosts: adults in man, *Homo sapiens*, domestic dog *Canis lupus familiaris* [as *Canis familiaris*], wolf, *Canis lupus lupus* [as *Canis lupus*], fox, *Vulpes vulpes vulpes* [as *Canis vulpes*], horse, *Equus caballus caballus* [as *Equus caballus*], ass, *Equus asinus asinus* [as *Equus asinocaballus*], sheep, *Ovis aries aries* [as *Ovis aries*], domesticated goat, *Capra hircus hircus* [as *Capra hircus*]; nymphs in man, *Homo sapiens*, long-eared hedgehog, *Hemiechinus auritus auritus* [as *Erinaceus auritus*], *Paraechinus aethiopicus aethiopicus* [as *Erinaceus aethiopicus*], cat, *Felis catus*, black rat, *Rattus rattus* [as *Mus rattus*], brown rat, *Rattus* [as *Mus*] *norvegicus*, crested porcupine, *Hystrix* (*Hystrix*) *cristata* [as *Hystrix cristata*], cavy, *Cavia porcellus* [as *cutleri*], common hare, *Lepus (Eulagos) europaeus europaeus* [as *Lepus europaeus*], common rabbit, *Oryctolagus cuniculus cuniculus* [as *Lepus cuniculus*], bull, *Bos taurus taurus* [as *Bos taurus*], pronghorn antelope, *Antilocapra americana americana* [as *Antilocapra americana*], South African blue duiker, *Philantomba monticola monticola* [as *Cephalophus monticola*], bubla antelope, *Alcelaphus buselaphus buselaphus* [as *Bubalus buselaphus*], roebuck, *Capreolus capreolus capreolus* [as *Capreolus capreolus*], European fallow-deer, *Dama dama dama* [as *Dama dama*], Arabian camel, *Camelus dromedarius*, deomestic pig, *Sus scrofa scrofa* [as *Sus scrofa domesticus*], and collared peccary, *Pecari tajacu tajacu* [as *Dicotyles tajacu*]); Hett, 1924a: 152 (larvae in *Boselaphus tragocamelus*); Pillers, 1925a: 126 (in nasal cavity of bull terrier bitch); 1925b: 444 (in bovine mesenteric lymphatic glands); 1929: 307, figs (England: London; in nasal cavity of dog); Haffner, 1925: 1 (including *Pentastomum taenioides* and *Linguatula rhinaria*); Sievers, 1926: 306 (Chile); Bisset, 1926: 202 (larva in hepatic nymph glands of cow); Chapin, 1926: 180 (in the caribou); Faust, 1927a: 311 (China: Peking; in lungs of rabbit); Stiles, 1928: 61 (priority over *L. rhinaris*); Sprehn, 1928b: 854 (Arctic; in dog, *Canis lupus familiaris* [as *Canis familiaris*]); Parodi & Mazza, 1928: 642, figs; Pillars, 1929: 307 (in nasal cavity of dog); Ortlepp, 1934: 113, fig. (South Africa; in a dog); Murie, 1935: 1 (Alaska; in caribou); Heymons, 1935: 245, fig. 143 (diagnosis); 1942a: 607, figs (revision; cosmopolitan; in *Canis lupus familiaris* [as *Canis familiaris*]); Pullar, 1936: 61 (Australia); Heymons & Vitzhum, 1935a: 96; Brumpt, 1936: 1101, figs; Tubangui & Masiluñgan, 1936: 399, fig. (Philippine Islands; larvae in *Bubalus bubalis bubalis* [as *Bubalus buffalus*]); Ivanov, 1933a: 157 (larvae in *Bubalus bubalis bubalis* [as *Bubalus buffalus*]); 1937a: 192 (Bulgaria; in dogs); 1937b: 79 (Bulgaria; in goats); Iwanoff, 1937: 481 (Bulgaria; distribution); Tagle, 1938: 108; Pinto, 1938: 49; Gelormini & Roveda, 1938: 3, figs (synonym); Jezhikov, 1939: 3 (morphology); Roy & Ganguly, 1940: 478 (in human); Whittick, 1943: 254, fig.; Gajardo-Tobár, 1943: 295; 1944: 354 (Chile); Marambio, 1946: 59 (in dog); Moore & Moore, 1947: 279 (USA: Alabama; parasite of cottontail rabbits); Pujatti, 1949: 18, fig. (India: Bangalore; in murid intermediary host, *Bandicota indica* [as *Nesocia bandicota*]); Symmers & Valteris 1950: 212 (human infestation by larvae); Unat & Sahin, 1950: 362 (infestation); Parenzan & Chieffi, 1951: 67 (Italy; human infestation); Gurr, 1953: 49 (New Zealand; in European rabbit, *Oryctolagus cuniculus cuniculus* [as *Oryctolagus cuniculus*]); Griffiths & Sinclair 1953: 5 (Great Britain; fox reservoir); Zukovic, 1953a: 155 (in Guinea pig, *Cavia porcellus* [as *cobaya*]); 1953b: 251; Ohbayashi & Oshima, 1954: 47 (role of intermediate host in linguatulosis; nymph in new host, the dog, *Canis lupus familiaris* [as *Canis familiaris*]); Sinclair, 1954: 371 (Great Britain;

life cycle); Yamashita & Ohbayashi, 1954: 146 (tongue worm in dog body); Luque-Forero, 1957: 595 (Colombia: nymphs); Seidel, 1957: 153 (Indonesia); Tobie et al., 1957: 628 (infestation in patient with acute leukemia); Lucas et al., 1957: 159, figs (France: Lièvre; Haute Savoie; mortal pulmonary infestation in man); Self & Kuntz, 1957: 195 (Sudan: Upper Egypt: Qena Province: Wadi Nassim, in pleural cavity of Egyptian hare, *Lepus capensis capensis* [as *Lepus capensis*]; Giza: Giza Province; nymph in liver of spiny mouse, *Acomys* (*Acomys*) *cahirinus* [as *Acomys cahirinus*]); Taborda-Duarte & Borges-Ferreira, 1957: 149 (nymphs in autoctonous bovids); Symmers, 1957: 549 (eosinophilous prostatitis by larvae); Papadakis & Hourmonziadis, 1958: 454 (human infestation); Buljevic & Rendic, 1958: 544; Papadakis, 1958: 307 (human infestation); G. Castellani, 1958: 505 (mesenteric effects of parasitism in buffalo); Besh, 1959: 544 (USA: north central Oklahoma; nymph in *Sylvilagus (Sylvilagus) floridanus floridanus* [as *Sylvilagus floridanus*]); Vaidova & Feizullaev, 1959: 423 (Azerbaidjan; first case of nymphs in birds); Gast-Galvis, 1960: 15, fig. (Colombia; in liver of girl); Paramananthan, 1960: 93 (Ceylon: Colombo; nymphal stages in goats); Alvarez, 1960: 22, figs 1-2 (Chile; nymphs from rodents, *Octodon degus* [as *Octodon degus degus*], and *Abrocoma bennettii bennettii* [as *Abrocama benetti*], and canid, *Lycalopex culpaeus culpaeus* [as *Dusucion culpaeus*]; adult in fox); Corroler & Pierre, 1960: 730, figs (Marrocos; linguatulosis, nymphs in lungs of humans); Todenhofer & Jacob, 1961: 237; Zumpt, 1961: 362 (Africa: Ethiopian region); Sweatman, 1962: 23 (New Zealand; in brown hare); Drury, 1962: 289 (larval granulomata in the liver of a dog); Deweese et al., 1962: 587 (tongue worm in anterior chamber of human eye); Rendtorff et al., 1962: 762 (within human eye); Slais, 1963: 163, figs (larva in liver of man); 1967: 207, fig. 2 (Latvia); Broberg & Ghafghasi, 1964: 846 (abdominal changes in sheep); Lapage, 1965 (veterinary helminthology); Khalil & Schacher, 1965: 736, figs (Lebanon: halzoun and marara syndrome); Schacher & Biagi, 1966: 279, figs (Mexico; in goat); Gill et al., 1968: 506 (in domesticate animals); Haffner & Rack (in Haffner et al.), 1969: 123, figs 31-32 (Serengeti; in *Connochaetes taurinus taurinus*, *Damaliscus korrigum korrigum*, *Alcelaphus buselaphus cokii*, and *Syncerus caffer caffer*); Schacher et al., 1969: 854 (Lebanon: nymphs from two patients, halzoun); Khalil, 1970: 485 (Egypt: cairo; infection in mongrel dogs); 1972: 363 (Egypt; parasiting humans and animals; review of parasitology); 1973: 288 (Egypt: El-Dakhla oasis; from mongrel dogs); 1976: 126 (Egypt: Cairo; infection in animals); Khalidi, 1972: 159 (life cycle); Rahman & Soliman, 1971: 65 (India: Bangladesh; in street dogs); S.P. Singh et al., 1973: 181 (infestation in goat); Fain, 1975: 60 (review in man); Muraleedharan & Zaki, 1975: 430 (developmental stages in cattle); Krishna et al., 1975: 317 (larval infection in goats); Sherkov & Rabie, 1976: 89 (Jordan; in domestic animals); Rizzo, 1977: 313 (Italy; human infestation by nymphs); Elbadawi et al., 1978: 171 (Sudan; nymph in goat, *Capra hircus hircus* [as *Capra hircus*]); Moreno Montañez et al., 1979: 383 (Spain; in hare, *Lepus* (? *Eulagos*) *granatensis granantensis* [as *Lepus capensis granatensis*]); Latrive et al., 1980: 567 (liver abscess and visceral linguatulosis); Valero Lopez et al., 1980: 565 (Spain: Granada; linguatulosis in goat, *Capra hircus hircus* [as *Capra hircus*]); Andrews et al., 1980: 395 (southeastern USA; in cottontail rabbits, *Sylvilagus (Sylvilagus) floridanus floridanus* [as *Sylvilagus floridanus*]); S. G. Vargas et al., 1980: 75 (Costa Rica: human parasitism); Zakarian, 1981: 35 (intracranial in a dog, *Canis lupus familiaris* [as *Canis familiaris*]); Graber, 1981a: 155 (Congo Republic; in dog, *Canis lupus familiaris* [as *Canis familiaris*]); Mumcuoglu & Rufli, 1981: 1923 (human hosts); Ehrenford & Newberne, 1981: 74 (USA; in dogs, *Canis lupus familiaris* [as

Canis familiaris]); Blake & Overend, 1982: 111 (Australia: northeastern Victoria; in urban pound dogs, *Canis lupus familiaris* [as *Canis familiaris*]); Rehbinder & Nordkvist, 1982: 45 (Sweden: in reindeer); Dinçer, 1982: 324 (Turkey: Elazing kennel; nymphal stages in stray dogs, cattle, sheep, and black goats); Velásquez et al., 1982: 76 (Costa Rica: in dogs); Banaja, 1983: 271 (larvae from abdominal cavity of goat; scanning electron microscopy of regions of body); Rego, 1984a: 49, pl. 3 fig. 1 (adults in nasospharyngeal cavity of carnivores, mainly canids; larvae from many mammals including man; cosmopolitan species); Gardiner et al., 1984: 187 (USA: Michigan; hepatic granuloma, nymphs in woman); El-Sherry & Sakla, 1984: 123 (Egypt; in goat, *Capra hircus hircus* [as *Capra hircus*]); Riley et al., 1985: 49 (Australia: Victoria: head of Dart River, in nasal sinus of *Canis lupus familiaris* [as *Canis familiaris dingo*]; New South Wales: Snowy Plains; in lung of *Oryctolagus cuniculus cuniculus* [as *Oryctolagus cuniculus*]; Serdyukov & Marchenko, 1985: 6 (Russian SFSR: Altai; in sheeps, *Ovis aries aries* [as *Ovis aries*]; imaginal form, parasite morphology and biometrics; description); Arroyo et al., 1986: 157, fig. 1 (Costa Rica: San Pedro-Montes de Oca; nymphs in man, *Didelphis marsupialis marsupialis* [as *Didelphis marsupialis*], and *Oryctolagus cuniculus cuniculus* [as *Oryctolagus cuniculus*]; pentastomiasis; meristics, differentiation); Rokiki, 1987: 145 (Poland); Martinez-Gomez et al., 1987: 347 (Spain; in the hare, *Lepus* (? *Eulagos*) *granatensis granatensis* [as *Lepus granatensis granatensis*]); Pandey et al., 1987: 53 (Morocco: Rabat; in stray dogs, *Canis lupus familiaris* [as *Canis familiaris*]); Nsengwa & Otaru, 1987: 81 (Tanzania; infection in hunting dogs, *Canis lupus familiaris* [as *Canis familiaris*]); Tasan, 1987: 86; Tischler, 1988: 97 (West Germany); El-Refaii & Michael, 1988: 353 (Egypt; larvae in sheep and goats); J.K. Baird et al., 1988: 198 (North America; nymph causing hepatic granuloma in man); El-Hassan et al., 1991: 309 (marrara syndrome, nymphs from patient and viscera of goats); Oryan et al., 1993: 290 (Iran: Fars Province; causing pathology in visceral organs of camel, *Camelus*); Valenzuela et al., 1995: 29 (Chile: Valdivia; nymph infection in cattle livers); Akyol et al., 1995: 267 (Turkey: Bursa; infection in stray dogs; importance to public health); Yagi et al., 1996: 127 (Sudan: Khartoun: Wad Hisouma, between Blue Nile and Atbara rivers; marrara syndrome, nymphs in upper respiratory tracts); Sanecal et al., 1996: 3555 (human subretinal invasion); Saiyari et al., 1996: 312 (Iran: nymphs in lungs of goat); Montazeri et al., 1997 (Iran: Tabriz; in humans); Wahba et al., 1997: 153 (Egypt; in camel, *Camelus dromedarius*); Aydenizoz, M. & Guclu, 1997: 75 (Turkey: Konya Province); Sadjadi et al., 1998: 193 (southern Iran: Shiraz; human pharynx); Ganzorig et al., 1998: 74 (Mongolia: Tov Province: Onjuul County; nymphs from rodent, *Meriones* (*Pallasiomys*) *unguiculatus* [as *Meriones unguiculatus*]); Z.S. Li et al., 1998: 238 (China; human infection); Rezaee, 1998 (Iran: Shiraz; in goats and dogs); Alcaino & Gorma, 1999: 7 (Chile; larva in domestic animals: goat, *Capra hircus hircus* [as *Capra hircus*], sheep, *Ovis aries aries* [as *Ovis aries*], dog, *Canis lupus familiaris* [as *Canis* (*Canis*) *familiaris*], and rabbit, *Oryctolagis cuniculus domesticus*); Panaiotova et al., 1999: 57 (karyotype, clinical symptons of disease, first time described; nymph morphology; in *Canis lupus familiaris* [as *Canis familiaris*]); Morsy et al., 1999: 787 (Egypt; human nasopharyngeal linguatulosis); Lazo et al., 1999: 405 (Ecuador; larvae causing ocular linguatulosis); Sielfeld, 2000: 1 (central Chile; in nasal sinus of domestic dog); Sergiev et al., 2000: 53 (Russia; life cycle in mammalian hosts); Gorokhov et al., 2000: 7 (Russia; pentastomiasis in human, mammalian, and reptilian hosts); Bowman, 2000 (nasal mucosa and sinuses of dog and cat); Esmail-Nia et al., 2000: 94 (Mazandaran Prov: Babol abbattoir; in small ruminants);

Maleky, 2001: 439 (central Iran: Tehra; in human throat); Pampiglioni et al., 2001: 105 (Italy; in pulmonary nodular lesion of man); Moghadam et al., 2001 (Iran: Kashan; human infestation); Tavassoli et al., 2001: 4 (experimental infection and life cycle in dogs); 2007: 73 (Iran: Urmia; nymphs in lymph nodes in sheeps); Tenquist & Charleston, 2001: 507 (New Zealand; in dog); Shekarforoush & Arzani, 2001: 57 (Iran: Shahrekord; nymphs in liver of sheep, goats and cattle); Kolte et al., 2002: 195 (India: Maharashtra; in dog, *Canis lupus familiaris* [as *Canis familiaris*]); Hes & Vrabec, 2002: 60 (in *Bitis gabonica*); Ma et al., 2002: 166 (China; pentastomiasis); Meshgi & Asgarian, 2003: 466 (Iran: Shahreford; infestation in stray dogs); Razavi et al., 2004: 213 (Iran: Shiraz; nymphs in goats); Shekarforousch et al., 2004a: 67; 2004b: 99 (Iran: Shiraz; nymphs in sheep); Hidalgo Toledo, 2004: 11, 2 figs (Chile: Nueva Imperial; larvae in liver of bull, *Bos taurus taurus* [as *Bos taurus*]); Mir et al., 2004: 23 (India: Kashmir; in a cow); 2009: 301, figs 1-7 (India: Kashmir: Shuhama; third instar nymphs causing visceral linguatulosis and paratuberculosis in alpine cross goat, *Capra hircus hircus* [as *Capra hircus*]); Vrhovec et al., 2005: 779 (Austria and Germany; infestation in imported dogs from Turkey and Italy); Sivakumar et al., 2005: 506 (North India; nymphs in water buffaloes, *Bubalus bubalis bubalis* [as *Bubalus bubalis*]); Tappe et al., 2006: 1034 (Germany; human visceral linguatulosis); Tajik et al., 2007: 69 (Iran; nymphs in slaughteted camels); 2008: 174 (Iran: Urmia; nymphs in river buffaloes); Gurler & Dogamy, 2007: 105 (Turkey: Ankara; in digestive and respiratory systems of rabbits); Pourjafar et al., 2007: 171 (Iran: Najafabad; nymphs in camel, *Camelus dromedarius*); Alcala-Canto et al., 2007: 1011 (Mexico: Mexico City; demonstration of serine proteinase activation of larval stage; in sheep livers); Miclaus et al., 2008: 1385 (immature stages infecting mesenteric lymph nodes of adult sheep); Esmaeilzadeh et al., 2008: 387 (nymph in a cat); Mohammadi et al., 2008: 53 (Iran: Tehran; third nymphal stage causing nasopharyngeal linguatulosis in man); Shakerian et al., 2008: 243 (Iran: Urmia: Najaf-Abad; nymphs in one-humped camel, *Camelus dromedarius*); Ravindran et al., 2008: 808 (south India: Kerala State: Wayanad; nymphs in domestic ruminants: goats, cattle, and buffaloes); Haddadzadeh et al., 2009: 59 (Iran: Tabriz; nymph in lung of two-humped camel, *Camelus bactrianus bactrianus* [as *Camelus bactrianus*]); Gicik et al., 2009: 135 (Turkey: Kars Province; in intestine of fox, *Vulpes vulpes vulpes* [as *Vulpes vulpes*]); Tappe & Büttner, 2009: 1 (human visceral pentastomiasis caused by nymphs); Hami et al., 2009: 25 (Iran: Azarbaijan-e-Sharghi Province; nymphs causing linguatulosis in domestic bovids); Sangwan et al., 2009: 83 (India: Haryana: Kamal; nymphs in mesentery and blood vessels of goats); Soriano et al., 2010: 81 (Argentina: Patagonia: Neuquén; in dogs); Fard et al., 2010, 2011 (Iran: Kerman; nymphs in mesenteric nymph nodes of goats); Haddadzadeh et al., 2010: 54 (Iran: Tabriz, in mesenteric lymph nodes of camel, *Camelus dromedarius*) ; Röhlig et al., 2010: 140, fig. 4c (nontype material, including Ceylon and Saudi Arabia, and including the host *Oryx beisa beisa* [as *Oryx beisa*], deposited in Museum für Naturkunde, Berlin); Radfar et al., 2011: 139 (Iran: nymphs in lymph nodes of camel); Koeshsler et al., 2011: 870 (Austria, in human eye); Vatsya et al., 2011: 249 (India: Uttarakhand: Pantnagar; in small ruminants);Yakhchali & Tehrani, 2011: 396 (Iran: nymphs in mesenteric lymph nodes of sheep); Khalafalla 2011 (Egypt: Nile delta, in cats); Oryan et al., 2011: 1225 (Iran: Yazd Province; nymphs in lymph nodes causing linguatulosis in camel); Rezaei et al., 2011: 561 (Iran: infection in dog definitive hosts and ruminant intermediate hosts); Pal et al., 2011: 442 (case of human intraocular pentastomiasis in India); Poore, 2012a: 221-222 (list

of synonyms and discussion of priority of *L. serrata* over other names. Application of ICZN Article 24.2 to select *Linguatula serrata* over *Taenia capraea* Abildgaard, 1789).

Taenia capraea Abildgaard, 1789: 52, pl. 108, fig. 64 (type: Denmark or Norway; juvenile in *Capra hircus hircus* [as *Capra hircus*]).

Linguatula integerrima Frölich, 1791: 104 (listed in Baird, 1853a: 41, but with no indication of type material).

Taenia caprina Gmelin, 1791: 3069 (type: no locality given, from the goat *Capra hircus hircus* [as *Capra hircus*]); 1800: 3069 (juvenile).

Polystoma serratum; Zeder, 1800; Goeze, 1800: 317 (juvenile); 1803: 270 (larva).

Taenia lanceolata Pilger, 1803: 1284; Rudolphi, 1805: 41 (types: bibliographic reference to a 2-page description of 'Ténia lancéolé, a French vernacular name by Chabert (1787: 39); material from nose of a horse *Equus caballus caballus* [as *Equus caballus*] and dog *Canis lupus familiaris*).

Halysis caprina; Zeder, 1803: 372 (juvenile).

Taenia rhinaria; Pilger, 1803: 1285.

Cochlus rhinarius; Rudolphi, 1808: 318.

Linguatula denticulata Rudolphi, 1805: 42 (juvenile; unnecessary replacement name for *Taenia capreae*, see Rudolphi (1809: 447); Leuckart, 1858a: 566; 1858b: 48 (as young form of *P. taenioides*); Tessé, 1913: 147 (ganglia in bovids); Bugge, 1927b: 345 (in a dog).

Prionoderma rhinarium; Rudolphi, 1808: 637; 1810: 432.

Polystoma denticulatum; Rudolphi, 1809: 447, pl. 12 (juvenile).

Pentastoma denticulatum; Rudolphi, 1809 (juvenile); Diesing, 1836 (*partim*; larvae in *Hystrix* (*Hystrix*) *cristata* [as *Hystrix cristata*]; p.p. = *Linguatula recurvata*); Dujardin, 1845: 304 (France: Paris; in lung of Guinea pig, *Cavia porcellus* [as *cobaya*]; Denmark; in mouth of *Capra hircus hircus* [as *Capra hircus*]; Sweden: Lund; in *Antilocapra americana americana* [as *Capra americana*]; Germany; in lung of bull and crested porcupine, *Hystrix* (*Hystrix*) *cristata* [as *Hystrix cristata*]; Greifswald, in liver of cat *Felix catus*); Kauffmann, 1847: pl. 1 (larvae in *Oryctolagus cuniculus cuniculus* [as *Lepus cuniculus*]); Beneden, 1857b: 29 (Egypt: Cairo; in man); Leuckart, 1857a: 30; 1860a; 1860b: 222; Cobbold, 1861a: 125 (in *Bubalus bubalis bubalis* [as *Antilope bubalis*] and *Philantomba monticola monticola* [as *Cephalophus pygmaeus*]); 1862: 350, pl. 33 fig. 6 (larvae in *Philantomba monticola monticola* [as *Cephalophus caeruleus*]); Loukin, 1878: 389; Babes, 1889: 1 (in cattle); Buri, 1912a: 16 (in cattle, causing pentastomiasis); 1913: 585 (in cattle); 1912b: 22; Sagredo, 1924: 608 (larva in human lung); Behn 1938: 39 (Chile: Concepción, larvae in human corpses).

Pentastoma taenioides; Rudolphi, 1809: 123; 1819; Bremser, 1824: pl. 10, figs 14-16; Miram, 1835: 623, pl. 46 (anatomy); 1836: 135, pl. 8 (anatomy); Diesing, 1836: 16, pl. 2 figs 1, 2, 14-16, 20, pl. 3 figs 1-5; Leuckart, 1857a: 30; 1857b: 444; 1857c: 48; 1857d: 25; 1860a; 1860b: 241; McCall, 1892a: 168; 1892b: 503; Tutt, 1913: 124 (two cases).

Pentastoma emarginatum Rudolphi, 1809: 124 (juvenile); 1819: 433 (type: no locality given, from Guinea pig *Cavia porcellus*).

Polystoma taenioides Rudolphi, 1809: 441 (types: no locality given; from the sinus of a horse *Equuus cabalus* and dog *Canis lupus familiaris*).

Tetragulus caviae Bosc, 1811: 269, pl. 2 fig. 1 (type: no locality given; juvenile in *Cavia porcellus*).

Linguatula taenioides; Lamarck, 1816; Haan, 1821: 290; Miram, 1835: 623; Owen, 1835: 325, pl. 41; 1837 (anatomy); McCall, 1892a 168; 1892b: 503 (in a collie dog; also so-called

Pentastoma taenioides); Flook, 1907: 648 (in the dog); Gaiger, 1909: 528; Roe, 1922.

Prionoderma; Cuvier, 1817: 35.

Pentastoma taeniöides; B.A. Grevé, 1818: 184 (diseases in domestic animals; adult in *Equus asinus asinus* [as *Equus asino-caballus*]).

Pentastomum serratum; Rudolphi, 1819: 14.

Pentastome taenioïde; Colin, 1824 (worms in nasal cavities of dogs); 1861a: 676 (larvae in mesenteric gland of sheep, *Ovis aries aries* [as *Ovis aries*], producing verminous malaide); 1861b: 275 (in dog; believed to have been transformed from linguatule from the mesenteric ganglia of sheep); 1861d: 682; 1862a: 342 (larvae in mesenteric glands); 1863a: 721 (in nasal cavity of dog); 1863b: 22; 1864: 108 (pentastome in nasal cavity of dog); Gellé, 1877a: 545 (in the ear of a dog); 1877b: 539 (in dog).

Linguatula lanceolata; Blainville, 1828: 531; Gomez, 1945: 104 (Spain).

Linguatula caviae; Blainville, 1828: 531.

Pentastoma fera Creplin, 1829: 76 (type: no locality givern; juvenile in *Felis catus* [as *Felis domesticus*]).

Worm [sine nomine]; Rhind, 1830: 29 (adult in front sinus of sheep, *Ovis aries aries* [as *Ovis aries*]).

Pentastomum taenioides; Miram, 1835: 623; 1836: 135; Diesing, 1850; Schubärt, 1853: 117 (development); Beneden, 1857b: 29 (Egypt: Cairo; in man); Leuckart, 1857a: 30; 1857e: 163; 1857f: 250; 1859a: 182 (development); 1860c: 78 (parasites of man); Weinland, 1860: 17 (in antelope, *Bubalus bubalis bubalis* [as *Antilope bubalis*]); Bruckmuler, 1869 (larvae in *Capra hircus hircus* [as *Capra hircus*]); Laudon, 1878: 730 (in man); Landois, 1886: 17; Kulagin, 1895: 499 (in intestine); Tutt, 1913: 124 (two cases); Plum, 1925: 509; Cave et al., 1998: 19.

Holyseris; Waldheim, 1840: 139.

Monostoma settinii Numan, 1840: 390 (type: no locality given; from horse *Equus caballus caballus* [as *Equus caballus*]).

Pentastoma taenoides; Dick, 1840: 71 (= misprint for *P. taenioides*) (apud Sambon, 1922b: 426).

Polystoma taenioidea; Nørdmann, 1840 (misprint for *P. taenioides*).

Pentastome taenioide; Dujardin, 1845: 303 (France: Paris, Toulouse; dogs and pharynx of a wolf, *Canis lupus lupus* [as *Canis lupus*]).

Linguatula ferox; G. Gros, 1849: 549 (juvenile); Beneden, 1854: 380 (on Küchenmeister's observations); 1855: 4; Kuchenmeister, 1855b: 21 (also known as *Pentastoma denticulatum* or *P. serratum*); 1855c: 4.

Pentastomum denticulatum; p.p. Diesing, 1850: 609 (juvenile; p.p. = *Linguatula recurvata*); Zenker, 1854: 212, pl. 8 figs 1-2 (new animal parasite in man); 1856: 581 (in kidney); 1860: 192; 1862: 478 (in milk); Wagner, 1856: 581 (in the kidney); 1862: 478 (in dolphin); Küchenmeister, 1857b: 777 (juvenile in *Dama dama dama* [as *Dama dama*]); Leuckart, 1857a: 30 (as the young stage of *P. tenioides*); 1857b: 444; 1857c: 48; 1857d: 25; 1857e: 163; 1857f: 250; 1857g: 163; 1857h: 4 (transformation of one form into another); 1858a: 566; 1858b: 48; 1858c: 78; 1859a: 182; 1859b: 320 (young of *P. taenioides*); 1860a: 53 (parasites in man); 1860b: 222; Wedl, 1861: 225 (Egypt; larvae in insectiver, *Hemiechinus auritus auritus* [as *Erinaceus auritus*]); Gerlach, 1869: 73 (from goats); Senner, 1870; Bochefontaine, 1877: 261 (in lung of Guinea pig); Csokor, 1887: 1 (in liver of lemurs; larvae in *Equus caballus caballus* [as *Equus caballus*]); Babes, 1889: 1 (larvae in *Capreolus capreolus*

capreolus [as *Capreolus capreolus*], and *Bos taurus taurus* [as *Bos taurus*]); Ratz, 1892a: 305; 1892b: 329; Ströse, 1898: 1 (in liver of pig, *Sus scrofa scrofa* [as *Sus domesticus*]); Kulagin, 1898: 489 (adult in *Bos taurus taurus* [as *Bos taurus*]); Bogdaschew, 1930: 252 (SSR; in mesenterial knots of goat; histology); 1931: 401 (in mesenterial lymph knot of sea gull); Laengner, 1906: 368 (parasite in man); Johnston & Cleland, 1910: 315 (Australia: New South Wales; in cattle); Schlegel, 1911a: 207; 1911b: 91 (massive invasion in cattle); Lurje, 1929: 193; Saupe, 1930: 401 (parasites in spleen); Straub, 1936: 1468 (Amsterdam; in man); Behn, 1938: 39 (Chile; larvae in nodules of autopsies); Jezhikov, 1939: 3; 1940: 263 (morphology).

Pentastomum ferox; Küchenmeister, 1855c: 4; Beneden, 1857a: 250.

Linguatula senata Küchenmeister, 1857a: 29 (misprint for *L. serrata*).

Pentastomum cephalopi pygmaei Cobbold, 1861b: 349; Diesing, 1864: 328 (type: bibliographic reference to description by Cobbold, 1862, p. 357 of material from the Cape guevi *Philantomba monticola monticola* [as *Cephalophus pygmaeus*]).

non *Pentastomum denticulatum*; Cobbold, 1861a: 117 (= *Neolingulata nuttalli*).

Linguatule taenioides; Tisserant, 1870: 50 (cause of death of a dog); Chauvrat, 1890: 489 (in nasal cavities of dog).

Pentastomum ténioide; B.A. Grevé, 1877 (in ear of dog).

Pentastome denticulé; Bochefontaine, 1877: 261 (in lung of guinea pig).

Linguatule denticullee; Railliet, 1884: 81 (larvae in surmulot, the brown Norwegian rat, *Rattus norvegicus*).

Linguatula rhinaria; Railliet, 1886: 308; 1900: 199 (in dog); Stiles, 1895: 1163 (USA); Koch, 1906: 288, 2 pls (in *Procapra gutturosa* [as *Gazella gutturosa*] and *Gazella subgutturosa subgutturosa* [as *Gazella yarkandensis*]; larvae in *Mus* (*Mus*) *musculus musculus* [as *Mus musculus*]); 1912: 381 (parasitism; also known as *Pentastomum taenioides*); S.V. Rátz, 1910: 137 (Hungary); 1913: 400 (Hungary; parasitism); Austin & Carpenter, 1914: 56 (larva in human feces); Schornagel, 1921: 154 (Netherlands; in a dog); Sagredo, 1924: 608 (as larva of *Pentastomum denticulatum* in humans); 1928: 314 (larva in humans); Sysak & Bykow, 1930: 114 (pathology); Carnevallini, 1931: 71; Schmitt & Pohlmann, 1935: 435 (larva in goat); Galli-Valerio, 1936: 577 (in dog); Hobmaier & Hobmaier, 1940: 199 (life cycle in *Canis lupus lupus* [as *Canis lupus*] and *Vulpes vulpes vulpes* [as *Canis vulpes*]).

Linguatula denticulatum; Neumann, 1888: 491.

Taenia lanceolatum; Neumann, 1888: 491.

Linguatula caprina; R. Blanchard, 1890: 425.

Linguatula rhinaris; Moniez, 1891: 160.

Pentastoma tenioide; Bertolini, 1892: 352 (in sheep).

Echinorhynchus caprae; Braun, 1908 (juvenile).

Linguatula dingophila Johnson, 1910: 248 (types: Australia, from the dingo, *Canis lupus dingo*); 1916 (suggested synonym of *Linguatula serrata*); Heymons, 1932a: 420, fig. (Australia; in wild dog, *Canis lupus dingo* [as *Canis dingo*]); 1935: 246, fig. 144 (diagnosis); 1942a: 621 (Australia, in dingo; East India, in European dog); Heymons & Vitzhum, 1935a: 97 (distribution: East Africa, in pharynx of lion, *Panthera leo leo* [as *Felis leo*]); Riley et al., 1985 (suggested synonym of *Linguatula serrata*); Poore & Spratt, 2011 (suggested synonym of *Linguatula serrata*); Poore, 2012a: 221 (synonymized with *L. serrata*).

Linguatula tanoides; Gaiger, 1911: 634.

Linguatula rhinaris; Stiles, 1927: 61.

Linguatula cerata; Garedaghi et al., 2011 (larvae in sheep lungs in Iran) (misspelling of *serrata*).

Unidentified species: *Linguatula* sp.; Self & Kuntz, 1957: 195 (Egypt: West desert Governate; near El Ammya; nymph in hedgehog, *Hemiechinus auritus auritus* [as *Hemiechinus auritus*]).

Distr.: Cosmopolitan. Primary and intermediate hosts: mammals, including man.

Remarks: The subspecies *Linguatula serrata serengetiana* Haffner & Rack (in Haffner, Rack & Sachs), 1969 permits the usage of subspecies *Linguatula serrata serrata* Frölich, 1789 for the present nominal species after 1969.

Linguatula serrata serengetiana Haffner & Rack (in Haffner, Rack & Sachs), 1969

Linguatula serrata var. *serengetiana* Haffner & Rack (in Haffner et al.), 1969: 123, figs 33-36 (Africa: Serengeti; in wild dogs, *Lycaon pictus lupinus*, and *Canis mesomelas schmidti* [as *Thos mesomelas elongae*]); Sachs et al., 1973: 401 (Africa: in *Canis mesomelas mesomelas* [as *Canis mesomelas*], *Canis adustus adustus* [as *Canis adustus*], and *Canis lupus familiaris* [as *Canis domesticus*]).

Distr.: Africa. Primary hosts: dogs.

Remarks: Omitted from Poore's (2012a) list.

Neolinguatula Haffner (in Haffner, Rack & Sachs), 1969

Fissilinguatula Heymons, 1942a: 621 (for *Linguatula nuttalli*).

Neolinguatula Haffner (in Haffner, Rack & Sachs), 1969: 138; Riley, 1986: 63 (synonymyzed with *Linguatula*).

Type-species, by original designation: *Linguatula nuttalli* Sambon, 1922.

Remarks: Although Riley (1986) synonymyzed *Neolinguatula* with *Linguatula*, the former genus has continued to be used after this date (Horak et al., 1988, 1992; cf. Poore, 2012a: 221). Furthermore, at leat one diagnostic character provided for *Neolinguatula* by Haffner et al. (1969) has been interpreted above (see item clades of Pentastomida) as a potential apomorphy distinguishing this genus from *Linguatula*. The two genera are nevertheless closely related.

Neolinguatula nuttalli (Sambon, 1922)

Pentastomum denticulatum; Cobbold, 1861a: 124 (lungs and intestine of bubale, *Bubalus bubalis bubalis* [as *Antilope bubalis*], some encysted beneath pleura, and from abdominal cavity of Cape guevi, *Philantomba monticola monticola* [as *Cephalophus pygmaeus*]); Heymons, 1935: 247, fig. 145 (diagnosis).

Linguatula nuttalli Sambon, 1922b: 414, fig. 22 (types: East Africa: Magadi [now Kajiado River, Kenya]; in *Panthera leo leo* [as *Felis leo*]); Heymons, 1935: 247, fig. 145; 1942a: 621 (British East Africa; in antilope, *Philantomba monticola monticola* [as *Cephalophus caeruleus*], and a lion); Heymons & Vitzhum, 1935a: 97; Poore, 2012a: 221.

Neolinguatula nuttalli; Haffner et al., 1969: 130, figs 37-49 (Serengeti; in leopard, *Panthera pardus pardus* [as *Felis pardus*]); Haffner, 1972: 235 (musculature of larvae); Sachs et al., 1973: 401 (Africa; in *Panthera pardus pardus* [as *Panthera pardus*]); Graber, 1981b: 25

(Central African Republic; in primate, "*Cebus defassa*"); Horak et al., 1983: 243 (South Africa: Transvaal; in mammal, blue wildbeast, *Connochaetes taurinus taurinus* [as *Conochaetes taurinus*]); 1988: 145 (South Africa: Transvaal: Lowveld; in warthog mammal, *Phacochoerus aethiopicus aethiopicus* [as *Phacochoerus aethiopicus*]); 1992: 259 (South Africa: eastern Transvaal and Cape Province; in mammal, *Tragelaphus strepsiceros strepsiceros* [as *Tragelaphus strepsiceros*]).

Distr.: East Africa. Primary and intermediate hosts: mammals.

SUBTRIQUETRIDAE Fain, 1961

Subtriquetridae Fain, 1961: 27 (attributed to the Porocephalida); Motta, 1963a: 9; Nicoli, 1963: 498.

Subtriquetra Sambon, 1922

Subtriquetra Sambon, 1922a: 205 (attributed to Linguatulini; for *Linguatula subtriquetra* and *L. megacephala*); Heymons, 1935: 248 (diagnosis); Heymons & Vitzhum, 1935a: 100; Fain, 1961: 1; M. Vargas V., 1974: 1021 (biology and taxonomy); Rego, 1984a: 50 (diagnosis); Junker et al., 1998a: 159 (diagnosis); Junker & Boomker, 2006: 32 (diagnosis).

Type-species, by original designation: *Pentastoma subtriqueta* Diesing, 1836.

Subtriquetra megacephalum (Baird, 1853)

Pentastoma megacephalum W. Baird, 1853a: 39 (types: India; flesh in head of *Crocodylus palustris*); 1853b: 21.

Porocephalus megacephalus; Shipley, 1898: 70, fig. 15; Hett, 1921: 164.

Subtriquetra megacephala; Sambon, 1922a: 205, figs (India: Sunderbunds, in muggar or Indian marsh crocodile, *Crocodylus palustris*; Bengal: Hugli river in *Crocodylus palustris, Crocodylus porosus*, or Sangor crocodile, *Gavialis gangeticus*?); Huchzermeyer, 2003: 207 (in *Crocodylus palustris*); Junker & Boomker, 2006: 32 (catalogue) (species revalidated).

Pentastomum megacephalum; Hett, 1924a: 107.

Diesingia (?) *megacephala*; Heymons, 1935: 227, fig. 134 (diagnosis; as *Diesingia megacephala*).

Subtriquetra megacephalum; Poore, 2012a: 232 (the specific name *megacephalum* would appear to be a noun and its ending does not require to be changed to *megacephala* as appears in recent literature).

Distr.: India. Primary hosts: crocodiles.

Subtriquetra rileyi Junker, Boomker & Booyse, 1998

Subtriqueta rileyi Junker et al., 1998a: 162, figs 1-2 (types: South Africa: Transvaal: Kruger National Park: Phabeni Dam, infective larvae in cichlid fish, *Tilapia rendalli* [as *Tilapia rendalli swierstrae*], and *Oreochromis mossambicus*); Huchzermeyer, 2003: 207 (in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Junker & Boomker, 2006: 27 (infective stages in Nile crocodiles as final hosts, recovered from fish; catalogue); Luus-Powell

et al., 2008: 323 (South Africa: Limpopo Province: Phalaborwa Barrage and Ga-Selati River; larvae in swim bladder of cichlid fish *Oreochromis mossambicus*).

Distr.: South Africa. Primary host: Nile crocodiles. Intermediate hosts: freshwater fishes.

Subtriquetra shipleyi Hett, 1924

Linguatula subtriqueta; Shipley, 1910: 275.

Subtriquetra shipleyi Hett, 1924a: 153 (types from the Indian Museum, Calcutta: ? India: Calcutta, in crocodiles, *Crocodylus palustris*, *Crocodylus porosus*, and pharynx of Indian crocodile, *Gavialis gangeticus*?); Heymons, 1935: 249, fig. 2 (diagnosis); Heymons & Vitzhum, 1935a: 103 (distribution); Huchzermeyer, 2003: 207 (in trachea of undetermined crocodile from India); Junker & Boomker, 2006: 33 (catalogue).

Distr.: India. Primary host: crocodile.

Subtriquetra subtriquetra (Diesing, 1836)

Pentastoma proboscideum; Bremser, 1824: pl. 10, figs 19-21 (*partim*; in crocodyle, *Caiman crocodilus* [as *Champsa sclerops*]).

Pentastoma subtriquetum Diesing, 1836: 17, pl. 3 figs 6-8 (type: no locality given; from *Caiman crocodilus* [as *sclerops*]); Dujardin, 1845: 306 (in caiman, *Caiman crocodilus* [as *Crocodylus sclerops*], from Museum of Vienna).

Pentastomum subtriquetrum; Diesing, 1850: 609.

Pentastomum pusillum Diesing, 1856: 31, pl. 5 figs 6-8 (type: Brazil: Mato Grosso: Augusto; in intestine of fish, *Aequidens tetramerus* [as *Acara cascudo*]).

Linguatula subtriquetra; Railliet, 1883: 26; Shipley, 1898: 56, fig. 3 (in throat of cayman, *Caiman crocodilus* [as *Crocodylus sclerops*]); Faria & Travassos, 1913a: 126 (Brazil: Rio de Janeiro: Iguassú river; in *Caiman crocodilus* [as *sclerops*]).

Not *Linguatula subtriqueta*; Shipley, 1910: 275 (= *Subtriquetra shipleyi* Hett, 1924a).

Subtriquetra subtriquetra; Sambon, 1922a: 205 (Argentina; Brazil; in mouth cavity of common caiman, *Caiman crocodilus*) and from black caiman, *Melanosuchus niger*; nymphs in intestine of the tropical fish, *Aequidens tetramerus* [as *Acara cascudo*]); Travassos & Pereira, 1928: 5 (Brazil: Mato Grosso: São João, larvae in swimming bladder of *Pygocentrus piraya*); Heymons, 1935: 248 (diagnosis; Brazil; young in fishes, *Aequidens tetramerus,* and *Pygocentrus piraya*); Heymons & Vitzhum, 1935a: 101 (distribution: South America; in two species of crocodiles; young in fish); M. Vargas V., 1971: 137 (Costa Rica); 1975: 67, figs 1-6 (Costa Rica; adults in crocodile, *Caiman crocodilus*; larvae in fish, *Amatitlania nigrofasciata* [as *Cichlasoma nigrifasciatum*], *Priapichthys annectens,* and *Poecilia* [as "lebistes"] spp.; life cycle); Rego, 1984a: 50, pl. 2 fig. 8, pl. 4 figs 6, 7 (adults in nasal fossae of crocodiles, *Caiman crocodilus,* and *Melanosuchus niger*; larvae in fish *Aequidens tetramerus*, *Pygocentrus piraya* and *Hoplias malabaricus*); Winch & Riley, 1986a: 81, figs 1-3 (Trinidad; larva in crocodile, *Caiman crocodilus*; development in fish, *Poecilia, Tilapia*, and *Xiphophorus maculatus*); Salgado-Maldonado et al., 1997: 195 (Mexico; in cichlid fish, *Paraneetroplus synspillus* [as *Cichlasoma synspilum*], and *Cichlasoma urophthalmus*); Huchzermeyer, 2003: 207 (in *Caiman crocodylus* and *Melanosuchus niger*).

Pentastoma gracile; Travassos & Pereira, 1928: 5 (juveniles in fish, *Pygocentrus piraya* [as *"Serrasalmo piranha"*]).

Cephalobaena subtriquetra subtriquetra; Heymons, 1935: figs

Distr.: Americas. Primary host: crocodilians; intermediate hosts: freshwater fishes.

POROCEPHALOIDEA Sambon, 1922

Porocephalinae Sambon, 1922a: 190 (erected as a subfamily of the Linguatulidae). Porocephaloidea; Almeida & Christoffersen, 1999: 702 (for Sebekidae and Porocephalidae).

SEBEKIDAE Sambon, 1922

Sebekidae Sambon, 1922; Self, 1982a: 192 (erected as a section of the Porocephalinae, subfamily Linguatulidae); Self & Rego, 1985: 33 (revision); Riley & Huchzermeyer, 1995a: 151 (systematics); Poore, 2012a: 229 (using the prevailing usage over the more correctly derived and the recently used Sebekidae).

Sebekinae; Heymons, 1935: 215 (diagnosis); Heymons & Vitzhum, 1935a: 38 (diagnosis); Self & Rego, 1985: 33 (revision).

Sambonidae Heymons; 1941a: 317; Self, 1982a: 727; Poore, 2012a: 227 (maintaining the prevailing usage rather than the more correctly derived Samboniidae).

Diesingiidae; Rego, 1983b: 237.

Sebekiidae; Martin & Davis, 2001: 60; Ahyong et al., 2011: 168.

LEIPERIINAE, **new subfamily**

Diagnostic apomorphies: hooks bifurcate in larvae, with single lamina in adult; females with spirally coiled abdomen, with comparatively large radius coils; parasites in the crocodilian tracheae, with an obligatory phase in circulatory system (Rego, 1984; Riley & Huchzermeyer, 1996; Junker et al., 2000).

Remarks: Although the new subfamily-level taxon is created to contain only the type-genus *Leiperia,* it is a phylogenetically informative clade, being the sister-group to all the remaining subfamilies of the Sebekidae (Samboninae, Diesingiinae, and Sebekinae). From a phylogenetic perspective, *Leiperia* is a redundant, uninformative phylogenetic name available for the same clade as Leiperiinae, although the names of genera are required under the present rules of taxonomy.

Leiperia Sambon, 1922

Leiperia Sambon, 1922a: 195 (of Sebekini, for *R. cincinnalis*); Heymons, 1935: 217 (diagnosis); 1940b: 84, figs (larvae); Heymons & Vitzhum, 1935a: 43; Rego, 1980: 783 (mammalian hosts; from Oswaldo Cruz Institute); 1984a: 49 (diagnosis); Riley & Huchzermeyer, 1996: 60 (males, first time described); Junker et al., 2000: 29; Junker & Boomker, 2006: 30 (diagnosis).

Type-species, by original designation: *Reighardia cincinnalis* Sambon (in Vaney & Sambon), 1910.

Leiperia australiensis Riley & Huchzermeyer, 1996

Leiperia australiensis Riley & Huchzermeyer, 1996: 60, figs 1, 3a-d, 4a-d (types: Australia: Queensland, in pulmonary artery of *Crocodylus johnsoni*; Northern Territory: Wildman River Station; Noonamah Crocodile Farm, near Darwin; in tracheae of *Crocodylus porosus*; Adelaide River: Kerlin Station, in lung of *Crocodylus porosus*; Gregory National Park: Bullita Station; Kakadu National Park: Yellow Waters, nymph in lung of *Crocodylus porosus*); Huchzermeyer, 2003: 207 (in *Crocodylus porosus* and *Crocodylus johnsoni*); Junker & Boomker, 2006: 30 (catalogue).

Distr.: Australia. Primary and intermediate hosts: crocodiles.

Leiperia cincinnalis Sambon (in Vaney & Sambon) 1910

Reighardia cincinnalis Sambon (in Vaney & Sambon), 1910: 139 (type: Uganda: Victoria Nile: Murchison Falls: Fajao, females in the Nile crocodyle, *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]).

Leiperia cincinnalis; Beauchamp, 1914: 109 (Democratic Republic of the Congo: in fish intermediate host, *Mastacembelus*); Cunnngton, 1920: 571 (Africa; in fishes); Sambon, 1922a: 196, figs (Zimbabwe; in the heart of *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Hett, 1924a: 107 (larva in fish, *Chrysichthys brachynema* and *Lates microlepis*); Southwell & Pillers, 1929: 130 (Upper Nile: nymph in muscle of *Oreochromis niloticus niloticus* [as *Tilapia nilotica*]); Rodhain & Vuylsteke, 1932: 1 (Democratic Republic of the Congo: Albertville and Leopoldville, in the bronchi and aorta of *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Heymons, 1935: 218, fig. 125; 1940b: 78, figs 1-3 (larvae); 1941b: 263, fig. (Democratic Republic of the Congo: Luapula, Kilwa and Chibambo; larva in chichlid fish, *Chrysichthys mabusi*, and in characid fish, *Alestes macrophthalmus*); Heymons & Vitzhum, 1935a: 43, fig. 24 (distribution: Africa, in Nile crocodile, *Crocodylus niloticus suchus* [as *Crocodylus vulgaris*]; young stages in latid fish, *Oreochromis niloticus niloticus* [as *Lates niloticus*]); Devos, 1939: 193 (Chibambo: Luapala; in tracheae of *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Fain, 1961: 52, figs (Central Africa; infective larvae in *Mecistops* [as *Crocodylus*] *cataphractus* and fish, *Bathybates ferox*, *Alestes macrophthalmus*, *Chrysichthys brachynema*, *C. mabusi*, *Lates microlepis*, *L. niloticus*, *Mastacembelus* sp., and *Oreochromis niloticus niloticus* [as *Tilapia nilotica*]); 1975: 60 (nymph in human faeces); Graber, 1981a: 155 (Zaire: Lubumbashi; Congo Republic; in reptilian, *Cycloderma aubryi*); Riley & Huchzermeyer, 1996: 58, figs 1-2a-h (Malawi: Uppershire, nymphs in crocodile; South Africa, in body cavity of fish, *Sargochromis giardi* [as *Pelamatochromis robustus*]; Nyasaland; Rhodesia; Democratic Republic of the Congo: Katanga); Junker et al. 1998a: 159 (South Africa; in piscean, *Oreochromis mossambicus*); 1999: 66 (South Africa: Kruger National Park: Shimuwini Dam; in crocodile, *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); 2000: 33, figs 1-3 (South Africa: Kruger National Park; in Nile crocodile, *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]; male first time described; female redescribed); Junker, 2002: xii (South Africa; in intermediate host, *Serranochromis meridianus*); Huchzermeyer, 2003: 207 (in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Junker & Boomker, 2006: 29 (catalogue); Luus-Paulus et al., 2008: 328 (in central Africa; in Nile tilapia, *Oreochromis nilotica*); Röhlig et al., 2010: 148, fig. 5e (non-type material deposited in Museum für Naturkunde, Berlin).

Porocephalus nematoides Beauchamp, 1918: 19, fig. 20 (type: Democratic Republic of the Congo: Lake Tanganyka: Kilewa Bay; juvenile in digestive tract of *Mastacembelus* sp.).

? *Leiperia cincinnalis*; Hett, 1924a: 161, fig. (Lake Tanganika, larval forms in fishes, *Chrysichthys brachynema* and *Lates microlepis*).

Distr.: Africa. Primary hosts: crocodiles and turtles. Intermediate hosts: freshwater fish, and man.

Leiperia gracilis (Diesing, 1836)

Pentastomum gracile Diesing, 1836: 23, pl. 4 figs 19-23 (types: Brazil: Mato Grosso: Cuiabá: Caiçara: Vila Maria; larvae in fishes, *Astronotus* [as *Acara*] *crassipinnis*, *Sciades herzbergii* [as *Bagrus mesops* and *Bagrus pemecus*], "*Clupea tobarana*", *Salminus brasiliensis* [as *Hydrocyon brevidens*], *Cichla* [as *Lobotes*] *monoculus*], *Hoplias malabaricus* [as *Macrodon trahira*], *Pellona castelnaeana*, *Pinirampus* [as *Pimelodus*] *pirarampu*, *Pseudoplatystoma* [as *Platystoma*] *tigrinum*, *Phractocephalus hemioliopterus* [as *Pirarara bicolor*], *Salminus brasiliensis* [as *Salmo auratus*], *Pristobrycon aureus* [as *Salmo erythrophthalmus*], *Salmo salar*, *Rhaphiodon vulpinus* [as *Salmo tamuco*], *Pygocentrus piraya* [as "*Serrasalmo piranha*"], *Hemisorubim platyrhynchos* [as *Silurus gerupoca*], *Zungaro* [as *Silurus*] *jahu*, *Pseudoplatystoma fasciatum* [as *Silurus fasciatus*], *Pimelodus ornatus* [as *Silurus megacephalus*], "*Silurus pintado*", *Brachyplatystoma filamentosum* [as "*Silurus piratinga*"], "*Silurus (Pimelodus) vituga*", in reptiles, "*Podinema nattereri*", and *Tupinambis teguixin*, and in mustelid, *Pteronura brasiliensis brasiliensis* [as *Lutra brasiliensis*]) (p.p. = *Porocephalus stilesi*); p.p. Diesing, 1850: 23 (p.p. = *Sebekia oxycephalum*); Leidy, 1856: 42; Parona, 1887: 69; Roveda, 1948: 47, figs 1-4 (Argentina: Entre Rios Province: Parana river; in muscles of surubin fish, *Pseudoplatystoma* sp.); Self & Rego, 1985: 39, fig. 6 (redescription).

Pentastomum gracilis; Leidy, 1856: 42 (North America; in *Alligator mississippiensis*); Dujardin, 1845: 308 (Brazil; in reptiles *Tupinambis teguixin* [as *Podinema teguixin*], *Bothropoides* [as *Bothrops*] *jararaca, Eunectes murinus* [as *scytale*], "*Podinema*" sp. n., *Elaps s*p. n., "*Pseuderys*" sp. n., *Tropidonotus* sp. n., *Coluber* sp. n., and fish *Pygocentrus piraya* [as "*Serrasalmo piranha*"], *Hoplius malabaricus* [as *Erythrinus trahira*], *Silurus*, *Phractocephalus hemioliopterus* [as *Pirarara bicolor*], *Pinirampus pirinampu* [as *Pimelodes pirirampus*], *Apteronotus* [as *Sternarchus*] *albifrons*, "*Clupea tobarana*", *Potamotrygon* [as *Raia*] *motoro*, *Cichla* [as *Lobotes*] *monoculus*] and *Synbranchus*); Parona, 1887: 72, pl. 3 figs 5-8 (Argentina: Plata; in *Hoplias malabaricus* [as *Macrodon trahira*]).

Pentastoma gracilis; Parona, 1887: 72, figs 5-8 (Argentina: Plata river, nymph in body cavity of symbranchid fish, *Hoplias malabaricus* [as *Macrodon trahira*]); Pearse, 1920: 1 (Venezuela: Lake Valencia; in fish); Sambon, 1922b: 424 (in symbranchid fish, *Synbranchus marmoratus*, and gymnotid fish, *Electrophorus* [as *Gymnotus*] *electricus*); Travassos & Pereira, 1928: 5 (in fish, *Astyanax mexicanus*); Heymons, 1941b: 256 (Belgian Congo: Luapala, Kilwa and Chibambo; larva in cichlid fish, *Chrysichthys mabusi*; larva in characid fish, *Alestes macrophthalmus*); Devos, 1939: 194, fig. (Luapula: between Kilwa and Chibambo; in peritoneum or external wall of cloaca of fish, *Alestes macrophthalmus*, *Chysichthys mabusi;* considered a larval form of *Leiperia cincinnalis*); Roveda, 1948: 47, figs (Argentina: Paraná river: Entre Rios Province; in fish, *Pseudoplatystoma* sp.).

Porocephalus gracilis; Shipley, 1898: 67, fig. 12 (Brazil; in fish); Wheeler, 1915: 207

(*partim*); Pearse, 1920 (in fish, *Aequidens pulcher*).

Reighardia gracile; Sambon (in Vaney & Sambon), 1910a: 139.

Porocephalus crocodili Wheeler, 1915: 207 (*partim*; type: Ecuador; in lungs of American crocodile, *Crocodylus acutus* [as *americanus*]; synonymized by Heymons & Vitzhum, 1935a and in part by Junker & Boomker, 2006; also a possible synonym of *Sebekia oxycephalum* (Diesing, 1836)).

Pentastoma gracile; Sambon, 1922b: 401, figs 15-16; Heymons, 1935: 249, fig. 147 (as *incertae sedis*); Heymons & Vitzhum, 1935a: 33 (p.p. = *Sebekia oxycephalum*); Sandon, 1951: 60 (a human parasite); Self & Rego, 1985: 40 (suggested synonym of *Leiperia cincinnalis*).

Leiperia neotropica Heymons & Vitzhum, 1935a: 153, figs (types from Berlin Museum: Ecuador: Guayaquil river; nymphs in fish, *Gobioides peruanus;* synonymised by Heymons & Vitzhum, 1935a).

Leiperia gracilis; Heymons, 1935: 219 (South America; in *Crocodylus acutus*; Brazil, in *Caiman crocodilus*); 1940b: 83; 1941b: 256 (Amazon; larva in fish *Arapaima gigas*; from British Museum, London); Heymons & Vitzhum, 1935a: 32, figs 17, 23 (distribution: America; larvae in a silurid fish, *"Silurus mamaiacu*"; young in fish; adults in crocodiles *Caiman crocodilus* [as *sclerops*], and *Crocodylus acutus* [as *americanus*]); Motta, 1964: 63, figs (female larva in tracheae of South American crocodile *Caiman crocodilus* [as *sclerops*], and larvae encysted in intestinal wall of fish *Salminus brasiliensis* [as *brevidens*]); Motta & Gomes, 1968b: 125 (evolutionary cycle); 1968c: 67, figs 1-4 (Brazil: State of Espírito Santo: Macuco Lake; larva in fish *Hoplias malabaricus*; Deakins, 1971: 1197 (USA, in *Alligator mississippiensis*); Hazen et al., 1978: 435 (USA, in *Alligator mississippiensis*); Rego, 1984a: 49, pl. 2 fig. 5 (adults in heart and aorta of crocodiles, *Crocodylus acutus* [as *americanus*], and *Caiman crocodilus*; larvae in fish, amphibians, serpents and chelonians: *Pseudoplatystoma fasciatum*, *Pseudoplatystoma* sp., *Hemisorubim platyrhynchus*, *Pimelodus ornatus*, *Zungaro zungaro* [as *Paulicea luetkeni*], *Phractocephalus hemioliopterus*, *Brachyplatystoma filamentosum*, *Pinirampus pirinampu* [as *Pinirampus pinirampus*], *Hoplias malabaricus*, *Gobioides peruanus*, *Brachyplatystoma filamentosum* [as *"Silurus piraiba*"], *"Silurus mamaiacu*", *"Piraniu"* sp., *Salminus brasiliensis* [as *Salmo auratus* and *Salminus brevidens*], *Potamotrygon motoro*, *Culuber* sp., *Testudo* sp., in marine fish, *Cichla* [as *Lobotes*] *monoculus*, and in bird, *Ardea cocoi*); Riley & Huchzermeyer, 1996: 63 (as *species inquirenda*); Junker & Boomker, 2006: 30 (catalogue); Röhlig et al., 2010: 148 (non-type material, including juvenile from host *Gobioides broussonnetii*, deposited in Museum für Naturkunde, Berlin); Poore, 2012a: 231 (valid species; synonymy).

Leiperia gracile; Rego et al., 1987: 865, figs 1-3 (Brazil: in alligator, *Caiman crocodilus*); Rego & Eiras, 1989: 591 (description); Riley & Huchzermeyer, 1996: 63 (*species inquirenda*); Scott et al., 1997: 258 (USA: Texas; in reptilian, *Alligator mississippiensis*); Luus-Paulus et al., 2008: 328 (in Gulf killfish, *Fundulus grandis*, bluegill, *Lepomis macrochirus*, Atlantic croaker, *Micropogonias undulatus*, and largemouth bass).

Distr.: Southern USA, South America, and Africa. Primary hosts: alligators, snakes, and lizard. Intermediate hosts: freshwater and marine fishes, amphibians, serpents, chelonians, a bird and small mammals.

Remarks: Because it is generally agreed that Diesing's material contained more than one species, it would be appropriate to select a lectotype, if syntypes still exist, or a neotype, if they don't, especially as other junior availabe names compete. The same applies to *Porocephalus crocodili* Wheeler, 1915, in order to fix the synonymies.

SAMBONINAE Heymons, 1935

Samboninae Heymons, 1935: 222 (as a subfamily of the Porocephalidae); 1941a: 317 (revised); Heymons & Vitzhum, 1935a: 49.

Sambonidae; Heymons, 1941: 317; Fain, 1961: 28; Martin & Davis, 2001: 60.

Sambonia Noc & Giglioli, 1922

Sambonia Noc & Giglioli, 1922: 279; Sambon, 1922b: 428; Heymons, 1935: 223 (diagnosis); Heymons & Vitzhum, 1935a: 49; Self & Kuntz, 1966b: 256 (new synonym, *Megadrepanoides*); Almeida & Christoffersen, 1999: 701 (referred to Sebekidae from Sambonidae).

Megadrepanoides Self & Kuntz, 1957: 196 (type-species: *Megadrepanoides solomonensis* Self & Kuntz, 1957; synonymized by Self & Kuntz, 1966).

Type-species, by monotypy: *Reighardia lohrmanni* Sambon (in Vaney & Sambon), 1910 [as *Sambonia lohrmanni*].

Unidentified species: *Sambonia* sp; Flach et al., 2000: 91 (United Kingdom: England; pentastomiasis of undescribed species in monitor lizard, *Varanus exanthematicus*, imported from West Africa).

Sambonia clavata (Lohrmann, 1889)

Not *Pentastomum clavatum;* Leuckart, 1860a (= *Porocephalus clavatus* Wyman, 1845).

Pentastomum clavatum Lohrmann, 1889: 336 (types: Egypt; in lungs of *Varanus niloticus*).

Porocephalus clavatus; Shipley, 1898: 63, fig. 9 (in monitor, *Varanus exanthematicus* [as *ocellatus*]); 1910: 275 (in *Varanus exanthematicus*); Haffner, 1927: 361, figs; Heymons, 1935: figs; Pinto, 1938: 50, figs; Berghe, 1939: 39, figs (Not *Porocephalus clavatus* (Wyman, 1845)).

Reighardia lohrmanni Sambon (in Vaney & Sambon), 1910a: 138 (unnecessary replacement name for *Pentastomum clavatum* Lohrmann, 1889).

Sebekia (?) *lohrmanni*; Sambon, 1922a: 194 (in the lungs of the Egyptian monitor, *Varanus niloticus*, of the ocellated monitor, *Varanus exanthematicus* [as *ocellatus*], and of the common teguixin, *Tupinambis teguixin*).

Sambonia lohrmanni; Noc & Giglioli, 1922: 277, fig. (Senegal: Dakar; in Nilotic monitor, *Varanus niloticus*); Sambon, 1922b: 393, figs 4-6; Heymons, 1926a: 45 (in gecko, *Varanus salvator salvator* [as *Varanus salvator*]); 1932a: 427, fig. 10; 1935: 223, fig. 30; 1939: 681, figs; 1941a: 319, fig. (Kamerun: in lung of varan, *Varanus niloticus*; revised); Heymons & Vitzhum, 1935a: 50; Self & Kuntz, 1957: 196 (Sudan: Bahr El Ghazal Province: Tonj District; in Nile monitor lizard, *Varanus niloticus* [as *nilotica*]; British Solomon Islands: Florida Island, in snake, *Acrochordus granulatus*); Fain & Mortelmans, 1960: 518, fig. 2 (evolutionary cycle in varanid); Fain, 1961: 55, figs (Sonde Arquipelago: Flores Island: Komodo; in *Varanus komodoensis*); Riley, 1992a: 402 (sex differences).

Sambonia clavata; Poore, 2012a: 228 (correct name); Röhlig et al., 2010: 149 (non-type material deposited in Museum für Naturkunde, Berlin).

Distr.: Africa, Flores and Solomon Islands. Primary hosts: monitor lizards.

Sambonia parapodum Self & Kuntz, 1966

Sambonia parapodum Self & Kuntz, 1966b: 257, figs 1-6 (type: female; Philippine Islands: Puerto Princesa: Palawan; in lung of *Varanus salvator salvator* [as *Varanus salvator*]); Riley, 1992a: 402, fig. 1c (sex differences).

Distr.: Philippines. Primary host: monitor lizard.

Sambonia solomonensis (Self & Kuntz, 1957)

Megadrepanoides solomonensis Self & Kuntz, 1957: 196, figs 1, 2. 5, 6 (types: Solomon Islands: Florida Island; in *Varanus indicus*).

Distr.: Solomon Islands. Primary host: monitor lizard.

Sambonia varani (Self & Kuntz, 1957)

Megadrepanoides varani Self & Kuntz, 1957: 197, figs 3, 4, 7, 8 (types: Solomon Island: Florida Island; in lung of *Varanus indicus*).

Distr.: Solomon Islands. Primary host: monitor lizard.

Sambonia wardi Sambon (in Vaney & Sambon), 1910, *species inquirenda*

Pentastoma proboscideum; Diesing, 1836: pl. 4 figs 1-10 (*partim*).

Pentastomum proboscideum; Diesing, 1850: 609 (*partim*).

Porocephalus crotali; Shipley, 1898: 52 (*partim*).

Porocephalus wardi Sambon (in Vaney & Sambon), 1910: 137 (type: Uruguay; in lizard *Tupinambis teguixin;* bibliographic reference to material figured and misidentified as *Pentastoma proboscideum* by Diesing, 1836, pl. 4 figs 1-10); Rego, 1984a: 50 (*species inquirenda*, probably a species of *Sebekia*); Poore, 2012a: 227 (listed as a valid species of *Porocephalus*).

Sambonia wardi; Sambon, 1922: 417 (in snakes, *Boa constrictor, Bothropoides* [as *Bothrops*] *jararaca*, *Crotalus horridus, Eunectes murinus, Xenodon merremii* [as *Ophis merrimi*], and *Spilotes pullatus pullatus* [as *Spilotes pullatus*]); Heymons, 1935: 223 (diagnosis; doubtful species); Heymons & Vitzhum, 1935a: 51 (list of hosts).

Distr.: Uruguay. Primary hosts: lizards and snakes.

DIESINGIINAE Heymons, 1935

Diesingiinae Heymons, 1935: 224 (diagnosis); Heymons & Vitzhum, 1935a: 52. Diesingidae; Martin & Davis, 2001: 60.

Type-genus: *Diesingia* Sambon, 1922.

Diesingia Sambon, 1922

Diesingia Sambon, 1922b: 397; Heymons, 1935: 225 (diagnosis); Heymons & Vitzhum, 1935a: 53; Rego, 1983b: 237 (*Butantanella* as new synonym; *Diesingia* designated as type for new family Diesingiidae); 1984a: 49 (diagnosis); Self & Rego, 1985: 39 (status); Junker et al., 2003: 211 (diagnosis); Junker & Boomker, 2006: 32 (diagnosis).

Butantanella Fonseca & Ruiz, 1956: 471 (type-species, by original designation: *Pentastoma megastomum* Diesing, 1836).

Type-species, by monotypy: *Porocephalus kachugensis* Shipley, 1910.

Unidentified species: *Diesingia* sp.; Self & Kuntz, 1957: 196 (South Pacific: Florida Islands and Solomon Islands; in Pacific boa, *Candoia carinata* [as *Engyrus carinatus*]).

Diesingia kachugensis (Shipley, 1910)

Porocephalus kachugensis Shipley, 1910: 276, pl. 20 (type: India and Burma; in turtle, *Batagur kachuga* [as *Kachuga lineata*]); Hett, 1921: 164 (India: Calcutta; young in liver of mud-turtles, *Batagur kachuga* [as *Kachuga lineata*], and *Batagur baska* [as *basca*]); Sambon, 1922b: 397, fig. 9.

Diesingia kachugensis; Sambon, 1922a: 192; Heymons, 1935: 226, fig. 133 (diagnosis); Heymons & Vitzhum, 1935a: 54.

Distr.: India, Burma. Intermediate hosts: turtles.

Diesingia megastomum (Diesing, 1836)

Pentastoma megastomum Diesing, 1836: 23, pl. 4 figs 14-18 (type in Wien Museum: no locality given; in lung of side-necked turtle, *Phrynops geoffroanus*); Sambon, 1922b: 397.

Pentastomum megastomum; Dujardin, 1845: 306; Leuckart, 1860a: 1.

Porocephalus megastomus; Shipley, 1898: 71, fig. 16.

Diesingia megastoma; Sambon, 1922a: 193 (Brazil); Heymons, 1935: 226, figs; 1941b: 330, figs (revised); Heymons & Vitzhum, 1935a: 56; Rego, 1983b: 237 (in aquatic turtles, *Phrynops geoffroanus* [as *Hydraspis geoffroyana*], and *Hydromedusa tectifera*); 1984a: 49, pl. 2 figs 6, 7, pl. 4 fig. 5; Self & Rego, 1985: 39 (referred to *Sebekia*); Junker et al., 2003: 212; Junker & Boomker, 2006: 32 (catalogue).

Pentastoma (*Diesingia*?) *megastoma*; Sambon, 1922b: 397 (in mud-turtles, *Batagur kachuga* [as *Kachuga lineata*]).

Pentastoma megacephalum; Hett, 1924a: 153 (females in head of *Crocodylus palustris*).

Sebekia megastoma; Travassos, 1924: 239; Self & Rego, 1985: 39, fig. 4 (transferred from *Diesingia*; Brazil; redescribed).

Sebekia crocodili; Heymons & Vitzhum, 1935b: 155, fig. (Berlin Aquarium; in lungs of *Crocodylus acutus* [as *americanus*]).

Butantanella megastoma; Fonseca & Ruiz, 1956: 471, figs (Brazil: Paraná State: Tranqueira; in lungs of snake-necked turtle, *Hydromedusa tectifera*, from Instituto Butantã).

Diesingia megastomum; Poore, 2012a: 230 (the specific name appears to be a noun and its ending does not require to be changed to *megastoma*).

Distr.: Brazil. Primary hosts: snakes, turtles, and crocodiles.

Alofia Giglioli (in Sambon), 1922

Alofia Giglioli (in Sambon), 1922: 194; Heymons, 1935: 219 (diagnosis); 1942b: 419, figs (revision); Heymons & Vitzhum, 1935a: 46; Fain, 1961; Rego, 1984a: 49 (diagnosis); Riley et al., 1990: 24 (removal from synonymy with *Sebekia*); Riley, 1994: 23; Junker & Boomker, 2006: 28 (diagnosis).

Type-species, by original designation: *Alofia ginae* Giglioli in Sambon, 1922.

Unidentified species: *Alofia* sp.; Foster et al., 1998: 62 (southeast Florida; in soft-shell turtle *Apalone ferox*); Luus-Powell et al., 2008: 323 (South Africa: Limpopo Province: Phalaborwa Barrage; larvae in swim bladder of cichlid fish *Oreochromis mossambicus*).

Alofia adriatica Hirst, 1922, *species inquirenda*

Alofia adriatica Hirst, 1922: 289 (type: Adriatic; host unknown); Giglioli (in Sambon), 1922: 393, figs; Heymons, 1935: 221, fig. 128 (diagnosis); 1942a: 423 (Adriatic fish); Heymons & Vitzhum, 1935a: 46 (distribution: Adriatic Sea, in fish); Junker & Boomker, 2006: 28 (diagnosis; as *species inquirenda*); Poore, 2012a: 229 (comment on identity).

Distr.: Adriatic sea. Intermediate host in marine fish?

Alofia ginae Giglioli (in Sambon), 1922

Alofia ginae Giglioli (in Sambon), 1922: 194, figs (types: Samoa; "probably from some fish"); Giglioli, 1922a: 371, figs 1-5; Heymons, 1932a: 429 (Samoa; in *Crocodylus*); 1935: 220, fig. 126; 1942b: 419, fig. 1; Heymons & Vitzhum, 1935a: 46 (distribution); Riley, 1994: 33, fig. 5f (Philippines: Davao: Santa Cruz, in bronchioles of marine crocodile, *Crocodylus porosus*); Huchzermeyer, 2003: 207 (in *Crocodylus porosus*); Junker & Boomker, 2006: 29 (catalogue).

Distr.: Philippines. Primary host: crocodile.

Alofia indica (Linstow, 1906), *species inquirenda*

Porocephalus indicus Linstow, 1906: 270, pl. 3 figs 6-10 (type: India: Calcutta, in lungs and tracheae of *Gavialis gangeticus*); Sambon, 1922b: 406, fig.; Maskey et al., 1998: 291 (Nepal; in juvenile reptilian host, *Gavialis gangeticus*).

Reighardia indica; Sambon (in Vaney & Sambon), 1910a: 139.

Sebekia indica; Sambon, 1922: 406.

Alofia indica; Hett, 1924a: 140, fig. 10; Heymons, 1935: 221, fig. 127; 1942a: 423; Heymons & Vitzhum, 1935a: 48 (distribution; type in Indian Museum of Calcutta); Maskey et al., 1998: 291 (disastrous intestinal infection in captive gharial hatchlings); Huchzermeyer, 2003: 207 (in *Gavialis gangeticus*); Junker & Boomker, 2006: 29 (catalogue, as *species inquirenda*).

Distr.: India. Primary and intermediate hosts: crocodiles.

Alofia merkii Giglioli (in Sambon), 1922

Alofia (?) *merkii* Giglioli (in Sambon), 1922: 195 (type: Samoa: in unknown host); Heymons, 1932a: 429 (Samoa; in *Crocodylus*); 1935: 220 (diagnosis); Heymons & Vitzhum, 1935a: 46 (distribution); Self & Rego, 1985: 35 (as synonym of *A. platycephalum*); Riley, 1994: 33, figs 6, 7a-e, 8a-d (Australia: Northern Territory; Philippines; both in bronchioles of marine crocodile *Crocodylus porosus*); Huchzermeyer, 2003: 207 (in *Crocodylus porosus*); Junker & Boomker, 2006: 29 (catalogue; species revalidated).

Sebekia merkii; Heymons, 1942a: 429 (as *species inquirenda*).
Distr.: Southern Pacific. Primary host: crocodile.

Alofia nilotici Riley & Huchzermeyer, 1995

Alofia nilotici Riley & Huchzermeyer, 1995b: 232, fig. 6a-d (types: Botswana: Okavango swamps, host *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Junker et al., 1999: 67 (South Africa: Kruger National Park, in crocodile, *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Huchzermeyer, 2003: 207 (in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Junker & Boomker, 2006: 28 (catalogue).
Distr.: Southern Africa. Primary host: crocodile.

Alofia parva Riley & Huchzenmeyer, 1995

Alofia parva Riley & Huchzenmeyer, 1995a: 155, figs (types: Republic of the Congo: Congo-Brazzaville, in African dwarf crocodile, *Osteolaemus tetraspis*, and *Mecistops* [as *Crocodylus*] *cataphractus*); 2000: 582; Huchzermeyer, 2003: 207 (in *Osteolaemus tetraspis*); Junker & Boomker, 2006: 29 (catalogue).
Distr.: Democratic Republic of the Congo. Primary host: crocodile.

Alofia platycephalum (Lohrmann, 1889)

Pentastomum platycephalum Lohrmann, 1889: 303 (type: locality not given; in unknown crocodilian).
Porocephalus platycephalus; Shipley, 1898: 75, fig. 22.
Reighardia platycephala; Sambon (in Vaney & Sambon), 1910a: 139; Sambon, 1910b: 212.
Sebekia merki; Sambon, 1922: 195.
Alofia platycephala; Sambon, 1922a: 195, figs (host unknown, possibly *Alligator*); Heymons, 1935: 220; 1942a: 423 (Brazil; in *Caiman crocodilus* [as *sclerops*]; Paraguay; in crocodile, *Caiman latirostris*); Heymons & Vitzhum, 1935a: 48, figs 22, 25 (in *Alligator mississippiensis*); Rego, 1984a: 49, pl. 2 figs 3, 4, pl. 4 fig. 4; Self & Rego, 1985: 35, fig. 2 (redescription; *Alofia merki* as synonym); Riley, 1994: 23; Huchzermeyer, 2003: 207 (in *Caiman crocodylus* and *Caiman latirorstris*); Junker & Boomker, 2006: 30 (catalogue); Poore, 2012a: 230 (spelling of name).
Distr.: South America. Primary hosts: crocodiles.

Alofia simpsoni Riley, 1994

Alofia simpsoni Riley, 1994: 35, fig. 8e, f (types: Ghana; in unknown crocodile); Riley & Huchzermeyer, 1995a: 151 (Botswana, in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Junker et al., 1999: 67 (South Africa: Kruger National Park, in Nile crocodile, *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]; male described first time; female redescribed); Huchzermeyer, 2003: 207 (in undetermined crocodile from Ghana); Junker & Boomker, 2006: 29 (catalogue).
Distr.: South Africa. Primary host: crocodile.

Alofia solaris (Tubangui & Masiluñgan, 1936), *species inquirenda*

Pentastomum solaris Tubangui & Masiluñgan, 1936: 401, fig. (type: Philippine Islands: Palawan; in crocodile, *Crocodylus porosus*); Poore, 2012a: 214 (genus and species uncertain).

Remarks: Tubangi & Masiluñgan (1936) noted similarities of their parasite with *Pentastomum gracile*, now *Leiperia gracile* (Diesing, 1836), which occurs only in the Americas and Africa. On the other hand, they also sugested the possibility of it being a developmental stage of *Alofia travassosi* (Heymons, 1932), another parasite of crocodiles in the Philippines. We herein thus suggest that this species is either a synonym of *Alofia travassosi* or another closely related species of *Alofia*.

Distr.: Philippines. Primary host: crocodile.

Alofia travassosi (Heymons, 1932)

Elenia (*Waddycephalus*) *travassosi* Heymons, 1932b: 295, figs 1-2 (type in Zoologisches Museum Berlin: Philippines: Samar Islands: Basey River; host unknown).

Alofia travassosi; Heymons, 1935: 222, fig. 129; 1942a: 422; Heymons & Vitzhum, 1935a: 47 (distribution; type in Berliner Museum, in *Crocodylus porosus*).

Elenia travassosi; Poore, 2012a (listed without consideration of subsequent treatments as *Alofia* by the author of the species).

Distr.: Philippines. Primary host: crocodile.

Selfia Riley, 1994

Selfia Riley, 1994: 27; Junker & Boomker, 2006: 32 (diagnosis).

Type-species, by monotypy: *Selfia porosus* Riley, 1994.

Selfia porosus Riley, 1994

Selfia porosus Riley, 1994: 27, figs 1-4, 5a-e (types: Australia: Northern Territory; in bronchioles of the marine crocodile, *Crocodylus porosus*); Huchzermeyer, 2003: 207 (in *Crocodylus porosus*); Junker & Boomker, 2006: 32 (catalogue).

Distr.: Australia. Primary host: marine crocodile.

SEBEKINAE Sambon, 1922

Sebekidae Sambon, 1922a: 192; Heymons, 1935: 215 (diagnosis); Heymons & Vitzhum, 1935a: 38 (diagnosis).

Agema Riley, Hill & Huchzermeyer, 1997

Agema Riley et al., 1997: 211; Junker & Boomker, 2006: 27 (endemic in African region).

Type-species, by original designation: *Agema silvaepalustris* Riley, Hill & Huchzermeyer, 1997.

Agema silvaepalustris Riley, Hill & Huchzermeyer, 1997

Agema silvaepalustris Riley et al., 1997: 211, figs 1-3 (types: Congo Republic: Congo-Brazzaville: Likovala region; in lungs of the African dwarf crocodile, *Osteolaemus tetraspis* Cope and from the slender-snouted crocodile, *Mecistops* [as *Crocodylus*] *cataphractus*); Riley & Huchzermeyer, 2000: 582 (northern Congo Republic: Congo and Oubangui rivers, in lungs of dwarf crocodile, *Osteolaemus tetraspis* [as *Osteolaemus tetraspis osborni*]); Huchzermeyer, 2003: 207 (in *Mecistops* [as *Crocodylus*] *cataphractus* and *Osteolaemus tetraspis*); Junker & Boomker, 2006: 28 (catalogue).

Distr.: Democratic Republic of the Congo. Primary host: crocodile.

Pelonia Junker & Boomker, 2002

Pelonia Junker & Boomker, 2002: 54; Junker & Boomker, 2006: 32 (diagnosis).

Type-species, by original designation: *Pelonia africana* Junker & Boomker, 2002.

Pelonia africana Junker & Boomker, 2002

Pelonia africana Junker & Boomker, 2002: 54, fig. 1 (types: South Africa: Northern Province; in lungs of terrapin turtles, *Pelomedusa subrufa subrufa* [as *Pelomedusa subrufa*], and *Pelusios sinuatus*).

Distr.: South Africa. Primary host: terrapin turtles.

Sebekia Sambon, 1922

Sebekia Sambon, 1922a: 193; Heymons, 1922: 154 (diagnosis); 1942a: 419, figs (revision); Heymons & Vitzhum, 1935a: 38; M. Vargas V., 1974: 1021 (biology and taxonomy); Boyce et al., 1984: 1419 (sebekiosis in captive alligator hatchlings); Riley et al., 1985: 39 (Australia: Peron Island); Mairena et al., 1989: 352 (human dermatitis caused by nymph); Rego, 1984a: 48 (diagnosis); Rego & Vicente, 1988: 65 (Brazil: Mato Grosso State: Pantanal region; in fishes, *Pinirampus*, *Pseudoplatystoma*, and *Pygocentrus* [as *Serrasalmus*], and reptilian, *Helicops leopardinus* [as *leopardina*]); Ladds & Sims, 1990: 323 (Papua New Guinea; diseases in young captive *Crocodylus*); Riley et al., 1990: 24 (removal of *Alofia* from synonymy; revision); Junker et al., 1999: 65 (South Africa; in reptilian, *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Junker & Boomker, 2006: 28 (diagnosis).

Bdukus Holl, 1928: 64 (type-species: *Bdukus ichthyus* Holl, 1928; synonymized by Junker & Boomker, 2006).

Type-species, by original designation: *Sebekia wedli* Giglioli (in Sambon), 1922 [= *Sebekia minor* (Wedl, 1861)]

Unidentified species: *Sebekia* sp.; Salgado-Maldonado et al., 1997: 195 (Mexico; in cichlid fish, *Parachromis* [as *Cichlasoma*] *montaguense*); Guidelli et al., 2003: 261 (Brazil: Upper Paraná River; in pimelodid fish); Goldberg & Bursey, 2004: 62 (Costa Rica; in colubrid and elapid snakes).

Sebekia acuminata Travassos, 1924, *species inquirenda*

Sebekia acuminata Travassos, 1924: 240 (types: Brazil: Amazonas State; in unknown crocodilian); Heymons, 1935: 316; Heymons & Vitzhum, 1935a: 42 (inperfectly known species); Rego, 1984a: 50 (*species inquirenda*, probably *Sebekia oxycephalum*); Riley et al., 1990: 23 (*species inquirenda*, insufficiently described); Huchzermeyer, 2003: 207 (in undetermined crocodile from Brazil); Junker & Boomker, 2006: 30 (catalogue, *species inquirenda*); Röhlig et al., 2010: 149 (as *nomen dubium*; non-type material from Paraguay, host not recorded, deposited in Museum für Naturkunde, Berlin); Poore, 2012a: 213 (listed as a doubtful species).

Distr.: Brazil and Paraguay. Primary host: crocodile.

Sebekia cesarisi Giglioli (in Sambon), 1922

Sebekia cesarisi Giglioli (in Sambon), 1922: 193 (types: Africa; in lungs of *Crocodylus* sp.; belonging to Sebekini, together with *Pentastoma wedli* and *P. divestei*); Junker & Boomker, 2006: 30 (catalogue).

Sebekia divestii; Heymons, 1935: 217; Heymons & Vitzhum, 1935a: 42 (species known imperfectly); Riley et al., 1990: 14, figs 2e, 3d, 4e (Uganda, in *Crocodylus* sp.; Ghana, nymphs in *Crocodylus* sp.); Riley & Huchzermeyer, 1995b: 229, figs 1c, e, f, 5a-f (Botswana, in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Junker et al., 1999: 66 (South Africa, in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Huchzermeyer, 2003: 207 (in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]).

Non *Sebekia cesarii*; Riley et al., 1990 (= *S. okavangoensis*).

Distr.: Africa. Primary host: crocodile.

Sebekia divestei Giglioli (in Sambon), 1922

Sebekia divestei Giglioli (in Sambon), 1922: 193 (types: Central and South America: locality unknown, in lungs of American crocodile, *Crocodylus acutus* [as *americanus*]).

Sebekia divesti; Heymons, 1935: 216; Heymons & Vitzhum, 1935a: 42 (species imperfectly known); Self & Rego, 1985: 35 (synonymized with *Sebekia oxycephalum*); Riley et al., 1990: 9, fig. 2d (Central and South America: locality unknown, in *Crocodilus*; removal from synonymy with *S. oxycephalum*); Huchzermeyer, 2003: 207 (in *Crocodylus acutus*).

Sebekia divestei; Rego, 1984a: 49; Junker & Boomker, 2006: 30 (catalogue).

Distr.: Central and South America. Primary host: crocodile.

Sebekia johnstoni Riley, Spratt & Winch, 1990

Sebekia johnstoni Riley et al., 1990: 15, figs 2f 3e, 4f, 7a, b, 8a, b, 9a (types: Australia: Northern Territory, in *Crocodylus johnsoni,* and *Crocodylus porosus*); Huchzermeyer, 2003: 207 (in *Crocodylus johnsoni*); Junker & Boomker, 2006: 30 (catalogue).

Distr.: Australia. Primary hosts: crocodiles.

Sebekia joubini (Vaney & Sambon, 1910), *species inquirenda*

Porocephalus joubini Vaney & Sambon, 1910: 131, fig. (types from Muséum National d'Histoire Naturelle, Paris: Gabon; in *Crocodylus siamensis*); Poore, 2012a: 213 (as incertae sedis, erroneously spelled *jubini* by some authors).

Reighardia joubini; Sambon (in Vaney & Sambon), 1910a: 139.

Sebekia jubini; Sambon, 1922a: 194 (Southeast Asia: Siam; Cambodia; Java; in nasal cavity of Siamese crocodile, *Crocodylus siamensis*); Heymons, 1935: 217 (diagnosis); Heymons & Vitzhum, 1935a: 42 (species imperfectly known); Riley et al., 1990: 23 (*species inquirenda*, perhaps belonging to *Subtriqueta*); Huchzermeyer, 2003: 207 (in *Crocodylus siamensis*); Junker & Boomker, 2006: 30 (catalogue).

Distr.: Southeast Asia. Primary host: crocodile.

Sebekia microhamus Self & Rego, 1985

Sebekia microhamus Self & Rego, 1985: 37, fig. 3 (type: Brazil; in crocodile, *Caiman crocodilus*); Huchzermeyer, 2003: 207 (in *Caiman crocodylus*); Junker & Boomker, 2006: 31 (catalogue).

Distr.: Brazil. Primary host: crocodile.

Sebekia minor (Wedl, 1861)

Pentastoma oxycephalum var. *minor* Wedl, 1861: 225 (type: Africa: Luapala; in bronchiae of *Crocodylus niloticus suchus* [as *Crocodylus vulgaris*]).

Sebekia wedli Giglioli (in Sambon), 1922: 193 (Africa, in bronchi of *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]; objective synonym, unnecessary replacement name); Heymons, 1935: 216, fig. 124; Heymons & Vitzhum, 1935a: 39 (distribution); Devos, 1939: 194, figs (Democratic Republic of the Congo, in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Fain, 1961: 51, fig. (Central Africa); Legendre, 1967: 341 (chromosome number); Self & Rego, 1985: 35 (synonymized with *Sebekia oxycephalum*); Riley et al., 1990: 14, figs 2b, 3a (Uganda, in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]; species revalidated; removed from synonymy of *S. oxycephalum*, which is unjustified on biogeographical grounds); Riley & Huchzermeyer, 1995b: 223, figs 1a, b, 2a-d (Botswana, in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Junker et al., 1998a: 159 (South Africa; piscen hosts, *Oreochromis mossambicus*, and *Tilapia rendalli*); 1998b: 233 (South Africa: Transvaal: Kruger National Park; in Nile crocodile, *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*], and larvae in Mocambique brean, *Oreochromis mossambicus, Tilapia rendalli*, and the guppy, *Poecilia reticulata*); 1999: 66 (South Africa: Kruger National Park, in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Huchzermeyer, 2003: 207 (in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Junker & Boomker, 2006: 30 (catalogue); Luus-Powell et al., 2008: 323 (South Africa: Limpopo Province; Flag Boshielo Dam; larvae in body cavity of mormyrid fish, *Marcusenius macrolepidotus*).

Sebekia oxycephala; Self & Rego, 1985: 35.

Sebekia minor; Poore, 2012a: 231 (explanation of new combination).

Distr.: Africa. Primary hosts: crocodiles. Intermediate hosts: freshwater fishes.

Sebekia mississippiensis Overstreet, Self & Vilet, 1985

Pentastoma oxycephalum Diesing, 1836: 23 (*partim*).

Sebekia mississippiensis Overstreet et al., 1985: 266 (types: USA: Louisiana; Mississippi; Florida; in American alligator, *Alligator mississippiensis*); Boyce, 1985: 278 (USA: north Florida; in *Alligator misisippiensis*); Ferenc et al., 1986: 296 (experimental infestation in brown water snake, *Nerodia taxispilota*); Boyce et al., 1987a: 689 (southwestern USA: Florida: West Lafayette, Indiana; definitive host, *Alligator mississippiensis*; intermediary hosts, several species of fish: moskitofish, *Gambusia affinis affinis* [as *Gambusia affinis*], swordtails, *Xiphophorus helleri*); 1987b: 265 (in vitro maintainance); Moreland et al., 1989: 42 (USA: north central Florida; in young alligators, *Alligator mississippiensis*); Riley et al., 1990: 7, figs 2c, 3c, 4a, 5c, d (USA: Louisiana: Marsh Island); Boyce & Kazacos, 1991: 104 (nymphal infection in paratenic hosts, turtle, *Pseudemys nelsoni*, hamsters and mice, causing pentastomiasis); Scott et al., 1999: 127 (USA; Texas and Louisiana; in American alligator, *Alligator mississippiensis*); Adams et al., 2001: 500 (causing fatal pentastomiasis in African dwarf crocodile, *Osteolaemus tetraspis*); Huchzermeyer, 2003: 207 (in *Alligator mississippiensis*); Junker & Boomker, 2006: 31 (catalogue).

Distr.: Southern USA. Primary hosts: alligators and snake. Intermediate hosts: freshwater and marine fishes, turtle and small mammals.

Sebekia multiannulata Riley, Spratt & Winch, 1990

Sebekia multiannulata Riley et al., 1990: 17, figs 2g, 3f, 4g, 7c, 8c, d, 9a-d, 10a, b (types: Australia: Northern Territory, in *Crocodylus johnsoni,* and *Crocodylus porosus*); Huchzermeyer, 2003: 207 (in *Crocodylus johnsoni* and *Crocodylus porosus*); Junker & Boomker, 2006: 30 (catalogue).

Distr.: Australia. Primary hosts: crocodiles.

Sebekia novaeguineae Riley, Spratt & Winch, 1990

Sebekia novaeguineae Riley et al., 1990: 21, figs 2a, i, 3h, 4i, 7d (types: Papua New Guinea; in *Crocodylus novaeguineae*); Huchzermeyer, 2003: 207 (in *Crocodylus novaeguineae*); Junker & Boomker, 2006: 30 (catalogue).

Distr.: Papua-New Guinea. Primary host: crocodile.

Sebekia okavangoensis Riley & Huchzermeyer, 1995

Sebekia okavangoensis Riley & Huchzermeyer, 1995b: 228, fig. (types: Botswana: Okavango swamps; in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]; Republic of the Congo, in *Mecistops* [as *Crocodylus*] *cataphractus*); 1995a: 152 (Republic of the Congo: Brazzaville, in lungs of African dwarf crocodile, *Osteolaemus tetraspis*); Junker et al., 1999: 66 (South Africa: Kruger National Park, in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*]); Riley & Huchzermeyer, 2000: 582 (Republic of the Congo, in crocodilian, *Osteolaemus tetraspis*); Huchzermeyer, 2003: 207 (in *Crocodylus niloticus niloticus* [as *Crocodylus niloticus*], *Mecistops* [as *Crocodylus*] *cataphractus*, and *Osteolaemus tetraspis*); Junker & Boomker, 2006: 30 (catalogue); Luus-Powell et al., 2008: 323 (South Africa:

Mpumalanga Province: Komatipoort region; larvae in body cavity of clariid fish, *Clarias gariepinus*).

Sebekia cesarisi; Riley et al., 1990: 1.

Distr.: Africa. Primary host: crocodiles. Intermediate host: freshwater fish.

Sebekia oxycephalum (Diesing, 1836)

Pentastoma proboscideum; Rudolphi, 1819: 637 (*partim*; in pharynx and tracheae of *Caiman crocodilus* [as *sclerops*]); Mayer, 1851: 130.

Pentastomum proboscideum crocodile scleropis; Rudolphi, 1819; Shipley, 1898: 52; Junker & Boomker, 2006.

Not Leidy, 1850: 96; 1884: 140; 1890: 410 (= *Kiricephalus coarctatus*).

Pentastoma oxycephalum Diesing, 1836: 20, pl. 3, figs 16-23 (*partim;* types: Brazil: Mato Grosso: Cuiabá; Rio Cabacal; in fishes, *Gymnotus carapo* [as *Carapus brachyurus*], *Electrophorus electricus*, and *Apteronotus* [as *Sternarchus*] *albifrons,* and in *Crocodylus acutus* [as *americanus*]); Dujardin, 1845: 307 (Austria: Vienna; in lung of *Caiman crocodilus* [as *Crocodylus sclerops*], and *Crocodylus acutus*; Brazil; abundant in lungs and trachaeae of caiman); Cobbold, 1861a: 124 (in lungs of *Alligator mississippiensis*).

Pentastoma gracile; Diesing, 1836: 20 (*partim*; in snake, *Bothrops* [as *Lachesis*] *lanceolatus*; larvae in fishes, *Potamotrygon* [as *Taeniura*] *motoro, Synbranchus marmoratus*, and in snake, *Eunectes murinus* [as *scytale*]).

Pentastomum oxycephalum; Diesing, 1850: 609 (*partim;* in fishes, *Salminus brasiliensis* [as *Hydrocyon brevidens*], *Rhaphidion vulpinus, Tetragonopterus argentatus*, and in snakes, *Pseudoeryx plicatilis plicatilis* [as *Dimades plicatilis*], *Micrurus tschudii tschudii* [as *Helicops tschudii*], and *Heterodon* sp.); Chatin, 1882: 30 (in cayman, *Alligator mississippiensis* [as *lucius*]).

Pentastomum gracile; Diesing, 1850 (*partim*).

Pentastomum heterodontis Leuckart, 1860a: 156 (types not stated; synonymized by Junker & Boomker, 2006); Sambon, 1922b: 418 (immature forms of doubtful determination); Heymons & Vitzhum, 1935b: 150, figs (United States); 1936: 34.

Pentastomum proboscideum; Leidy, 1884: 140 (USA: Florida; in rattlesnake *Crotalus durissus durissus* [as *Crotalus adamanteus*]); MacAllister, 1874: 425; Stiles, 1891a: 348; 1891b: 85.

Porocephalus oxycephalus; Stiles,1891b: 85; Shipley, 1898: 69, fig. 13.

Porocephalus heterodontis; Shipley, 1898: 69.

Reighardia oxycephala; Sambon (in Vaney & Sambon), 1910a: 138.

Porocephalus crocodili Wheeler, 1915: 207 (*partim*) (type: Ecuador: Guayaquil: Guayas river; in *Crocodylus acutus* [as *americanus*]; synonymized in part by Junker & Boomker, 2006) (p.p. = *Diesingia megastomum;* p.p. possibly = *Leiperia gracilis*).

Sebekia oxycephala; Sambon, 1922a: 193 (*partim;* Africa; in *Alligator mississippiensis*, *Caiman crocodilus*, and *Crocodylus acutus*); Heymons, 1935: 215, fig. 123; 1941a: 317 (locality unknown, in *Caiman latirostris*); 1941b: 254, figs (Brazil; larvae in silurid fish, *Vandellia cirrhosa*, from Naturhistisk Museum Wien); Heymons & Vitzhum, 1935b: 150; 1936: 150, figs 18-21 (distribution: southern North America; South America; Paraguay; in crocodiles, *Alligator missisippiensis*, *Crocodylus acutus* [as *americanus*], *Caiman crocodilus* [as *sclerops*]; larvae in reptiles, *Farancia abacura abacura* [as *Farancia abacura*], *Heterodon*

sp., *Pseudoeryx plicatilis plicatilis* [as *Pseudoerix plicatilis*], *Tupinambis teguixin*, and fish); Bangham, 1939: 263 (Florida; in fishes); Venard & Bangham, 1941: 23, figs 1-8 (Florida; larva encysted in mesenteries of fish, *Amia calva, Gambusia holbroocki* [as *Gambusia affinis holbroocki*], *Lepomis punctatus* [as *Sclerotis punctatus punctatus*], *Lepomis megalotis* [as *Xenotis megalotis marginatus*], *Lepomis gibbosus* [as *Eupomotis microlophus*], *Lepomis* [as *Chaenobryttus*] *gulosus,* and *Pomoxis nigromaculatus* [as *sparoides*]); Fain, 1961: 51, fig.; Dukes et al., 1971: 1028 (USA: Louisiana: Concordia Parish: Lake St. John; in largemouth bass and snapping turtle, *Chelydra* [as *Chelhydra*] *serpentina*); Hazen et al., 1978: 435 (USA: South Carolina; in the American alligator, *Alligator mississippiensis*); Cherry & Ager, 1982: 509 (USA: Florida; in American alligators, *Alligator mississippiensis*); Boyce et al., 1984: 1419 (sebekiosis in captive alligator hatchlings, *Alligator mississippiensis*); Rego, 1984a: 48, pl. 2 figs 1, 2, pl. 4 figs 2, 3 (in lung of crocodile from Americas, *Crocodylus acutus* [as *americanus*], and *Caiman crocodilus*; larvae in mammals, *Pteronura brasiliensis brasiliensis* [as *Pteronura brasiliensis*], reptiles *Tupinambis teguixin, Farancia abacura abacura* [as *Farancia abacura*], *Eunectes murinus, Boa constrictor, Crotalus horridus, Xenodon merremii* [as *Ophis merrimi*], *Spilotes pullatus pullatus* [as *Spilotes pullatus*], *Bothropoides* [as *Bothrops*] *jararaca, Pseudoeryx plicatilis plicatilis* [as *Dimades plicatilis*], *Micrurus* sp., *Tropidonotus* sp., *Coluber* sp., and fish, *Pseudoplatystoma fasciatum, Pygocentrus piraya, Synbranchus marmoratus, Apteronotus* [as *Sternarchus*] *albifrons*, *Potamotrygon motoro, Electrophorus electricus*, *Rhaphiodon vulpinus* [as *Salmo tamuco*], *"Silurus pintado", "Silurus dourado", Silurus* sp., *Salmo salar* [as *saua*], *Salmo* sp., *Pristobrycon aureus* [as *Salmo erythrophthalmus*], and in marine fish, *"Clupea tobarana"*); Self & Rego, 1985: 34, fig. 1 (Brazil; in *Melanosuchus niger*; new synonym: *S. wedli*); (Winch & Riley, 1986a: 251 (Trinidad; in crocodile, *Caiman crocodilus* [as *sclerops*]); Boyce et al., 1987a: 689 (nymphs in viscera of four species of fish: mollies, *Poecilia latipinna,* guppies, *Poecilia reticulata,* platies, *Xiphophorus maculatus,* and *Tilapia zilli*); Rego & Eiras, 1989: 591 (Brazil; in piscean hosts, *Pseudoplatystoma* and *Pygocentrus* [as *Serrasalmus*] *nattereri,* and reptilians, *Caiman crocodilus,* and *Melanosuchus niger*); Eiras & Rego, 1989: 1 (Brazil; in piscean, *Hoplias malabaricus*); Riley et al., 1990: 1 (Brazil; in fish, *Pygocentrus* [as *Serrasalmus*] *nattereri, Pseudoplatystoma corruscans*, and crocodiles, *Caiman crocodilus* [as *sclerops*], and *Melanosuchus niger*; removed from synonymy: *S. divesti* and *S. wedli*); Junker & Boomker, 2006: 31 (catalogue); Luus-Paulus et al., 2008: 327 (Trinidad; infective larva in fish, blue acra, *Aequidens pulcher* [as *pulchra*], *Tilapia* sp.; Florida; infective larvae in mosquitofish, *Gambusia affinis affinis* [as *Gambusia affinis*]); Almeida et al., 2010 (Brazil: Paraná: Cambé river; nymph from mesentery of fish *Phalloceros harpagos*); Röhlig et al., 2010: 150, fig. 5f (non-type material, including Paraguay, deposited in Museum für Naturkunde, Berlin); Brito et al., 2012: 394 (Brazil: Mato Grosso do Sul: Corumbá; adults in lung, and larvae in stomach and intestine of crocodile *Caiman yacare*).

Bdukus ichthyius Holl, 1928: 64, fig. (types: USA: North Carolina: Gibsonville; in yellow bullhead fish, *Ameiurus natalis*, and the pumplonseed fish, *Lepomis* [as *Eupomotis*] *gibbosus*; synonymized by Junker & Boomker, 2006).

Not *Porocephalus crocodili* (and *Sebekia crocodili*); Heymons & Vitzhum, 1935b: 155-156 (= *S. megastoma*).

Leiperia heterodontis; Heymons & Vitzhum, 1935b: 150, figs 1-2.

Sebekia oxycephalum; Poore, 2012a: 232 (the specific name *oxycephalum* would appear to be a noun and its ending does not require to be changed to *oxycephala* as appears in recent literature; partial synonymies also discussed).

Distr.: Americas Primary hosts: snakes and lizards. Intermediate hosts: freshwater fishes, reptiles, and mammals.

Remarks: The problem or the *oxycephalum*/*oxycephala* termination could be solved permanently with the designation of a lectotype or neotype (Gary Poore, in litt.).

Sebekia purdieae Riley, Spratt & Winch, 1990

Sebekia purdieae Riley et al., 1990: 20, figs 2h, 3g, 4h (types: Australia: Northern Territory; in *Crocodylus porosus*); Huchzermeyer, 2003: 207 (in *Crocodylus johnsoni* and *Crocodylus porosus*); Junker & Boomker, 2006: 30 (catalogue).

Distr.: Australia. Primary host: crocodile.

Sebekia samboni Travassos & Pereira, 1924, *species inquirenda*

Sebekia samboni Travassos, 1924: 240 (types: Brazil: Amazonas State; in unknown crocodilian); Heymons, 1935: 216; Heymons & Vitzhum, 1935a: 42 (species imperfectly known); Rego, 1984a: 50 (*species inquirenda*, probably *Sebekia oxycephalum*); Riley et al., 1990: 23 (*species inquirenda*, insufficiently described); Huchzermeyer, 2003: 207 (in undetermined crocodile from Brazil); Junker & Boomker, 2006: 31 (catalogue); Poore, 2012a: 213 (listed as a doubtful species).

Distr.: Brazil. Primary host: crocodile.

Sebekia trinitatis Riley, Spratt & Winch, 1990

Sebekia trinitatis Riley et al., 1990: 4, figs 1c, 3b, 4b-d, 5a-b, 6a-d (types: Trinidad, in *Caiman crocodilus* [as *sclerops*]); Huchzermeyer, 2003: 207 (in *Caiman crocodylus*); Junker & Boomker, 2006: 31 (catalogue).

Distr.: Trinidad. Primary host: crocodile.

POROCEPHALIDAE Sambon, 1922

Pentastomidae Shipley, 1909: 488; Poore, 2012a: 225 (explanation of why this name does not have priority).

Porocephalinae Sambon, 1922a: 190 (erected as a subfamily of the Linguatulidae).

Porocephalidae; Kishida, 1928: 399 (introduced as a 'nov. fam.' in spite of earlier use); Curasson, 1929: 255 (development of hosts of new porocephalans); Heymons, 1935: 214 (diagnosis); Heymons & Vitzhum, 1935a: 26 (diagnosis); Nicole & Golvan, 1959: 145 (Angola); Self, 1969: 63; Saint Raymond-Moynat, 2008: 99 (review of genera and species causing cutaneous eruptions in reptiles).

Armilliferidae Kishida, 1928: 397; Fain, 1961; Poore, 2012a: 222 (listed as distinct from Porocephalidae, explaining authorship of name).

Diesingiinae Heymons, 1935: 224 (diagnosis); Heymons & Vitzhum, 1935a: 52.

Nettorhynchidae Doucet, 1962: 117 (*nomen nudum*); Nicoli, 1963: 500 (*nomen novum pro* Armilliferidae); Poore, 2012a: 222 (explaining origin of name).

Diesingiidae; Rego, 1983b: 237; Self, 1982a: 727.

Type: *Porocephalus* Humboldt, 1812: 298.

ARMILLIFERINAE Kishida, 1928

Armilliferinae Kishida, 1928: 400.
Armilliferidae; Fain, 1961: 68; Riley, 1986: 92; Poore, 2012a: 222 (authorship of name).
Nettorhynchidae Doucet, 1962, 117 (nomen nudum).

Armillifer Sambon, 1922

'nettorhynche' Blainville, 1824: 517.

Armillifer Sambon, 1922a: 200 (for *Porocephalus armillatus*, *P. moniliformis*, and *P. annulatus*); Kishida, 1928: 400 (diagnosis); Heymons, 1935: 236 (diagosis); Heymons & Vitzhum, 1935a: 76 (*Cubirea* as synonym); Dollfus, 1950: 112 (as synonym of *Nettorhynchus*); Steinbach & Johnstone, 1957: 234 (porocephaliasis in man, roentgen diagnosis); Nicoli et al., 1965a: 238; 1965b: 513 (nomenclature); Riley & Self, 1981b: 171 (diagnostic characters); Nozais et al., 1982: 497 (pentastomiasis in man); Faveaux, 1984: 1 (Ethiopian region; in Chiroptera); Lok & Kirkpatrick, 1987: 494 (pentastomiasis in captive monkeys, *Cebus capucinus*); Poore, 2012a: 222 (history of *Armillifer* and purported synonyms, *Netrorhynchus*/*Nettorhynchus*, showing that the priority of the latter two names seems to be ill-supported, without popular support, and have not been used since 1967).

Ligamifer Heymons, 1932a: 416 (Type-species: *Waddycephalus mazzai* Sambon,1922 [as *Ligamifer mazzai* Sambon, 1922], by monotypy); Heymons, 1932a: 416; 1935: 243 (diagnosis); Heymons & Vitzhum, 1935a: 93.

Type-species, by original designation: *Linguatula armillata* Wyman, 1845, as *Armillifer armillata* (Wyman, 1848).

Unidentified species: *Nettorhynchus* sp. Dollfus, 1950: 112 (*Armillifer* as a junior synonym); 1959: 519, figs (Sudan: Bamako; in frugivorous bat, *Eidolon helvum helvum* [as *Eidolus helvum*]). *Armillifer* spp.; Goldsmid & Melmed, 1973: 213 (Rhodesia; human porocephaliasis, infection); Paré, 2008: 285 (causing pentastomiasis in reptiles and other vertebrates). *Armillifer* sp.; Young, 1975: 335 (South Africa: Kruger National Park; in wild animals); Krishnasamy et al., 1980: 231 (west Malaysia; in rat, *Rattus tiomanicus*); M.H. Qiu & Jiang, 2007: 510 (patient from Guanxi: Yulin, previously misidentified with *Armillifer* sp.; recovered specimen probably belongs to a nasal leech); Pantchev & Tappe, 2011: 528 (pentastomiasis in China provoked by snake infection).

Armillifer arborealis Riley & Self, 1981

Armillifer arborealis Riley & Self, 1981b: 176 (type from London Zoo: Australia: Northern Territory; in snake, *Morelia* [as *Chondropython*] *viridis*, and colubrid, *Boiga irregularis*); Riley et al., 1985: 48 (Australia: Western Australia: Walsh Point: Mitchell Plateau; in liver of *Dasyurus* [as *Satanellus*] *hallucatus,* and from liver and lung of *Isoodon macrourus macrourus* [as *Isoodon macrourus*]; Northern Territory: Cannon Hill; in small intestine of *Dasyurus* [as *Satanellus*] *hallucatus*).

Distr.: Australia. Primary host: snake. Intermediate host: mammals.

Armillifer agkistrodontis Self & Kuntz, 1966

Armillifer agkistrodontis Self & Kuntz, 1966b: 259, figs 7-9 (types: Taiwan: Ping Tung Hsien; female in lung of snake, *Deinagkistrodon* [as *Agkistrodon*] *acutus*); Keegan et al.,

1969: 150, fig. (Asia); Q.Y. Zhang et al., 1996: 747 (China; disease report case); S.H. Chen et al., 2010: 1 (China; genetic identification; larvae in liver and spleen of mouse, adults in lung of snakes, *Deinagkistrodon* [as *Agkistrodon*] *acutus* and *Python molurus*); Mätz-Rensing et al., 2012: 210 (peritoneal cavity of long-tailed macaque, *Macaca fascicularis fascicularis* [as *Macaca fascicularis*], imported from China, heavily infested with nymphs).

Distr.: China. Primary host: snake.

Armillifer armillatus (Wyman, 1845)

Netrorhynchus blainvillei J.C. Zenker, 1827: 53; Poore, 2012a: 222 (nomenclatural history; potential senior synonym of *Armillifer*, but it has been suggested that *Netrorhynchus*/*Nettorhynchus* is in fact a nematode, although not appearing in modern lists of Nematoda; *Nettorhynchus* apparently not used again since 1967).

Linguatula armillata Wyman, 1845: 295 (types: West Africa: near Cape Palmas [now Liberia]; in snake, *Python bivittatus* [as *bivittata*]).

Nettorhynchus blainvillei; Gervais, 1847: 630 (incorrect subsequent spelling); Cobbold, 1864: 414 (from salmon); Dolley, 1894: 1004; Stiles & Hassall, 1905: 123 (cited among nematodes); Dollfus, 1950: 113 (original figures considered to be *Armillifer armillatus*; placed by that author among the linguatules).

Pentastomum constrictum Siebold, 1853: 65 (types, ? London School of Hygiene and Tropical Medicine: Egypt: Cairo; juvenile in man); Prüner, 1852: 19, pl. 5; Canstatt, 1852: 206; Bilharz, 1856: 329 (in man); Aitken, 1865: 939 (as a cause of painful disease and death in human body); Leuckart, 1879: 179 (parasite in man); Giard, 1896: 469 (parasite of liver in blacks); 1898: 1098 (in liver of black man); Huber, 1898: 1098 (in liver of black man); Thiroux, 1905: 78, fig. 1a-d (Senegal; a case in man); Salm, 1907a: 464.

Linguatula diesingii Beneden, 1848e: 189 (types from Jardin zoologique d'Anvers, Antwerp, Belgium: Africa; juvenile in mandrill, *Mandrillus sphinx* [as *Cynocephalus mormon*], and *Papio papio*); 1849: 69 (Africa; juvenile in mandrill, *Mandrillus sphinx* [as *Cynocephalus mormon*]); Ives, 1889: 31 (from the sooty mangabey, *Cercocebus atys atys* [as *Cercopithecus fuliginosus*]).

Pentastomum tornatum Creplin, 1849: 54 (juvenile; unnecessary replacement name for *Linguatula deisingii*) (p.p. = *Armillifer moniliformis moniliformis*); Ives, 1889: 31 (from the sooty mangabey).

Armillifer armillatus; Sambon, 1922a: 201, fig. 24 (hosts: adults in snakes, *Bitis arietans*, *Bitis gabonica*, *Cerastes cerastes* [as *cornutus*], *Python molurus*, *Broghammerus* [as *Python*] *reticulatus*]; nymphs from man, *Homo sapiens*, macaque monkey, *Macaca fascicularis fascicularis* [as *Macacus cynomolgus*], rhesus monkey, *Macaca mulatta* [as *Macacus rhesus*], Sumatran monkey of undetermined species, simians, *Chlorocebus aethiops* [as *Cercopithecus aethiops* and *Cercopithecus engythithea*], *Chlorocebus tantulus tantulus* [as *Cercopithecus pousarguei*], *Chlorocebus tantulus tantulus* [as *Cercopithecus tantalus*], tiger, *Panthera tigris tigris* [as *Felis tigris*], leopard, *Panthera pardus pardus* [as *Felis pardus*], dog, *Canis lupus familiaris* [as *Canis familiaris*], Indian otter, *Lutra lutra lutra* [as *Lutra nair*], carnivores, *Galidictis fasciata fasciata* [as *Ariella fasciata*], *Atilax paludinosus paludinosus* [as *Atilax paludinosus*], and *Herpestes ichneumon cafra* [as *Herpestes cafer*], suid, *Phacochoerus aethiopicus aethiopicus* [as *Phacochoerus aethiopicus*]); Southwell, 1924: 515 (larvae in *Bos taurus taurus* [as *Bos taurus*]); Hett, 1924a: 146 (adults in *Python sebae*, *Python regius*, and

Bitis arietans; larvae in man, *Cercopithecus mona*, *Chlorocebus aethiops* [as *Cercopithecus engythithia*], *Papio cynocephalus ibeanus* [as *Perodictus ibeanus*], *Crossarchus obscurus*, *Hyemoschus aquaticus*, *Herpestes javanicus javanicus* [as *Mungo galera*], *Cephalophus leucogaster leucogaster* [as *Cephalophus leucogaster*], *Potamochoerus porcus* [as *penicillatus*], and *Herpestes naso* [as *Herpestes urva naso*]); Porter, 1928: 359, figs (South Africa: Shangaan; in man); Curasson, 1929: 255 (in snakes, *Naja naja* [*as haje*], and *Hemachatus haemachatus* [as *Sepedon haemachates*]); Natvig, 1932: 123, figs (Norway: near Oslo: Nesodden, in *Pernis apivorus*); Heymons, 1935: 236, fig. 8 (Distr. of hosts: adults in snakes *Bitis arietans*, *Bitis gabonica*, *Bitis nasicornis*, *Cerastes cerastes* [as *cornutus*], *Python regius*, and *Python sebae*; nymphs in suid *Phacochoerus aethiopicus aethiopicus* [as *Phacochoerus aethiopicus*], and simian, *Papio cynocephalus cynocephalus* [as *Papio cynocephalus*]); 1940c: 219 (Congo Republic: Cameroon; larva in *Cerastes cerastes* [as *cornutus*], and *Causus rhombeatus*; adults in hedge-hog, *Atelerix frontalis frontalis* [as *Athechinus frontalis*], bat, *Hipposideros cyclops*, rodents, *Atherurus africanus*, and *Anomalurus derbianus* [as *fraseri*], in carnivores, *Nandinia binotata binotata* [as *Nandinia binonata*], *Viverra civettina* [as *Civettictis civetta*], *Hydrictis maculicollis* [as *Lutra maculipennis*], and *Mellivora capensis cottoni* [as *Mellivora sagulata*], ruminants, *Hippotragus equinus equinus* [as *Hippotragus equinus*], and *Cephalophus weynsi weynsi* [as *Cephalophus weynsi*], prosimian, *Euoticus* [as *Galago*] *elegantulus*, simian, *Chlorocebus cynosuros* [as *Cercopithecus aethiops cynosuros*], strigid bird, *Bubo africanus*, and mammals, *Herpestes* sp., *Atilax paludinosus paludinosus* [as *Atilax paludinosus*], *Genetta* sp., *Mungos* sp., *Mungos mungo mungo* [as *Crossarchus fasciatus*], *Phacochoerus* sp., and *Potamochoerus porcus*); Heymons & Vitzhum, 1935a: 77, figs 31-32 (young forms in edentate, *Orycteropus afer aethiopicus* [as *Orycteropus aethiopicus*], insectivore, *Macroscelides* sp., rodents, *Cricetomys gambianus*, carnivore, and *Xerus (Euxerus) erythrophus erythrophus* [as *Xerus erythropus*], viverrids, *Genetta pardina*, *Ichneumia albicauda albicauda* [as *Ichneumia albicauda*], *Herpestes ichneumon cafra* [as *Mungos cafer*], *Atilax paludinosus paludinosus* [as *Mungos paludinosus*], *Herpestes naso*, *Mungos mungo mungo* [as *Crossarcus fasciatus*], *Crossarchus obscurus*, and *Bdeogale crassicaudata puisa* [as *Bdeogale puisa*], carnivore, *Paradoxurus hermaphrodites hermaphroditus* [as *Paradoxus hermaphrodites*], felids, *Panthera leo leo* [as *Felis leo*], *Leptailurus serval serval* [as *Felis serval*], and *Acinonyx jubatus jubatus* [as *Acinonyx guttatus*], suid, *Phacochoerus africanus africanus* [as *Phacochoerus africanus*], bovid, *Redunca* [as *Eleotragus*] *arundimum*, and *Tragelaphus scriptus scriptus* [as *Tragelaphus scriptus*], simians, *Cercocebus atys atys* [as *Erythrocebus fuliginosus*], *Papio papio*, *Papio ursinus ursinus* [as *Papio porcarius*], *Mandrillus sphinx* [as *maimon*], *Pan troglodytes troglodytes* [as *Pan satyrus* and *Pan chimpanse*], and *Erythrocebus patas*); V.S. Dias, 1942: 762, figs 1-2 (Portugal, in guinea-pig); Whittick, 1943: 254, fig; Manuwa, 1947: 507 (porocephalosis in man); Ardran, 1948: 342 (calcification of cysts in man); Coster & Rodhain, 1951: 331 (nymphs in eye of indigenous infant); Self & Kuntz, 1957: 195 (Egypt: El Amiriya, in *Hemiechinus auritus auritus* [as *Hemiechinus auritus*]); Brumpt et al., 1949: 1060 (Sudan: Bahr El Ghazal Province: Tonj District; nymph in body cavity of four-toed hedgehog *Atelerix albiventris* [as *Atelerix pruneri owensi*]); Gratama & Thiel, 1957: 374, fig. (Liberia; in eye of human); Bouckaert & Fain, 1959: 793 (nymphs causing intestinal obstruction and death in man); Doucet, 1960b: 3 (Congo Republic; adults in snake, *Python sebae*, nymph in abdominal cavity of mammal, *Dologale dybowskii*); Heuschele, 1961: 911 (internal parasites of monkeys); Fain, 1961: 68, figs (Central Africa); 1975: 61 (review of occurrence in man); Bretland 1962: 603 (Ghana: infestation in two soldiers);

Nicole, 1963: 500 (adults in *Boaedon lineatus, Bothrophthalmus lineatus*, *Naja naja* [as *haje*], and *Hemachatus haemachatus* [as *Sepedon haemachates*]); Fain & Salvo, 1966: 677, figs (nymphs); Dönges, 1966: 252, figs 1-6 (southwest Nigeria: State Abeokuta; nymphs; parasitic cysts in mesentery of abdomen of a Nigerian); Legendre, 1967: 341 (chromosome number); Ranque, 1972: 437 (fluorescence and precipitant antibodies against this parasite); Cappucceli & Martinetto, 1972: 251 (discussion of electrophoretic fractioning of homogenates in nymph); Ranque et al., 1974: 329 (pentastomiasis); Mohammed, 1974: 139 (Sierra Leone; in a cat, *Felis catus* [as *Felis domesticus*]); J.H. Greve & Russell, 1974: 52 (nymph in new host, the brown hyaena, *Hyaena brunnea*); Mapp et al., 1976: 198 (roentgen diagnosis of infestation causing porocephalosis in man); Ogunsuri & Mohammed, 1978: 361 (West Africa: nymphs in chimpanzee, *Pan troglodytes troglodytes* [as *Pan troglodites*]); Azinge et al., 1978: 78 (midwest Nigeria: Bendel State: Yogwiri village: near Auchi; epidemiology in human hosts); Polderman & Manschot, 1979: 71 (Ghana; in lacrimal caruncle of human hosts); Graber, 1981b: 25 (Central African Republic; in reptilian, *Python sebae*); Graber & Gevrey, 1981: 27 (Congo Republic; in primate, *Cercopithecus nictitans nictitans*); Self, 1982b: 269 (life cycle, serpent hosts); Durden et al., 1985: 5 (USA: Tenessee; in bushbaby, *Otolemur crassicaudatus crassicaudatus* [as *Galago crassicaudatus*], imported from Tanzania); Moens & Tshamala, 1986: 44 (nymphal pentastomiasis in a cat, *Felis catus*); Kagei & Schichiri, 1990: 17 (Africa; nymphs in thick-tailed bush baby, *Otolemur crassicaudatus crassicaudatus* [as *Galago crassicaudatus*]); Guardia et al., 1991: 515 (Canada; encysted nymphs in autopsied tissues of man from Nigeria, causing pentastomiasis); Riley, 1992a: 402, fig. 1a (sex differences); Nzeh et al., 1996: 29 (calcification in abdomen); Meneghi, 1999: 573 (Zambia; in snakes); Lavarde & Fornes, 1999: 1346 (third stage nymphs in dead Congolese); Sacchi et al., 2001: 89 (Italy; in *Bitis rhinoceros* [as *Bitis gabonica rhinoceros*]); Lavrov et al., 2004: 537 (total mtDNA sequence); Dakubo et al., 2006: 166 (larvae encysted in small intestine of man, causing pentastomiasis); Plessis et al., 2007: 928 (infestation in man causing pentastomiasis); Tappe & Büttner, 2009: 1 (human visceral pentastomiasis caused by nymphs); Röhlig et al., 2010: 140, fig. 4d (non-type material, including Uganda, Tanzania, Togo and Kenya, and including host *Neotragus pygmaeus*, deposited in Museum für Naturkunde, Berlin); Tappe et al., 2011: 251 (Gambia, ova in dogs); Jisieike-Onuigbo et al., 2011: 501 (human infection causing pentastomiasis in Nigeria).

Pentastomum euryzonum Diesing, 1850: 611 (juveniles; unnecessary replacement name for *Linguatula diesingii*); Leidy, 1850: 96 (larvae in *Papio ursinus ursinus* [as *Cynocephalus porcarius*]).

Nematoideum hominis (*viscerum*) Diesing, 1850: 609 (juvenile).

Linguatula constricta; Küchenmeister, 1855b: 21.

Pentastoma constrictum; Bilharz, 1856: 329, pl. 17.

Pentastoma polyzonum Harley, 1857: 115, pl. 47 fig. 3 (type of unknown provenance; in Egyptian cobra, *Naja naja* [*as haje*]); Bell, 1880: 173; 1884: 92.

Pentastomum armillatum; Leuckart, 1860a; Diesing, 1864: 200.

Pentastoma armilata; Wyman, 1863: 179 (in lung of *Python sebae*).

Pentastoma leonis Wedl, 1863: 415 (types from Schönbrunner Menagerie, Austria: Africa; larva in *Panthera leo leo* [as *Felis leo*]).

Pentasomum leonis; Diesing, 1864: 200.

Pentastoma moniliformis; Bassi, 1877: 529 (larvae in panther, *Panthera pardus pardus* [as *Felis pardus*]); 1878: 114.

Pentastoma tornatum; Cobbold, 1879 (larva).

Pentastoma moniliforme; Mégnin, 1880: 443 (*partim*).

Pentastomum polyzonum; Bell, 1880: 173; 1884: 92.

Pentastomum protelis Hoyle, 1883: 188, figs (type possibly from zoo in the UK: South Africa; larva in mesentery of *Proteles cristata*); 1884: 219 (South Africa).

Porocephalus constrictus; Stiles, 1891c: 85.

Porocephalus polyzonys; Stiles, 1891c: 85.

Pentastoma constrictum; Mosler & Peiper, 1894: 6; Chalmers, 1899: 1715 (a case of infection).

Pentastomum diesingi; Shipley, 1898: 52 (larva).

Porocephalus armillatus; Shipley, 1898: 60, fig. 7 (synonym; in lion, *Panthera leo leo* [as *Felis leo*]); Laveran & Pettit, 1909: 1142 (in *Python sebae* infected with haemogregarines); Wilson, 1913: 71 (Nigeria, infection in man); 1915: 420 (infection in man from the tropics); Henry & Joyeux, 1920: 176 (larvae in *Panthera pardus pardus* [as *Felis pardus*] and *Leptailurus serval serval* [as *Felis serval*]); Nattan-Larrier, 1920: 659 (larva in *Phacochoerus africanus africanus* [as *Phacochoerus africanus*]); Monziols & Roy, 1920: 28 (Senegal: in human liver, lungs, peritoneal cavity, and intestinal wall; a grave case of itching followed by death); Noc, 1922: 621 (in *Cricetomys gambianus*; larvae in *Redunca* [as *Cervicapra*] *arundinum, Genetta pardina, Genetta genetta genetta* [as *Genetta senegalensis*] and *Periodicticus potto potto* [as *Periodictus potto*]); Noc & Curasson, 1920: 656 (evolution and biology; larvae in *Erythrocebus* [as *Cercopithecus*] *patas*); Arnaud & Joyeux, 1921: 25, figs (a vermiform arachnid, parasite of the intestine of man); Noc & Giglioli, 1922: 276 (evolution); Haffner, 1922a: 162 (German east Africa; ovarium); 1922b: 170 (egg development); 1924b: 270 (body muscles); 1924c: 126 (glands); 1924d: 183 (nervous system); 1924e: 285 (spermatocyst); Riding, 1926: 143, figs (Khartoum; a case of porocephaliasis in man); Glover, 1928: 107; J.R.C. Stephens, 1928: 107 (in human); Turnbull, 1928: 84; Curasson, 1929: 255 (larvae in *Acinonyx jubatus jubatus* [as *Cynailurus guttatus*]); Peruzzi, 1929: 1 (pathology); 1930: 278 (valvular apparatus); Palles et Ponderoux, 1934: 51; Low & Cordiner, 1935: 535, figs (West Africa: Nigeria; infesting negro); Heymons & Vitzhum, 1935a: 77, figs 30-32 (distribution: Africa, in lungs of boids and viperids; young in mammal, *Galago senegalensis senegalensis* [as *Galago* (*Otolicnus*) *senegalensis*]); Brumpt, 1936: 1103, figs; 1949: 1063 (Belgian Congo: Cameroon; African parasite, adults in lungs of serpents, *Python sebae*, *Python regius*, and *Bitis nasicornis*; frequent in *Bitis gabonica*; larvae found in man and African primates, *Cercopithecus albogularis albogularis* [as *Cercopithecus albogularis*], *Chlorocebus tantulus tantulus* [as *Cercopithecus pousarguei*], *Macacus* sp., in giraffe, antilopes, wild pig, African hedgehog, *Paraechinus aethiopicus aethiopicus* [as *Erinaceus aethiopicus*]); Dopf, 1937: 112 (Dahomey: a case of indigenous pneumonia); Reid & E. Jones, 1963: 169 (larvae in eye of man).

Porocephalus moniliformis; Loos, 1905: 77 (in snake, *Python sebae natalensis* [as *Python natalensis*]; larvae in *Cercopithecus albogularis albogularis* [as *Cercopithecus albogularis*]); Broden & Rodhain, 1908: 493, pl. 43 (in man and monkeys); 1909: 303 (larvae in murid, *Rattus rattus* [as *Mus rattus*], experimental infestation); 1910: 167 (in python); Schäfer, 1912: 109 (Cameroon; larvae in *Cephalophus leucogaster leucogaster* [as *Cephalophus leucogaster*], *Ichneumia albicauda albicauda* [as *Herpestes albicaudus*], *Herpestes naso* [as *Herpestes urva naso*], *Potamochoerus porcus* [as *penicillatus*], and *Sus scrofa scrofa* [as *Sus domesticus*]).

Porocephalus; Weinberg, 1906: 534 (larvae in *Pan troglodytes troglodytes* [as *Anthropopithecus troglodytes*]); Corin, 1914: 502 (larvae in antelope, *Tragelaphus scriptus scriptus* [as *Tragelaphus scriptus*]); Treadgold, 1920: 113 (larvae in *Papio cynocephalus cynocephalus* [as *Papio cynocephalus*]).

Non *Porocephalus constrictus*; Herzog & Hare, 1907: 41 (= *Armillifer moniliformis moniliformis*).

Pentastoma constrictor; Galli-Valerio, 1936: 577.

Linguatula constrictor; Galli-Valerio, 1936: 577.

Nettorhynchus armillatus; Doucet, 1962: 115; 1965: 47.

Nettorhynchus (Armillifer) armillatus; Gretillat & Thièry, 1960: 305 (Dakar; porocephalosis in cat).

Nerrorhynchus armillatus; Nicoli & Golvan, 1963: 148 (Angola).

Armillifer (Nettorhynchus) armillatus; Challier et al., 1967: 255 (Mali: porocephalosis in bull and pig).

Porocephalus armillifer armillatus; Delorne et al., 1978: 1611 (thoracic calcification in man evoking pentastomosis) (error for *Porocephalus* (*Armillifer*) *armillatus*).

Distr.: Africa. Primary hosts: snakes. Intermediate hosts: mammals, including man.

Remarks: The subspecies *Armillifer armillatus intermedius* Heymons, 1940 permits the usage of subspecies *Armillifer armillatus armillatus* (Wyman, 1845) for the present nominal species.

Armillifer armillatus intermedius Heymons, 1940

Armillifer armillatus var. *intermedius* Heymons, 1940c: 212, fig. (Africa: Congo Republic; larva in lung of python, *Python sebae*).

Distr.: Africa. Primary host: snake.

Remarks: Not listed in Poore, 2012a.

Armillifer australis Heymons, 1935

Armillifer moniliformis australis Heymons, 1935: 242 (types in Zoologisches Museum, Hamburg: Australia: Queensland; in *Morelia amethistina* [as *Python amethystinus*]; this species was described and figured, but not named, in Heymons, 1932a: 409).

Armillifer australis Riley & Self, 1981b: 175, fig. 3 (types: Western Australia and Papua New Guinea; in snake, *Morelia amethistina* [as *Liasis amethystinus*]; subjective synonym and primary homonym of *Armillifer moniliformis australis* Heymons; both species declared to be 'clearly the same'); Riley et al., 1985: 48 (Australia: Queensland: Danbulla State Forest, near Atherton; in oesophagus of *Perameles nasuta*); Riley & Spratt, 1987: 145 (Australia: South Australia, from viscera of unknown species of python; Melbourne Zoo; in lung of snake, *Morelia amethistina*; Queensland; in lung of reptile, *Morelia spilota spilota* [as *Morelia spilota*]; Queensland; encysted nymph in body cavity of rodent, *Rattus leucopus* [as *Rattus leucopus cooktownensis*]); Poore & Spratt, 2011 (synonymyzed with *A. australis* Heymons, 1935); Poore, 2012a: 224 (nomenclature).

Distr.: Australia and Indonesia. Primary host: snakes. Intermediate host: rodent.

Armillifer grandis (Hett, 1915)

Porocephalus grandis Hett, 1915a: 115 (types from Zoological Society Gardens: England: London; in African snakes, *Bitis gabonica*, *Bitis nasicornis*, and *Cerastes cerastes* [as *cornutus*]); Sambon, 1922b: 398.

Armillifer grandis; Sambon, 1922a: 188; Heymons, 1935: 239, fig. 140 (diagnosis); 1940c: 215 (in *Bitis nasicornis*); Heymons & Vitzhum, 1935a: 81; Fain, 1961: 84, figs (Central Africa); 1975: 62 (Zaire; nymphs in man; adults in lungs of *Bitis nasicornis*); Fain & Salvo, 1966: 675, fig. (Congo Republic: Province of Cuvette: Ingende and Bolomba; nymph in man); Cagnard et al., 1979: 345 (lethal pentastomiasis); Riley, 1992a: 402 (sex differences); Ette et al., 2003: 52 (West Ivory Coast: Abidjan; nymphs in lungs of woman); Tappe & Büttner, 2009: 1 (human visceral pentastomiasis caused by nymphs); Röhlig et al., 2010: 142 (non-type material, including Uganda, deposited in Museum für Naturkunde, Berlin).

Distr.: Africa. Primary hosts: snakes. Intermediate host: man.

Armillifer mazzai (Sambon, 1922)

Pentastomum moniliforme; Mazza, 1892: 54, figs.

Waddycephalus mazzai Sambon, 1922b: 400 (type: bibliographic reference to Massa's 1892 description of material misidentified as *Pentastoma moniliforme* Diesing, 1836, apparently new for New Guinea).

Ligamifer mazzai; Heymons, 1932a: 416 (New Guinea); 1935: 244, fig. 142 (diagnosis); 1941a: 326, figs 2-3 (Australia: North Queensland: Cairns; in native cat, *Dasyurus* sp.); Heymons & Vitzhum, 1935a: 93 (distribution: New Guinea, and west Asia: Hong Kong).

Ligamifer mazzi; Riley, 1992a: 407, fig. 2b-d (copulation).

Armillifer mazzai; Riley & Self, 1981b: 176 (Australia; in Macleay's water snake, *Pseudoferania* [as *Enhydris*] *polylepis*; New Guinea; in lungs of *Morelia amethistina* [as *Liasis amethystinus*]; new combination, transferred from *Ligamifer*); Röhlig et al., 2010: 142, fig. 4f (non-type material deposited in Museum für Naturkunde, Berlin).

Distr.: Australian region. Primary hosts: snakes.

Armillifer moniliformis (Diesing, 1836)

Pentastoma moniliforme Diesing, 1836: 22, pl. 4 figs 11-12 (type: locality not stated; in *Python molurus*); Dujardin, 1845: 308 (in *Python molurus* [as *tigris*]); Gottheil, 1889: 42 (a rare parasite).

Pentastomum tornatum Creplin, 1849: 52 (*partim*; juvenile).

Pentastomum moniliforme; Diesing, 1850: 609; Mazza, 1892: 54 (anatomy); Sambon, 1922b: 399.

Pentastoma wedlii Cobbold, 1866: 23 (types from the Museum of the Royal College of Surgeons, London: Southeastern Asia; in flat-headed cat *Prionailurus* [as *Felis*] *planiceps*); 1867: 281; Sambon, 1922b: 414 (synonymyzed with *A. moniliformis*).

Pentastoma aonycis MacAlister, 1877: 66 (types: Pakistan: Indus River; juvenile in *Lutra lutra lutra* [as *Lutra nair*]); Sambon, 1922b: 414, fig. 21 (synonymyzed with *A. moniliformis*).

Not *Pentastoma moniliformis*; Bassi, 1877, 1888 (= *Armillifer armillatus*).

Linguatule moniliforme; Mégnin, 1880; 443 (p.p.).

Not *Pentastoma moniliforme*; Méguin, 1880: 443 (p.p. = *Porocephalus clavatus*; p.p. = *Armillifer armillatus*).

Porocephalus moniliformis; Shipley, 1898: 72, fig. 17 (in snake, *Broghammerus* [as *Python*] *reticulatus*); 1905: 250; 1910: 276; Jonge, 1906: 524; Ouwens, 1906: 37 (Africa); Salm, 1907a: 464; 1907b: 11 (larvae in *Panthera tigris tigris* [as *Felis tigris*], and in man; Seiffert, 1908: 320 (Cameroon); 1910a: 101; 1910b: 506 (Cameroon); Waldow, 1908: 321; 1910: 101 (Cameroon: in black man); Sambon, 1909: 79 (Upper Congo; nymph in man and monkeys); Bugnion, 1910: 467, figs (in python); Mouchet, 1914: 497 (Cameroon); Prowazek, 1918: 465 (haemogregarins); Hett, 1921: 163 (India: Calcutta; larvae in stomach of *Tragulus javanicus*); 1924a: 149 (adult in lung of *Python sebae*; larvae in *Proteles cristata*, *Loris* [as *Nycticebus*] *tardigradus*, and *Prionailurus viverrinus* [as *Felis viverrina*]); Heymons, 1922: 156, figs; Haffner, 1924b: 270 (body musculature); 1924e: 285 (male; general organization); Brumpt, 1936: 1106; 1949: 1064 (Java, Philippines, in man; Madagascar, larvae in serpent, *Acrantophis madagascariensis*; synthesis; adults in lungs of serpents, *Python molurus*, *Broghammerus* [as *Python*] *reticulatus*; nymphs in monkeys of Asia, *Macaca fascicularis fascicularis* [as *Macacus cynomolgus*]); Kozlowski et al., 1958: 755 (Madagascar: generalized porocephalosis caused by nymphs in monkeys); Brygoo, 1963: 195; Fain, 1975: 61 (review of occurrence in man); Rego, 1987: 73, figs 1-2; Riley, 1992a: 402 (sex differences).

Porocephalus aonycis; Shipley, 1898: 59, fig. 6 (juvenile in otter, *Aonyx cinerea cinerea* [as *Aonyx leptonyx*]).

Not *Porocephalus moniliformis*; Loos, 1905: 77; Füllerborn, 1908, 1909, 1910; Schäfer, 1912 (= *Armillifer armillatus*).

Pentastomum constrictum; Herzog & Hare, 1907: 41 (juvenile; Philippines: in native Filipino).

Armillifer moniliformis; Sambon, 1922a: 202, figs (larvae in *Macaca fascicularis fascicularis* [as *Macaca irus*] and *Macaca mulatta*); Southwell, 1924: 749 (larvae in Philippine palm civet cat, *Paradoxurus hermaphrodites philippinensis* [as *Paradoxus philippinensis*]); Hett,1924a: 148 (in *Python sebae*, from Oxford Museum; larvae in carnivore, *Proteles cristata* [as *Protelis cristatus*]); Faust, 1927a: 311, fig. (China; nymph from liver of Tibetan; records from man: Manilla; Djambi, Sumatra; China, Tibet, hepatic infection; young stages in *Prionailurus* [as *Felis*] *planiceps*, and *"Viverricola malaccensis"*); Heymons, 1930: 193 (Java; in lung of king python); 1932a: 418, fig. 8 (distribution: known from East-Indies, Ceylon, Sunda Island, Philippines and China; in snakes *Morelia* [as *Python*] *amethystinus*, *Tropidonophis* [as *Tropidonotus*] *picturatus*, and *Morelia spilota spilota* [as *Python spilotes*]); 1935: 241, fig. 61 (diagnosis); Hill, 1935a: 118, pls 36-39; Heymons & Vitzhum, 1935a: 86, fig. 35 (distribution: Indo-Malaysian and Australian regions; Middle and West-Africa; young stages in *Panthera pardus pardus* [as *Felis pardus*], *Prionailurus* [as *Felis*] *planiceps*, *Panthera tigris tigris* [as *Felis tigris*], *Lutra lutra lutra* [as *Lutra nair*], *Loris tardigradus*, *Macaca fascicularis fascicularis* [as *Macaca irus*], *Macaca mulatta*, *Herpestes javanicus javanicus* [as *Mungos javanicus*], *Macaca nemestrina* [as *Nemestrinus nemestrinus*], *Nycticebus coucang coucang* [as *Nycticebus coucang*], *Loris* [as *Paradoxurus*] *tardigradus*, and *Viverra zibetha zibetha* [as *Viverra zibetha*]); Yutuc, 1954: 119, figs (nymphs in domestic cat); Boch, 1957: 424 (pentastomiasis in rhesus monkeys, *Macaca mulatta* [as *Macacus*

rhesus]); Kozlowski et al., 1958: 755 (nymphs causing generalized porocephalosis in monkey, *Macaca fascicularis fascicularis* [as *Macacus cynomolgus*]); Fain, 1961: 88, fig. (Central Africa); Stabler & Self, 1967: 923 (nymphs in the bear cat, *Arctictis binturong binturong* [as *Arctictis binturong*]); Wong & Conrad, 1978: 412 (in Asian macaques, *Macaca*); Riley & Self, 1981b: 173, figs 1-2 (redescription); Chooi et al., 1982: 41 (Malaysia; nymphs in cat, *Felis catus*); Lee et al., 1986: 195 (Malaysia; nymphs in Malayan tapir, *Tapirus indicus indicus* [as *Tapirus indicus*]); Singh et al., 1987: 349 (Malaysia: Jahore: Ulu Endau; in mammal, *Tupaia glis*); Sani, 1987: 83 (Malaysia; in *Felis catus*); Riley & Spratt, 1987: 139 (Australia; in rodent, *Rattus leucopus*); Rego, 1987: 72 (in snake); Rompaey, 1988: 37 (USA; in mammal binturong, *Arctictis binturong binturong* [as *Arctictis binturong*]); Cheah et al., 1989: 139 (Malaysia; in smooth otter, *Lutrogale perspicillata perspicillata* [as *Lutra perspicillata*]); C.P. Qiu et al., 2004: 273 (China; case report of infected boy); Pan et al., 2005: 262 (China; case report of heavy infection); Syed-Arnez & Mohd Zain, 2006: 19 (Malaysia: Johor: Endau Rompin National Park; endoparasite of wild rats); Tappe & Büttner, 2009: 1 (human visceral pentastomiasis caused by nymphs); Röhlig et al., 2010: 143 (non-type material, including Java, deposited in Museum für Naturkunde, Berlin); Latif et al., 2011: 878 (Borneo, nymphs causing visceral pentastomiasis in aboriginal farmer).

Moniliformis moniliformis; Dulac & Ralaimkhoatra, 1962: 159 (Madagascar; first case of human parasitization).

Not *Armillifer moniliformis*; Silva & Barbosa Jr., 1984: 139 (Brazil: State of Bahia; pentastomiasis in rodent, *Necromys lasiurus* [as *Zygadontomys pixuna*]) (= *Porocephalus crotali*).

Distr.: Africa, Indo-Malayan, and Australasian regions. Primary hosts: snakes. Intermediate hosts: mammals, including man, and snakes.

Remarks: The subspecies *Armillifer moniliformis heymonsi* Sambon, 1922 has occasioned the usage of subspecies *Armillifer moniliformis moniliformis* (Diesing, 1836) for the present nominal species (see below).

Armillifer moniliformis heymonsi Sambon, 1922

Armillifer moniliformis var. *heymonsi* Sambon, 1922b: 417 (types: locality not specified, from *Broghammerus* [as *Python*] *reticulatus*]); Tubangui, 1924: 749, fig. 1 (Philippine Islands; in palm civet cat, *Paradoxurus hermaphrodites philippinensis* [as *Paradoxurus philippensis*]); Yutuc, 1954: 119, figs 1-4 (Philippines: Quezon City, in lungs of native cat); Röhlig et al., 2010: 143 (non-type material deposited in Museum für Naturkunde, Berlin); Poore, 2012a: 224 (listed as synonym of *A. moniliformis,* but status of subspecies not investigated).

Armillifer moniliformis heymonsi; Kugi, 1977: 152 (from the reticulated python, *Broghammerus* [as *Python*] *reticulatus*]); Kikuchi et al., 1979: 226 (Thailand; Philippine Islands; morphology; in lung of reticulated python, *Broghammerus* [as *Python*] *reticulatus*); Poore, 2012a: 224 (included as a junior synonym of *A. moniliformis*, but the status of the subspecies has not been investigated).

Distr.: Southeast Asia. Primary host: snake. Intermediate host: felid.

Remarks: The status of the subspecies has not been investigated (Poore, 2012a: 224).

Armillifer moniliformis moniliformis (Diesing, 1836)

Armillifer moniliformis moniliformis; Fernando, 1953: 155, figs 1-3 (Ceylon: Eastern Province: Kethiraveli; male from sloth bear, *Melursus ursinus ursinus* [as *Melursus ursinus*]; nymph from liver); Paramanathan, 1961: 8 (nymphs in civet cats and wild boar); 1962: 23, figs (Ceylon; nymph in civet cats and wild boar).

Armillifer yoshidai Kishida, 1928

Armillifer yoshidai Kishida, 1928: 397, figs (type: Japan: Osaka: Ten-noji Zoological Park; in lungs of *Python molurus*).

Distr.: Japan. Primary host: snake.

Cubirea Kishida, 1928

Cubirea Kishida, 1928: 400 (placed in Armilliferinae); Nicoli, 1963: 502; Self, 1969: 77.

Cuberia; Poore, 2012a: 225 (erroneous spelling).

Type-species, by original designation: *Pentastoma annulatum* W. Baird, 1853.

Cubirea annulata (W. Baird, 1853)

Pentastoma annulatum W. Baird, 1853a: 113 (type from Natural History Museum, London: Egypt; in lungs of Egyptian cobra, *Naja naja* [as *haje*]); 1853b: 22, pl. 30, fig. 7; Poore, 2012a: 225 (discussion of priority).

Pentastoma multicinctum Harley, 1857: 115, pls 46, 47 (types: Egypt; in lung of Egyptian cobra, *Naja naja* [as *hage*]; synonymized by Shipley, 1898, but possibly earlier); Lohrmann, 1889: 303 (nymphs in water-hen, *Porphyrio* sp.).

Pent[*astomum*] *najae* Leuckart, 1860a: 32 (types not designated; larvae encysted in snake, *Naja sputatrix* [as *Naja tripudians sputatrix*]).

Pent[*astomum*] *najae-sputatricis* Leuckart, 1860a: 157 (types: no locality given, from the cobra *Naja naja*); Diesing, 1864: 335 (doubtfully synonymised with *P. multicinctum*); Shipley, 1898: 73, fig. 18; Sambon, 1922b: 400; Heymons, 1935: 250 (as *species incertae*); Brumpt, 1949: 1065 (India; larva in man).

Porocephalus najae-sputatrixis; Shipley, 1898: 73, fig. 18; Brumpt, 1949: 1065.

Pentastoma annulosum Stiles, 1891b: 85, figs (erroneous spelling for *annulata*).

Porocephalus annulosus; Stiles, 1891b: 85 (erroneous spelling for *annulatus*).

Porocephalus annulatus; Shipley, 1898: 58, fig. 5 (synonymy; larvae in crane, *Grus virgo*).

Pentastomum naie; Sambon, 1922b: 418 (an unjustified emendation of *Porocephalus najae-sputatricis*).

Armillifer annulatus; Sambon, 1922a: 202, figs 19-20 (in *Naja melanoleuca*, black cobra, *Naja nigricollis*, gaboon puff-adder, *Bitis gabonica*, and rhinoceros viper, *Bitis nasicornis*); Hett, 1924a: 146; Heymons, 1935: 239, fig. 3 (diagnosis); 1940c: 210 (in *Naja naja* [*as haje*], and *Psammophis sibilans*); Heymons & Vitzhum, 1935a: 82, fig. 33 (distribution: Africa, in lungs of elapids and viperids).

Cubirea annulata; Kishida, 1928: 400 (new combination for *Pentastomum annulatum*).

Cubirea armulata; Self, 1969: 77 (misspelling).

Cubirea annulatus; Röhlig et al., 2010: 143 (non-type material, including one female specimen received from the British Museum, London, from Chinguar, Bié Province, Angola, from cobra *Naja anchietae,* deposited in Museum für Naturkunde, Berlin)

Pentastomum najaesputatricis; Poore, 2012a: 225 (spelling of species name, as a synonym of *Cubirea annulata*).

Cuberia annulata; Poore, 2012a: 225 (erroneous spelling).

Distr.: Africa. Primary hosts: snakes. Intermediate host: bird.

Cubirea pomeroyi (Woodland, 1921)

Porocephalus pomeroyi Woodland, 1921: 337, fig. (types: Africa: Nigeria: Ilaro; in gut of Nigerian cobra, *Naja* [as *Naia*] *nigricolis*); 1923: 39, figs; Sambon, 1922b: 410, fig. 18.

Armillifer pomeroyi; Hett, 1924a: 147; 1924b: 161 (Africa; in lungs of *Naja melanoleuca*); Heymons, 1935: 240, fig. 4; 1940c: 210 (in *Grus* [as *Anthropoides virgo*]); Heymons & Vitzhum, 1935a: 85, fig. 34 (distribution; in *Naja melanoleuca*); Self & Kuntz, 1957: 196 (Sudan: Bahr El Ghazal Province: Tonj District; in lung of golden or Egyptian cobra, *Naja naja* [*as haje*]; British Solomon Islands: Florida Island; in reptile, *Acrochordus granulatus*); Trotti & Trentini, 2000 (Italy; in *Broghammerus* [as *Python*] *reticulatus*).

Cubirea pomeroyi; Kishida, 1928; Fain, 1961: 90, figs (Central Africa); Riley, 1992a: 402 (sex differences); Röhlig et al., 2010: 144, fig. 4f (non-type material deposited in Museum für Naturkunde, Berlin).

Cuberia pommeroyi; Poore, 2012a: 225 (erroneous spelling).

Distr.: Africa. Primary hosts: snakes. Intermediate host: bird.

POROCEPHALINAE Sambon, 1922

Pentastomidae Shipley, 1909: 488.

Porocephalinae Sambon, 1922b: 190 (with three sections, Sebekini, Porocephalini, and Linguatulini); Heymons, 1935: 227 (diagnosis).

Porocephalidae; Kishida, 1928: 400 (introduced as a 'nov. fam.', diagnosis).

Porocephalini Sambon, 1922b: 405 (type: *Porocephalus* Humboldt, 1812; used as Section or Subfamily).

Parasambonia Stunkard & Gandal, 1968

Parasambonia Stunkard & Gandal, 1968: 50; Riley & Self, 1982: 129 (diagnostic character; fulchrum); Almeida & Christoffersen, 1999: 701 (referred to Porocephalidae, from Sambonidae).

Type-species, by original designation: *Parasambonia bridgesi* Stunkard & Gandal, 1968.

Unidentified species: *Parasambonia* sp. a and b Riley & Spratt, 1987: 142 (Australia; New South Wales: Bowral; in reptile, *Austrelaps superbus*; Mogo; in reptiles, *Cryotophis nigriscens*, and *Pseudechis*).

Parasambonia bridgesi Stunkard & Gandal, 1968

Parasambonia bridgesi Stunkard & Gandal, 1968: 50, figs 1-6 (types from New York Zoological Park: Australia: Victoria; in lungs of snake, *Pseudechis porphyriacus porphyriacus* [as *Pseudechis porphyriacus*]); Riley & Self, 1982: 128, figs 1-3, 6 (Australia: Sydney, Queensland, and Mount Nebo, south Queensland, in *Pseudechis porphyriacus porphyriacus* [as *Pseudechis porphyriacus*], and *Tropidechis carinatus*; Mount Glorius, Queensland, in *Demansia psammophis psammophis* [as *Demansia psammophis*]; description); Riley & Spratt, 1987: 142 (Australia: Victoria: Healesville Sanctuary, in lung of snake, *Pseudechis porphyriacus porphyriacus* [as *Pseudechis porphyriacus*]; frontal gland; male first time description).

Distr.: Australia. Primary hosts: snakes.

Parasambonia minor Riley & Self, 1982

Parasambonia minor Riley & Self, 1982: 128, figs 4, 5 (type: locality unknown, in Australian copperhead snake, *Austrelaps superbus*).

Distr.: Australia. Primary host: snake.

Porocephalus Humboldt, 1812

'Echynorynchus' Humboldt, 1808; 75; 1849: 266.

Porocephalus Humboldt, 1812: 266, 300; Lamarck, 1845: 200; Mayer, 1851: 130; Raebigher, 1910: 170 (Cameroon; porocephaliasis in man); Füllerborn, 1914: 297 (development); 1919a: 5 (development and pathology); 1919b (causing pathology); M. Blanchard, 1914: 501 (larvae on corpses); Sambon, 1922a: 196, fig. (species descriptions, synonyms); Daukes, 1923: 8 (Gold Coast: heavy infestation of larvae in hedgehog); Fornara, 1924: 233 (location of larva); Thiel, 1926: 585 (porocephalus); 1927: 208 (list); Curasson, 1929: 255 (new hosts); M.A.N. Rao & Maduliar, 1932: 10 (larvae in muscle of fresh water fish); Rodhain & Vuylsteke, 1932: 1 (Africa; in crocodiles); Schouten, 1933: 40 (porocephalan); Low et al., 1935: 535 (West Africa; infection in negro); Heymons, 1935: 229 (diagnosis); Heymons & Vitzhum, 1935a: 64; Schilling, 1937: 303 (infection in European); Bergue, 1939: 39 (development of porocephalans); Noosten, 1941: 148 (in pythons); Lechner, 1965: 488 (human infection); Riley & Self, 1979: 25 (general account of species); Rego, 1983c: 219 (tropical America; in boid and viperid hosts); 1984a: 47 (diagnosis); 1984b: 393 (identification of larvae); Schwab, 1985: 14 (USA: Virginia: the Grat Dismal swamp; in the northern copperhead snake, *Agkistrodon contortrix mokasen*); Frederickson et al., 1985: 209 (nymph morphology from brain of squirrel monkey, *Saimiri sciureus sciureus* [as *Saimiri sciureus*]); Lok & Kirkpatrick, 1987: 494 (in monkey, *Macaca fascicularis fascicularis* [as *Macaca fascicularis*]); Shen et al., 1988: 26 (China; infection in tamarin, *Saguinus mystax mystax* [as *Saguinus mystax*]); M.H. Qiu et al., 2005: 69 (China: Taiwan; new species and pathogenic features); Reavill, 2005: 1 (reptile clinical pathology).

Polystoma (*Pentastoma*) Rudolphi, 1812: 106 (type-species, by monotypy: *Polystoma proboscideum* Rudolphi, 1812).

Pentastoma; Rudolphi, 1819: 123; Diesing, 1836; Dujardin, 1845: 299.

Pentastomum; Creplin, 1849: 54 (incorrect subsequent spelling of *Pentastoma*); Diesing, 1856: 31; Küchenmeister, 1857a: 29 (metamorphosis); Sambon, 1922b: 399; Ahmad 1962: 109 (east Pakistan); Poore, 2012a: 226 (discussion of convoluted history of *Pentastomum* and *Pentastoma* and priorities).

Porocephalus (*Pentastomum*); Füllerborn, 1908: 169 (in organs of west African black).

Type-species: *Porocephalus crotali* Humboldt, 1812, by monotypy.

Unidentified species: *Pentastoma* sp.; Krefft, 1871: 214 (in gecko, *Ctenotus taeniolatus* [as *Lygosoma taeniolatum*]). *Porocephalus* sp.; Sambon, 1910b: 17 (porocephaliasis in man); J.W.T. Thomas, 1920: 154 (in hernial sac); Narayan et al., 1932: 10 (larva in muscle of freshwater fish); Heymons & Vitzhum, 1935a (in mustelid, *Pteronura brasiliensis brasiliensis* [as *Pteronura brasiliensis*]); Heymons, 1939a: 687, figs; Rego, 1984a: 51 (in *Leontopithecus rosalia*, *Saguinus* sp., *Bothropoides* [as *Bothrops*] *jararaca*, and *Bothrops* sp.); F.A. Martínez et al., 2000: 1 (Argentina; in snakes); Pereira et al., 2010: 358 (Brazil: Pará: Ananindeua; fatal infections in lungs and aorta of neotropical primate *Pithecia irrorata*); Pantchev & Tappe, 2011: 528 (pentastomiasis in China provoked by snake infection); Britoi et al., 2012: 394 (Brazil: State of Mato Grosso do Sul: Corumbá; in lung of *Crotalus durissus durissus* [as *Crotalus durissus*]; unknown locality, from coelomic cavity of *Boa constrictor amarali*). *Pentastomum* sp.; Sambon, 1922b: 423 (in lizards, *Diplodactylus vittatus,* and *Ctenotus taeniolatus* [as *Lygosoma taeniolatum*]).

Porocephalus basiliscus Riley & Self, 1979

Porocephalus basiliscus Riley & Self, 1979: 30, fig. (types: Mexico; in snake, *Crotalus* sp.).

Porocephalus basilicus; Poore, 1012: 227 (wrong spelling).

Distr.: Mexico. Primary host: rattlesnakes.

Porocephalus benoiti Fain, 1960

Porocephalus benoiti Fain, 1960b: 118 (types: 'Belfian Congo': Katanga; female in *Naja* sp.); 1961: 65, figs (Congo Republic: Upper Lwiswishi, near highway Kasenga-Katanga; in intestine of serpent, *Naja*; types from Congo Museum, at Tervuren).

Distr.: Democratic Republic of the Congo. Primary host: cobras.

Porocephalus clavatus (Wyman, 1845)

Pentastoma proboscideum; Diesing, 1836 (*partim*; in snakes, *Boa constrictor constrictor* [as *constrictor*], and *Eunectes murinus* [as *scytale*]).

Linguatula clavata Wyman, 1845: 296 (types: from the 'South American Boa'); 1848: 59.

Linguatula proboscidea; Beneden, 1848a: 89 (in a *Boa*); E. Blanchard, 1850b: 646 (in *Boa constrictor constrictor* [as *constrictor*]).

Pentastomum proboscideum; Diesing, 1850: 609 (*partim*); Leidy, 1850: 96; Filippi, 1861: 18 (in snake, *Epicrates angulifer* [as *Boa brachyura*]).

Pentastomum didelphidis virginianae Leidy, 1850: 98 (types: USA; nymph in marsupial, *Didelphis virginiana virginiana* [as *Didelphis virginiana*]).

Pentastomum subcylindricum; Leidy, 1856: 42 (larva); Stiles, 1891b (larva in snakes, *Natrix* [as *Tropidonotus*] *natrix*, and *Vipera berus* [as *serus*]; in murid, *Mus* (*Mus*) *musculus musculus* [as *Mus musculus*]).

Pentastomum clavatum; Leuckart, 1860a.

Pentastoma imperatoris MacAlister, 1877: 65 (types: South America; in snake, *Boa constrictor imperator* [as *Boa imperator*]).

Pentastoma moniliforme; Mégnin, 1880; 452 (*partim*) (p.p. = *Armillifer armillatus*).

Not *Pentastomum clavatum* Lohrmann, 1889: 303 (= *Sambonia clavata*).

Porocephalus crotali; Shipley, 1898: 52 (*partim*).

Porocephalus clavatus; Shipley, 1898: 64 (in lungs of *Varanus niloticus*); Sambon, 1912: 371 (Central and South America, adults in common boa, *Boa constrictor constrictor* [as *constrictor*], and emperor boa, *Boa constrictor imperator* [as *Boa imperator*]; nymphs in Virginian opussum, *Didelphis virginiana virginiana* [as *Didelphys virginiana*], *Marmosa murina*, and philander opossum, *Caluromys* (*Caluromys*) *philander philander* [as *Philander philander*]); 1922: 422 (in *Mus* (*Mus*) *musculus musculus* [as *Mus musculus*]); Southwell, 1924: 515 (in snake, *Causus* [as *Bitis*] *rhombeatus*; maybe = *P. subulifer*); Giglioli, 1927a: 33 (in snake, *Epicrates cenchria cenchria* [as *Epicrates cenchris*]; larvae in *Saimiri sciureus sciureus* [as *Callitrix sciurea*]); 1927b: 260 (morphology of egg and embryo; American boids and serpents of genus *Lachesis*); Haffner, 1927: 361 (Brazil: Pernambuco: Recife: Dois Irmãos; in *Marmosa murina* [as *Marmosa murina parata*], *Boa constrictor*, *Boa constrictor imperator* [as *Boa imperator*], *Didelphis virginiana virginiana* [as *Didelphys virginiana*], and *Caluromys* (*Caluromys*) *philander philander* [as *Caluromys philander*]); 1927b: 361; Heymons, 1935: 230, fig. 136 (diagnosis; in lungs of *Boa constrictor*, *Boa constrictor imperator* [as *Boa imperator*], *Epicrates angulifer, Epicrates cenchria cenchria* [as *Epicrates cenchris*], *Epicrates crassus,* and *Eunectes murinus*); Heymons & Vitzhum, 1935a: 67, fig. 28 (distribution: South America, in lungs of boid snake, *Eunectes murinus*; young stages in lizard, *Dracaena guianensis*); Pinto, 1938: 50, figs; Fonseca, 1938: 157 (evolutionary cycle in Guinea pigs); 1939: 185 (Brazil: São Paulo: Butantan; in Guinea pigs); Berghe, 1939: 39, figs; M. Vargas V., 1970a: 241 (Costa Rica: Limón: La Fortuna; in *Coniophanes imperialis* [as *Boa constrictor imperialis*]; morphology of egg and nymphal stages); 1970b: 27 (morphology of nymphs); Rego, 1984b: 393, pl. 3 fig. 4 larvae in mammals, *Caluromys* (*Caluromys*) *philander philander* [as *Caluromys philander*], *Didelphis* sp., and *Saimiri sciureus sciureus* [as *Callitrix sciurea*]); D.A.C. Jones et al., 1991: 61 (frontal gland proteins); Manna & Dutta, 1992: 87 (India: West Bengal; in reptile, *Calotes versicolor*); Lia et al., 2000: 63 (Italy: Puglia; in *Boa constrictor*; Foldener et al., 2008: 443 (pentastomiasis in *Boa constrictor*, imported from Colombia); Röhlig et al., 2010: 144 (non-type material, including 2 specimens from Trinidad, in *Bothrops atrox*, and several specimens from Berlin Aquarium with identification of host as *Python molurus* most certainly misidentified, probably from a *Boa*, deposited in Museum für Naturkunde, Berlin); Gomez-Puerta et al., 2011: 379 (Peru: Departamento Loreto: Nayta; in lungs of boid snakes *Boa constrictor*, and *Epicrates cenchria cenchria* [as *Epicrates cenchria*]).

Distr.: Americas. Primary hosts: snakes and lizard. Intermediate hosts: lizard and mammals.

Remarks: Most authors treat *Pentastoma subcylindricum* Diesing, 1836 as a junior synonym of *P. crotali* (Humboldt, 1808). Heymons & Vitzhum (1936: 67) believe that at least the larva belongs to *P. clavatus*, but this could only be fixed by lectotype designation to avoid it being potentially a senior name to *P. clavatus*.

Porocephalus crocidurae Parona, 1890, *species incertae*

Pentastomum crodidurae Parona, 1890: 71, pl. 3 figs 1-4 (type: Burma; parasite of sooty shrew, *Crocidura fuliginosa fuliginosa* [as *Crocidura fuliginosa*]); Sambon, 1922b: 400, fig. 13; Heymons, 1935: 250, fig. 148 (diagnosis; as *species incertae*); Poore, 2012a: 213 (genus unassigned).

Porocephalus crocidura; Shipley, 1898: 52 (misprint for *P. crocidurae*).

Pentastoma crocidurae; Braun, 1908 (apud Sambon, 1922b: 400).

Distr.: Burma. Primary host ?: mammal.

Remarks: Sambon (1922) and Heymons (1935) could not assign this species to a genus. We follow the previous placement of Shipley (1898).

Porocephalus crotali (Humboldt, 1812)

Porocephalus crotali Humboldt, 1812: 301, pl. 26, figs 1-4 (type: Venezuela: Cumana; in *Crotalus durissus durissus* [as *Crotalus durissus*]); Shipley, 1898: 65, fig. 11 (synonym; p.p. = *P. stilesi*; adults in *Mastigodryas bifossatus bifossatus* [as *Drymobius bifossatus*], *Crotalus durissus durissus* [as *Crotalus adamanteus*], *Crotalus horridus*, *Xenodon merremii* [as *Ophis merrimi*], *Python molurus*, *Spilotes pullatus pullatus* [as *Spilotes pullatus*], *"Urocrotalon catesbyanum"*, and *Ptyas korros* [as *Zamenis koros*]); 1905: 249 (synonymy); Faria & Travassos, 1913a: 126 (Brazil: São Paulo; northwest highway and Butantan Institute, in three species of snakes, *Bothrops* [as *Lachesis*] *lanceolatus, Crotalus horridus*, and *Spilotes pullatus pullatus* [as *Spilotes pullatus*]; Sambon, 1922a: 197 (hosts: *Boa constrictor*, *Boa constrictor imperator* [as *Boa imperator*], *Crotalus durissus durissus* [as *Crotalus durissus*]; nymphs in *Didelphis virginiana virginiana* [as *Didelphys virginiana*], and *Caluromys* (*Caluromys*) *philander philander* [as *Caluromys philander*]); Hett, 1924a: 141 (in *Crotalus durissus durissus* [as *Crotalus adamanteus*], *Crotalus atrox*, and *Crotalus horridus*); Heymons, 1935: 229 (diagnosis; in *Crotalus durissus terrificus* [as *Crotalus terrificus*]; larvae in mammals, *Pteronura brasiliensis brasiliensis* [as *Pteronura brasiliensis*], *Wiedomys pyrrhorhinos* [as *Rhipidomys pyrrhorhinus*], and *Leontopithecus* [as *Mystax*] *chrysopygus*); Heymons & Vitzhum, 1935a: 65 (distribution: South America: Brazil; lung of *Crotalus durissus durissus* [as *Crotalus durissus*]; in reptiles: monitor, *Tupinambis teguixin* [as *Podinema teguixin*], in lung of *Boa constrictor,* in abdomen of *Bothopoides* [as *Bothrops*] *jararaca* in lung and abdomen of *Crotalus horridus*; in lung of *Eunectes murinus* [as *scytale*]; in tracheae of *Xenodon* [as *Ophis*] *merremii*; in lung of *Spilotes pullatus pullatus* [as *Spilotes pullatus*]; Bolivia; young in marsupials, edentates, rodents, carnivores and simians); Penn, 1940: 125 (life cycle); 1942: 277 (Louisiana; muskrat); Penn & Martin, 1941: 13 (in Louisiana muskrat); Brues, 1942: 112 (Florida: Indian River County: Fellsmere: St. Johns river marsh; in water moccasin, *Agkistrodon piscivorus*); Keegan, 1943b: 54 (USA: Louisiana; from cotton-mouth moccasin, *Agkistrodon piscivorus*); Self, 1947: 18 (USA: Oklahoma; in rattlesnakes); 1951b: 255, fig. 1 (auxiliary hooks); Esslinger, 1960: 5 (development in intermediate hosts); 1962a: 631 (hepatic lesions in rats); 1962b: 452, figs (USA: Louisiana: New Orleans, in lungs of cottonmouth water moccasins, *Agkistrodon piscivorus*; development); 1962c: 457, figs 1-8 (USA: Louisiana: New Orleans, in lungs of water moccasin, *Agkintrodon piscivorus*; egg and larva; hepatic lesions in rats); Self & McMurry, 1948: 21, figs 1-4 (USA: Oklahoma; in rattlesnakes, *Crotalus atrox* and *Crotalus horri-*

dus); Self & Kuntz, 1967: 202, figs; Layne, 1967: 105 (Florida; incidence in mammals); Forrester et al., 1970: 977 (South Carolina); Rego & Vicente, 1972: 65 (Brazil; in mammals); Rodrick, 1974: 1022 (ontogeny of lactate dehydrogenase); 1976: 325 (ontogeny of lactate-dehydrogenase); Kinsella, 1974: 116 (USA: Florida salt marsh; in rice rat, *Oryzomys palustris*); Trainer et al., 1975: 753, figs 1-5 (USA: Oklahoma: Blaine and Comanche counties, in western diamondback rattlesnakes, *Crotalus atrox*; cuticle ultrastructure, with phylogenetic implications); Hollis, 1979a: 461 (enzymes, demonstration of alkaline-phosphatase activity); 1979b: 114 (nervous system); Rego, 1980: 783 (in mammalian hosts; from Oswaldo Cruz Institute); 1983b: 234, fig. 1 (larvae in mammals *Marmosa murina* [as *Marmosa murina parata*], *Micoureus paraguayanus travassosi* [as *Marmosa cinerea*], *Chironectes minimus minimus* [as *Chironectes minimus*], *Philander opossum opussum* [as *Philander opossum*], *Phyllostomus discolor discolor* [as *Phyllostoma discolor*], *Dasypus novemcinctus novemcinctus* [as *Dasypus novemcinctus*], *Wiedomys pyrrhorhinos* [as *Oryzomys pirrhorinus*], *Thaptomys nigrita* [as *Akodon fuliginosus and Akodon nigrita*], *Procyon cancrivorus cancrivorus* [as *Procyon cancrivorus*], *Pteronura brasiliensis brasiliensis* [as *Pteronura brasiliensis*], *Nasua narica narica* [as *Nasua narica*], and *Saguinus* sp.); Wolfe, 1982: 3 (in marsh rice rat, *Oryzomys palustris*); Riley, 1981: 127 (USA: Oklahoma: Comache County, in the Western Diamondback rattlesnake, *Crotalus atrox*; experimental investigation of development); 1992a: 402, figs 1c, 2a (sex differences; copulation); 1992b: 133 (excretory products); F.A. Martínez, 1982: 74 (Argentina; nymphs in edentates, *Chaetophractus vellerosus vellerosus* [as *Chaetophractus vellorosus*] and *Tolypeutes matacus* [as *mataco*]); Detterline et al., 1984: 137 (USA: Alabama; in the cottonmouth reptile, *Agkistrodon piscivorus*); Böckeler & Böhme, 1987: 52 (Paraguay; in serpents); Ambrose & Riley, 1988a: 381 (integumentary glands); 1988b: 721 (cuticle); 1988c: 27 (in mammals, *Mus* (*Mus*) *musculus musculus* [as *Mus musculus*], and *Rattus*); 1989: 699 (in mammal, *Mus (Mus) musculus domesticus* [as *Mus domesticus*]); Storch et al., 1990: 610, figs 1-5 (adults from lungs of rattlesnake, *Crotalus atrox* bred in Dundee; genitital of male, ultrastructure); Abele et al., 1989: 685 (18S rRNA sequences, from lungs of a water moccasin, *Agkistrodon piscivorus*); 1992: 373 (18S rRNA and DNA nucleotide sequences); D.A.C. Jones & Riley, 1991: 331 (ELISA for detection of infections); D.A.C. Jones et al., 1991: 61 (excretory and secretory components of frontal glands); 1992: 469 (lipid and proteins of surface membranes); Richardson et al., 1992: 163 (USA: Arkansas; in raccoon, *Procyon lotor lotor* [as *Procyon lotor*]); Storch & Jamieson, 1992: 95 (sperm ultrastructure, relationship with Crustacea; in *Crotalus atrox*); McHardy et al., 1993: 47 (adults in lungs of rattlesnake definitive hosts; larvae in rat intermediate hosts); Buckle et al., 1997: 503 (in vitro development from infective to adult stage); Riley & Henderson, 1999: 89 (in tetrapod lung); F.A. Martínez et al., 2000a: 39 (Argentina; in colubrid snake, *Hydrodynastes gigas*); 2000b: 43 (nymph infestation); Buckle et al., 2002: 391 (proteinases from adults in lung of rattlesnakes, and from larval stages in rodent intermediate hosts); Goldberg et al., 2003: 51 (USA: California: Santa Catalina Island; in rattleless rattlesnake); Böckeler, 2007: 7, figs (parasites of reptiles); Møller et al., 2008: 335 (18S sequence from GeneBank); Tappe & Büttner, 2009: 1 (human visceral pentastomiasis caused by nymphs); Brookins et al., 2009: 460 (USA; nymphs causing massive visceral pentastomiasis in a schnauzer dog); Röhlig et al., 2010: 146, fig. 5b (non-type material, including a specimen from Cascavél, State of Paraná, Brazil, deposited in Museum für Naturkunde, Berlin); Rataj et al., 2011: 9, figs 2-4 (adults and eggs in snake *Platyceps karelini*).

Polystoma proboscideum Rudolphi, 1812: 106 (replacement name given for *Porocephalus crotali* Humboldt, 1812 without any explanation).

Porocephalum crotali; Blainville, 1828: 365.

Pentastoma subcylindricum Diesing, 1836: 21 (*partim*; types: Brazil: Mto Grosso State: Cuiabá: Ipanema; larva in mammals, *Leontopithecus* [as *Midas*] *chrysopygus*, *Marmosa* [as *Didelphis*] *murina*, *Caluromys* (*Caluromys*) *philander philander* [as *Didelphis philander*], *Didelphis marsupialis marsupialis* [as *Didelphis marsupialis*], *Procyon cancrivorus cancrivorus* [as *Procyon cancrivorus*], *Dasypus novemcinctus novemcinctus* [as *Dasypus niger*], *Wiedomys* [as *Mus*] *pyrrhorhinos*, *Rattus rattus* [as *Mus fuliginosus*], *Phyllostomus discolor discolor* [as *Phyllostoma discolor*]).

Pentastomum proboscideum; Diesing, 1850: 609; Leidy, 1884: 140 (in snake, *Crotalus durissus durissus* [as *Crotalus adamanteus*]).

Pentastomum subcylindricum; Diesing, 1850: 609 (larva in *Leontopithecus* [as *Mystax*] *chrysopygus*, in bat, *Phyllostomus discolor discolor* [as *Phyllostoma discolor*], in edentate, *Dasypus novemcinctus novemcinctus* [as *Tatusia novemcincta*], in murids, *Wiedomys pyrrhorhinos* [as *Rhipidomis pyrrhorhinus*], and *Thaptomys nigrita* [as *Akodon fuliginosus*]); Stiles, 1891a: 348; 1891b: 85 (development).

Porocephalus humboldtii Mayer, 1851: 130 (listed as a synonym of *P. crotali* in Sambon, 1922: 427; information on type material not obtained).

Linguatula quadriuncinata Meyer (apud Shipley, 1898: 65; 1905: 249; listed in the synonymy of *Porocephalus crotali*).

Porocephalus crotalis; Layne, 1967: 105 (USA: Florida; in mammals); Self & Kuntz, 1967: 202, fig; Rego & Vicente, 1972: 65 (Brazil; larvae in mammals); Rego, 1983b: 233; 1984b: 393 (Brazil: Bahia; larval pentastomiasis in rodent, *Necromys lasiurus* [as *Zigodontomys pixuna*]); Storch & Jamieson, 1992: 95 (sperm, ultrastructural evidence for relationship with Crustacea); Goldberg et al., 2003: 51 (Mexico: Baja California Sur: Santa Catalina Island; in rattlesnake, *Crotalus catalinensis*).

Distr.: Americas. Primary host: rattlesnakes and moccasins; intermediate host: small mammals.

Porocephalus dominicana Riley & Walters, 1980

Porocephalus dominicana Riley & Walters, 1980: 123, figs 1-2 (types: Dominica; in lungs of boa, *Boa constrictor nebulosa* [as *Constrictor constrictor nebulosus*]).

Distr.: Dominican Republic. Primary host: Dominican boas.

Porocephalus siamensis Koch, 1906, *species incertae*

Porocephalus siamensis Koch, 1906: 288 (type: Siam; larvae in *Felis catus* [as *siamensis*]); Heymons, 1935: 251, fig. 148 (diagnosis; as *species incertae*); Heymons & Vitzhum, 1935a: 90 (juvenile of *Armillifer moniliformis moniliformis*?); Poore, 2012a: 213 (genus uncertain).

Distr.: Thailand. Intermediate host: lion. Heymons (1935) could not assign this species to a genus and subsequent authors have largely ignored it (Poore, 2012a).

Porocephalus stilesi Sambon (in Vaney & Sambon), 1910

Pentastoma proboscideum; Bremser, 1824 (*partim*); Diesing, 1836: 1 (*partim*; in snake, *Bothrops* [as *Lachesis*] *lanceolatus*); Mayer, 1851: 130.

Pentastoma gracile Diesing, 1836: 1 (*partim*; larva in intestine of *Bothropoides* [as *Bothrops*] *jararaca*).

Pentastomum proboscideum; Diesing, 1850: 609 (*partim*).

Porocephalus crotali; Shipley, 1898: 65 (*partim*).

Porocephalus stilesi Sambon (in Vaney & Sambon), 1910: 137, figs (types: USA; in snakes *Lachesis muta* [as *mutus*] and *Bothrops* [as *Lachesis*] *lanceolatus*); Sambon, 1922a: 197 (adults in snakes, *Lachesis muta* [as *mutus*] and rat-tailed pit-viper, *Bothrops* [as *Lachesis*] *lanceolatus*); Giglioli, 1927a: 33 (in snake, *Bothrops atrox*); Heymons, 1935: 231, fig. 137; Heymons & Vitzhum, 1935a: 68 (larvae in reptile, *Tupinambis teguixin*); M. Vargas V., 1970a: 241 (copulation dilatators); 1970b: 27 (morphology of egg and nymphal stages); Riley & Self, 1979: 25 (reptilian host specificity, *Lachesis*); Rego, 1984a: 48, pl. 1 fig. 6 (experimental infestation of adults in lungs of *Cavia porcellus*, snakes, *Lachesis muta, Lachesis* sp., and *Helicops angulatus*); 1987: 73, figs 3-4; Storch et al., 1990: 610 (gentalia of male, ultrastrucute; Peru; in lungs of bushmaster, *Lachesis muta*); Röhlig et al., 2010: 147, fig. 5c (non-type material, including material from hosts *Rhinocerophis* [as *Bothrops*] *alternatus*, *Bothrops jararacussu*, and *Spilotes pullatus pullatus* [as *Spilotes pullatus*], deposited in Museum für Naturkunde, Berlin).

Porocephalus stilesi?; Hall et al., 1985: 195 (nymphs in the brain of the squirrel-monkey, *Saimiri sciureus sciureus* [as *Saimiri sciureus*]).

Distr.: South America. Primary host: pit vipers; intermediate host: small mammals.

Porocephalus subuliferum (Leuckart, 1860)

Pent[*astomum*] *subuliferum* Leuckart, 1860a: 154 (type: no locality given; in glottis of *Naja naja* [*as haje*]).

Porocephalus subulifer; Shipley, 1898: 75, fig. 21 (in Egyptian cobra, *Naja naja* [*as haje*]); Sambon, 1922a: 198 (in man); Heymons, 1935: 233 (diagnosis); 1940c: 205, fig.; Heymons & Vitzhum, 1935a: 70 (distribution: Africa: Uganda, in snakes); Fain, 1961: 60, figs (Central Africa); Nicoli, 1963: 499 (adults in *Gonionotophis poensis* [as *Mehelya poensis*], *Gonionotophis savorgnani* [as *Mehelya savorgnani* and *Mehelya lamani*]; larvae in *Psammophis sibilans, Galago senegalensis senegalensis* [as *Galago senegalensis*], and *Gonionotophis* [as *Simocephalus*] *capensis*); Legendre, 1967: 341 (chromosome number); Graber, 1981a: 155 (Congo Republic; in reptile, *Bitis gabonica*); Riley, 1992a: 402 (sex differences).

Porocephalus cercopitheci Breinl & Hindle, 1910: 322, figs (types from Liverpool Research Lab, UK: West Africa; larva in *Chlorocebus sabaeus* [as *Cercopithecus callitrichus*]; synonymized by Heymons (1935: 233)); Röhlig et al., 2010: 147 (non-type material deposited, including material from Lake Tanganyika and from host *Bitis nasicornis*, in Museum für Naturkunde, Berlin).

Porocephalus bouvieri Vaney & Sambon, 1910: 129, figs (type: 'French Congo'; in snake *Simocephlaus capensis*; synonymized by Heymons (1935: 233)).

Armillifer subulifer; Sambon, 1912: 258 (in snake, *Bitis gabonica*).

? *Porocephalus clavatus*; Southwell, 1924: 515 (in snake, *Causus rhombeatus*).

Distr.: Africa. Primary host: snake-eating snakes; intermediate host: other snakes and man.

Porocephalus taiwana M.H. Qiu, Ma Fan & Lu, 2005

Porocephalus taiwana M.H. Qiu et al., 2005: 69 (Taiwan; nymphs causing porocephaliasis taiwana in humans); Yao et al., 2008: 1295 (China; causing pentastomiasis in boy).

Distr.: Taiwan. Intermediate host: man.

Remarks: Species omitted by Poore (2012a).

Porocephalus tortugensis Riley & Self, 1979

Porocephalus tortugensis Riley & Self, 1979: 30, fig. (types: Mexico: Tortuga Island; in rattlesnake *Crotalus atrox* [as *tortugensis*]).

Distr.: Tortuga Island, Mexico. Primary host: rattlesnakes.

The following remaining genera of Porocephalidae are treated as *incertae sedis*, presently not being able to be placed in either of the two subfamilies, Porocephalinae or Armilliferinae:

Elenia Heymons, 1932

Elenia Heymons, 1932a: 413; 1935: 224 (diagnosis); Heymons & Vitzhum, 1935a: 53; Bosch & Frank, 1986: 673 (intermediate and definitive hosts); Bosch, 1987 (biology); 1991: 50 (Australia; host specificity); Almeida & Christoffersen, 1999: 701 (attributed to Porocephalidae, from Sambonidae).

Type-species, by monotypy: *Elenia australis* Heymons, 1932.

Elenia australis Heymons, 1932

Elenia australis Heymons, 1932a: 413, figs 4-7 (types from Zoologischen Museum, Hamburg: east Australia: Queensland: Rockhampton; type-host unknown); 1935: 224, fig. 131; 1939: 684, figs; Heymons & Vitzhum, 1935a: 53, fig. 26 (distribution); Riley et al., 1985: 44, fig. 2 (Australia: Adelaide zoo; in lung of *Varanus varius*; New Guinea: Boroko, in lung of *Varanus salvator salvator* [as *Varanus salvator*]; in reptiles and mammals; unknown locality; in lung of *Varanus* sp.).

Distr.: Australian region. Primary host: snake. Intermediate hosts: mammals.

Elenia liasisi Heymons, 1939, *nomen dubium*

Elenia liasisi Heymons, 1939a: 686, figs 3, 4 (syntype in Museum für Naturkunde, Berlin: Dutch New Guinea; in body cavity of lacertilian, *Lialis* [as *Liasis*] *jicari*).

Elenia (?) *lialisi*; Heymons, 1941a: 326 (revised).

Distr.: Papua New Guinea. Primary host: snake.

Remarks: This may represent an immature *Waddycephalus* specimen from Indonesia (according to Wikipedia, 2012).

Gigliolella Chabaud & Choquet, 1954

Gigliolella Chabaud & Choquet, 1954: 336.
Type-species, by monotypy: *Armillifer brumpti* Giglioli [in Sambon], 1922b: 371.

Gigliolella brumpti (Giglioli, 1922)

Armillifer brumpti Giglioli (in Sambon), 1922b: 565 (types: Madagascar; nymph in insectivore, *Setifer* [as *Ericulus*] *setosus*; adults in lungs of two species of boids, *Acrantophis* [as *Boa*] *madascariensis*, and *Sanzinia madagascariensis madagascariensis* [as *Sanzinia madascariensis*]); Sambon, 1922b: 396, figs; Heymons, 1935: 243, fig. 141 (diagnosis); Heymons & Vitzhum, 1935a: 91 (distribution; in snale, *Sanzinia madagascariensis madagascariensis* [as *Corallus madagascariensis*]); Brygoo, 1963: 195 (Madagascar: Moramanga and Ampamaherana; in *Acrantophis dumerilli*; Ampijoroa; encysted larvae in *Tenrec ecaudatus*; Antogil Bay; larvae in *Hemicentetes semispinosus,* and in *Oryzoryctes hova* [as *talpoides*]); Slocombe & Budd, 1973: 352 (Canada; in a boa).

Gigliolella brumpti; Chabaut & Choquet, 1954: 331, fig. 1 (Madagascar; larvae nymphs in lemur, *Cheirogaleus medius*); Gretillat et al., 1962: 295, fig. 1; Röhlig et al., 2010: 144 (non-type material from the Berliner Aquarium deposited in Museum für Naturkunde, Berlin).

Distr.: Madagascar. Primary hosts: snakes. Intermediate hosts: mammals.

Kiricephalus Sambon, 1922

Kiricephalus Sambon, 1922a: 199 (of Porocephalini); Heymons, 1935: 233 (diagnosis); 1940b: 85; Heymons & Vitzhum, 1935a: 71; Riley & Self, 1980: 128 (systematics); Rego, 1984a: 52 (diagnosis; in *Bothrops atrox*, and *Mastigodryas boddaerti boddaerti* [as *Drymobius boddaerti*]); Reavill, 2005: 1 (reptile clinical pathology).

Cayerina Kishida, 1927: 987, fig. 1901 (type-species by monotypy: *Cayerina mirabilis* Kishida, 1927; synonymyzed with *Kiricephalus* by Heymons & Vitzhum, 1935a, p. 74); Neave, 1939 (listed as an arachnid); Poore, 2012a: 225 (listed as a valid genus and species, overlooking the proposed synonymy by Heymons & Vitzhum, 1935a).

Type-species, by original designation: *Pentastomum proboscideum* var. *coartatum* Diesing, 1850: 609.

Unidentified species: *Kiricephalus* sp.; Heymons, 1939b: 85 (systematics); Goldberg et al., 2004: 208 (Argentina; nymphs in lizards); 2009b: 58 (Papua New Guinea; in skinks *Sphenomorphus* spp.); 2010: 461 (Papua New Guinea; in skinks, *Sphenomorphus jobiensis* and *Sphenomorphus simus*); Bursey et al., 2005: 1385 (Papua New Guinea; in intestine of saurian, nymphs in *Sphenomorphus jobiensis*); 2008: 43 (Papua New Guinea; nymphs in ranid, *Hylarana* [as *Sylvirana*] *supragrisea*]; Röhlig et al., 2010: 144 (non-type material, including material labeled "Hansa Brasil" [locality uncertain] from *Oxymycterus* [as *Hesperomis*] *rufus* deposited in Museum für Naturkunde, Berlin).

Kiricephalus clellii Riley & Self, 1980

Kiricephalus clellii Riley & Self, 1980: 133, fig. (types: Trinidad; reptilian host); Rego, 1984a: 48 (Trinidad; in lung of *Clelia clelia*).

Distr.: Trinidad. Primary host: pseudoboa.

Kiricephalus coarctatus (Diesing, 1850)

Pentastomum proboscideum var. *coarctatus* Diesing, 1850: 612 (*partim;* types: Brazil, in snake *Mastigodryas bifossatus bifossatus* [as *Coluber lichensteinii*]; East Indies, in *Ptyas* [as *Coluber*] *korros*).

Pentastomum proboscideum; Leidy, 1850: 96; 1884: 140; 1890: 140 (in snake, *Coluber constrictor constrictor* [as *Bascanion constrictor*]; larvae in mustelid, *Mephitis mephitis mephitis* [as *Mephitis mephitis*]).

Linguatula (*Porocephalus*) *seurati* Neveu-Lemaire, 1900: 112, fig. (type: Guatemala; juveniles in muscles of *Micrurus* [as *Elaps*] *fulvius*).

Porocephalus herpetodryados Shipley, 1905: 250, fig. 52 (types: Honduras: east of Andes to Rio de La Plata; Trinidad; Guadeloupe; St. Vincent; in snake, *Chironius* [as *Herpetodryas*] *carinatus*); Sambon, 1922b: 408, fig. 17.

Porocephalus coarctatum; Sambon, 1910a: 134 (Paraguay; Bolivia; Brazil; in snakes *Drymarchon corais corais* [as *Coluber corais*], *Mastigodryas bifossatus bifossatus* [as *Drymobius bifossatus*], and *Lygophis* [as *Aporophis*] *lineatus*).

Porocephalus grandis; Hett, 1915a: 115, figs 1-2 (in African vipers, *Bitis gabonica*, *Cerastes cerastes* [as *cornutus*], and *Bitis nasicornis*; larva in *murid*, *Oxymycterus rufus*).

Porocephalus globicephalus Hett, 1915a: 118, fig. 3 (type from London Zoo: southeastern USA; in lung of moccasin snake, *Nerodia fasciata fasciata* [as *Tropidonotus fasciatus*]; synonymized by Bambon, 1922); Job & Cooper, 1917: 138 (in lung of American "mocasin", *Nerodia fasciata fasciata* [as *Tropidonotus fasciatus*]; State of Iowa; in respiratory tracts of black snake, *Coluber constrictor constrictor* [as *Bascanion constrictor*]); Heymons, 1922: 155; Sambon, 1922b: 408.

Kiricephalus coarctatus; Sambon, 1922a: 199 (Guatemala; Mexico; adults in snakes, *Coluber constrictor constrictor* [as *Coluber constrictor*], *Drymarchon corais corais* [as *Coluber corais*] *Coluber flagellum* [as *flagelliformis*], *Mastigodryas bifossatus bifossatus* [as *Drymobius bifossatus*], *Drymarchon couperi* [as *Elaphe corais couperi*], *Micrurus* [as *Elaps*] *fulvius*, *Chironius* [as *Herpetodryas*] *carinatus*, *Lampropeltis* [as *Ophibolus*] *getula*, *Nerodia fasciata fasciata* [as *Tropidonotus fasciatus*], and *Thamnophis proximus proximus* [as *Thamnophis proximus*]; young forms in *Lygophis* [as *Aporophis*] *lineatus*, *Micrurus* [as *Elaps*] *fulvius*, and *Pituophis melanoleucus melanoleucus* [as *Elaps melanoleucus*]); Hett, 1924a: 144 (in snakes, *Lampropeltis* [as *Ophibolus*] *getula, Morelia spilota spilota* [as *Python spilotes*], and *Coluber flagellum* [as *Zamenis flagelliformis*]); Haffner, 1926a: 201 (juveniles in snake, *Pituophis melanoleucus melanoleucus* [as *Coluber melanoleucus*]); Hill, 1935b: 226 (USA: new host); Heymons, 1935: 234, fig. 138; 1940b: 85, figs; 1941a: 317, figs; Heymons & Vitzhum, 1935a: 72, fig. 29 (distribution: America; larva inmurid, *Oxymycterus rufus*); Keegan, 1943a: 194, figs 1-3 (eggs and larvae in snakes, *Nerodia floridana* [as *Natrix cyclopion floridana*], and *Lampropeltis getula* [as *Lampropeltis getulus floridana*]); Riley & Self, 1980: 127 (serpents as hosts); Guidry & Dronen, 1980: 686 (biology of primary larva, in serpent host, and amphibian intermediate host, *Lithobates catesbeianus* [as *Rana catesbeiana*]); Rego, 1983b: 236, fig. 2 (Brazil; in snakes, *Mastigodryas bifossatus bifossatus* [as *Dryadophis bifossatus*], *Lygophis* [as *Aporophis*] *lineatus*, *Chironius* [as *Herpetodryas*] *carinatus*, and *Drymarchon corais corais* [as *Coluber corais*]; French Guiana: Approyage river; in lung and body cavities of snakes *Hydrodynastes bicinctus bicinctus* [as *Hydrodynastes bicinctus*], and *Mastigodryas bifossatus bifossatus* [as *Dryadophis bifossatus*]; *Kiricephalus constrictor* as new

synonym); 1984a: 48, pl. 1 fig. 7; Detterline et al., 1984: 137 (USA: Alabama; in snake, *Natrix*); Foster et al., 2000: 124 (Florida; in snake, *Drymarchon couperi* [as *Drymarchon corais couperi*]); Almeida & Christoffersen, 2002: 201 (distribution: Mexico; in snakes, *Micrurus* [as *Elaps*] *fulvius*, and *Coluber constrictor constrictor* [as *Zamenis constrictor*]); Montgomery et al., 2006: 277 (Panama; in colubrid snakes); Röhlig et al., 2010: 144 (non-type material, including a specimen from Gorgona, Colombia, deposited in Museum für Naturkunde, Berlin); Brock et al., 2012: 107 (in eastern indigo snake, *Drymarchon couperi*).

Kiricephalus constrictor Riley & Self, 1980: 133, fig. (types from Chicago Zoo: South America; reptilian host; sympatric occurrence with *Kiricephalus coarctatus*); Rego, 1984a: 48 (USA: Chicago; in lung of *Boa constrictor*; Poore, 2012a: 226 (listed as a valid species, without consideration of Rego's 1983b proposed synonomy with *K. coarctatus*).

Pentastomum colubri; Rego, 1984a: 53 (in *Lygophis* [as *Coluber*] *lineatus*).

Distr.: Americas and Asia. Primary hosts: snakes. Intermediate hosts: amphibians, snakes, and mammals.

Kiricephalus gabonsensis Riley & Self, 1980

Kiricephalus gabonsensis Riley & Self, 1980: 134, fig. (types: Cameroon Republic; in colubrid snake *Polemon gabonensis* [as *Miodon*] *gabonenses*]).

Distr.: Cameroon. Primary hosts: colubrid snakes.

Kiricephalus pattoni (Stephens, 1908)

Pentastomum proboscideum var. *coarctatum* Diesing, 1850: 609 (*partim*).

Pentastomum pattoni Stephens, 1908: 553, pl. 1 figs 2, 3 (types: Madagascar; in snake, *Ptyas mucosa* [as *Zamenis mucosus*]).

Porocephalus moniliformis pattoni; Hett, 1921: 163 (Calcutta; adults in mesentery and stomach of *Ptyas mucosa* [as *Zamenis mucosus*]; larvae in mesentery and stomach of rat-snake, *Bungarus fasciatus*).

Kiricephalus pattoni; Sambon, 1922a: 200, figs (hosts: in lungs of snakes, *Xenochrophis* [as *Tropidonotus*] *piscator*, *Amphiesma stolatum* [as *Tropidonotus stolatus*], *Ptyas mucosa* [as *Zamenis mucosus*], and *Ptyas* [as *Zamenis*] *korros*); 1928: 82 (Java; beneath skin of *Fejervarya* [as *Rana*] *cancrivora*; juveniles in *Micryletta* [as *Microhyla*] *inornata*); Hett, 1924a: 144 (Madagascar; in *Leioheterodon madagascariensis*); Southwell, 1924: 515 (China: Hong Kong; in snake); Faust, 1927a: 317, figs 8-9 (Central China: Changsa; in *Xenochrophis* [as *Tropidonotus*] *piscator* and *Amphiesma stolatum* [as *Tropidonotus stolatus*]; nymph in lung of a cat, *Felis catus* [as *Felis domesticus*]; in flesh and viscera of snakes, *Rhabdophis tigrinus* [as *Natrix tigrina lateralis*], and *Plectrurus perrotetii*); Heymons, 1935: 235 (diagnosis; Australia; in *Morelia spilota spilota* [as *Python spilotes*]); Heymons & Vitzhum, 1935a: 74 (distribution: Indo-Malay [and Australian] regions, in lungs of snakes; Madagascar, in lungs of two species of snakes, *Sanzinia madagascariensis madagascariensis* [as *Corallus madagascariensis*], and *Leioheterodon madagascariensis*); Fernando, 1953: 155, figs 4-5 (Ceylon; male and nymph in body cavity of *Duttaphrynus* [as *Bufo*] *melanostictus*); Self & Kuntz, 1957: 196 (British Solomon Islands: Florida Island, in lung of the painted bronze snake, *Dendrelaphis calligastra* [as *Ahaetulla calligaster*]);

1967: 202, figs 1-5, 9; Brygoo, 1963: 165; Keegan et al., 1969: 149, figs (East and south Asia; male, female); Nadakal & Mohandas, 1975: 197 (histochemical study); Yamamoto et al., 1978: 143 (Japan; in vertebrate hosts); Riley & Self, 1980: 127 (serpent hosts, and amphibians as intermediate hosts, *Fejervarya* [as *Rana*] *limnocharis*); John & Nadakal, 1985: 333 (India; new reptilians, *Calotes, Ptyas*, and *Natrix*; life cycle with amphibian, *Euphlyctis* [as *Rana*] *hexadactyla*); 1986: 194 (juvenile in reptilian host, *Xenochrophis* [as *Natrix*] *piscator*); 1987: 67 (transplantation of nymphs); 1988: 295 (juvenile features in males; in reptilian hosts); 1989: 201 (in vitro culture); D.S. Li, 1985: 42 (China; in reptiles, *Ptyas* and *Morelia spilota spilota* [as *Python spilotes*]); Manna & Dutta, 1991: 171 (India: West Bengali; in thigh muscle of *Duttaphrynus* [as *Bufo*] *melanostictus*); Bursey & Goldberg, 2004: 1428 (Oceania: Republic of Belau: Palau Islands; in frog, *Platymantis pelewensis*); Norval et al., 2009: 79 (Taiwan: Chiayi County; nymph in the snake, *Lycodon rushtrati rushtrati;* Australian region mentioned in Heymons & Vitzhum, 1935a not based on any definitive record); Röhlig et al., 2010: 144, fig. 5a (non-type material, including Thailand and Xiamen, China, deposited in Museum für Naturkunde, Berlin).

Pentastomum javanicum Bovien, 1927a: 2, figs 1-4 (syntypes from host *Fejervarya cancrivora* in Museum für Naturkunde, Berlin (see Röhlig et al., 2010): Indonesia: Java: Djombang; in *Hoplobatrachus tigerinus* [as *Rana tigrina*]; young form in *Micryletta* [as *Microhyla*] *inornata*) (synonymised by Hett, 1934).

Cayerina mirabilis Kishida, 1927: 987 (type: Japan; juveniles in *Fejervarya* [as *Rana*] *limnocharis*); Poore, 2012a: 225 (listed as a valid genus and species, on the basis of the illustration, Japanese description, and host; however, the species was synonymized with *Kiricephalus pattoni* by Heymons & Vitzhum, 1935a, p. 74, and has thus not been entirely ignored in the pentastome literature).

Porocephalus pattoni; Hett, 1934: 425 (Burma; from lung of *Hemidactylus gleadowi* [as *gleadovi*]; adults in lung of *Ptyas mucosa* [as *Zamenis mucosus*]; immature forms in liver of *Felis catus* [as *Felis domesticus*] and common garden lizard, and body cavities of snakes, *Xenochrophis* [as *Natrix*] *piscator*, *Amphiesma stolatum* [as *Natrix stolatus*], *Xenochrophis punctulatus* [as *Nerodia punctata*], *Trimeresurus purpuromaculata bicolor*, and *Oligodon purpurascens*, in mesentery of *Oligodon* [as *Simotes*] *cruentatus*, in muscles of *Duttaphrynus melanostictus* [as *Bufo melanostictum*] and common frog, *Hoplobatrachus tigerinus* [as *Rana tigrina*], and in connective tissues of stomach of *Oligodon cruentatus*).

Distr.: Asia, Australia. Primary hosts: snakes; intermediate hosts: amphibians, lizards, and snakes.

Kiricephalus tortus (Shipley, 1898)

Porocephalus tortus Shipley, 1898: 77, fig. 23 (types: New Britain: Bismarck Archipel; in snake, *Boiga* [as *Dipsadomorphus*] *irregularis*).

Kiricephalus tortus; Sambon, 1922a: 200, figs; Heymons, 1935: 236, fig. 139 (diagnosis); 1940b: 85, figs; 1941a: 317, figs; Heymons & Vitzhum, 1935a: 75 (distribution); Krishnasamy & Self, 1981: 750, fig. 1 (Malaysia: nymph in cat shark, *Hemiscillium* [as *Chiloscyllium*] *indicum*).

Distr.: South Pacific Islands. Primary host: snakes. Intermediate host: cat shark.

Waddycephalus Sambon, 1922

Waddycephalus Sambon, 1922a: 203 (of Porocephalini); Heymons, 1935: 228 (diagnosis); 1941a: 317 (revised); Heymons & Vitzhum, 1935a: 60; Riley & Self, 1981a: 244 (revision); Riley et al., 1985: 39 (Australia: Northern Territory; mammalian host; attachment hooks); Almeida & Christoffersen, 1999: 701 (referred to Porocephalidae, from Sambonidae).

Type-species, by original designation: *Pentastoma terestiusculum* W. Baird, 1862.

Unidentified species: *Waddycephalus* sp. Keegan et al., 1969: 150, figs (male); Riley et al., 1985: 40 (Australia; in *Diplodactylus vittatus*); *Waddycephalus* spp. Riley & Self, 1981a: 249 (in tiger snake, *Notechis* sp., and copperhead snake, *Austrelaps superbus*). *Waddycephalus* spp. a-e Riley & Spratt, 1987: 142, fig. 2. (Australia: Victoria: Grampians; in snake, *Notechis scutatus scutatus* [as *Notechis scutatus*]; Reevesby Island; in *Notechis scutatus scutatus* [as *Notechis ater niger*]; South Australia: Fenelon Island; in lung of snake, *Drysdalia coronoides*; South Australia: Saint Francis Island; in lung of snake, *Morelia spilota spilota* [as *Morelia spilota*]; locality unknown; nymphs in marsupial, *Parantechinus apicalis*; South Australia; encysted in skink, *Hemiergis decresiensis decresciensis* [as *Hemiergis decresciensis*]; Western Australia: Woodstock station and Abydos station, near Marble Bar; encysted in abdomen of marsupial, *Dasykaluta rosamondae*; Papua New Guinea; from below post-orbital skin of a frog, *Crinia* [as *Ranidella*] *remota*; Mogo S.F: New South Wales; from below intestinal connective tissue of snake, *Cryptophis nigrescens*; Queensland: Wyberba: Girraween National Park; encysted in gecko, *Heteronotia binoei*); Barton, 2007: 254 (Australia: Northern Territory; in introduced Asian house gecko, *Hemidactylus frenatus*).

Distr.: Australia. Primary host: snakes and lizards. Intermediate hosts: reptiles, frogs, and marsupials.

Waddycephalus calligaster Riley & Self, 1981

Waddycephalus calligaster Riley & Self, 1981a: 250 (types: Australia: central Queensland: Cape York; in northern tree snake, *Dendrelaphis calligastra* [as *calligaster*]).

Distr.: Australia. Primary host: snakes.

Waddycephalus komodoensis Riley & Self, 1981

Waddycephalus komodoensis Riley & Self, 1981a: 250, figs 7, 8 (type: Indonesia: Komodoro Island: Loho Liang; in tree snake, the painted bronze back, *Dendrelaphis pictus pictus* [as *Dendrophis pictus*]).

Distr.: Indonesia. Primary host: snakes.

Remarks: Omitted from Poore's (2012a) and earlier species lists.

Waddycephalus longicauda Riley & Self, 1981

Waddycephalus longicauda Riley & Self, 1981a: 248, figs 4a, 5 (types: Australia: Indooropilly; in *Demansia* sp.; North Queensland: Laura; in black-headed python, *Aspidites melanocephalus*; Brisbane; in yellow faced whip-snake, *Demansia psammophis psammophis*

[as *Demansia psammophilis*]; South Australia: Lake Puntawoloma, immature specimens in lung of western brown snake, *Pseudonaja nuchalis*); Riley & Spratt, 1987: 142 (Australia: Queensland: Moggill, Queensland National Parks and Wildlife Service; in lung of snake, *Demansia psammophis psammophis* [as *Demansia psammophis*]).

Distr.: Australia. Primary hosts: snakes. Intermediate host: snakes.

Waddycephalus porphyriacus Riley & Self, 1981

Waddycephalus porphyriacus Riley & Self, 1981a: 248 (types: Australia: Queensland: Brisbane; in carpet python, *Morelia spilota* [as *spilotes*] *variegata*, black snake, *Pseudechis porphyriacus porphyriacus* [as *Pseudechis porphyriacus*], and brown snake, *Pseudonaja textilis textilis* [as *Pseudonaja textilis*]).

Distr.: Australia. Primary hosts: snakes.

Waddycephalus punctulatus Riley & Self, 1981

Waddycephalus punctulatus Riley & Self, 1981a: 250, figs 9, 10 8 (types: Indonesia; in common tree snake, *Dendrelaphis punctulatus*); Riley & Spratt, 1987: 144 (Australia: Northern Territory; in lung of snake, *Dendrelaphis punctulatus* [as *punctulata*]).

Distr.: Indonesia and Australia. Primary host: snake.

Waddycephalus radiata Riley & Self, 1981

Waddycephalus radiata Riley & Self, 1981a: 252 (type: Hong Kong; in snake, *Coelognathus radiatus* [as *Elaphe radiata*]).

Distr.: Hong Kong. Primary host: snake.

Waddycephalus scutata Riley & Self, 1981

Waddycephalus scutata Riley & Self, 1981a: 248 (types: Australia: South Australia: Saint Francis Island; in tiger snake, *Notechis scutatus scutatus* [as *Notechis scutata*]).

Distr.: Australia. Primary host: snake.

Waddycephalus superbus Riley & Self, 1981

Waddycephalus superbus Riley & Self, 1981a: 246, figs 2b, 4b (types: Australia: Tasmania: Green Bay; Bass Straight: Cape Barren Islands; in ground-dwelling copperhead snake, *Austrelaps* [as *Hoplocephalus*] *superbus*); Riley et al., 1985: 46; Riley & Spratt, 1987: 143 (Australia: Tasmania: Launceston and Lonford; in lung of snake, *Austrelaps superbus*).

Distr.: Australia. Primary hosts: snakes.

Waddycephalus teretiusculus (W. Baird, 1862)

Pentastoma teretiusculum W. Baird, 1862: 114 (type: Australia; one female in mouth of Australian snake, *Austrelaps* [as *Hoplocephalus*] *superbus*).

Pentastomum teretiusculum; Spencer, 1893: 1, pl. 1-9 (anatomy; Australia: Bass Strait: between Victoria and Tasmania: King Island; in lung of *Pseudechis porphyriacus porphyriacus* [as *Pseudechis porphyriacus*]).

Porocephalus teretiusculus; Shipley, 1898: 76, fig. 22 (in Australian snake).

Waddycephalus teretiusculus; Johnston, 1912: 233 (Australia; in reptiles, *Notechis scutatus scutatus* [as *Notechis scutatus*], *Demansia psammophis psammophis* [as *Diemenia psammophis*], *Pseudonaja textilis textilis* [as *Diemenia textilis*], and *Pseudechis porphyriacus porphyriacus* [as *Pseudechis porphirineus*]); Sambon, 1922a: 203, figs (hosts: in lungs of Australian snakes, *Pseudechis porphyriacus porphyriacus* [as *Pseudechis porphyriacus*], *Austrelaps superbus* [as *Denisonia superba*], *Pseudonaja textilis textilis* [as *Diemenia textilis*], and *Demansia psammophis psammophis* [as *Diemenia reticulata*], and in the tiger snake, *Notechis scutatus scutatus* [as *Notechis scutatus*]); Hett, 1924a: 150, fig. 12; Heymons, 1932a: 409 figs 1-2; 1935: 228, figs 1, 135; 1941a: 317 (revision; distribution: Australia, Hong Kong, China, Bengal, Maldive Islands, Sumatra, Java); Heymons & Vitzhum, 1935a: 61, fig. 27 (distribution: Australia; in lungs of five species of snakes); Self & Kuntz, 1957: 194 (British Solomon Islands: Florida Island, in painted bronze snake, *Dendrelaphis calligastra* [as *Ahaetulla calligaster*]); 1967: 205, figs; Stunkard & Gandal, 1968: 49 (Australia: Victoria; in lungs of snake, *Pseudechis porphyriacus porphyriacus* [as *Pseudechis porphyriacus*], that died in the New York Zoo); Riley & Self, 1981a: 246, fig. 2a (Australia; in ground-dwelling copperhead snake, *Austrelaps superbus*); Riley et al., 1985: 40; Riley, 1992a: 402, fig. 1d (sex differences); Röhlig et al., 2010: 148, fig. 5d (non-type material, including juvenile male from northern Queensland, in *Dasyurus* sp., deposited in Museum für Naturkunde, Berlin).

Distr.: Asia and Australia. Primary hosts: snakes.

Waddycephalus vitiensis Heymons, 1932

Waddycephalus vitiensis Heymons, 1932a: 412, fig. 3 (type, Zoologisches Museum, Hamburg: Fiji Islands; Viti; in *Crocodylus porosus* ?); Heymons, 1935: 229 (diagnosis); Heymons & Vitzhum, 1935a: 64.

Distr.: Fiji Islands. Primary host: crocodile.

Remarks: Omitted from Poore's (2012a) and earlier species lists.

Host/parasite checklist of Recent Pentastomida

Species were first searched with Google (2012), being then listed from Wikipedia (2012), and finally checked by specific taxon sites or checklists indicated below for each group; taxa within double quotes are not confirmed as valid from these sources. Several of these unconfirmed host names were introduced by Diesing (1836, 1850), their problematic status already having been noted by Heymons (1935). Full synonyms of host species may be obtained in the databases cited for each group. Herein we indicate only previous names indicated in the pentastomid literature.

INSECTA (Species were validated, in addition to the general references indicated above, with ITIS, 2012).

COLEOPTERA: SCARABEIDAE (scarab beetles):

Microctecnochira bilobata (Boheman, 1855) [= *Coelosis bilobata* Boheman, 1855]. Parasite: *Raillietiella gigliolii*.

NEOPTERA: BLATTARIA (cochroaches): BLABERIDAE (giant cochroaches):

Blaberus discoidalis Serville, 1839 (discoid cockroach). Parasite: *Raillietiella gehyrae* (nymphs in fat bodies of intermediate host; infective third stage free in coelom).

NEOPTERA: BLATTARIA: BLATTIDAE (household cochroaches):

Periplaneta americana (Linnaeus, 1758) (American cockroach). Parasites: *Raillietiella amphiboluri*; *R. hebitihamata* (larvae in fat bodies, infective stages free in coelom of intermediate host); *R. gigliolii*.

Periplaneta australasiae (Fabricius, 1775) (Australian cockroach). Parasite: *Raillietiella hebitihamata*.

PISCES (Species were validated, in addition to the general references indicated above, with Eschmeyer, 1998, Reis et al., 2003, and FishBase, 2012).

ELASMOBRANCHII (sharks and rays): ORECTOLOBIFORMES (carpet sharks): HEMISCYLLIDAE (bamboo sharks):

Chiloscyllium indicum (Gmelin, 1789 [in Linnaeus & Gmelin, 1788]) [= *Hemiscyllium indicum* (Gmelin [in Linnaeus & Gmelin, 1788]) (slender bambooshark). Parasite: *Kiricephalus pattoni*.

ELASMOBRANCHII: RAJIFORMES (skates and rays): POTAMOTRIGONIDAE (river stingrays):

Potamotrygon motoro (Müller & Henle, 1841) [= *Raia motoro* (Müller & Henle, 1841; *Taeniura motoro* Müller & Henle, 1841] (South American freshwater stingray; "raia de fogo"; "raia-maça"; "boro"). Parasites: *Leiperia gracilis* (larvae); *Sebekia oxycephalum* (larvae).

ACTINOPTERYGII (ray-finned fish): AMIFORMES (bowfins): AMIIDAE (bowfins):

Amia calva Linnaeus, 1766 (bowfin). Parasite: *Sebekia oxycephalum* (larvae encysted in mesenteries).

ACTINOPTERYGII: CHARACIFORMES (characins): ALESTIDAE (African tetras):

Alestes macrophthalmus Günther, 1867 (torpedo robber, an alestid fish). Parasites: *Leiperia cincinnalis* (larvae); *L. gracilis* (larva in peritoneum of cloaca).

ACTINOPTERYGII: CHARACIFORMES: BRYCONIDAE: SALMINAE:

Salminus brasiliensis (Cuvier, 1816) [= *Hydrocyon brevidens* Cuvier, 1819; *Salminus brevidens* (Cuvier, 1819); *Salmo auratus* Natterer, 1836] ("dourado", a freshwater fish). Parasite: *Leiperia gracilis* (larvae encysted in intestinal wall).

ACTINOPTERYGII: CHARACIFORMES: CHARACIDAE (characins):

Astyanax mexicanus (De Filippi, 1853). (Mexican tetra). Parasite: *Leiperia gracilis.*

ACTINOPTERYGII: CHARACIFORMES: CHARACIDAE: TETRAGONOPTERINAE:

Tetragonopterus argentatus (Baird & Girard, 1854); ("sardinha matupiri"; "sauá"). Parasite: *Sebekia oxycephalum*.

ACTINOPTERYGII: CHARACIFORMES: CYNODONTIDAE (dogtooth characins): CYNODONTINAE:

Rhaphiodon vulpinus Spix & Agassiz, 1829 [= *Salmo tamuco* Kner, 1860] (a characoid freshwater fish: biara; "chafalote"; "chambira-challua"; "dentudo"; "peixe-cachorro"; "peixe cadela"; "saranha"). Parasites: *Leiperia gracilis*; *Sebekia oxycephalum* (larva).

ACTINOPTERYGII: CHARACIFORMES: ERYTHRINIDAE (trahyras):

Hoplias malabaricus (Bloch, 1794) [= *Macrodon trahira* (Agassiz, 1829)] (a freshwater

fish: trahira; "aimara"). Parasites: *Leiperia gracilis* (larvae in body cavity); *Sebekia oxycephalum*; *Subtriquetra subtriquetra* (larvae).

ACTINOPTERYGII: CHARACIFORMES: SERRASALMIDAE:

Pristobrycon aureus (Spix & Agassiz, 1829) [= *Salmo erythrophthalmus* Kner, 1860] (a salmonid fish). Parasite: *Sebekia oxycephalum* (larva).

Pygocentrus nattereri Kner, 1858 [= *Serrasalmus natteri* (Kner, 1858)] (red piranha). Parasites: pentastomids (in muscles, coelomic cavity, and air bladder); *Sebekia oxycephalum* (larvae).; *S.* sp.

Pygocentrus piraya (Cuvier, 1819) [= "*Serrasalmo piranha*"] (true piranha; San Francisco piranha; "cariba"). Parasites: *Leiperia gracilis* (larva); *Sebekia oxycephalum* (larva); *S.* sp.; *Subtriquetra subtriquetra* (larvae in swimming bladder).

ACTINOPTERYGII: CLUPEIFORMES (clupeiformes herrings): CLUPEIDAE (herrings, shads, sardines, menhadens):

"*Clupea tobarana* Natterer, 1836" (a marine fish). Parasites: *Leiperia gracilis*; *Sebekia oxycephalum* (larva). Remarks: Heymons (1935) was also unable to identify this fish name. It does not appear on FishBase (2012).

ACTINOPTERYGII: CLUPEIFORMES: PRISTIGASTERIDAE (pristigasterids):

Pellona castelnaeana Valenciennes, 1847 (Amazon pellona; "apapá"; "sardinha branca"; "sardinata"). Parasite: *Leiperia gracilis*. Remarks: Heymons (1935) synonymyzed this species with *Ilisha flavipennis* (Vallenciennes, 1849), but both species are now considered valid.

ACTINOPTERYGII: CYPRINODONTIFORMIS (rivulines, killifishes, and levebearers): CENTRARCHIDAE (sunfishes):

Pomoxis nigromaculatus (Lesueur, 1829) [= *Pomoxis sparoides* (Lacepède, 1801)] (black crappie). Parasite: *Sebekia oxycephalum* (larvae encysted in mesenteries).

ACTINOPTERYGII: CYPRINODONTIFORMIS: FUNDULIDAE (topminnous and killifishes):

Fundulus grandis Baird & Girard, 1853 (Gulf killfish, a fundulid). Parasite: *Leiperia gracilis* (intermediate host).

ACTINOPTERYGII: CYPRINODONTIFORMIS: POECILIIDAE (poeciliids):

Phalloceros harpagos Lucinda, 2008 ("barrigudinho"). Parasite: *Sebekia oxycephalum* (nymphs in mesenteries).

Poecilia Bloch & Schneider, 1801 sp. (a freshwater fish: guppy; lebistes). Parasite: *Subtriquetra subtriquetra* (developmental stages).

Poecilia latipinna (Lesueur, 1821) (sailfinmolly). Parasite: *Sebekia oxycephalum* (nymphs in viscera).

Poecilia reticulata Peters, 1859 (guppy). Parasites: *Sebekia minor* (larvae); *S. oxycephalum* (nymphs in viscera).

ACTINOPTERYGII: CYPRINODONTIFORMIS: POECILIIDAE: POECILIINAE:

Gambusia affinis affinis (Baird & Girard, 1853) [= *Gambusia affinis* (Baird & Girard, 1853)] (mosquitofish). Parasites: *Sebekia mississippiensis* (intermediate host); *S. oxycephalum* (infective larvae).

Gambusia holbroocki (Girard, 1859) [= *Gambusia affinis holbroocki* (Girard, 1859)] (eastern mosquito fish). Parasite: *Sebekia oxycephalum* (larvae encysted in mesenteries).

Priapichthys annectens (Regan, 1907) (a freshwater fish). Parasite: *Subtriquetra subtriquetra* (larvae introduced experimentally into host).

Xiphophorus helleri Heckel, 1848 (green swordtail, a freshwater fish). Parasite: *Sebekia mississippiensis* (intermediate host).

Xiphophorus maculatus (Günther, 1866) (southern platyfish). Parasites: *Sebekia oxycephalum* (nymphs in viscera); *Subtriquetra subtriquetra* (developmental stages).

ACTINOPTERYGII: GYMNODONTIFORMES (knifefishes): APTERONOTIDAE (ghost knifefishes):

Apteronotus albifrons (Linnaeus, 1766) [= *Sternarchus albifrons* (Linnaeus, 1766)] (black ghost knife fish; "ituí cavalo"). Parasites: *Leiperia gracilis* (larva); *Sebekia oxycephalum* (larvae).

ACTINOPTERYGII: GYMNODONTIFORMES: GYMNOTIDAE (naked-back knifefishes):

Electrophorus electricus (Linnaeus, 1766) [= *Gymnotus electricus* Linnaeus, 1766] (electric eel; "poraquê"). Parasite: *Leiperia gracilis*; *Sebekia oxycephalum* (larva).

Gymnotus carapo Linnaeus, 1758 [= *Carapus brachyurus* Bloch, 1786] (banded knifefish; "carapó"; "mailura"; "tira-faca"). Parasite: *Leiperia gracilis*.

ACTINOPTERYGII: OSTEOGLOSSIFORMES (bony tongs): ARAPAIMIDAE (bonytongues):

Arapaima gigas (Schinz, 1822) (arapaima; pirarucu; a freshwater fish). Parasite: *Leiperia gracilis* (larvae).

ACTINOPTERYGII: OSTEOGLOSSIFORMES: MORMYRIDAE (elephantfishes):

Marcusenius macrolepidotus (Peters, 1852) (bulldog, a freshwater fish). Parasite: *Sebekia minor* (encysted infective larvae).

ACTINOPTERYGII: PERCIFORMES (perch-likes): CENTRARCHIDAE (sunfishes): *Lepomis gibbosus* (Linnaeus, 1758) [= *Eupomotis gibbosus* Linnaeus, 1758; *Eupomotis microlophus* (Günther, 1859)] (common sunfish; pumpkinseed; stump-knocker). Parasite: *Sebekia oxycephalum* (larvae encysted in mesenteries).

Lepomis gulosus (Cuvier, 1829) [= *Chaenobryttus gulosus* (Cuvier, 1829)] (warmouth bass). Parasites: *Raillietiella* sp. (larvae in tissues); *Sebekia oxycephalum* (larvae encysted in mesenteries).

Lepomis macrochirus Rafinesque, 1819 (bluegill). Parasite: *Leiperia gracilis* (intermediary host).

Lepomis megalotis (Rafinesque, 1820) [= *Xenotis megalotis marginatus* (Holbrook, 1855)] (Florida long-eared sunfish). Parasite: *Sebekia oxycephalum* (larvae encysted in mesenteries).

Lepomis punctatus (Valenciennes, 1831) [= *Sclerotis punctatus punctatus* (Valenciennes, 1831)] (black-spotted sunfish). Parasite: *Sebekia oxycephalum* (larvae encysted in mesenteries).

ACTINOPTERYGII: PERCIFORMES: CICHLIDAE: ASTRONOTINAE:

Astronotus crassipinnis (Heckel, 1840) [= *Acara crassipinnis* Heckel, 1840] ("acaruaçu"; "oscar"; "apaiari"). Parasite: *Leiperia gracilis.*

ACTINOPTERYGII: PERCIFORMES: CICHLIDAE: CICHLASOMATINAE:

Aequidens pulcher (Gill, 1858) [= *Aequidens pulchra* (Gill, 1858)] (blue acara). Parasite: *Sebekia oxycephalum* (intermediate host).

Aequidens tetramerus (Heckel, 1840) [= *Acara cascudo* Linnaeus, 1758] ("acará-cascudo"; saddle cichlid; an Amazon fish). Parasite: *Subtriquetra subtriquetra* (nymph in intestine).

Amatitlania nigrofasciata (Günther, 1867) [= *Cichlasoma nigrofasciatum* (Günther, 1867)] (convict). Parasite: *Subtriquetra subtriquetra* (larvae and nymphs in swimm bladder).

Cichlasoma urophthalmus (Günther, 1862) (Mayan cichlid fish). Parasite: *Subtriquetra subtriquetra.*

Parachromis montaguensis (Günther, 1867) [= *Cichlasoma montaguense* (Günther, 1867)] (false yellow jacket cichlid). Parasite: *Sebekia* sp. (in mesenteries).

Paraneetroplus synspillus (Hubbs, 1935) [= *Cichlasoma synspilum* Hubbs, 1935] (pastel cichlid; quetzel cichlid; redhead cichlid; firehead cichlid). Parasite: *Subtriquetra subtriquetra* (in mesenteries).

ACTINOPTERYGII: PERCIFORMES: CICHLIDAE: CICHLINAE:

Cichla monoculus Spix & Agassiz, 1831 [= *Lobotes monoculus* Spix & Agassiz, 1831] (a marine fish). Parasite: *Leiperia gracilis* (larvae).

ACTINOPTERYGII: PERCIFORMES: CICHLIDAE: PSEUDOCRENILABRINAE:

Bathybates ferox Boulenger, 1898. Parasite: *Leiperia cincinnalis* (infective larvae).

Oreochromis mossambicus (Peters, 1852) (Mossambique bream; "tilápia"). Parasites: *Alofia* sp. (larvae in swim bladder); *Leiperia cincinnalis* (experimentally infected with primary larvae)*; Sebekia minor* (larvae); *Subtriquetra rileyi* (infective larvae in swim bladder).

Oreochromis niloticus niloticus (Linnaeus, 1758) [= *Lates niloticus* Linnaeus, 1758; *Tilapia nilotica* (Linnaeus, 1758)] (mango fish; Nile perch; Nile tilapia; nilotica; a freshwater latid fish). Parasite: *Leiperia cincinnalis* (nymphs in muscle).

Sargochromis giardi (Pellegrin, 1903) [= *Pelamatochromis robustus* Gilchrist & Thompson, 1917] (ligros-happy; pink happy). Parasite: *Leiperia cincinnalis* (nymphs in body cavity).

Serranochromis meridianus Jubb, 1967 (lowveld largemouth). Parasite: *Leiperia cincinnalis* (as intermediary host).

Tilapia Smith, 1840 sp. Parasite: *Sebekia oxycephalum* (infective larvae); *Subtriquetra subtriquetra* (developmental stages).

Tilapia rendalli (Boulenger, 1897) [= *Tilapia rendalli swierstrae* Gilchrist & Thompson, 1917] (redbreasted Maori wrasse; redbreast tilapia). Parasites: *Sebekia minor* (infective larvae); *Subtriquetra rileyi* (infective larvae).

Tilapia zilli (Gervais, 1848) (redbelly tilapia). Parasite: *Sebekia oxycephalum* (nymphs in viscera).

ACTINOPTERYGII: PERCIFORMES: GOBIIDAE (gobiids): GOBINELLINAE:

Gobioides broussonnetii Lacepède, 1800 (violet goby). Parasite: *Leiperia gracilis* (juvenile).

Gobioides peruanus (Steindachner, 1880) (Peruvian eelgoby). Parasite: *Leiperia gracilis* (nymphs).

ACTINOPTERYGII: PERCIFORMES: LATIDAE (Lates perches):

Lates microlepis Boulenger, 1898 (forktail latid, a freshwater fish). Parasite: *Leiperia cincinnalis* (larval forms).

ACTINOPTERYGII: PERCIFORMES: SCIAENIDAE (drums or croakers):

Micropogonias undulatus (Linnaeus, 1766) (Atlantic croaker). Parasite: *Leiperia gracilis* (intermediary host).

ACTINOPTERYGII: SALMONIFORMIS (salmons): SALMONIDAE (salmonids): SALMONINAE:

Salmo Natterer, 1836 sp. Parasite: *Sebekia oxycephalum* (larvae).

Salmo salar Linnaeus, 1758 (Atlantic salmon). Parasite: *Sebekia oxycephalum* (larvae).

ACTINOPTERYGII: SILURIFORMES (catfish): ARIIDAE (sea catfishes):

Sciades herzbergii (Bloch, 1794) [= *Bagrus mesops* Valenciennes, 1840; *Bagrus pemecus* Vallenciennes, 1840] (pemecou sea catfish; gillbacker; mud cuirass; "bagre branco"; "bagre guriba"; bagre juba"; "gurijuba"; "jahu Amazonense"). Parasite: *Leiperia gracilis*.

ACTINOPTERYGII: SILURIFORMES: CLARIIDAE (airbreathing catfishes):

Clarias gariepinus (Burchell, 1822) (North African catfish; walking catfish). Parasite: *Sebekia okavangoensis* (larvae in body cavity).

ACTINOPTERYGII: SILURIFORMES: CLAROTEIDAE (claroteid catfishes): CLAROTEINAE:

Chrysichthys brachynema Boulenger, 1900 (kibonde; planet catfish). Parasite: *Leiperia cincinnalis* (larval forms).

Chrysichthys mabusi Boulenger, 1905 (bemba). Parasites: *Leiperia cincinnalis* (larvae); *L. gracilis* (larvae in peritoneum of cloaca).

ACTINOPTERYGII: SILURIFORMES: ICTALURIDAE (North American freshwater catfishes):

Ameiurus natalis (LeSueur, 1819) (yellow bullhead fish). Parasite: *Sebekia oxycephalum* (larvae).

Ictalurus meridionalis (Günther, 1864) (blue catfish). Parasite: Pentastomida sp. (nymphs).

ACTINOPTERYGII: SILURIFORMES: PIMELODIDAE (long-whiskered catfishes):

Brachyplatystoma filamentosum (Lichtenstein, 1819) [= *Silurus piraaiba* (Goeldi, 1898); *"Silurus piratinga"*] (kumakuma; "bagre amarelo"; "bagre branco"; "bandeirinha"; "cadete"; "chumbadinha"; "dourado"; "filhote"; "guirí"; "piramutaba"; a freshwater catfish). Parasite: *Leiperia gracilis* (larva). Remarks: Using piraiba as a vernacular name, *Brachyplatystoma filamentosum* (Lichtenstein, 1819) appears in FishBase (2012), with *Piratinga piraaiba* Goeldi, 1898 (lau-lau, "bagre-branco", "bagre-pobre") as a synonym. It appears that *Brachyplatystoma filamentosum* may have been the species intended.

Hemisorubim platyrhynchos (Valenciennes, 1840) [= *Silurus gerupoca* Natterer, 1858] (porthole shovelnose catfish; toa; "gerupoca"; "jurupoca"). Parasites: *Leiperia gracilis* (larvae); *Sebekia* sp.

Phractocephalus hemioliopterus (Bloch & Schneider, 1801) [= *Pirarara bicolor* Spix & Agassiz, 1829] (redtailed catfish; "lorai"; "parabé-prê"; "pirarara"; "varara"). Parasite: *Leiperia gracilis* (larvae).

Pimelodus sp. Lacépède, 1803. Parasite: *Sebekia* sp.

Pimelodus ornatus Kner, 1858 [= *Silurus megacephalus* (Natterer, 1858)] (ornate pimelodus; "bagre-de-água-doce"; "mandi"; "mandi-guaru"). Parasite: *Leiperia gracilis* (larvae).

*Pinirampu*s sp. Bleeker, 1858 (a fish). Parasite: *Sebekia* sp.

Pinirampus pirinampu (Spix & Agassiz, 1829) [= *Pimelodus pinirampu* Spix & Agassiz, 1829] (flatwiskered catfish; "piranabu"). Parasite: *Leiperia gracilis* (larvae).

Pseudoplatystoma Bleeker, 1862 sp. (a fish). Parasites: *Sebekia* sp.; *Leiperia gracilis* (larvae; in muscles); *Sebekia oxycephalum.*

Pseudoplatystoma corruscans (Spix & Agassiz, 1829) (spotted sorubim). Parasite: *Sebekia oxycephalum.*

Pseudoplatystoma fasciatum (Linnaeus, 1766) [= *Silurus fasciatus* Linnaeus, 1766]

(barred-sorubun; tigerfish; "cachara"; "pintado"; "surubim-cachara"). Parasites: Pentastomida sp.; *Leiperia gracilis* (larvae); *Sebekia oxycephalum* (larvae).

Pseudoplatystoma tigrinum (Valenciennes, 1840) [= *Platystoma tigrinum* Valenciennes, 1840] (tiger sorubin; "cachara-tigre"; "caparari"; "pirambucu"; "surubim". Parasite: *Leiperia gracilis*.

Zungaro jahu (Ihering, 1898) [= *Silurus jahu* Ihering, 1898] ("jaú", a migratory catfish). Parasite: *Leiperia gracilis* (larvae).

Zungaro zungaro (Humboldt, 1821) [= *Paulicea luetkeni* (Steindacker, 1871)] (gilded catfish). Parasite: *Leiperia gracilis*.

ACTINOPTERYGII: SILURIFORMES: SILURIDAE (sheatfishes):

Silurus sp. Parasites: *Leiperia gracilis* (larvae); *Sebekia oxycephalum* (larva).

"Silurus dourado". Parasites: *Sebekia mississippiensis* (larvae); *S. oxycephalum* (larva). Remarks: Several genera and species appear on FishBase (2012) when dourado is entered as a vernacular name, but no species name is associated with *Silurus.*

Silurus glanis Linnaeus, 1758 (Wels catfish). Parasite: *Linguatula serrata*.

"*Silurus mamaiacu*". Parasite: *Leiperia gracilis* (larva). Not listed in FishBase (2012).

"*Silurus pintado* Natterer (in Diesing), 1836". Parasite: *Sebekia oxycephalum* (larva). Remarks: No distinguishing characters mentioned for this taxon name (Eschmeyer, 1998: 2343). Heymons (1935: 168) was unable to place this fish species. Not listed in FishBase (2012).

"*Silurus* (*Pimelodus*) *vituga* (Natterer, in Diesing, 1836)" (apimelodid fish). Parasite: *Leiperia gracilis*. Remarks: No distinguishing characters mentioned for this taxon name (Eschmeyer, 1998: 1773). Heymons (1935: 168) was unable to place this fish species. Not listed in FishBase (2012).

ACTINOPTERYGII: SILURIFORMES: TRICHOMYCTERIDAE (pencil or parasitic catfishes): VANDELLINAE:

Vandellia cirrhosa Cuvier & Valenciennes, 1846 (candiru). Parasite: *Sebekia oxycephalum* (larva).

ACTINOPTERYGII: SYNBRANCHIFORMES (spiny eels): MASTACEMBELIDAE (spiny eels):

Mastacembelus Scoopoli (ex Gronow), 1777 sp. (a freshwater fish). Parasite: *Leiperia cincinnalis* (juvenile in digestive tract of intermediate host).

ACTINOPTERYGII: SYNBRANCHIFORMES: SYNBRANCHIDAE (swamp-eels):

Synbranchus Bloch, 1795 sp. (a freshwater fish). Parasite: *Leiperia gracilis.*

Synbranchus marmoratus Bloch, 1795 (marbled swamp eel; "mussum"). Parasites: *Leiperia gracilis*; *Sebekia oxycephalum* (larvae).

AMPHIBIA; (Species were validated, in addition to the general sites indicated above, with the AmphibiaWeb DataBase, 2012).

ANURA: BUFONIDAE:

Amietophrynus mauritanicus (Schlegel, 1841) [= *Bufo mauritanicus* Schlegel, 1841] (berber toad; Mauritian toad; Moroccan toad; morrish toad; pantherine toad). Parasites: *Raillietiella* (larvae); *R.* sp.

Amietophrynus regularis (Reuss, 1833) [= *Bufo regularis* Reuss, 1833] (common African toad; common square-marked toad; Egyptian toad; Reuss's toad). Parasite: *Raillietiella* sp. (definitive host).

Duttaphrynus melanostictus (Schneider, 1799) [= *Bufo melanostictum* (Schneider, 1799);

Bufo melanostictus (Schneider, 1799)] (Asian blackhead toad; Asian black-spotted toad; Asian eyebrow-ridge toad; black-lipped toad; black-spined toad; house toad; kneeled-nosed toad; common Indian toad; reticulated toad; southeast Asian broad-skulled toad; spectacled toad). Parasites: *Kiricephalus pattoni* (immature forms in muscles; nymph in body cavity); *Raillietiella indica* (immature forms in lung); *R. rileyi* (in lung).

Peltophryne lemur Cope, 1869 [= *Bufo lemur* (Cope, 1869)] (lowland Caribbean toad; Puerto Rican crested toad). Parasite: *Raillietiella bufonis* (adults in lungs).

Rhaebo blombergi (Myers & Funkhouser, 1951) [= *Bufo blombergi* Myers & Funkhouser, 1951] (Blomberg's toad; Colombia toad; "sapo gigante de Blomberg"). Parasite: *Raillietiella* sp.

Rhinella marina (Linnaeus, 1758) [= *Bufo marinus* (Linnaeus, 1758)] (agua road; invasive cane toad; giant toad; marine toad; shoulder-knot frog). Parasites: *Raillietiella hebitihamata*; *R. indica* (in lungs); *R*. spp.

Rhinella schneideri (Werner, 1894) [= *Bufo paracnemis* Lutz, 1925] (bull-frog; cururu toad; Schneider's toad). Parasite: *Raillietiella freitasi*.

ANURA: CERATOBATRACHIDAE:

Platymantis pelewensis Peters, 1867 (Palau wrinkled ground frog). Parasite: *Kiricephalus pattoni* (nymphs in intestine).

ANURA: DICROGLOSSIDAE:

Euphlyctis hexadactylus (Lesson, 1834) [= *Rana hexadactyla* (Lesson, 1834)] (green pond frog; Indian bullfrog; Indian five-fingered frog; Indian green frog; six-toed frog). Parasite: *Kiricephalus pattoni*.

Fejervarya cancrivora (Gravenhorst, 1829) [= *Rana cancrivora* Gravenhorst, 1829] (brackish frog; crab-eating frog; Gulf coast frog; Java wart frog; mangrove frog; marsh frog; rice-field frog). Parasites: *Kiricephalus pattoni* (beneath skin); *Raillietiella gehyrae.*

Fejervarya limnocharis (Gravenhorst, 1829) [= *Rana limnocharis* Gravenhorst, 1829] (Boie's wart frog; grass frog; Indian cricket frog; Indian rice frog; marsh frog; paddy-field frog; paddy frog; rice field frog; terrestrial frog; white-lined frog). Parasite: *Kiricephalus pattoni* (juvenile in intermediate host).

Hoplobatrachus tigerinus (Daudin, 1802) [= *Rana tigrina* Merrem, 1820] (common frog; golden frog; Indian bullfrog; Indus Valley bullfrog; Peter's frog; tiger frog). Parasite: *Kiricephalus pattoni* (immature forms in muscles).

ANURA: HYLIDAE:

Litoria Tschudi, 1838 sp. [= *Nyctimystes* Stejneger, 1916 sp.] (a tree frog). Parasite: *Raillietiella* sp. (nymph).

Litoria caerulea (White, 1790) (common green tree frog). Parasite: *Raillietiella indica.*

ANURA: MICROHYLIDAE: MICROHYLINAE:

Micryletta inornata (Boulenger, 1890) [= *Microhyla inornata* Boulanger, 1890] (deli little pygmy frog; deli paddy frog; false ornate narrow-mouthed frog; inornate froglet). Parasite: *Kiricephalus pattoni* (larvae).

ANURA: MYOBATRACHIDAE:

Crinia remota (Tyler & Parker, 1974) [= *Ranidella remota* Tyler & Parker, 1974] (paper bark froglet; remote froglet; torrid froglet). Parasite: *Waddycephalus* sp. (nymphs in post-orbital skin).

ANURA: RANIDAE:

Lithobates catesbeianus (Shaw, 1802) [= *Rana catesbeiana* Shaw, 1802] (American bull-

frog; bloody nouns; common bullfrog; eastern bullfrog; edible bullfrog; jug-o'-rum). Parasites: *Kiricephalus coarctatus* (primary larva in intermediate host).

Hylarana supragrisea (Menzies, 1987) [= *Sylvirana supragrisea* Menzies, 1987] (Papua Gray frog). Parasite: *Kiricephalus* sp. (nymphs in small intestine).

REPTILIA; (Species were validated, in addition the the general sites indicated above, with Reptile DataBase, 2012).

"Tropidonotus Boie, 1826 sp.". Parasite: *Sebekia oxycephalum* (larva). Remarks: Not listed in Reptile Database (2012).

CROCODYLIA (crocodiles, alligators): ALLIGATORIDAE:

Alligator mississippiensis (Daudin, 1802) [= *Alligator lucius* Cuvier, 1807] (American alligator; gator). Parasites: *Alofia platycephalum*; *Sebekia mississippiensis* (adults and nymphs, experimental nymphal infection of paratenic hosts); *S. oxycephala* (larvae in lungs and tracheae; adults in lungs, causing sebekiosis).

Caiman crocodilus (Linnaeus, 1758) [= *Caiman sclerops* (Schneider, 1801); *Champsa sclerops* (Schneider, 1801; *Caiman crocodilus* [as *Crocodylus sclerops*] (South American crocodile; common caiman; spectacled caiman). Parasites: *Alofia platycephalum*; *Leiperia gracilis* (larvae in tracheae; adults in heart and aorta); *Sebekia microhamus* (female); *S. oxycephalum* (adults in lung); *S. trinitatis* (nymphae and adults); *Subtriquetra subtriquetra* (larvae and adults in mouth cavity, nasal fossae, and throat).

Caiman latirostris (Daudin, 1892) (broad-snouted caiman). Parasites: *Alofia platycephalum*; *Sebekia oxycephalum.*

Caiman yacare (Daudin, 1802) (jacaré-do-pantanal). Parasite: *Sebekia oxycephalum* (in lung, stomach and intestine).

Melanosuchus niger (Spix, 1825) (black caiman; "crocodilo"; "jacaré-açu"; "jacaré assu"; "jacaré guaçu"; "jacaré negro"; "jacaré una"). Parasites: *Sebekia oxycephalum* (adults); *Subtriquetra subtriquetra* (adults in nasal fossae).

CROCODYLIA: CROCODYLIDAE:

Crocodylus Laurenti, 1768 sp. Parasites: *Alofia ginae*; *A. merki*; *Sebekia cesarii* (adults in lungs).

Crocodylus acutus (G. Cuvier, 1807) [= *Crocodylus americanus* Laurenti, 1768] (American crocodyye; sharped-nosed crocodile). Parasites: *Diesingia megastomum* (in lungs); *Leiperia gracilis* (adults in heart and aorta); *Sebekia divestei* (nymphs and adults in lungs); *S. oxycephalum* (in lungs and bronchial cavity).

Crocodylus johnsoni Krefft, 1825 (Australian freshwater crocodyle; Johnston's river crocodyle). Parasites: *Leiperia australiensis* (adult and immature female in pulmonary artery; female nymph near lung); *Sebekia johnstoni* (nymphs and adults); *S. multiannulata* (nymphs and adults); *S. purdiae.*

Crocodylus niloticus niloticus Laurenti, 1768 [= *Crocodylus niloticus* Laurenti, 1768] (Nile crocodyle; Nilotic crocodyle). Parasites: *Alofia nilotici*; *A. simpsoni*; *Leiperia cincinnalis* (adults in tracheae and lungs); *Sebekia cesarisi; S. minor* (young hosts infected experimentally with larvae obtained from fish); *S. okavangoensis*; *Subtriquetra rileyi* (final hosts); *S. wedli*.

Crocodylus niloticus suchus I. Geoffroy, 1807 [= *Crocodylus vulgaris* Cuvier, 1897] (Nile crocodyle). Parasites: *Leiperia cincinnalis* (in heart; aorta, bronchiae, and tracheae); *Sebekia minor* (adults in bronchii).

Crocodylus novaeguineae K.P. Schmidt, 1928 (New Guinea crocodyle). Parasite: *Sebekia novaeguineae* (adults).

Crocodylus palustris (Lesson, 1831) (Indian marsh crocodyle; Indian swamp crocodile; mugger crocodile). Parasites: *Diesingia megacephala* (imbebed in flesh of head); *Subtriquetra megacephalum* (in head); *S. shipleyi*.

Crocodylus porosus Schneider, 1801 (saltwater crocodyle). Parasites: *Alofia ginae* (in lungs and bronchioles); *A. merkii* (single male in branchioles); *A. travassoi*; *Leiperia australiensis* (nymph in lung and tracheae); *Alofia solaris* (in lungs); *Sebekia johnstoni; S. multiannulata* (nymphs and adults); *S. purdiae* (nymphs and adults); *S.* sp. (females in lung); *Selfia porosus* (in bronchioles); *Subtriquetra megacephalum*; *S. shipleyi*; ? *Waddycephalus vitiensis*.

Crocodylus siamensis Schneider, 1801 (Siamese crocodyle). Parasite: *Sebekia joubini* (adults in nasal cavity).

Mecistops cataphractus (G. Cuvier, 1825) [= *Crocodylus cataphractus* Cuvier, 1825] (African slender-snouted crocodile). Parasites: *Agema silvaepalustris* (in lungs); *Alofia parva* (in lungs); *Leiperia cinccinalis* (infective larva); *Sebekia okavangoensis*.

Osteolaemus tetraspis Cope, 1861 [= *Osteolaemus tetraspis osborni* Schmidt, 1919 (broad-nosed crocodile; dwarf crocodile; west African dwarf crocodile). Parasites: *Agema silvaepalustris* (in lungs); *Alofia parva* (in lungs); *Sebekia mississippiensis* (causing fatal pentastomiasis); *S. okavangoensis*.

CROCODYLIA: GAVIALIDAE:

Gavialis gangeticus (Gmelin, 1789) (gavial; gharial; Indian crocodile; Sangor crocodile). Parasites: *Alofia indica* (adults in lungs and tracheae); *Subtriquetra megacephalum*; *S. shipleyi* (in pharynx).

TESTUDINES (turtles): BATAGURIDAE or GEOEMYDIDAE:

Batagur baska (Gray, 1831) (a mud-turtle: batagur; river terrapin). Parasite: *Diesingia kachugensis* (young stage in liver).

Batagur kachuga Gray, 1831 [= *Kachuga lineata* Gray, 1831] (a semiaquatic Oriental tortoise: mud-turtle; red-crowned roofed turtle). Parasites: *Diesingia kachugensis* (young encysted in liver); *D. megastomum*.

TESTUDINES: CHELIDAE:

Hydromedusa tectifera Cope, 1869 (South American snake-necked turtle; "cágado"). Parasite: *Diesingia megastomum* (adults).

Phrynops geoffroanus (Schweigger, 1812) [= *Hydraspis geoffroana* (Schweigger, 1812)] (Geoffroy's side-necked turtle; Geoffroy's toadhead turtle; "cágado"). Parasite: *Diesingia megastomum* (adult in lung).

TESTUDINES: CHELYDRIDAE:

Chelydra serpentina (Linnaeus, 1758) [= *Chelhydra serpentina* (Linnaeus, 1758) (common snapping turtle). Parasite: *Sebekia oxycephala*.

TESTUDINES: ERYDIDAE; DEIROCHELYNAE:

Pseudemys nelsoni Carr, 1938 (Florida redbelly turtle, a freshwater turtle). Parasite: *Sebekia mississippiensis*.

TESTUDINES: PELOMEDUSIDAE:

Pelomedusa subrufa subrufa (Lacépède, 1788) [= *Pelomedusa subrufa* (Lacépède, 1788) *nigra* (Gray, 1863)] (helmeted turtle). Parasite: *Pelonia africana* (immature forms, males and females in lungs).

Pelusios sinuatus (Smith, 1838) (east African serrated mud turtle; serrated hinged terrapin). Parasite: *Pelonia africana* (immature forms, males and females in lungs).

TESTUDINES: TESTUDINIDAE:

Testudo Linnaeus, 1758 sp. (a tortoise). Parasite: *Leiperia gracilis* (larvae).

TESTUDINES: TRIONYCHIDAE:

Apalone ferox (Schneider, 1783) (Florida soft-shell turtle). Parasite: *Alofia* sp.

Cycloderma aubryi (Duméril, 1856) (Aubry's flapshaped turtle; Aubry's soft-shelled turtle). Parasite: *Leiperia cincinnalis*.

SAURIA (lizards, geckos): AGAMIDAE:

Japalura swinhonis Günther, 1864 (Taiwan japalure, an agamid lizard). Parasite: *Raillietiella hebitihamata.*

Laudakia stellio stellio (Linnaeus, 1758) [= *Agama stellio* (Linnaeus, 1758)] (roughtail rock agama). Parasites: *Raillietiella aegyptii*; *R. affinis* (adults); *R. gehyrae* (adult).

Uromastyx aegyptia aegyptia (Forskal, 1775) (Egyptian dab lizard; Egyptian mastigure; Egyptian spiny-tailed lizard). Parasites: *Raillietiella aegyptii*; *R. affinis*.

SAURIA: AGAMIDAE: AGAMINAE:

Agama aculeata aculeata Merrem, 1820 (ground agama). Parasite: *Raillietiella namibiensis* (larvae).

Agama agama (Linnaeus, 1758) (agamid rainbow lizard; common agama; red-headed agama). Parasite: *Raillietiella* sp. (infection).

Agama planiceps Peters, 1862 [= *Agama planiceps* Peters, 1862; *Agama planiceps planiceps* Peters, 1862] (Namib rock agama). Parasite: *Raillietiella namibiensis* (in lungs).

Trapelus mutabilis (Merrem, 1820) [= *Agama mutabilis* Merrem, 1820] (desert agama). Parasite: *Raillietiella aegyptii.*

SAURIA: AGAMIDAE: AMPHIBOLOURINAE:

Pogona barbata (Cuvier, 1829) [= *Amphibolurus barbatus* (Cuvier, 1829)] (bearded dragon lizard; jew lizard). Parasite: *Raillietiella amphiboluri* (female in lungs).

Pogona vitticeps (Ahl, 1926) [= *Amphibolurus vitticeps* Ahl, 1926] (central bearded dragon). Parasite: *Raillietiella amphiboluri.*

SAURIA: AGAMIDAE: DRACONINAE:

Calotes Cuvier, 1817 sp. Parasite: *Kiricephalus pattoni*.

Calotes versicolor (Daudin, 1802) (eastern gardens lizard; oriental golden lizard). Parasites: *Porocephalus clavatus*; *Raillietiella geckonis* (in lungs); *R. gehyrae* (rates of infection in lungs); *R. hemidactyli* (adults in lungs, causing pulmonary pathology); *R.* sp.

SAURIA: CARPHODACTYLIDAE:

Nephrurus laevissimus Mertens, 1958 (Australian gecko; smooth knob-tail). Parasite: *Raillietiella scincoides* (third stage larvae in large intestine).

SAURIA: CHAMAELEONIDAE:

Chamaeleo namaquensis Smith, 1831 (Namaqua chameleon). Parasite: *Raillietiella mabuiae* (adults).

Furcifer oustaleti (Mocquard, 1894) [= *Chamaeleo oustaleti* Mocquard, 1894] (Oustalet's chameleon). Parasites: *Raillietiella chamaeleonis* (adults in pulmonary sacs); *R. hemidactyli.*

Furcifer verrucosus (G. Cuvier, 1829) [= *Chamaeleo verrucosus* Cuvier, 1829] (Malagasy giant chameleon). Parasites: *Raillietiella chamaeleonis* (adults in pulmonary sacs); *R. hemidactyli; R.* sp.

SAURIA: DIPLODACTYLIDAE:

Diplodactylus vittatus Gray, 1832 (eastern stone gecko; wood gecko). Parasites: *Porocephalus* sp.; *Raillietiella* sp.; *Waddycephalus* sp.

SAURIA: GEKKONIDAE:

Gehyra australis (Gray, 1845) (house gecko; native gecko; northern dtella; top-end dtella). Parasite: *Raillietiella* sp.

Gehyra mutilata (Wiegmann, 1834) [= *Peropus mutilatus* (Wiegmann, 1834)] (common four-clawed gecko; house gecko; stump-toed gecko). Parasites: *Raillietiella affinis*; *R. gehyrae* (in lungs); *R. hebitihamata; R. hemidactyli* (adults).

Gekko Linnaeus, 1758 sp. Parasites: *Raillietiella geckonis* (in lung); *R. gehyrae*; *R. hemidactylus*.

Gekko gecko gecko (Linnaeus, 1758) [= *Gekko verticillatus* Laurenti, 1758] (today gecko; Siamese gecko). Parasites: Pentastomida sp. (causing pentastomiasis); *Raillietiella affinis* (in lung); *R. geckonis* (in lungs); *R. indicus* (in lungs).

Gekko monarchus (Schlegel, in Duméril & Bibron, 1836) (spotted house gecko). Parasites: *Raillietiella hebitihamata; R. monarchus.*

Gekko smithii Gray, 1842 (green eyed today; large forest gecko). Parasite: *Raillietiella* sp.

Hemidactylus (Gray, 1825) sp. Parasites: *Raillietiella cartagenensis; R.* sp.

Hemidactylus angulatus Hallowell, 1852 [= *Hemidactylus brooksi haitianus* Meerwarth, 1901; *Hemidactylus brooksi angulatus* Hallowell, 1852] (Antillean house gecko; Brook's house gecko; Burmese gecko; western house gecko). Parasites: *Kiricephalus pattoni* (in lungs); *Raillietiella affinis* (having pathogenetic effects); *R. hemidactyli* (in lungs); *R.* sp. *(frenatus?); R.* spp.; *R. teagueselfi*.

Hemidactylus brooksi Gray, 1845 (Brook's house gecko). Parasite: *Raillietiella* sp.

Hemidactylus flaviviridis Rüppell, 1835 (northern house gecko; yellow-belly gecko). Parasite: *Raillietiella geckonis* (adult).

Hemidactylus frenatus Schlegel (in Duméril & Bibron), 1836 (Asian house gecko; chikhak; common house gecko). Parasites: Pentastomida sp. (causing pentastomid infections); *Raillietiella gehyrae* (in lungs); *R. hemidactyli* (adults in air sacs and lungs); *Raillietiella indica* (nymphs and adults); *Waddycephalus* sp. (nymphs and adults).

Hemidactylus gleadowi Murray, 1884 [= *Hemidactylus gleadovi* Murray, 1884] (Gleadow's house gecko). Parasites: *Kiricephalus pattoni*; *Raillietiella hemidactylus*.

Hemidactylus leschenaultii Duméril & Bibron, 1836 (bark gecko; Leschenault's leaf-toed gecko). Parasites: *Raillietiella afinis*; *R. maculatus.*

Hemidactylus mabouia (Moreau De Jonnès, 1818) (house gecko; invader lizard). Parasites*: Raillietiella cartagenensis* (in lungs); *R. hebitihamata* (in respiratory tracs of adult hosts only); *R. hemidactyli* (adults); *R. mottae* (causing infection in adult hosts only); *Raillietiella* sp.

Hemidactylus maculatus Duméril & Bibron, 1836 (spotted leaf-toed gecko). Parasite: *Raillietiella maculatus.*

Hemidactylus platyurus Schneider, 1792) [= *Cosymbotus platyurus* (Schneider, 1792)] (flat-tailed house gecko; flattened gecko). Parasites: *Raillietiella gehyrae* (in lungs); *R. hebitihamata* (in lungs).

Hemidactylus turcicus turcicus (Linnaeus, 1758) [= *Hemidactylus turcicus* (Linnaeus, 1758)] (Mediterranean house gecko). Parasites: *Raillietiella furcocercum; R. hebitihamata* (causing infection); *R. teagueselfi.*

Heteronotia binoei (Gray, 1845) (Binoe's prickly gecko). Parasite: *Waddycephalus* sp. (encysted nymphs).

Lepidodactylus lugubris (Duméril & Bibron, 1836) (common smooth-scaled gecko; mourning gecko). Parasites: *Raillietiella affinis*; *R. hebitihamata.*

Phelsuma standingi Methuen & Hewitt, 1913 (standing's day gecko). Parasite: Pentastomida sp.

SAURIA: GYMNOPHTHALMIDAE:

Micrablepharus maximiliani (Reinhart & Lütken, 1862) (blue-tailed lizard). Parasite: *Raillietiella mottae* (in lungs).

SAURIA: IGUANIA: DACTYLOIDAE:

Anolis porcatus porcatus Gray, 1840 (Cuban green anole) [= *Anolis porcatus* Gray, 1840]. Parasite: *Linguatula* sp.

Norops sagrei (Duméril & Bibron, 1837) [= *Anolis sagrei* Duméril & Bibron, 1837] (Bahamian brown anole; Cuban brown anole). Parasite: *Raillietiella hebitihamata.*

SAURIA: IGUANIA: TROPIDURIDAE:

Tropidurus hispidus (Spix, 1825) (Peter's lava lizard). Parasites: *Raillietiella hebitihamata*; *R. mottae* (causing pulmonary infection).

Tropidurus semitaeniatus (Spix, 1825) (striped lava lizard). Parasite: *Raillietiella mottae* (causing pulmonary infection).

Tropidurus torquatus (Wied Neuwied, 1820) (Amazon lava lizard; "taraguira"). Parasite: *Raillietiella freitasi.*

SAURIA: LACERTIDAE:

Gallotia atlantica atlantica (Peters & Doria, 1882) [= *Gallotia atlantica* (Peters & Doria, 1882)] (Atlantic lizard). Parasite: *Raillietiella morenoi* (in lung).

SAURIA: PHYLLODACTYLIDAE:

Phyllopezus periosus Rodrigues, 1986. Parasite: *Raillietiella mottae* (causing pulmonary infection).

Phyllopezus pollicaris (Spix, 1825) (Brazilian gecko; Paraíba gecko). Parasite: *Raillietiella mottae* (causing pulmonary infection).

Tarentola annularis (É. Geoffroy de Saint-Hilaire, 1827) (ringed wall gecko; white-spotted gecko). Parasite: *Raillietiella* sp.

SAURIA: PLATYNOTA: VARANIDAE:

Varanus Merrem, 1820 sp. (a monitor lizard). Parasites: *Elenia asutralis* (adults); *Raillietiella kochi.*

Varanus (*Odaria*). Parasite: pentastomid (intestine).

Varanus exanthematicus (Bosc, 1792) [= *Varanus exanthematicus exanthematicus* (Bosc, 1792); *Varanus exanthematicus ocellatus* Rüppell & Heyden (in Rüppell), 1830; *Varanus ocellatus* Heyden (in Rüppell), 1830] (Bosc's monitor lizard; savannah monitor lizard). Parasites: *Raillietiella* sp.; *R. kochi* (adults in lungs); *Sambonia* sp. n. (eggs, immature stages, and adults in lungs and liver, causing pentastomiais); *S. lohrmanni* (in lungs).

Varanus griseus griseus (Daudin, 1803) [= *Varanus griseus* (Daudin, 1803)] (western desert monitor). Parasites: *Raillietiella kochi* (in lungs); *Sambonia clavata*.

Varanus indicus (Daudin, 1802) (mangrove monitor). Parasites: *Sambonia solomonensis* (adults); *S. varani* (adult in lung).

Varanus komodoensis Ouwens, 1912 (Komodoro dragon). Parasite: *Sambonia clavata.*

Varanus niloticus (Linnaeus, 1758) [= *Varanus nilotica* (Linnaeus, 1758)] (Egyptian monitor; Nile monitor lizard; Nilotic monitor; ocellated monitor; water Leguaan). Parasites: *Porocephalus clavatus* (in lungs); *Sambonia clavata*.

Varanus salvator salvator (Laurenti, 1768) [= *Varanus salvator* (Laurenti, 1768)] (common water monitor). Parasites: *Elenia australis* (in lung); *Sambonia clavata*; *S. parapodium* (adults in lung).

Varanus varius (White, 1790) (lace monitor). Parasites: *Elenia australis* (adults in lung).

SAURIA: SCINCIDAE: EGERNIINAE:

Tiliqua scincoides scincoides (White, 1790) [= *Tiliqua scincoides* (White, 1790)] (blue-tongued skink; common blue-tongue). Parasite: *Raillietiella scincoides.*

SAURIA: PYGOPODIDAE:

Lialis jicari Boulenger, 1903 [= *Liasis jicari* Boulenger, 1903] (Papua snake lizard). Parasite: *Elenia liasisi.*

SAURIA: SCINCIDAE: MABUYINAE:

Brasiliscincus agilis (Raddi, 1823) [= *Mabuya agilis* Raddi, 1823] (a skink). Parasite: *Raillietiella* sp.

Copeoglossum arajara (Rebouças-Spieker,1981) [= *Mabuya arajara* Rebouças-Spieker, 1981] (Arajara mabuya). Parasite: *Raillietiella mottae*.

Eutropis carinata (Schneider, 1801) [= *Mabuya carinata* (Schneider, 1801)] (keeled Indian mabuya; common skink; many-keeled grass skink). Parasites: *Raillietiella gehyrae* (direct life cycle); *R. hemidactyli; R. maculatus*.

Eutropis longicaudata (Hallowell, 1857) [= *Mabuya longicaudata* (Hallowell, 1857)] (longtail mabuya). Parasite: *Raillietiella hebitihamata.*

Psychosaura macrorhyncha (Hoge, 1946) [= *Mabuya macrorhyncha* Hoge, 1946] (a skink). Parasite: *Raillietiella* sp.

Trachylepis homalocephala (Wiegmann, 1828) [= *Mabuya homalocephala* (Wiegmann, 1828)] (red-slided skink). Parasites: *Raillietiella gehyrae*; *R. mabuya*.

Trachylepis atlantica (Schmidt, 1945) [= *Mabuya punctata* (Gray, 1839); *Trachylepis atlanticus* (Schmidt, 1945); *Trachylepis maculata* (Gray, 1839)] (a skink). Parasite: *Raillietiella freitasi* (in lung).

Trachylepis maculilabris (Gray, 1839) [= *Mabuya maculilabris* (Gray, 1839)] (speckle-lipped mabuya). Parasite: *Raillietiella maculilabris*.

Trachylepis striata striata (Peters, 1844) [= *Mabuya striata* (Peters, 1844)] (African styriped mabuya, a scincid lizard). Parasites: *Raillietiella gehyrae* (evidence for direct life cycle in lungs); *R. maculilabris*.

Trachylepis sulcata (Peters, 1867) [= *Mabuya sulcata* (Peters, 1867)] (African skink; western rock skink). Parasite: *Raillietiella mabuiae* (adults in lung).

SAURIA: SCINCIDAE: SCINCINAE:

Chalcides sepsoides (Audouin, 1829) (elongated barrel skink; sand skink; wedge-snouted skink). Parasites: *Raillietiella aegyptii*; *R. affinis* (adults).

Eumeces schneideri schneideri (Daudin, 1802) [= *Eumeces schneiderii* (Daudin, 1802)] (golden skink; Schneider's skink). Parasites: *Raillieteiella aegytyii*; *R. affinis* (adults).

Scincus scincus (Linnaeus, 1758) [= *Scincus officinalis* Laurenti, 1768] (sand fish skink). Parasites: *Raillietiella aegyptii*; *R. affinis* (adults).

SAURIA: SCINCIDAE: SPHENOMORPHINAE:

Ctenotus taeniolatus (White, 1790) [= *Lygosoma taeniolatum* White, 1790] (Australian striped skink; copper-tailed ctenotus). Parasites: *Porocephalus* sp.; *Waddycephalus* sp.

Hemiergis decresiensis decresciensis (Cuvier, 1829) [= *Hemiergis decresiensis* (Cuvier,

1829)] (three-toed earless skink). Parasite: *Waddycephalus* sp. (encysted nymph).

Prasinohaema virens (Peters, 1881) (green tree skink). Parasite: *Raillietiella hebitihamata.*

Sphenomorphus Fitzinger, 1843 spp. (scincid skinks). Parasite: *Kiricephalus* sp. (nymphs).

Sphenomorphus indicus (Gray, 1853) (Hymalaian forest skink; Indian forest skink). Parasite: *Raillietiella hebitihamata.*

Sphenomorphus jobiensis (Meyer, 1874) (New Guinean skink). Parasite: *Kiricephalus* sp. (in intestine).

Sphenomorphus simus (Sauvage, 1879) (a skink). Parasite: *Kiricephalus* sp.

SAURIA: SPHAERODACTYLIDAE:

Gonatodes Fitzinger, 1843 sp. Parasite: *Raillietiella cartagenensis.*

SAURIA: TEIIDAE:

Cnemidophorus abaetensis E.J.R. Dias, Rocha & Vrcibradic, 2002 (Bahian sand dune lizard). Parasite: *Raillietiella* aff. *furcocerca.*

Cnemidophorus ocellifer (Spix, 1825) (Spix's whiptail). Parasite: *Raillietiella* aff. *furcocerca.*

Dracaena guianensis Daudin, 1802 (a teid reptile: Guyana Caiman lizard; northern Caiman lizard). Parasite: *Porocephalus clavatus* (young stages).

"Podinema sp.n.". Parasite: *Leiperia gracilis.*

"Podinema nattereri (Diesing, 1850)". Parasite: *Leiperia gracilis.* Remarks: *Podinema nattereri* (Diesing, 1850) has not been confirmed as a valid name by Heymons (1935: 169) nor herein. It does not appear in Reptile Database (2012).

Tupinambis teguixin (Linnaeus, 1758) [= *Podinema teguixin* (Linnaeus, 1758)] (a monitor lizard: black tegu; common teguixin; golden tegu; great tegu; "teiú"). Parasites: *Leiperia gracilis*; *Porocephalus crotali* (immature specimen); *Sambonia clavata* (in body cavity); *S. oxycephalum* (young stages)*; S. wardi*.

SERPENTES (snakes):

"Urocrotalon catesbyanum Fitzinger, 1843". Parasite: *Porocephalus crotali* (adult). Remarks: Not validated by Heymons (1935: 174). Not cited in Reptile Database (2012).

SERPENTES: CAENONOPHIDIA: ACROCHORDIDAE:

Acrochordus granulatus (Schneider, 1799) (little filesnake; marine file snake; wart snake). Parasites: *Armillifer pomeroyi*; *Sambonia clavata* (adults).

SERPENTES: COLUBRIDAE: COLUBRINAE:

Chironius carinatus (Linnaeus, 1758) [= *Herpetodryas carinatus* Garman, 1887] (golden tree-snake; sipo; "cobra-cipó"; "acutimbóia"). Parasite: *Kiricephalus coarctatus* (in lung).

Coelognathus helena (Daudin, 1803) [= *Coluber helena* Daudin, 1803; *Elaphe helena* (Daudin, 1803)] (common trinket snake). Parasite: *Raillietiella orientalis.*

Coelognathus radiatus Boie, 1827 [= *Elaphe radiata* (Boie, 1827)] (copperhead ratsnake; radiated rattlesnake). Parasite: *Waddycephalus radiata* (female).

Coluber Linnaeus, 1758 sp. Parasites: *Raillietiella orientalis* (adult); *Leiperia gracilis; Sebekia oxycephalum* (larvae).

Coluber constrictor constrictor Linnaeus, 1758 [= *Bascanion constrictor* Baird & Girard, 1853; *Coluber constrictor*; Linnaeus, 1758; *Zamenis constrictor* (Linnaeus, 1758)] (American black snake; eastern racer; northern black racer). Parasites: *Kiricephalus coarctatus* (in lung); *K. constrictor* (in lungs); *Raillietiella bicaudatus*; *R. furcocercum* (in lungs).

Coluber constrictor flaviventris Say, 1823 [= *Coluber flaviventris* Say, 1823; *Zamenis flaviventris* (Say, 1823)] (eastern yellowbelly racer). Parasites: *Kiricephalus coarctatus*; *Raillietiella furcocercum.*

Coluber flagellum Shaw, 1802 [= *Coluber flagelliformis* (Duméril & Bibron, 1854); *Zamenis flagelliformis* Duméril & Bibron, 1854] (eastern coachwhip). Parasite: *Kiricephalus coarctatus* (in lungs).

Crotaphopeltis hotamboeia (Laurenti, 1768) [= *Crotaphopeltis hotamboeia hotamboeia* (Laurenti, 1768)] (red-lipped snake). Parasite: *Raillietiella boulengeri* (adults).

Dendrelaphis calligastra (Günther, 1867) [= *Ahaetulla calligaster* (Günther, 1867); *Ahaetulla calligastra* (Günther, 1867)] (green treesnake; northern tree snake; painted bronze snake). Parasites: *Kiricephalus pattoni* (in lung); *Waddycephalus calligaster* (female); *W. terestiusculus*.

Dendrelaphis pictus pictus (Gmelin, 1789) [= *Dendrophis pictus* (Gmelin, 1789)] (common bronze-black; Indonesian bronze-black; painted bronze back). Parasite: *Waddycephalus komodoensis.*

Dendrelaphis punctulatus (Gray, 1826) [= *Dendrophis punctulata* (Gray, 1826); *Dendrophis punctulatus* (Gray, 1826)] (common tree snake; green tree snake). Parasite: *Waddycephalus punctulatus* (adults in lung).

Dinodon semicarinatum (Cope, 1860) [= *Dinodon semicarinatus* (Cope, 1860)] (Loo-Choo big toothed snake; Ryukyu odd-tooth snake). Parasite: *Raillietiella orientalis.*

Drymarchon corais corais (Boie, 1827) [= *Coluber corais* Boie, 1827; *Drymarchon corais* (Boie, 1827)] (corais snake; Couper's snake; "papa-ovo"). Parasites: *Kiricephalus coarctatus* (in lungs); *Raillietiella furcocercum.*

Drymarchon couperi (Holbroock, 1842) [= *Drymarchon corais couperi* (Holbrook, 1842); *Elaphe corais couperi* (Holbrook, 1842)] (Couper's snake; eastern indigo snake). Parasites: *Kiricephalus coarctatus* (in lungs); *Raillietiella bicaudata* (adults).

Elaphe carinata carinata (Günther, 1864) [= *Elaphe carinata* (Günther, 1864)] (keeled rattlesnake; king rattlesnake; Taiwan stink snake). Parasite: *Raillietiella orientalis.*

Elaphe quatuorlineata quatuorlineata (Bonnaterre, 1790) [= *Elaphe quatuorlineata* (Bonnaterre, 1790)] (four-lined ratsnake). Parasite: *Raillietiella orientalis.*

Hapsidophrys smaragdina (Schlegel, 1837) [= *Gastropyxis smaragdina* (Schlegel, 1837)] (emerald snake). Parasite: *Raillietiella boulengeri* (larvae).

Hemorrhois ravergieri ravergieri (Ménétries, 1832) [= *Coluber ravergieri* Menétries, 1832; *Zamenis ravergieri* (Menétries, 1832)] (spotted whip snake). Parasite: *Raillietiella boulengeri* (adults).

Hierophis gemonensis (Laurenti, 1768) [= *Coluber gemonensis* (Laurentii, 1768); *Zamenis gemonensis* Laurenti, 1768] (Balkan racer; Balkan whip snake; dark-green snake). Parasite: *Raillietiella mediterranea* (in lung).

Leptophis ahaetulla liocercus (Wied Neuwied, 1824) [= *Leptophis liocercus* (Wied Neuwied, 1824)] (parrott snake). Parasite: *Cephalobaena tetrapoda* (in lungs).

Liophis miliaris (Linnaeus, 1758) [= *Rhadineae fusca* Cope, 1891] (a water colubrid: military ground snake; "cobra-lisa"). Parasite: *Raillietiella furcocercum* (in lungs).

Liophis poecilogyrus (Wied-Neuwied, 1825) (cobra-de-capim). Parasite: *Raillietiella* sp.

Liophis reginae reginae (Linnaeus, 1758) [= *Leimadophis reginae* Linnaeus, 1758] (a small reticulate snake: royal ground snake; "jabutibóia"). Parasite: *Raillietiella* sp.

Lycodon rushtrati rushtrati (Fischer, 1886) (Formosa wolf snake). Parasite: *Kiricephalus pattoni.*

Mastigodryas bifossatus bifossatus (Raddi, 1820) [= *Dryadophis bifossatus* (Raddi, 1820); *Drymobius bifossatus* Raddi, 1820; *Coluber lichtensteinii* Wiedl-Neuwied, 1824; *Mastigodryas bifossatus* (Raddi, 1820)] (Rio tropical racer; "cobra-nova"). Parasites: *Armillifer armillatus* (nymphs); *Kiricephalus coarctatus* (nymphs in lungs and body cavity); *Porocephalus crotali*; *Raillietiella furcocercum* (larvae in mesenteries).

Mastigodryas boddaerti boddaerti (Sentzen, 1796) [= *Drymobios boddaerti* Sentzen, 1796; *Mastigodryas boddaerti* (Sentzen, 1796)] (Bodaert's tropical racer; "biru-listrada"). Parasites: *Kiricephalus* sp.; *Raillietiella furcocercum*.

Oligodon cruentatus (Günther, 1868) [= *Simotes cruentatus* Günther, 1868] (pegu kukri snake). Parasite: *Kiricephalus pattoni* (immature forms in mesentery and in connective tissues of stomach).

Oligodon pupurascens (Schlegel, 1837) (brown kukri snake). Parasite: *Kiricephalus pattoni* (immature forms in body cavity).

Oxybelis aeneus (Wagler, 1824) (brown vine snake; Mexican vine snake; "bicuda"). Parasites: *Cephalobaena tetrapoda*; *Raillietiella furcocercum*.

Pituophis melanoleucus melanoleucus (Daudin, 1803) [= *Coluber melanoleucus* Daudin, 1803; *Elaphe melanoleucus* (Daudin, 1803); *Pituophis melanoleucus melanoleucus* (Daudin, 1803)] (eastern pine snake; northern pine snake; Mexican snake). Parasites: *Kiricephalus coarctatus* (juvenile); *Raillietiella bicaudata*; *R. furcocercum* (in lungs).

Platyceps karelini (Brandt, 1838) (spotted desert racer). Parasite: *Porocephalus crotali*.

Platyceps najadum (Eichwald, 1831) [= *Coluber dahli* Fitzinger, 1827] (slender whip snake; Dahl's wipe snake). Parasite: *Raillietiella mediterranea* (in lung).

Pseustes sulphureus (Wagler, 1824) [= *Phrynomax sulphureus* (Wagler, 1824)] (Amazon puffing snake; yellow-bellied puffing snake; "limpa-campo"). Parasite: *Raillietiella furcocercum* (in lungs).

Ptyas Fitzinger, 1843 sp. (a rat-snake). Parasite: *Kiricephalus pattoni.*

Ptyas korros (Schlegel, 1837) [= *Coluber korros* Schlegel, 1837; *Zamenis korros* (Schlegel, 1837)] (Chinese rasnake; Indian rat-snake). Parasites: *Kiricephalus pattoni* (in lungs); *Porocephalus crotali*.

Ptyas mucosa (Linnaeus, 1758) [= *Coluber mucosus* Linnaeus, 1758; *Ptyas mucosus* (Linnaeus, 1758); *Zamenis mucosus* Linnaeus, 1758] (Dhaman; Indian rat-snake; oriental ratsnake). Parasites: *Kiricephalus pattoni* (adult in mesentery, stomach, liver, and lungs); *Porocephalus crotali* (adults in lungs); *Raillietiella orientalis* (larvae in body wall, intestine, pleurae, liver, tracheae, and lungs).

Spilotes Wagler, 1830 sp. (a tropical rat snake). Parasite: *Raillietiella furcocercum* (in lung).

Spilotes pullatus pullatus Linnaeus, 1758 [= *Spilotes pullatus* Linnaeus, 1758] (chicken snake; South American ratsnake; tigre snake; whip snake; yellow ratsnake; "carinana"). Parasites: *Porocephalus crotali* (in lung); *P. stilesi; Sambonia wardi*; *Sebekia oxycephalum* (larvae).

Thelotornis capensis oatesi (Günther, 1881)] (Oat's vine snake; twig snake). Parasite: *Raillietiella congolensis* (adults).

Thelotornis kirtlandi (Hallowell, 1844) (bird snake; forest vine snake; twig snake). Parasite: *Raillietiella boulengeri* (adults).

Thrasops jacksonii Günther, 1895 [= *Thrasops jacksoni jacksoni* Günther, 1895] (Jackson's black tree snake). Parasites: *Raillietiella boulengeri* (adults).

SERPENTES: COLUBRIDAE: DIPSADINAE:

Clelia clelia (Daudin, 1803) (mussurana snake; "muçarana"). Parasites: *Kiricephalus clellii* (in lung); *Raillietiella furcocercum* (egg and larva).

Coniophanes imperialis (Kennicott, in Baird, 1859) [= *Boa constrictor imperialis* (Kennicot, in Baird, 1859)] (black-stripped snake; tamaulipan black-striped snake). Parasite: *Porocephalus clavatus* (eggs and nymphs).

Conophis lineatus (Duméril, Bibron & Duméril, 1854) (road guarder). Parasite: *Raillietiella furcocercum*.

Farancia abacura abacura (Holbrook, 1836) [= *Farancia abacura* (Holbrook, 1836) (eastern abacura; mud snake). Parasite: *Sebekia oxycephalum* (larvae).

Helicops angulatus (Linnaeus, 1758) (mountain keelback, a water snake). Parasite: *Porocephalus stilesi* (adults in lungs).

Helicops leopardinus (Schlegel, 1837) [= *Helicops leopardina* (Schlegel, 1837)](leopard keelback). Parasite: *Sebekia* sp.

Heterodon Latreille & Sonnin, 1801 sp. (North American hose-nosed snake). Parasite: *Sebekia oxycephalum* (larva).

Hydrodynastes bicinctus bicinctus (Herrmann, 1804) [= *Hydrodynastes bicinctus* (Herrmann, 1804)] (Herrmann's water snake; "cobra-d'água"). Parasite: *Kiricephalus coarctatus* (nymphs in lungs and body cavity).

Hydrodynastes gigas (Duméril, Bibron & Duméril, 1854) (Brazilian smooth snake; false water cobra). Parasites: *Porocephalus* sp. (infestation by nymphs); *P. crotali* (adult in lung).

Lygophis lineatus (Linnaeus, 1758) [= *Aporophis lineatus* (Linnaeus, 1758); *Coluber lineatus* Linnaeus, 1758); *Liophis lineatus* (Linnaeus, 1758) (erroneous spelling)] (lined ground snake). Parasites: *Cephalobaena tetrapoda* (in respiratory tract); *Kiricephalus coarctatus*; *Raillietiella colubrilineati.*

Philodryas baroni Berg, 1895 (Baron's green racer; Paraguayan tree snake). Parasite: *Cephalobaena tetrapoda* (in lung).

Philodryas chamissonis (Wiegmann, 1835) (Chilean green racer; Chilean long-tailed snake). Parasite: *Raillietiella* sp.

Philodryas nattereri Steindachner, 1870 (Paraguayan green racer). Parasites: *Cephalobaena tetrapoda* (in lungs, pulmonary peritoneum, and tracheae); *Raillietiella furcocercum.*

Pseudoeryx plicatilis plicatilis (Linnaeus, 1758) [= *Dimades plicatilis* (Linnaeus, 1758); *Pseudoeryx plicatilis* (Linnaeus, 1758)] (eel-snake; South American pond snake). Parasite: *Sebekia oxycephalum* (larva).

Thamnodynastes chaquensis (Bergna & Alvarez, 1993) ("falsa-jararaca"). Parasite: *Raillietiella furcocercum*.

Xenodon merremii (Wagler, 1824) [= *Ophis merremi* Wagler, 1824; *Ophis merremii* Wagler, 1824] (Wagler's snake; "boipeva"). Parasites: *Porocephalus crotali* [doubtfull identification, probably *Kiricephalus coarctatus*] (in tracheae); *Raillietiella furcocercum*; *Sambonia wardi*; *Sebekia oxycephalum* (larvae).

SERPENTES: COLUBRIDAE: NATRICINAE:

Amphiesma pryeri (Boulenger, 1887 [= *Natrix pryeri pryeri* Boulenger, 1887] (Pryer's keelback). Parasite: *Raillietiella orientalis*.

Amphiesma stolatum (Linnaeus, 1758) [= *Natrix stolatus* (Linnaeus, 1758); *Tropidonotus stolatus* (Linnaeus, 1758)] (buff-striped keelback). Parasite: *Kiricephalus pattoni* (immature forms in body cavity).

Natrix natrix (Linnaeus, 1758) [= *Tropidonotus natrix* (Linnaeus, 1758) (European grass snake). Parasites: *Armillifer monifilormis moniliformis* (larva); *Porocephalus clavatus* (larva).

Nerodia fasciata fasciata (Linnaeus, 1766) [= *Tropidonotus fasciatus* (Linnaeus, 1766)] (American mocassin; banded water snake; mocassin snake; southern water snake). Parasite: *Kiricephlaus coarctatus* (in lung). Remarks: Diesing (1850) cites *Pentastoma gracile* from *Cloelia fasciata*, a species not recognized by Heymons (1935).

Nerodia floridana (Goff, 1936) [= *Natrix cyclopion floridana* Gott, 1936] (Florida green water snake). Parasite: *Kiricephalus coarctatus* (larvae).

Nerodia taxispilota (Holbrook, 1838) (brown water snake). Parasite: *Sebekia mississippiensis* (experimental infection).

Rhabdophis tigrinus (F. Boie, 1826) [= *Natrix tigrina lateralis* (Berthold, 1859)] (tiger keelbak). Parasite: *Kiricephalus pattoni* (in flesh and viscera).

Thamnophis proximus proximus (Say, 1823) [= *Thamnophis proximus* (Say, 1823)] (red-stripe ribbon snake; western ribbon snake). Parasite: *Kiricephalus coarctatus* (in lung).

Tropidonophis picturatus (Schlegel, 1837) [= *Tropidonotus picturatus* (Schlegel, 1837)] (painted keelback, a water snake). Parasite: *Armillifer moniliformis moniliformis.*

Xenochrophis piscator (Schneider, 1799) [= *Natrix piscator* (Schneider, 1799); *Tropidonotus piscator* Schneider, 1799] (Asiatic water snake; checquered keelback; Indian water-snake). Parasites: *Kiricephalus pattoni* (nymphs and immature forms in body cavity); Pentastomida sp.; *Raillietiella orientalis* (larva encysted in liver and lung; adult in liver and lung); *R. piscator* (in lung).

Xenochrophis punctulatus (Günther, 1858) [= *Nerodia punctata* Günther, 1858 (erroneous spelling)]. Parasite: *Kiricephalus pattoni* (immature forms in body cavity).

SERPENTES: ELAPIDAE:

Austrelaps superbus (Günther, 1858) [= *Denisonia superba* (Günther, 1858); *Hoplocephalus superbus* (Günther, 1858)] (Australian copperhead snake; ground-dwelling copperhead snake; lowlands copperhead). Parasites: *Linguatula* sp. (in lung); *Parasambonia* sp.; *P. minor* (adults); *Waddycephalus* sp.; *W. superbus* (adults in lung); *W. terestiusculus* (in mouth).

Bungarus fasciatus (Schneider, 1801) (rat snake; banded krait). Parasites: *Kiricephalus pattoni* (larvae in mesentery and stomach); *Raillietiella orientalis* (in coelom; larvae in fat body, connective tissue of back, and lung).

Bungarus multicinctus Blyth, 1861 [= *Bungarus candidus multiscinctus* Blyth, 1861] (Taiwanese many-banded krait). Parasite: *Raillietiella orientalis* (adults in lungs, larvae in connecdtive tissue of back and of lungs).

Cryptophis nigrescens (Günther, 1862) (eastern small-eyed snake; short-tailed snake). Parasite: *Waddycephalus* sp. (nymphs encysted in intestinal connective tissue).

Demansia Gray, 1842 sp. Parasite: *Waddycephalus longicaudata*.

Demansia psammophis psammophis (Schlegel, 1837) [= *Demansia psammophis* (Schlegel, 1837); *Diemenia psammophis* (Schlegel, 1837); *Diemenia reticulata* (Gray, 1842)] (brown snake; grey whip-snake; yellow faced whip-snake). Parasites: *Parasambonia bridgesi* (female); *Waddycephalus longicaudata* (adults in lung); *W. terestiusculus*.

Dendroaspis jamesoni jamesoni (Traill, 1843) [= *Dendraspis jamesoni* (Traill, 1843)] (Jameson's green mamba; trail green mamba; western green mamba). Parasite: *Raillietiella boulengeri* (adults).

Drysdalia coronoides (Günther, 1858) (white-lipped snake). Parasite: *Waddycephalus* sp. (adults in lungs).

Hemachatus haemachatus (Bonnaterre, 1790) [= *Sepedon haemachates* (Bonnaterre, 1789)] (ringhaus; ring-necked spitting cobra). Parasites: *Armillifer armillatus* (adults); *Raillietiella boulengeri* (adults).

Micrurus Wagler, 1824 sp. [= *Elaps* Merrem, 1820 sp.]. Parasites: *Leiperia gracilis*; *Sebekia oxycephalum* (larvae).

Micrurus fulvius (Linnaeus, 1766) [= *Elaps fulvius* (Linnaeus, 1766)] (American cobra; bead-snake; common coral snake; eastern coral snake; Harlequin coral snake; Harlequin snake; "cobra-coral"). Parasite: *Kiricephalus coarctatus* (juveniles in subcutaneous muscles).

Micrurus ibiboboca (Merrem, 1820) (caatinga coral snake). Parasite: *Raillietiella* sp.

Micrurus tschudii tschudii Jan, 1858 [= *Helicops tschudii* (Jan, 1858)] (desert coral snake). Parasite: *Leiperia gracilis.*

Naja Laurenti, 1768 sp. Parasite: *Porocephalus benoiti* (in intestine).

Naja anchietae Bocage, 1879 (cobra). Parasite: *Cubirea annulatus* (female).

Naja atra Cantor, 1842 [= *Naja naja atra* (Cantor, 1842)]. Parasite: *Raillietiella orientalis.*

Naja kaouthia Lesson, 1831 [= *Naja naja kaouthia* Lesson, 1831] (monocellate cobra; monocled cobra). Parasite: *Raillietiella orientalis.*

Naja melanoleuca Hallowell, 1857 (black and white cobra; black-lipped cobra). Parasites: *Cubirea annulata* (adults); *C. pomeroyi* (adults in lungs); *Raillietiella boulengeri* (adults).

Naja naja (Linnaeus, 1758) [= *Naia haie* (Linnaeus, 1758) (erroneous spelling); *Naja hage* (Linnaeus, 1758) (erroneous spelling); *Naja haje* (Linnaeus, 1758); *Naia tripudians* Merrem, 1820 (erroneous spelling); *Naja tripudians* Merrem, 1820] (Egyptian cobra; golden cobra; Indian cobra). Parasites: *Armillifer armillatus* (adults); *A. stilesi* (adults in larynx); *Cubirea annulata* (nymphs encysted in muscles and over peritoneum; young and adult in lung); *C. pomeroyi* (in lung); *Porocephalus subuliferum* (young forms in larynx and lungs); *Raillietiella agcoi*; *R. orientalis* (larvae in connective tissue and coelom).

Naja nigricollis Reinhardt, 1843 [= *Naia nigricollis* Reinhardt, 1843 (erroneous spelling); *Naja nigricollis nigricollis* Reinhardt, 1843; *Naja atriceps* (Fischer, 1885); *Naja naja atriceps* (Fischer, 1885)] (black cobra; black-necked spitting cobra). Parasites: *Cubirea annulata* (adults); *C. pomeroyi* (adults in gut); *Raillietiella agcoi*; *R. boulengeri* (adults).

Naja philippinensis Taylor, 1922 [= *Naja naja philippinensis* Taylor, 1922] (Philippine cobra). Parasites: *Raillietiella agcoi* (in lungs); *R. orientalis* (causing hyper-infection).

Naja sputatrix Boie, 1827 [= *Naja tripudians sputatrix* Boie, 1827]. (Indonesian cobra). Parasite: *Raillietiella orientalis.*

Notechis Boulenger, 1896 sp. (a tiger snake). Parasite: *Waddycephalus* sp.

Notechis scutatus scutatus (Peters, 1861) [= *Notechis ater niger* (Kinghorn, 1921); *Notechis scutatus* (Peters, 1861)] (black riger snake; eastern tiger snake; mainland tigersnake). Parasites: *Waddycephalus* sp. (adults in lung); *W. scutata*; *W. terestiusculus.*

Pseudechis sp. Wagler, 1830. Parasite: *Parasambonia* sp.

Pseudechis australis (Gray, 1842) (king brown snake; mulga snake). Parasite: *Raillietiella* sp.

Pseudechis porphyriacus porphyriacus (Shaw, 1794) [= *Pseudechis porphyriacus* (Shaw, 1794); *Pseudechis porphirineus* (Shaw, 1794) (erroneous spelling)] (Australian black snake; red-bellied black snake). Parasites: *Parasambonia bridgesi* (adults in lungs); *Waddycephalus longicaudata*; *W. porphyriacus* (adults); *W. terestiusculus* (in lungs).

Pseudonaja nuchalis Günther, 1858 (gwardar; western brown snake). Parasite: *Waddycephalus longicauda* (in lung).

Pseudonaja textilis textilis (Duméril, Bibron & Duméril, 1854) [= *Diemenia textilis* Duméril, Bibron & Duméril, 1854; *Pseudonaja textilis* (Duméril, Bibron & Duméril, 1854)] (eastern brown snake). Parasites: *Raillietiella* sp.; *Waddycephalus* sp. (female); *W. porphyriaceus*; *W. terestiusculus* (in lungs).

Tropidechis carinatus (Krefft, 1863) (Clarence river snake; rough-scaled snake). Parasite: *Sambonia bridgei* (female).

SERPENTES: HENOPHIDIA: ANILIIDAE:

Anilius scytale (Linnaeus, 1758) [= *Ilysia scytgale* Linnaeus, 1758] (false coral snake; red pipe snake). Parasite: Pentastomida sp.

SERPENTES: HENOPHIDIA: BOIDAE:

Acrantophis dumerili Jan, 1860 (Dumeril's ground boa). Parasites: *Gigliolella brumpti*; *Raillietiella tetrapoda* (male in air sacs).

Acrantophis madagascariensis (Duméril & Bibron, 1844) [= *Boa madagascariensis* Duméril & Bibron, 1844)] (Madagascar ground boa). Parasite: *Armillifer moniliformis moniliformis* (larvae).

Sanzinia madagascariensis madagascariensis (Duméril & Bibron, 1844) [= *Corallus madagascariensis* (Duméril & Bibron, 1844); *Sanzinia madagascariensis* (Duméril & Bibron, 1844)] (Madagascar ground boa; Madagascar tree boa). Parasites: *Gigliolella brumpti* (adults in lungs); *Kiricephlaus pattoni* (in lungs).

SERPENTES: HENOPHIDIA: BOIDAE: BOINAE:

Boa constrictor Linnaeus, 1758 (boa constrictor; common boa; "gibóia"). Parasites: *Kiricephalus coarctatus* (in lung); *Porocephalus clavatus* (adults in lungs, causing pentastomiasis); *P. crotali* (adults in lungs); *Raillietiella furcocercum* (in lungs); *Sambonia wardi*; *Sebekia oxycephalum* (larvae).

Boa constrictor amarali (Stull, 1932) (short-tailed boa). Parasite: *Porocephalus* sp.

Boa constrictor imperator Daudin, 1803 [= *Boa imperator* Daudin, 1803] (emperor boa; "cobra-de-veado"). Parasites: *Porocephalus clavatus* (adults in lungs); *P. crotali* (adults in lungs and body cavity); *Raillietiella furcocercum* (in lungs).

Boa constrictor nebulosa (Lazell, 1964) [= *Constrictor constrictor nebulosus* Lazell, 1964] (Dominican clouded boa). Parasite: *Porocephalus dominicana* (females in lungs).

Candoia carinata (Schneider, 1801) [= *Engyrus carinatus* (Schneider, 1801)] (carinata; New Guinea tree boa; Pacific boa). Parasite: *Diesingia* sp.

Epicrates angulifer Bibron, 1843 [= *Boa brachyura*] (Cuban boa; pale-headed tree-boa). Parasite: *Porocephalus clavatus* (in lungs).

Epicrates cenchria cenchria (Linnaeus, 1758) [= *Epicrates cenchria* (Linnaeus, 1758); *Epicrates cenchris* (Linnaeus, 1758) (erroneous spelling)] (Brazilian rainbow boa; "boa arco-iris"). Parasite: *Porocephalus clavatus* (in lungs).

Epicrates crassus (Cope, 1862) (Paraguayan rainbow boa; "salamanta"). Parasite: *Porocephalus clavatus* (in lungs).

Eunectes murinus (Linnaeus, 1758) [= *Eunectes scytale* (Linnaeus, 1758)] (green anaconda; sucuri; water boa). Parasites: *Porocephalus clavatus* (larva); *P. crotali* (in lung); *Sambonia wardi*; *Leiperia gracilis*; *Sebekia oxycephalum* (larva).

SERPENTES: HENOPHIDIA: PYTHONIDAE:

Aspidites melanocephalus (Krefft, 1864) (black-headed python). Parasite: *Waddycephalus longicaudata* (adults).

Broghammerus reticulatus (Schneider, 1801) [= *Python reticulatus* (Schneider, 1801)] (Asiatic reticulated python; netted snake; regal python). Parasites: *Armillifer armillatus* (adult); *A. moniliformis heymonsi* (adults in lung); *A. moniliformis moniliformis* (adult in lungs); *Cubirea pomeroyi*; *Raillietiella orientalis* (in body cavity).

Morelia amethistina (Schneider, 1801) [= *Liasis amethistinus* (Schneider, 1801); *Python amethystinus* Schneider, 1801] (amethystine; scrub python). Parasites: *Armillifer australis* (adults in lung); *A. mazzai* (females); *A. moniliformis moniliformis*; *Elenia liasisi* (in body cavity).

Morelia spilota spilota (Lacépède, 1804) [= *Morelia spilota* (Lacépède, 1804); *Python spilotes* (Lacépède, 1804)] (carpet python; diamond python). Parasites: *Armillifer australis* (in lung); *Armillifer moniliformis moniliformis*; *Kiricephalus coarctatus*; *K. pattoni.*

Morelia spilota variegata Gray, 1842 [= *Morelia spilotes variegata* Gray, 1842] (carpet python). Parasites: *Waddycephalus porphyriacus* (adults); *Waddycephalus* sp. (female in lung).

Morelia viridis (Schlegel, 1872) [= *Chondropython viridis* (Schlegel, 1872)] (Papua green tree python). Parasite: *Armillifer arborealis* (adults).

Python bivittatus Kuhl, 1820 [= *Python bivittata* Kuhl, 1820] (Burmese python). Parasite: *Armillifer armillatus*.

Python molurus (Linnaeus, 1758) [= *Python tigris* Daudin, 1803] (Indian python). Parasites: *Armillifer agkistrodontis* (adult); *A. armillatus* (adult); *A. moniliformis moniliformis* (adult males in lungs); *A. yoshidai*; *Porocephalus crotali* (adults in lungs and body cavity); *Raillietiella orientalis*.

Python regius (Shaw, 1802) (ball python; royal python). Parasites: *Armillifer armillatus* (adults in lungs); *Raillietiella boulengeri* (adults).

Python sebae (Gmelin, 1788) (African rock python; west African python). Parasites: *Armillifer armillatus* (adults in lungs); *A. armillatus intermedius*; *A. moniliformis moniliformis* (adults in lung).

Python sebae natalensis A. Smith, 1833 [= *Python natalensis* A. Smith, 1833] (African rock python). Parasite: *Armillifer armillatus.*

SERPENTES: HENOPHIDIA: UROPELTIDAE:

Plectrurus perrotetii Duméril, Bibron & Duméril, 1854 (Nilgiri burrowing snake; Perrotet's shiedtail snake). Parasite: *Kiricephalus pattoni* (in flesh and viscera).

SERPENTES: HOMALOPSIDAE:

Pseudoferania polylepis (Fischer, 1886) [= *Enhydris polylepis* (Fischer, 1886)] (Macleay's water snake; smooth water snake). Parasite: *Armillifer mazzai* (females).

SERPENTES: LAMPROPELTINI: COLUBRIDAE: COLUBRINAE:

Bogertophis subocularis (Brown, 1901) [= *Elaphe subocularis* Brown, 1901] (trans-pecos rat snake). Parasite: *Raillietiella* sp.

Boiga irregularis (Bechstein, 1802) [= *Dipsadomorphus irregularis* (Bechstein, 1802)]. (brown cat snake; brown tree-snake). Parasites: *Armillifer aborealis*; *Kiricephalus tortus* (adults).

Lampropeltis getula (Linnaeus, 1766) [= *Lampropeltis getulus* (Linnaeus, 1766); *Lampropeltis getulus floridana* Blanchard, 1919; *Ophibolus getulus* Linnaeus, 1766; *Ophibolus getula* Linnaeus, 1766; *Ophilobus* [*sic*] (common kingsnake; Florida kingsnake; chain kingsnake; common kingsnake; eastern kingsnake). Parasites: *Kiricephalus coarctatus* (larvae, in lungs); *Raillietiella bicaudata* (adults).

SERPENTES: LAMPROPHIIDAE:

Boaedon lineatus Duméril, Bibron & Duméril, 1854 [= *Boaedon lineatus lineatus* Duméril, Bibron & Duméril, 1854] (striped house snake). Parasites: *Armillifer armillatus*; *Raillietiella boulengeri* (adults).

Boaedon olivaceus (Duméril, 1856) (olive house snake; striped house snake). Parasite: *Raillietiella boulengeri* (adults).

Psammodynastes pulverulentus pulverulentus (H. Boie, 1827) [= *Psammodynastes pulverulentus* (H. Boie, 1827)] (common mock viper). Parasite: *Raillietiella orientalis.*

SERPENTES: LAMPROPHIIDAE: APARALLACTINAE:

Polemon gabonsensis (A.H.A. Duméril, 1856) [= *Miodon gabonenses* A.H.A. Duméril, 1856] (Gaboon snake-eater). Parasite: *Kiricephalus gabonensis.*

SERPENTES: LAMPROPHIIDAE: LAMPROPHIINAE:

Bothrophthalmus lineatus (Peters, 1863) (red-black striped snake). Parasites: *Armillifer armillatus* (adults); *Raillietiella boulengeri*.

Gonionotophis capensis (Smith, 1847) [= *Simocephalus capensis* (Smith, 1847)] (Cape file snake). Parasites: *Porocephalus stilesi* (adults in stomach); *P. subuliferum*.

Gonionotophis poensis (Smith, 1849) [= *Mehelya poensis* (Smith, 1847)] (western forest file snake). Parasites: *Porocephalus subuliferum* (young stages and adults); *Raillietiella boulengeri.*

Gonionotophis savorgnani (Mocquard, 1881) [= *Mehelya lamani* Schmidt, 1923; *Mehelya savorgnani* (Mocquard, 1887)]. Parasites: *Porocephalus subuliferum* (adults); *Raillietiella boulengeri* (larvae).

Lycophidion capense capense (Smith, 1831) [= *Lycophidion capense* (Smith, 1831); *Lycophidium capense capense* (Smith, 1831)] (Cape wolf snake; spotted wolf snake). Parasite: *Raillietiella boulengeri*.

SERPENTES: LAMPROPHIIDAE: PSAMMOPHIINAE:

Malpolon monpessulana (Hermann, 1804) [= *Coelopeltis monspessulana* (Hermann, 1804)] (Montpellier snake). Parasite: *Raillietiella spiralis* (adult in lung).

Mimophis mahfalensis (Grandidier, 1867) (big-eyed snake). Parasite: *Raillietiella belohaensis* (in lungs).

Psammophis lineatus (Duméril, Bibron & Duméril, 1854) [= *Dromophis lineatus* (Duméril, Bibron & Duméril, 1854)] (lined olympic snake; striped swamp snake). Parasite: *Raillietiella boulengeri* (adults).

Psammophis phillipsi (Hallowell, 1844) [= *Psammophis sibilans phillipsi* (Hallowell, 1844)] (olive grass racer; Phillip's sand snake). Parasites: *Cubirea annulata*; *Raillietiella boulengeri.*

Psammophis sibilans (Linnaeus, 1758) (hissing sand-snake; striped sand snake). Parasites: *Cubirea annulata*; *Porocephalus subuliferum* (larvae); *Raillietiella boulengeri* (larvae and adults); *R. boulengeri spiralis* (adults).

Psammophylax rhombeatus (Linnaeus, 1758) [= *Psammophylax tritaeniatus rhombeatus* (Linnaeus, 1758)] (rhombic skaapstecker; spotted skaapstecker). Parasite: *Raillietiella boulengeri* (adult).

Psammophylax tritaeniatus tritaeniatus Günther, 1868 [= *Psammophylax tritaeniatus* Günther, 1868] (striped skaapstecker). Parasite: *Raillietiella boulengeri.*

Psammophylax variabilis variabilis (Günther, 1893) [= *Psammophylax tritaeniatus variabilis* (Günther, 1893)] (grey-bellied grass snake; grey-bellied skaapstekker). Parasite: *Raillietiella boulengeri* (adults).

Rhamphiophis Peters, 1854 sp. (a beaked snake). Parasite*: Raillietiella boulengeri.*

SERPENTES: LAMPROPHIIDAE: PSEUDOXYRHOPHIINAE:

Leioheterodon madagascariensis (Duméril, Bibron & Duméril, 1854) (Malagasy giant hognose snake). Parasites: *Kiricephalus pattoni* (in lungs); *Raillietiella agcoi* (in lungs).

Leioheterodon modestus (Günther, 1863) (Malagasy giant hognose). Parasites: *Kiricephalus pattoni* (young stages); *Raillietiella chamaeleonis* (male in air sacs).

Liophidium vaillanti (Mocquard, 1901) (bright snake, a Malagasy colubrid). Parasite: *Raillietiella madagascariensis* (in lungs).

Madagascarophis colubrinus colubrinus (Schlegel, 1837) [= *Madagascarophis colubrina* (Schlegel, 1837)] (Malagasy cat-eyed snake). Parasites: *Raillietiella agcoi* (in air sacs); *R. ampanihyensis* (males and females in air sacs).

SERPENTES: VIPERIDAE: CROTALINAE:

Agkistrodon contortrix mokasen Palisot de Beauvois, 1799 (northern copperhead snake). Parasite: *Porocephalus* sp.

Agkistrodon piscivorus (Lacépède, 1789) (cottonmouth snake; eastern cottonmouth; water moccassin). Parasite: *Porocephalus crotali* (adults in lungs).

Bothropoides jararaca (Wied Niewied, 1824) [= *Bothrops jararaca* (Wied Niewied, 1824) ("jararaca"). Parasites: *Leiperia gracilis; Porocephalus clavatus; P. crotali* (in abdomen); *Porocephalus* sp.; *P. stilesi* (in lungs); *Sambonia wardi* (adults); *Sebekia oxycephalum* (larvae).

Bothropoides matogrossensis (Amaral, 1925) (pitviper). Parasite: *Raillietiella* sp.

Bothrops Wagler, 1824 sp. Parasites: *Porocephalus* sp.; *P. stilesi*.

Bothrops atrox (Linnaeus, 1758) (barba amarilla; common lancehead; for-de-lance). Parasites: *Kiricephalus* sp.; *Porocephalus stilesi* (in lungs); *Raillietiella furcocercum*; *R. ventili* (in stomach).

Bothrops jararacussu Lacerda, 1884 ("jararacuçu"; "jararacussu"). Parasite: *Porocephalus stilesi* (in lungs).

Bothrops lanceolatus (Bonnaterre, 1790) [= *Lachesis lanceolatus* (Lacépède, 1789)] (rat-tailed serpent; rat-tailed pit-viper). Parasites: *Leiperia gracilis; Porocephalus crotali* (in lungs); *P. stilesi* (adult).

Calloselasma rhodostoma (Kuhl, 1824) [= *Agkistrodon rhodostoma* (Boie, 1827); *Ancistrodon rhodostoma* (Boie, 1827)] (Malayan pit viper). Parasite: *Raillietiella orientalis.*

Crotalus Linnaeus, 1758 sp. (a rattlesnake). Parasite: *Porocephalus basiliscus*.

Crotalus atrox Baird & Girard, 1853 [= *Crotalus tortugensis* Van Denburgh & Slevin, 1921] (American rattlesnake; Texas diamond-back; western diamond backed rattlesnake; Tortuga Island diamond rattlesnake). Parasites: *Porocephalus crotali* (adults, development in lungs and tracheae); *P. tortugensis; Raillietiella furcocercum*.

Crotalus catalinensis Cliff, 1954 (rattleless rattlesnake; Catalina Island rattlesnake). Parasite: *Porocephalus crotali*.

Crotalus durissus durissus (Linnaeus, 1758) [= *Crotalus adamanteus* Palisot de Beauvois, 1799; *Crotalus durissus* (Linnaeus, 1758)] (Aruba Island rattlesnake; cascavel rattlesnake; eastern diamond- back rattlesnake; South American rattler; South American rattlesnake;

tropical rattlesnake; unicolor; uracoan rattlesnake; vegrandis; "cascavel"). Parasites: *Porocephalus crotali* (in lungs and tracheae); *P. furcocerca* (in stomach); *Sebekia oxycephalum*.

Crotalus durissus terrificus (Laurenti, 1768) [= *Crotalus terrificus* Laurenti, 1768] (dog-faced rattlesnake). Parasites: *Cephalobaena tetrapoda* (in lungs); *Porocephalus crotali* (adults in lung and tracheae); *Raillietiella furcocercum*; *Sambonia wardi.*

Crotalus horridus Linnaeus, 1758 (cane-brake rattlesnake; common rattlesnake; timber rattlesnake; banded rattlesnake). Parasites: *Porocephalus crotali* (adults in abdomen, lungs, and tracheae); *Sebekia oxycephalum* (larvae); *Sambonia wardi*.

Crotalus ruber Cope, 1892 (red diamond rattlesnake; red rattlesnake). Parasite: *Raillietiella crotali*.

Deinagkistrodon acutus (Günther, 1888) [= *Agkistrodon acutus* (Günther, 1888); *Ancistrodon acutus* (Günther, 1888)] (Chinese moccasin; long-nosed pit viper). Parasites: *Armillifer agkistrodontis* (adults in lungs); *Raillietiella orientalis*.

Rhinocerophis alternatus (Duméril, Bibron & Duméril, 1854) [= *Bothrops alternata* Duméril & Bibron, 1854; *Bothrops alternatus* Duméril & Bibron, 1854; *Lachesis alternatus* (Duméril & Bibron, 1854)] (urutu). Parasite: *Porocephalus stilesi.*

Gloydius brevicaudus brevicaudus (Stejneger, 1907) [= *Agkistrodon blomhoffi* var. *brevicaudus* Stejneger, 1907] (Japanese mamushi). Parasite: *Raillietiella orientalis.*

Lachesis Daudin, 1803 sp. Parasites: *Cephalobaena tetrapoda* (adult); *Porocephalus clavatus* (eggs and embryo); *P. stilesi*; *Raillietiella furcocercum* (in lungs).

Lachesis muta (Linnaeus, 1766) [= *Lachesis mutus* (Linnaeus, 1766)] (South American bushmaster; "surucucu"). Parasites: *Porocephalus crotali*; *P. stilesi* (adults in lungs).

Ovophis okinavensis (Boulenger, 1892) [= *Trimeresurus okinavensis* Boulenger, 1892] (himehabu; Okinawa pitviper; Ryukuy Island pit viper). Parasite: *Raillietiella orientalis.*

Protobothrops flavoviridis (Hallowell, 1861) [= *Trimeresurus flavoviridis flavoviridis* (Hallowell, 1861); *Trimerosurus flavoviridis* (Hallowell, 1861)] (habu). Parasite: *Raillietiella orientalis.*

Protobothrops mucrosquamatus (Cantor, 1839) [= *Trimeresurus mucrosquamatus* (Cantor, 1839) (brown-spotted pitviper; pointed-scaled pitviper). Parasite: *Railietiella orientalis.*

Rhinocerophis alternatus (Duméril, Bibron & Duméril, 1854) [= *Bothrops alternatus* Duméril, Bibron & Duméril, 1854; *Lachesis alternatus* (Duméril, Bibron & Duméril, 1854)] (crossed viper; "urutu"). Parasites: *Bothropseiella bicornuta* (in lung); *Cephalobaena tetrapoda* (adults in lungs); *Porocephalus stilesi* (in lungs); *Raillietiella* sp.

Trimeresurus gramineus (Shaw, 1802) (common bamboo pitviper). Parasite: *Raillietiella orientalis.*

Trimeresurus purpureomaculatus bicolor Boulenger, 1890 (mangrove viper; Schultze's pitviper; shore pit viper). Parasite: *Kiricephalus pattoni* (immature forms in body cavity).

SERPENTES: VIPERIDAE: VIPERINAE:

Atheris chlorechis (Pel, 1851) [= *Atheris chloroechis* (Pel, 1851)] (west Africa tree viper; west African leaf viper; western bush viper). Parasite: *Raillietiella boulengeri.*

Bitis arietans (Merrem, 1820) (common puff adder). Parasite: *Raillietiella boulengeri*.

Bitis gabonica (Duméril, Bibron & Duméril, 1854) (African viper; Gaboon puff-adder). Parasites: *Armillifer armillatus* (adults in lungs); *A. grandis* (adults); *Cubirea annulata* (adults); *Kiricephalus coarctatus*; *Linguatula serrata* (causing pentastomiasis); *Porocephalus stilesi* (adults); *P. subuliferum* (young stages in abdominal muscles); *Raillietiella boulengeri* (adults in in peritoneal cavity).

Bitis rhinoceros (Schlegel, 1855) [= *Bitis gabonica rhinoceros* (Schlegel, 1855)] (west Africa Gaboon viper). Parasite: *Armillifer armillatus* (adult infestation).

Bitis nasicornis (Shaw, 1802) (horned puff adder; rhinoceros adder; rhinoceros viper). Parasites: *Armillifer armillatus* (adults in lungs); *A. grandis* (adults in lungs); *Cubirea annulata* (adults); *Porocephalus subuliferum*; *Raillietiella boulengeri* (adults).

Causus rhombeatus (Lichtenstein, 1823) [= *Bitis rhombeatus* Lichtenstein, 1823] (Cape night adler; Cape viper; common night-adler; rhombic night-adler; demon night adler). Parasites: *Armillifer armillatus*; *Porocephalus clavatus*; *P. subuliferum* (young stages); *Raillietiella boulengeri* (adults and larvae).

Cerastes cerastes (Linnaeus, 1758) [= *Cerastes cornutus* Boulenger, 1896] (African horned desert viper; desert horned viper). Parasites: *Armillifer armillatus* (adult); *A. grandis*; *Kiricephalus coarctatus.*

Daboia russelii (Shaw & Nodder, 1797) [= *Vipera russelii* (Shaw & Nodder, 1797)] (Indian Russell's viper; chain viper; Russell's viper). Parasite: *Raillietiella orientalis.*

Daboia siamensis (M.A. Smith, 1917) [= *Vipera russelii formosensis* Klemer, 1963] (eastern Russell's viper; Siamese Russell's viper). Parasite: *Raillietiella orientalis.*

Echis carinatus carinatus (Schneider, 1801) [= *Echis carinatus* (Schneider, 1801)] (Indian saw-scaled viper; little Indian viper). Parasite: *Raillietiella orientalis.*

Vipera berus (Linnaeus, 1758) [= *Vipera serus* (Linnaeus, 1758) (erroneous spelling)] (common European adder; northern viper). Parasite: *Porocephlaus clavatus* (larvae).

Vipera palaestinae Werner, 1938 (Palestine viper). Parasite: *Raillietiella* sp.

SQUAMATA: AMPHISBAENIA: AMPHISBAENIDAE:

Amphisbaena Linnaeus, 1758 sp. (a worm lizard). Parasite: *Raillietiella gigliolii* (in lungs).

Amphisbaena alba Linnaeus, 1758 [= *Amphisbaena flavescens* Houttuyn, 1787] (giant amphisbaena; red worm lizard; white amphisbaena; "cobra-de-duas-cabeças"). Parasites: Pentastomida sp. (life cycle, including a beetle inquiline); *Raillietiella furcocercum*; *R. gigliolii* (adults in lungs).

Amphisbaena vermicularis Wagler, 1924 (Wagler's worm lizard). Parasite: *Raillietiella gigliolii* (in lungs).

Monopeltis schoutedeni Witte, 1933 (middle Congo worm lizard). Parasite: *Raillietiella schoutedeni* (adults in lung).

AVES; (Species were validated, in addition to the general sources indicated above, with AviBase, 2013, American Ornitologists Union, 2013, IUCN - The International Union for Conservation of Nature, 2013, and Birdlife International, 2013).

CHARADRIIFORMES: ALCIDAE:

Uria aalge (Pontoppidan, 1763) ("arau-comum"; common guillemot; common murre; thin-billed murre). Parasites: *Reighardia lomviae*; *R. sterna* (infection of juvenile and adult hosts).

CHARADRIIFORMES: LARIDAE:

Chroicocephalus philadelphia (Ord, 1815) [= *Larus philadelphia* Ord, 1815] (Bonaparte's gull; Dominican gull; "gaivota de Bonaparte"). Parasite: *Reighardia sternae*.

Larus argentatus Pontoppidan, 1763 (silver sea-gull; European herring gull; "gaivota-argêntea"). Parasite: *Reighardia sternae* (in air sacs; larva causing autoinfection).

Larus canus Linnaeus, 1758 [= *Larus glaucus* Bruch, 1853] (burgemaster; glaucous gull; mew gull; common gull; "gaivota-parda"). Parasite: *Reighardia sternae* (in air sacs).

Larus dominicanus Lichtenstein, 1823 (Dominican gull; kelp gull; "gaivota"). Parasite: *Reighardia sternae*.

Larus hyperboreus Gunnerus, 1767 ("gaivota-hiperbórea"; glaucous gull). Parasite: *Reighardia sternae.*

Larus marinus Linnaeus, 1758 ("Alcatraz-comum"; great black-headed gull). Parasite: *Reighardia sternae* (in air sacs).

Larus schistisagus Stejneger, 1884 (slaty-backed gull). Parasite: *Reighardia sternae*.

Pagophila eburnea Phipps, 1774 ("gaivota-marfim"; ivory gull). Parasite: *Reighardia sternae*.

Sterna hirundo Linnaeus, 1758 [= *Sterna fluviatilus* Naumann, 1819] (a marine tern: common tern; "andorinha-do-mar-comum"). Parasite: *Reighardia sternae* (nymphs in lungs, air sacs, and hepatic portal blood).

Sterna paradisaea Pontoppidan, 1763 [= *Sterna macrura* Naumann, 1819)] ("andorinha-do-mar-ártica"; silver tern). Parasite: *Reighardia sternae*.

CICONIIFORMES: ARDEIDAE:

Ardea cocoi (Linnaeus, 1766) (blue heron; cocoi heron). Parasite: *Leiperia gracilis* (larva).

FALCONIFORMES: ACCIPITRIDAE:

Aegypius monachus (Linnaeus, 1766) (black vulture). Parasite: *Hispania vulturis* (in abdominal sacs).

Gyps bengalensis (Gmelin, 1788) (Indian white-backed vulture; white-rumped vulture). Parasite: *Raillietiella tracheae* (in tracheae).

Pernis apivorus (Linnaeus, 1758) ("bútio-vespeiro"; honey buzzard). Parasite: *Armillifer armillatus* (larva).

GRUIFORMES: GRUIDAE:

Grus virgo (Linnaeus, 1758) [= *Anthropoides virgo* Linnaeus, 1758] (demoisille crane, a gruid bird; "grou-pequeno"). Parasites: *Cubirea annulata* (larva); *C. pomeroyi*.

GRUIFORMES: RALLIDAE:

Porphyrio Brisson, 1760 sp. (a water hen, or gallinule). Parasites: *Armillifer grandis* (larvae); *Cubirea annulata* (nymphs).

STRIGIFORMES: STRIGIDAE:

Bubo africanus (Temminck, 1821) (spotted eagle-owl; "bufo africano"). Parasite: *Armillifer armillatus* (larvae).

MAMMALIA; (Species were further validated, in addition to the general sources indicated above, with Wilson & Reeder, 2005).

AFROSORICIDA: TENRECOMORPHA: TENRECIDAE: ORYZORICTINAE:

Oryzoryctes hova A. Grandidier, 1870 [= *Oryzoryctes talpoides* G. Grandidier & Petit, 1930] (mole-like rice tenrec). Parasite: *Gigliolella brumpti* (larvae).

AFROSORICIDA: TENRECOMORPHA: TENRECIDAE: TENRECINAE:

Hemicentetes semispinosus G. Cuvier, 1798 (lowland streaked tenrec). Parasite: *Gigliolella brumpti* (larvae).

Setifer setosus (Schreiber, 1778) [= *Ericulus setosus* (Schreiber, 1778)] (greater hedgehog tenrec). Parasite: *Gigliolella brumpti* (nymph encysted in liver and lungs).

Tenrec ecaudatus (Schreber, 1778) (tail-less tenrec). Parasite: *Gigliolella brumpti* (encysted larvae).

ARTIODACTYLA: ANTILOCARPIDAE:

Antilocapra americana americana (Ord, 1815) [= *Antilocapra americana* (Ord, 1815);

Capra americana Ord, 1815] (American antelope; pronghorn antelope; Rocky Mountain goat). Parasite: *Linguatula serrata.*

ARTIODACTYLA: BOVIDAE: ALCEPAPHINAE:

Alcelaphus buselaphus buselaphus (Pallas, 1766) [= *Bubalus buselaphus* (Pallas, 1766)] (hartebeest). Parasites: *Linguatula serrata* (young form); *Neolinguatula nuttali* (larva).

Alcelaphus buselaphus cokii Günther, 1880 (bubla antelope; Coke's hartebeest; grassland antelope). Parasites: *Linguatula multiannulata*; *L. serrata* (nymphs).

Connochaetes taurinus taurinus (Burchell, 1824) [= *Connochaetes taurinus* (Burchell, 1824)] (blue wildbeest; bridled gnu). Parasites: *Linguatula serrata*; *Neolinguatula nuttalli*.

Damaliscus korrigum korrigum (Ogilby, 1836) (korrigan; tiang; topi). Parasite: *Linguatula serrata*.

ARTIODACTYLA: BOVIDAE: ANTILOPINAE:

Gazella subgutturosa subgutturosa (Guldenstaedt, 1778) [= *Gazella yarkandensis* Blanford, 1875] (goitered gazelle). Parasite: *Linguatula serrata* (larva).

Neotragus pygmaeus (Linnaeus, 1758) (royal antelope). Parasite: *Armillifer armillatus.*

Procapra gutturosa (Pallas, 1777) [= *Gazella gutturosa* Pallas, 1777)] (Mongolian gazelle). Parasite: *Linguatula serrata* (larvae).

ARTIODACTYLA: BOVIDAE: BOVINAE:

Boselaphus tragocamelus (Pallas, 1766) (blue antelope; nilgai). Parasite: *Linguatula serrata* (larvae).

Bos taurus taurus Linnaeus, 1758 [= *Bos taurus* Linnaeus, 1758] (aurochs; bull; cow; domestic ox). Parasites: *Armillifer armillatus* (larvae causing porocephalosis); *Linguatula serrata* (larvae and adults in hepatic lymph glands and liver).

Bubalus bubalis bubalis (Linnaeus, 1758) [= *Antilope bubalis* Pallas, 1767; *Bubalus buffalus* (Linnaeus, 1758)] (bubale; river buffalo; water buffalo). Parasites: *Armillifer armillatus* (larvae); *Linguatula serrata* (nymphs); *Neolinguatula nuttalli* (in lungs and intestine, some encysted beneath pleura).

Syncerus caffer caffer (Sparrman, 1779) (African buffalo; caffer mongoose; Cape gray mongoose). Parasites: *Armillifer armillatus* (larvae); *Linguatula multiannulata*; *L. serrata.*

Tragelaphus scriptus scriptus (Pallas, 1766) [= *Tragelaphus scriptus* (Pallas, 1766)] (bushbuck; harnessed antelope; kiwell). Parasites: *Armillifer armillatus* (young forms); *Linguatula recurvata* (larvae); *Porocephalus* sp. (larvae).

Tragelaphus strepsiceros strepsiceros (Pallas, 1766) [= *Tragelaphus strepsiceros* (Pallas, 1766)] (greater kudu). Parasite: *Neolinguatula nuttalli.*

ARTIODACTYLA: BOVIDAE: CAPRINAE:

Capra hircus hircus (Linnaeus, 1758) [= *Capra hircus* (Linnaeus, 1758)] (Alpine cross goat; domestic goat; wild goat). Parasite: *Linguatula serrata* (larvae and adults in abdonomal cavity, causing visceral linguatulosis).

Ovis aries aries Linnaeus, 1758 [= *Ovis aries* Linnaeus, 1758] (domestic sheep; red sheep). Parasite: *Linguatula serrata* (nymphs and adult in abdomen and lymph nodes).

ARTIODACTYLA: BOVIDAE: CEPHALOPHINAE:

Cephalophus leucogaster leucogaster Gray, 1873 [= *Cephalophus leucogaster* Gray, 1873] (white-bellied dukker). Parasite: *Armillifer armillatus* (larvae in viscera).

Cephalophus weynsi weynsi Thomas, 1901 [= *Cephalophus weynsi* Thomas, 1901] (Weyn's duiker). Parasite: *Armillifer armillatus*.

Philantomba monticola monticola (Thunberg, 1789) [= *Cephalophus caeruleus* H. Smith, 1827; *Cephalophus monticola* Thunberg, 1789; *Cephalophus pygmaeus*] (Cape guevi; South African blue duiker). Parasites: *Linguatula serrata* (nymphs); *Neolinguatula nuttalli* (juveniles in abdominal cavity).

ARTIODACTYLA: BOVIDAE: HIPPOTRAGINAE:

Hippotragus equinus equinus É. Geoffroy Saint-Hilaire, 1803 [= *Hippotragus equinus* É. Geoffroy Saint-Hilaire, 1803] (roan antelope). Parasite: *Armillifer armillatus* (larvae in liver).

Oryx beisa beisa (Rüppel, 1835) (oryx) [= *Oryx beisa* (Rüppel, 1835)]. Parasite: *Linguatula serrata*.

ARTIODACTYLA: BOVIDAE: REDUNCINAE:

Redunca arundinum (Boddaert, 1785) [= *Cervicapra arundinum* Boddaert, 1785; *Eleotragus arundinum* (Boddaert, 1785)] (South African reedbuck; southern reedbuck). Parasite: *Armillifer armillatus* (nymphs).

ARTIODACTYLA: CAMELIDAE:

Camelus bactrianus bactrianus Linnaeus, 1758 [= *Camelus bactrianus* Linnaeus, 1758] (bactrian camel; two-humped camel). Parasite: *Linguatula serrata* (nymphs forming red nodule in lung).

Camelus dromedarius Linnaeus, 1758 (Arabian camel; dromedary; one-humped camel). Parasite: *Linguatula serrata* (nymphs in intestine and mesenteric lymph nodes).

ARTIODACTYLA: CERVIDAE: CAPREOLINAE:

Capreolus capreolus capreolus (Linnaeus, 1758) [= *Capreolus capreolus* (Linnaeus, 1758)] (European roe deer; roebuck). Parasite: *Linguatula serrata* (nymphs).

Rangifer tarandus tarandus (Linnaeus, 1758) [= *Rangifer tarandus* (Linnaeus, 1758)] (caribou; mountain reindeer; wild reindeer). Parasites: *Linguatula arctica* (in nasal passages; sinus gland); *L. serrata.*

ARTIODACTYLA: CERVIDAE: CERVINAE:

Dama dama dama (Linnaeus, 1758) [= *Dama dama* (Linnaeus, 1758)] (European fallow-deer). Parasite: *Linguatula serrata* (nymphs).

ARTIODACTYLA: SUIDAE: SUINAE: PHACOCHOERINI:

Phacochoerus F. Cuvier, 1826 sp. Parasite: *Armillifer armillatus* (larvae).

Phacochoerus africanus africanus (Gmelin, 1788) [= *Phacochoerus africanus* (Gmelin, 1788)] (common whart-hog). Parasite: *Armillifer armillatus* (young stages).

Phacochoerus aethiopicus aethiopicus (Pallas, 1766) [= *Phacochoerus aethiopicus* (Pallas, 1766)] (desert wharthog). Parasites: *Armillifer armillatus* (larva); *Neolinguatula nuttalli.*

ARTIODACTYLA: SUIDAE: SUINAE: POTAMOCHOERINI:

Potamochoerus porcus Linnaeus, 1758 [= *Potamochoerus penicillatus* (Schinz, 1848)] (red river hog, a bush pig). Parasite: *Armillifer armillatus* (larvae in viscera and mesenterium).

ARTIODACTYLA: SUIDAE: SUINAE: SUINI:

Sus scrofa scrofa Linnaeus, 1758 [= *Sus domesticus* Erxleben, 1777; *Sus scrofa domesticus* Erxleben, 1777] (domestic pig; wild boar; "javali"). Parasites: *Armillifer armillatus* (larvae); *A. moniliformis moniliformis* (nymphs); *Linguatula serrata* (nymphs in liver, causing porocephalosis).

ARTIODACTYLA: TAYASSUIDAE:

Pecari tajacu tajacu (Linnaeus, 1758) [= *Dicotyles tajacu* (Linnaeus, 1758); *Pecari tajacu*

(Linnaeus, 1758)] (collared peccary; "queixada"). Parasites: *Linguatula recurvata* (juvenile); *L. serrata* (nymphs).

Tayassu pecari pecari (Link, 1795) [= *Dicotyles labiatus* Cuvier, 1817; *Tayassu pecari* (Link, 1795)] (white-lipped peccary; "porco-do-mato"). Parasite: *Linguatula recurvata* (larvae in heart).

ARTIODACTYLA: TRAQUILIDAE:

Hyemoschus aquaticus (Ogilby, 1841) (water chevrotain; fanged deer). Parasite: *Armillifer armillatus* (larvae in intestine).

Tragulus javanicus (Osbeck, 1765) (Java mouse deer; lesser mouse deer). Parasite: *Armillifer moniliformis moniliformis* (larvae in stomach).

CARNIVORA: CANIFORMIA: CANIDAE:

Canis Linnaeus, 1758 sp. (a dog). Parasites: *Linguatula serrata; Porocephalus crotali* (nymphs causing massive visceral pentastomiasis).

Canis adustus adustus Sundevall, 1847 [= *Canis adustus* Sundevall, 1847] (side-striped jackal; silver chacal). Parasite: *Linguatula serrata serengetiana.*

Canis lupus dingo Meyer, 1793 [= *Canis dingo* Meyer, 1793] (dingo; domestic dog; wild dog). Parasite: *Linguatula serrata* (adults in nasal sinus).

Canis lupus familiaris Linnaeus, 1758 [= *Canis domesticus* Linnaeus, 1758; *Canis familiaris* Linnaeus, 1758; *Canis familiaris dingo* Linnaeus, 1758; *Canis* (*Canis*) *familiaris* Linnaeus, 1758] (bull terrier bitch; dog; domestic dog; European dog; hunting dog; mongrel dog; schnauzer dog; stray dog; street dog; urban pound dogs). Parasites: *Armillifer armillatus* (nymphs); *A. moniliformis moniliformis* (nymphs); *Linguatula serrata* (larva; adults in nasal cavity and ear); *L. serrata serengetiana.*

Canis lupus lupus Linnaeus, 1758 [= *Canis lupus* Linnaeus, 1758] (wolf). Parasite: *Linguatula serrata* (adult in pharynx).

Canis mesomelas mesomelas (Schreber, 1778) [= *Canis mesomelas* (Schreber, 1778)] (black-backed jackal; silver-backed jackal). Parasite: *Linguatula serrata serengetiana*.

Canis mesomelas schmidti Noack, 1897 [= *Thos mesomelas elongae* Heller, 1914] (black-backed jackal; wild dog). Parasite: *Linguatula serrata serengetiana*.

Chrysocyon brachyurus (Illiger, 1815) [= *Canis jubatus* Desmarest, 1820] (maned wolf). Parasite: *Linguatula serrata*.

Lycaon pictus lupinus Thomas, 1902 (African wild dog). Parasite: *Lingutula serrata serengetiana.*

Lycalopex culpaeus culpaeus (Molina, 1782) [= *Dusicyon culpaeus* (Molina, 1782)] (culpeo fox; South American red fox). Parasite: *Linguatula serrata* (nymphs).

Vulpes vulpes vulpes (Linnaeus, 1758) [= *Canis vulpes* Linnaeus, 1758; *Vulpes vulpes* (Linnaeus, 1758)] (common fox; red fox). Parasite: *Linguatula serrata* (larvae and adults in intestine).

CARNIVORA: CANIFORMIA: MEPHITIDAE:

Mephitis mephitis mephitis (Schreber, 1776) [= *Mephitis mephitis* (Schreber, 1776)] (striped skunk). Parasite: *Sebekia proboscideum* (larva).

CARNIVORA: CANIFORMIA: MUSTELIDAE: LUTRINAE:

Aonyx cinerea cinerea (Illiger, 1815) [= *Aonyx leptonyx* (Horsfield, 1823)] (Oriental small-clawed otter). Parasite: *Armillatus moniliformis moniliformis* (larvae).

Hydrictis maculicollis (Lichtenstein, 1823) [= *Lutra maculipennis* Lichtenstein, 1823 (erroneous spelling)] ("lontra"; spotted-necked otter). Parasite: *Armillifer armillatus* (larvae).

Lutra lutra lutra (Linnaeus, 1758) *nair* F.G. Cuvier, 1823 [= *Lutra nair* F.G. Cuvier, 1823] (Indian otter). Parasites: *Armillifer armillatus* (nymphs); *A. moniliformis moniliformis* (nymphs in peritonela cavity).

Lutrogale perspicillata perspicillata (I. Geoffroy Saint-Hilaire, 1826) [= *Lutra perspicillata* Geoffroy, 1826] (smooth-coated otter). Parasite: *Armillifer moniliformis moniliformis*.

Pteronura brasiliensis brasiliensis (Gmelin, 1788) [= *Lutra brasiliensis* Gmelin, 1788; *Pteronura brasiliensis* (Gmelin, 1788)] (giant otter; "ariranha"). Parasites: *Porocephalus* sp. (larvae); *P. crotali* (larvae); *Sebekia oxycephalum* (larvae).

CARNIVORA: CANIFORMIA: MUSTELIDAE: MUSTELINAE:

Mellivora capensis cottoni Lydekker, 1906 [= *Mellivora sagulata* Hollister, 1910] (honey badger). Parasite: *Armillifer armillatus* (larvae in stomach).

CARNIVORA: CANIFORMIA: PROCYONIDAE:

Nasua narica narica (Linnaeus, 1766) [= *Nasua narica* (Linnaeus, 1766)] (white-nosed coati; "quati"). Parasites: *Porocephalus crotali*; *Sebekia oxycephalum.*

Procyon cancrivorus cancrivorus (G. Cuvier, 1798) [= *Procyon cancrivorus* (G. Cuvier, 1798)] (a mammal: crab-eating racoon; "guaxinim"; "mão pelada"). Parasites: *Linguatula serrata*; *Porocephalus crotali* (larvae in diaphragm); *Sebekia oxycephalum*.

Procyon lotor lotor (Linnaeus, 1758) [= *Procyon lotor* (Linnaeus, 1758)] (raccoon). Parasite: *Porocephalus crotali*.

CARNIVORA: FELIFORMIA: EUPLERIDAE: GALIDIINAE:

Galidictis fasciata fasciata (Gmelin, 1788) [= *Ariela fasciata* Gmelin, 1788] (banded mongoose; broad-striped Malagasy mongoose). Parasite: *Armillifer armillatus* (larvae).

CARNIVORA: FELIFORMIA: FELIDAE: FELINAE:

Acinonyx jubatus jubatus (Schreber, 1775) [= *Acinonyx guttatus* (Hermann, 1804); *Cynailurus guttatus* Hermann, 1804] (cheetah; guepardo). Parasite: *Armillifer armillatus* (larvae).

Felis catus Linnaeus, 1758 [= *Felis domesticus* Erxleben, 1777; *Felis siamensis* Trouessart, 1904] (domestic cat). Parasites: *Armillifer armillatus* (nymphal pentastomiasis); *A. moniliformis moniliformis* (nymphs); *Kiricephalus pattoni* (immature forms in liver; nymph in lungs); *Linguatula serrata* (nymphs in liver); *Porocephalus siamensis* (larvae).

Felis silvestris Schreber, 1777 (wildcat). Parasites: *Armillifer armillatus* (larva); *Linguatula serrata* (larva).

Leptailurus serval serval Schreber, 1776 [= *Felis serval* (Schreber, 1776)] (chat serval; serval; walking maru). Parasite: *Armillifer armillatus* (young specimens).

Prionailurus planiceps (Vigors & Horsfield, 1827) [= *Felis planiceps* (Vigors & Horsfield, 1827)] (flat-headed cat). Parasite: *Armillifer moniliformis moniliformis* (larvae).

Prionailurus viverrinus (Bennett, 1833) [= *Felis viverrina* Bennett, 1833] (fishing cat). Parasite: *Armillifer moniliformis moniliformis* (larvae).

CARNIVORA: FELIFORMIA: FELIDAE: PANTHERINAE:

Panthera leo leo (Linnaeus, 1758) [= *Felis leo* Linnaeus, 1758] (lion). Parasites: *Armillifer armillatus* (young stages); *Linguatula serrata* (in pharynx); *Neolinguatula nuttalli* (adults); *Porocephalus crotali* (in body cavity).

Panthera onca onca (Linnaeus, 1758) [= *Felis onca* Linnaeus, 1758] (jaguar; "onça-pintada"). Parasite: *Linguatula recurvata (*adults in frontal sinuses and tracheae).

Panthera pardus pardus (Linnaeus, 1758) [= *Felis pardus* Linnaeus, 1758; *Panthera pardus* (Linnaeus, 1758)] (leopard). Parasites: *Armillifer armillatus* (nymphs); *A. moniliformis*

(nymphs); *Neolinguatula nuttalli*; *Porocephalus crotali* (in lungs, body cavity, and spleen).

Panthera tigris tigris (Linnaeus, 1758) [= *Felis tigris* Linnaeus, 1758] (tiger). Parasites: *Armillifer armillatus* (nymphs); *A. moniliformis* (juveniles).

CARNIVORA: FELIFORMIA: HERPESTIDAE:

Atilax paludinosus paludinosus (G. Cuvier, 1829) [= *Atilax paludinosus* (G. Cuvier, 1829); *Mungos paludinosus* G. Cuvier, 1829] (marsh mongoose; water mongoose). Parasite: *Armillifer armillatus* (larvae).

Bdeogale crassicaudata puisa Peters, 1852 [= *Bdeogale puisa* Peters, 1852] (puisa; bushy-tailed mongoose). Parasite: *Armillifer armillatus* (young forms).

Crossarchus obscurus F.G. Cuvier, 1825 (common cusimanse; long-nosed cusimanse). Parasite: *Armillifer armillatus* (larvae).

Dologale dybowskii (Pousargues, 1893) (Pousargues' mongoose). Parasite: *Armillifer armillatus* (nymphs in abdominal cavity).

Herpestes Illiger, 1811 sp. (creeping thief). Parasite: *Armillifer armillatus* (larvae in intestine).

Herpestes ichneumon ichneumon (Linnaeus, 1758) *cafra* (Gmelin, 1788) [= *Herpestes cafer* Gmelin, 1788; *Mungos cafer* (Gmelin, 1788)] (Egyptian mongoose). Parasite: *Armillifer armillatus* (larvae).

Herpestes javanicus javanicus (É. Geoffroy Saint-Hilaire, 1818) [= *Mungos javanicus* É. Geoffroy Saint-Hilaire, 1818; *Mungos galera*] (mungo; small Asian mongoose). Parasites: *Armillifer armillatus* (larvae in liver, mesentery, and lung); *Armillifer moniliformis moniliformis* (young stage).

Herpestes naso De Winton, 1901 [= *Herpestes urva naso* De Winton, 1901] (crab-eating mongoose; long-nosed mongoose). Parasite: *Armillifer armillatus* (larvae in liver, mesentery, spleen, and free in body).

Ichneumia albicauda albicauda G. Cuvier, 1829 [= *Herpestes albicaudus* (G. Cuvier, 1829); *Ichneumia albicauda* G. Cuvier, 1829] (white-tailed mongoose). Parasite: *Armillifer armillatus* (young stages).

Mungos É. Geoffroy Saint Hilaire & Cuvier, 1795 sp. Parasite: *Armillifer armillatus* (larvae).

Mungos mungo mungo (Gmelin, 1788) [= *Crossarchus fasciatus* Desmarest, 1820] (African banded mongoose; banded ichneumon; broad-banded cusimanse). Parasite: *Armillifer armillatus* (larvae in mesenteries).

CARNIVORA: FELIFORMIA: HYAENIDAE:

Crocuta crocuta (Erxleben, 1777) [= *Crocuta crocuta crocuta* (Erxleben, 1777)] (spotted hyena). Parasite: *Linguatula multiannulata*.

Hyaena brunnea Thunberg, 1820 (brown hyena). Parasite: *Armillifer armillatus* (nymph).

Proteles cristata (Sparrmann, 1783) [= *Protelis cristatus* (Sparrmann, 1783)] (aardwolf). Parasites: *Armillifer armillatus* (larvae in in mesentery); *A. moniliformis moniliformis* (larvae).

CARNIVORA: FELIFORMIA: NANDINIIDAE:

Nandinia binotata binotata Gray, 1830 [= *Nandinia binotata* Gray, 1830] (African palm civet). Parasite: *Armillifer armillatus* (larvae in coelomic cavity).

CARNIVORA: FELIFORMIA: VIVERRIDAE: PARADOXURINAE:

Arctictis binturong binturong (Raffles, 1821) [= *Arctictis binturong* (Raffles, 1821)]

(Asian bear cat; binturong). Parasite: *Armillifer moniliformis moniliformis* (nymphs).

Paradoxurus hermaphrodites hermaphrodites Pallas, 1777 [= *Paradoxurus hermaphrodites* Pallas, 1777] (Asian palm civet). Parasite: *Armillifer armillatus*.

Paradoxurus hermaphrodites philippinensis Jourdan, 1837 [= *Paradoxurus phillippensis* Jourdan, 1837 (erroneous spelling); *Paradoxurus philippinensis* Jourdan, 1837] (Asian palm civet; native cat; palm civet cat). Parasites: *Armillifer moliliformis heymonsi* (in lungs); *A. moniliformis moniliformis* (young forms).

CARNIFORA: FELIFORMIA: VIVERRIDAE: VIVERRINAE:

Genetta G. Cuvier, 1816 sp. Parasite: *Armillifer armillatus* (larvae).

Genetta genetta genetta (Linnaeus, 1758) [= *Genetta senegalensis* J.B. Fischer, 1829)] (common genet). Parasite: *Armillifer armillatus* (larva).

Genetta pardina I. Geoffroy Saint-Hilaire, 1832 (pardine genet). Parasite: *Armillifer armillatus* (larvae).

Viverra civettina (Blyth, 1862) [= *Civettictis civetta* [*sic*] Schreber, 1776] (African civet cat; Malabar large-spotted cat). Parasite: *Armillifer armillatus* (larvae inside and outside of gut).

Viverra zibetha zibetha Linnaeus, 1758 [= *Viverra zibetha* Linnaeus, 1758] (common Indian civet). Parasite: *Armillatus moniliformis moniliformis (*larvae).

"Viverricula malaccensis Gmelin, 1788" (Indian civet; small civet cat). Parasite: *Armillifer moniliformis moniliformis* (nymphs). Remarks: The vernacular name small Indian civet keys down to *Viverricula indica* (É. Geoffroy Saint-Hilaire, 1803), but the species "*Viverricola malaccensis"* Gmelin, 1788 does not appear in the synonymy of this species (Wilson & Reed, 2005).

CARNIVORA: URSIDAE:

Melursus ursinus ursinus (Shaw, 1971) [= *Melursus ursinus* (Shaw, 1971)] (sloth bear). Parasite: *Armillifer moniliformis moniliformis* (adult; nymph in liver).

CETACEA: ODONTOCETI: PHACOENIDAE:

Phacoena phacoena phacoena (Linnaeus, 1758) [= *Phacoena phacoena* (Linnaeus, 1758)] (North Atlantic harbour porpoise). Parasite: *Reighardia sternae.*

CHIROPTERA: HIPPOSIDERIDAE:

Hipposideros cyclops Temminck, 1853 (cyclops leaf-nosed bat; roundleaf bat). Parasite: *Armillifer armillatus* (larvae).

CHIROPTERA: PHYLLOSTOMIDAE: PHYLLOSTOMINAE:

Phyllostomus discolor discolor Wagner, 1843 [= *Phyllostoma discolor* (Wagner, 1843)] (pale spear-nosed bat; particoloured javelin-bat). Parasite: *Porocephalus crotali* (larvae in stomach).

CHIROPTERA: PTEROPODIDAE:

Eidolon helvum helvum (Kerr, 1792) [= *Eidolon helvum* (Kerr, 1792); *Eidolus helvum* (Kerr, 1792) (erroneous spelling)] (a frugivorous bat). Parasite: *Linguatula* sp.

CINGULATA: DASYPODIDAE: DASYPODINAE:

Dasypus novemcinctus novemcinctus (Linnaeus, 1758) [= *Dasypus niger* Lichtenstein, 1818; *Dasypus novemcinctus* (Linnaeus, 1758); *Tatusia novemcincta* Linnaeus, 1758] (nine-banded armadillo; peba-armadillo; "tatu-galinha"; "tatu-peba"). Parasite: *Porocephalus crotali* (larvae in abdomen and liver).

CINGULATA: DASYPODIDAE: EUPHRACTINAE:

Chaetophractus vellerosus vellerosus (Gray, 1865) [= *Chaetophractus vellerosus* (Gray,

1865)] (little hairy armadillo; screaming hairy armadillo). Parasite: *Porocephalus crotali* (nymphs).

CINGULATA: DASYPODIDAE: TOLYPEUTINAE:

Tolypeutes matacus (Desmarest, 1804) [= *Tolypeutes mataco* (Desmarest, 1804) (erroneous spelling)] (southern three-banded armadillo; "tatu-bola"). Parasite: *Porocephalus crotali* (nymphs).

DASYUROMORPHA: DASYURIDAE: DASYURINAE:

Dasykaluta rosamondae (Ride, 1964) (little red kaluta). Parasite: *Waddycephalus* sp. (nymphs encysted in abdomen).

Dasyurus É Geoffroy, 1796 sp. (a native cat). Parasite: *Armillifer mazzai*.

Dasyurus hallucatus Gould, 1842 [= *Satanellus hallucatus* (Gould, 1842)] (northern quoll). Parasites: *Armillifer arborealis* (adults and nymphs in liver, lung, and small intestine); Pentastomida sp. (larvae). *Waddycephalus* sp. (male from mesentery).

DASYUROMORPHA: DASYURIDAE: DASYURINAE: DASYURINI:

Parantechinus apicalis (Gray, 1842) (southern dibbler). Parasite: *Waddycephalus* sp. (nymphs).

DIDELPHIMORPHA: DIDELPHIDAE: CALUROMYINAE:

Caluromys (*Caluromys*) *philander philander* (Linnaeus, 1758) [= *Caluromys philander* (Linnaeus, 1758); *Didelphis philander* Linnaeus, 1758*; Philander philander* (Linnaeus, 1758)] (bare-tailed woolly opossum; philander opossum; "macura"). Parasites: *Porocephalus clavatus* (larva); *P. crotali* (larvae in intestine, liver, and abdominal cavity).

DIDELPHIMORPHA: DIDELPHIDAE: DIDELPHINAE:

Chironectes minimus minimus (Zimmermann, 1780) [= *Chironectes minimus* (Zimmermann, 1780)] (water opossum; "cuica-d'agua"). Parasite: *Porocephalus crotali* (larvae).

Delphinidae Gray, 1821 sp. (a dolphin). Parasite: *Linguatula serrata.*

Didelphis Linnaeus, 1758 sp. ("gambá", a marmoset or opossum). Parasite: *Porocephalus clavatus* (larvae).

Didelphis marsupialis marsupialis Linnaeus, 1758 [= *Didelphis marsupialis* Linnaeus, 1758] (common opussum). Parasites: *Linguatula serrata* (nymphs); *Porocephalus crotali* (larvae).

Didelphis virginiana virginiana Kerr, 1792 [= *Didelphis virginiana* Kerr, 1792] (Virginian opossum). Parasites: *Porocephalus clavatus* (nymphs); *P. crotali* (nymphs).

Marmosa murina (Linnaeus, 1758) [= *Didelphis murina* Linnaeus, 1758; *Marmosa murina parata* Thomas, 1911] (common mouse opussum; Linnaeus' mouse opussum; marmosa; murine opossum). Parasites: *Porocephalus clavatus*; *P. crotali* (larvae in body cavity).

Micoureus paraguayanus travassosi Miranda-Ribeiro, 1936 [= *Marmosa cinerea* (Temminck, 1824)] (a pouchless marsupial: Tate's woolly mouse opussum; "cuíca"). Parasite: *Porocephalus crotali* (larvae).

Philander opossum opussum (Linnaeus, 1758) [= *Philander opussum* (Linnaeus, 1758)] (gray four-eyed opossum; "cuica"). Parasite: *Porocephalus crotali* (larvae).

DIPROTODONTIA: PHALANGERIFORMES: PETAUROIDEA: PETAURIDAE:

Petaurus breviceps breviceps (Waterhouse, 1838) [= *Petaurus breviceps* (Waterhouse, 1838)] (sugar glider). Parasite: *Yelirella petauri* (in lungs and nasal sinus).

ERINACEOMORPHA: ERINACEIDAE: ERINACEINAE:

Atelerix albiventris (Wagner, 1841) [= *Atelerix pruneri oweni* (Setzer, 1953)] (four-toed hedgehog). Parasite: *Armillifer armillatus* (nymph in body cavity).

Atelerix frontalis frontalis (A. Smith, 1831) [= *Antechinus frontalis* A. Smith, 1831] (southern African hedgehog, an insectivore). Parasite: *Armillifer armillatus* (larvae).

Erinaceus Linnaeus, 1758 sp. Parasite: *Linguatula serrata.*

Hemiechinus auritus auritus (Gmelin, 1770) [= *Erinaceus auritus* Gmelin, 1770; *Hemiechinus auritus* (Gmelin, 1770)] (long-eared hedgehog). Parasites: *Armillifer armillatus*; *Linguatula serrata* (nymphs); *L.* sp. (nymph).

Paraechinus aethiopicus aethiopicus (Ehrenberg, 1832) [= *Erinaceus aethiopicus* (Ehrenberg, 1832)] (African hedgehog; desert hedgehog). Parasites: *Armillifer armillatus* (larvae); *Linguatula serrata* (juveniles).

LAGOMORPHA: LEPORIDAE:

Lepus capensis capensis Linnaeus, 1758 [= *Lepus capensis* Linnaeus, 1758] (Cape hare; Egyptian hare). Parasite: *Linguatula serrata* (in pleural cavity, causing parasitosis).

Lepus (*Eulagos*) *europaeus europaeus* Pallas, 1778 [= *Lepus europaeus* Pallas, 1778] (common hare; European hare). Parasite: *Linguatula serrata* (nymphs).

Lepus (? *Eulagos*) *granatensis granatensis* Rosenhauer, 1856 [= *Lepus capensis granatensis* Rosehauer, 1856; *Lepus granatensis granatensis* Rosenhauer, 1856] (common hare). Parasite: *Linguatula serrata*.

Lepus (*Lepus*) *timidus timidus* Linnaeus, 1758 (blue hare; mountain hare). Parasite: *Linguatula serrata* (causing linguatulosis).

Oryctolagus cuniculus cuniculus (Linnaeus, 1758) [= *Lepus cuniculus* Linnaeus, 1758; *Oryctolagus cuniculus* (Linnaeus, 1758)] (common rabbit; European rabbit). Parasite: *Linguatula serrata* (nymphs in lungs).

Sylvilagus (Sylvilagus) floridanus floridanus (J.A. Allen, 1890) [= *Sylvilagus floridanus* (J.A. Allen, 1890)] (cottontail rabbit; eastern cottontail). Parasite: *Linguatula serrata* (nymphs).

MACROSCELIDEA: MACROSCELIDAE:

Macroscelides A. Smith, 1829 sp. (elephant shrew). Parasite: *Armillifer armillatus* (young stages).

PERAMELEMORPHIA: PERAMELIDAE: PERAMELINAE:

Isoodon macrourus macrourus (Gould, 1842) [= *Isoodon macrourus* (Gould, 1842)] (northern brown bandicoot). Parasite: *Armillifer arborealis* (in liver and lung).

Perameles nasuta É. Geoffroy, 1804 (long-nosed bandicoot). Parasite: *Armillifer australis* (nymph in oesophagus).

PERISSODACTYLA: EQUIIDAE:

Equus asinus asinus Linnaeus, 1758 [= *Equus asino-caballus* auct.] (ass; donkey; "jegue"; mule). Parasite: *Linguatula serrata* (nymphs and adults).

Equus caballus caballus (Linnaeus, 1758) [= *Equus caballus* (Linnaeus, 1758)] (horse). Parasite: *Linguatula serrata* (juveniles and adult).

PERISSODACTYLA: TAPIRIDAE:

Tapirus indicus indicus (Desmarest, 1819) [= *Tapirus indicus* (Desmarest, 1819)] (Malayan tapir). Parasite: *Armillifer moniliformis moniliformis* (nymphs).

PRIMATES: HAPLORRHINI: SIMIIFORMES: CEBIDAE: CALLITRICHINAE:

Leontopithecus chrysopygus (Mikan, 1823) [= *Midas chrysopygus* Mikan, 1823; *Mystax chrysopygus* (Mikan, 1823)] (black lion tamarin; golden-rumped marmoset; yellow-tailed tamarin; "mico-leão-preto"). Parasite: *Porocephalus crotali* (nymphs in lung).

Leonthopithecus rosalia (Linnaeus, 1766) (golden lion tamarin; "mico-leão-dourado"). Parasite: *Porocephalus* sp.

Saguinus Hoffmannsegg, 1807 sp. (a tamarin). Parasite: *Porocephalus crotali* (larvae).

Saguinus mystax mystax (Spix, 1803) [= *Saguinus mystax* (Spix, 1803)] (moustached tamarin). Parasite: *Porocephalus* (causing infection).

PRIMATES: HAPLORRHINI: SIMIIFORMES: CEBIDAE: CEBINAE:

Cebus capucinus Linnaeus (White-headed capucnin). Parasite: *Armillifer*.

"Cebus defassa" (a primate). Parasite: *Neolinguatula nuttalli.* Remarks: Not listed in Wilson & Reeder (2005).

PRIMATES: HAPLORRHINI: SIMIIFORMES: CEBIDAE: SAIMIRINAE:

Saimiri sciureus sciureus (Linnaeus, 1758) [= *Callitrix sciurea* (Linnaeus, 1758); *Saimiri sciureus* (Linnaeus, 1758)] (brown cappucin; common squirrel monkey). Parasites: Pentastomida sp.; *Porocephalus clavatus* (larvae); *P.* sp. (nymphs in brain); *P. stilesi* (nymph in brain).

PRIMATES: HAPLORRHINI: SIMIIFORMES: CERCOPITHECOIDEA: CERCOPITHECIDAE: CERCOPITHECINAE:

Cercocebus atys atys (Audebert, 1797) [= *Cercopithecus fuliginosus (*É. Geoffroy, 1812; *Erythrocebus fuliginosus* (É. Geoffroy, 1812)] (sooty mangabey, an old world monkey). Parasite: *Armillifer armillatus (*young forms).

Cercopithecus albogularis albogularis (Sykes, 1831) [= *Cercopithecus albogularis* (Sykes, 1831)] (an African primate: Sykes'guenon; Syke's monkey). Parasite: *Armillifer armillatus* (larvae).

Cercopithecus mona (Schreber, 1774) (mona monkey). Parasite: *Armillifer armillatus* (larvae).

Cercopithecus nictitans nictitans (Linnaeus, 1766) (greater spot-nosed monkey). Parasite: *Armillifer armillatus.*

Chlorocebus aethiops Linnaeus, 1758 [= *Cercopithecus aethiops* (Linnaeus, 1758); *Cercopithecus engythithia* (Hermann, 1804)] (grivet; malbrouck monkey; tota; white-nosed monkey). Parasite: *Armiliffer armillatus* (larvae).

Chlorocebus cynosuros Scopoli 1786 [= *Cercopithecus aethiops cynosuros* Scopoli 1786] (grivet; malbrouck). Parasite: *Armiliffer armillatus* (larvae in mesenteries).

Chlorocebus sabaeus (Linnaeus, 1766) [= *Cercopithecus callitrichus* I. Geoffroy, 1851] (green guenon, green monkey, callithrix monkey). Parasites: *Porocephalus stilesi* (larva in lung); *P. subulifer* (young stages encysted in lung).

Chlorocebus tantulus tantulus (Ogilby, 1841) [= *Cercopithecus pousarguei* Mitchell, 1897; *Cercopithecus tantulus* Olgiby, 1841] (mispelling)] (an African primate: Pousargue's guenon; tantalus guenon; tantulus monkey). Parasite: *Armillifer armillatus* (larvae).

Erythrocebus patas Schreber, 1775 [= *Cercopithecus patas* Schreber, 1775] (patas monkey). Parasite: *Armillifer armillatus* (young stages).

Macaca fascicularis fascicularis (Raffles, 1821) [= *Macaca fascicularis* (Raffles, 1821); *Macaca irus* I. Geoffroy, 1826; *Macacus cynomolgus* (Schreiber, 1775] (crab-eating macaque; cynomolgus monkey; long-tailed macaque; macaque monkey; Philippine monkey; Sumatrian monkey). Parasites: *Armillifer agkistrodontis* (nymphs); *A. armillatus* (nymphs); *A. moniliformis moniliformis* (nymphs causing porocephalosis); *Porocephalus* sp.

Macaca mulatta (Zimmermann, 1780) [= *Macacus rhesus* (Audebert, 1798)] (rhesus monkey). Parasites: *Armillifer armillatus* (nymphs); *A. moniliformis moniliformis* (nymphs causing pentastomiasis).

Macaca nemestrina (Linnaeus, 1766) [= *Nemestrinus nemestrinus* Linnaeus, 1766] (southern pig-tailed macacque). Parasite: *Armillifer moniliformis moniliformis* (larvae).

Mandrillus sphinx (Linnaeus, 1758) [= *Cynocephalus mormon* Alströmer, 1766; *Mandrillus maimon* (Linnaeus, 1766)] (Guinea baboon; mandrill). Parasite: *Armillifer armillatus* (juvenile).

Papio cynocephalus cynocephalus (Linnaeus, 1766) [= *Papio cynocephalus* (Linnaeus, 1766)] (yellow baboon). Parasite: *Armillifer armillatus* (larvae).

Papio cynocephalus ibeanus Thomas, 1910 [= *Periodictus ibeanus* Thomas, 1910] (a prosimian loriid baboon: Bosman's potto; eastern potto). Parasite: *Armillifer armillatus* (nymphs).

Papio papio (Desmarest, 1820) (Guinea baboon). Parasite: *Armillifer armillatus* (larvae).

Papio ursinus ursinus (Kerr, 1792) [= *Cynocephalus porcarius* Boddaert, 1787; *Papio porcari* (Boddaert, 1787)] (chacma baboon). Parasite: *Armillifer armillatus* (larvae).

PRIMATES: HAPLORRHINI: SIMIIFORMES: HOMINOIDEA: HOMINIDAE:

Homo sapiens Linnaeus, 1758 (human; man). Parasites: *Armillifer agkistrodontis*; *A. armillatus* (porocephaliasis; larvae in abdomen, eye, and lacrimal caruncle; 3rd stage nymphs; encysted in small intestine; in lungs, liver intestine, and ovarium; causing pentastomiasis and itching); *A. grandis* (nymphs in lungs; causing visceral pentastomiasis); *A. moniliformis moniliformis* (nymph in liver, causing visceral pentastomiasis); *Kiricephalus affinis* (aetiology of human porocephalosis); *Leiperia cincinnalis* (nymphs); *Linguatula serrata* (larvae in anterior chamber of eye, lungs, spleen, liver, intestine and stools, causing hepatic granuloma; adults in lungs, causing halzoun or marrrara syndrome); *Porocephalus crotali* (nymphs causing human visceral pentastomiasis); *P. subulifer* (in African human; in hernial sac; ganglioma; causing infection and nymphal porocephalosis); *P. taiwana* (nymphs causing porocephalosis taiwana in humans); *Sebekia* sp. (nymph causing human dermatitis).

Pan troglodytes troglodytes (Blumenbach, 1775) [= *Anthropopithecus troglodytes* Blumenbach, 1775; *Pan chimpanse* Meyer, 1856; *Pan satyrus* (Linnaeus, 1758); *Pan troglodytes* (Blumenbach, 1775)] (common chimpanzee; robust chimpanzee). Parasites: *Armillifer armillatus* (nymphs); *Porocephalus* sp. (larva).

PRIMATES: HAPLORRHINI: SIMIIFORMES: PITHECIIDAE: CALLICEBINAE:

Callicebus (*Callicebus*) *caligatus* (Wagner, 1842) [= *Callicebus caligatus* (Wagner, 1842)] (chestnub bellied titi, a South American primate). Parasites: *Linguatula recurvata* (larva); *Linguatula* sp. (larvae).

PRIMATES: HAPLORRHINI: SIMIIFORMES: PITHECIIDAE: PITHECINAE:

Pithecia irrorata Gray, 1842 (parauacu; rio Tapajós saki). Parasite: *Porocephalus* sp. (in lungs and aorta).

PRIMATES: STREPSIRRHINI: LEMURIFORMES: CHEIROGALEOIDEA: CHEIROGALEIDAE:

Cheirogaleus medius (É. Geoffroy, 1812) (lesser dwarf lemur). Parasite: *Gigliolella brumpti* (larvae).

PRIMATES: STREPSIRRHINI: LORISIFORMES: GALAGIDAE:

Euoticus elegantulus (Le Conte, 1857) [= *Galago elegantulus* Conte, 1857] (southern needle-clawed bushbaby, a prosimian). Parasite: *Armillifer armillatus* (larvae in coelom and intestine).

Galago senegalensis senegalensis É. Geoffroy, 1796 [= *Galago senegalensis* É. Geoffroy, 1796; *Galago* (*Otolicnus*) *senegalensis* É. Geoffroy, 1796] (lesser bush baby; lesser galago; Senegal bushbabie; Senegal galago). Parasites: *Armillifer armillatus* (young stages); *Porocephalus subuliferum* (larvae).

Otolemur crassicaudatus crassicaudatus É. Geoffroy Saint-Hilaire, 1812 [= *Galago crassicaudatus* (É. Geoffroy Saint-Hilaire, 1812)] (brown greater galago; thick-tailed bush baby; thick-tailed galago). Parasite: *Armillifer armillatus* (encysted nymphs).

PRIMATES: STREPSIRRHINI: LORISIFORMES: LORISIDAE:

Loris tardigradus Linnaeus, 1758 [= *Nycticebus tardigradus* (Linnaeus, 1758); *Paradoxurus tardigradus* (Linnaeus, 1758)] (a lemurid: galago; red slender Loris; slow loris). Parasite: *Armillifer moniliformis moniliformis* (larvae in intestine).

Nycticebus coucang coucang Boddaert, 1785 [= *Nycticebus coucang* Boddaert, 1785). (Bengal slow loris). Parasite: *Armillifer moniliformis moniliformis* (juveniles).

Periodicticus potto potto Müller, 1766 [= *Periodicticus potto* Müller, 1766] (potto). Parasite: *Armillifer armillatus.*

RODENTIA: ANOMALUROMOPRHA: ANOMALURIDAE: ANOMALURINAE:

Anomalurus derbianus (Gray, 1842) [= *Anomalurus fraseri* (Waterhouse, 1843) (lord Derby's scaly-tailed squirrel). Parasite: *Armillifer armillatus* (larvae in coelomic cavity and stomach).

RODENTIA: HYSTROCOMORPHA: HYSTRICOGNATHI: ABROCOMIDAE:

Abrocoma bennettii bennettii Waterhouse, 1837 [= *Abrocoma bennettii* Waterhouse, 1837] (Bennett's chinchilla rat). Parasite: *Linguatula serrata* (nymphs).

RODENTIA: HYSTRICOMORPHA: HYSTRICOGNATHI: CAVIIDAE: CAVIINAE:

Cavia porcellus (Linnaeus, 1758) [= *Cavia cobaya* Marcgrave, 1648; *Cavia cutleri* Bennett, 1835] (domesticated Guinea pig). Parasites: *Armillifer armillatus*; *Linguatula serrata* (larvae in lung); *Porocephalus stilesi.*

RODENTIA: HYSTRICOMORPHA: HYSTRICOGNATHI: CAVIIDAE: HYSTRICIDAE:

Hydrochoerus Brisson, 1762 sp. Parasite: *Linguatula* sp.

RODENTIA: HYSTROCOMORPHA: HYSTRICOGNATHI: HYSTRICIDAE:

Atherurus africanus Gray, 1842 (African bush-tailed porcupine; African tufed-tailed porcupine). Parasite: *Armillifer armillatus* (larvae).

Hystrix (*Hystrix*) *cristata* (Linnaeus, 1758) [= *Hystrix cristata* (Linnaeus, 1758)] (crested porcupine; European porcupine). Parasite: *Linguatula serrata* (nymphs in lung).

RODENTIA: HYSTROCOMORPHA: HYSTRICOGNATHI: OCTODONTIDAE:

Octodon degus (Molina, 1782) [= *Octodon degus degus* (Molina, 1782)] (degu). Parasite: *Linguatula serrata* (nymphs).

RODENTIA: MYOMORPHA: MUROIDEA: CRICETIDAE: SIGMODONTINAE:

Necromys lasiurus (Lund, 1840) [= *Zygadontomys pixuna* Moojen, 1943] (hairy tailed akodont). Parasites: not *Armillifer moniliformis moniliformis* [wrong identification]; *Porocephalus crotali* (nymphs causing larval pentastomiasis).

Oryzomys palustris (Harlan, 1837) (marsh oryzomys; rice rat). Parasite: *Porocephalus crotali*.

Oxymycterus rufus (Fischer, 1814) [= *Hesperomys rufus* Fischer, 1814] (rufous hocicudo). Parasite: *Kiricephalus coarctatus.*

Thaptomys nigrita (Lichtenstein, 1829) [= *Akodon fuliginosus* (Wagner, 1845); *Akodon nigrita* (Lichtenstein, 1829)] (blackish grass mouse; Brazilian field mouse; ebony akodont; "rato-do-mato"). Parasite: *Porocephalus crotali* (larvae).

Wiedomys pyrrhorhinos (Wied Neuwied, 1821) [= *Mus pyrrhorhinos* Wied Newied, 1821; *Oryzomys pyrrhorhinus* (Wied Newied, 1821); *Rhipidomys pyrrhorhinus* (Wied Newied, 1821)] (Brazilian field mouse; red-nosed wiedomys). Parasite: *Porocephalus crotali* (larvae in liver).

RODENTIA: MYOMORPHA: MUROIDEA: MURIDAE: DEOMYINAE:

Acomys (*Acomys*) *cahirinus* É. Geoffroy, 1803 [= *Acomys cahirinus* É. Geoffroy, 1803] (northeast African spiny mouse). Parasite: *Linguatula serrata* (nymph in liver).

RODENTIA: MYOMORPHA: MUROIDEA: MURIDAE: GERBELLINAE:

Meriones (*Pallasiomys*) *unguiculatus* Milne-Edwards, 1867 [= *Meriones unguiculatus* Milne-Edwards, 1867] (Mongolian jird; gerbil). Parasite: *Linguatula serrata* (nymphs).

RODENTIA: MYOMORPHA: MUROIDEA: MURIDAE: MURINAE:

Bandicota indica (Bechstein, 1800) [= *Nesocia bandicota* (Bechstein, 1800)] (greater bandicoot-rat). Parasite: *Linguatula serrata* (intermediate host).

Mus (Mus) musculus domesticus Schwarz & Schwarz, 1943 [= *Mus domesticus* Schwarz & Schwarz, 1943] (west European mouse). Parasites: *Linguatula serrata* (larvae); *Porocephalus crotali* (larvae); *P. stilesi* (experimentally infected host).

Mus (*Mus*) *musculus musculus* Linnaeus, 1758 [= *Mus musculus* Linnaeus, 1758] (east European house mouse). Parasites: *Porocephalus clavatus*; *P. crotali.*

Rattus G. Fischer, 1803 sp. Parasite: *Porocephalus crotali.*

Rattus leucopus (Gray, 1867) [= *Rattus leucopus cooktownensis* Tate, 1951] (Cape York rat; native rat). Parasites: *Armillifer australis* (encysted nymphs in body cavity); *A. moniliformis moniliformis*

Rattus norvegicus (Berkenhout, 1769) [= *Mus norvegicus* Berkenhout, 1769] (brown Norwegian rat; brown rat; surmulot). Parasites: *Linguatula serrata* (nymph); *Porocephalus stilesi* (host infected experimentally).

Rattus rattus (Linnaeus, 1758) [= *Mus fuliginosus* Bonaparte, 1833; *Mus rattus* Linnaeus, 1758] (black rat; roof rat). Parasites: *Armillifer armillatus* (young forms); *Linguatula serrata* (nymph); *Porocephalus crotali* (larvae in thoracic and abdominal cavity).

Rattus tiomanicus (Miller, 1900) (Malaysian field rat; wood rat). Parasite: *Armillifer* sp.

RODENTIA: MYOMORPHA: MUROIDEA: NESOMYIDAE: CRICETOMYIDAE:

Cricetomys gambianus Waterhouse, 1840 (Gambian pouched rat; northern giant pouched rat). Parasite: *Armillifer armillatus* (young stages).

RODENTIA: SCIUROMORPHA: SCIURIDAE: XERINAE: XERINI:

Xerus (Euxerus) erythrophus erythrophus Desmarest, 1817 [= *Xerus erythrophus* Desmarest, 1817] (red-footed ground-squirrel; striped ground-squirrel). Parasite: *Armillifer armillatus* (young stages).

SCANDENTIA: TUPAIIDAE:

Tupaia glis (Diard, 1820) (common tree shrew). Parasite: *Armillifer moniliformis moniliformis.*

SORICOMORPHA: SORICIDAE: CROCIDURINAE:

Crocidura fuliginosa fuliginosa (Blyth, 1855) [= *Crocidura fuliginosa* (Blyth, 1855)] (sooty shrew; southern Asian shrew). Parasite: *Porocephalus crocidurae* (nymph in peritoneum).

TUBULIDENTATA: ORYCTEROPODIDAE:

Orycteropus afer aethiopicus Sundevall, 1843 [= *Orycteropus aethiopicus* Sundevall, 1843] (aardvark, an edentate). Parasite: *Armillifer armillatus* (young forms).

Synthesis of pentastomes and pentastomiasis

Pentastomes in insects; Four species of *Raillietiella* are known from four species of insects (three conchroaches and one scarabeid coleopteran).

Pentastomes and pentastomiasis in fish; Fish do not harbor adult pentastomes, but they are common intermediate hosts for pentastome species of crocodilians and piscivorous chelonians, and rarely for some pentastomes of snakes (Paré, 2008). Species so far known from fish hosts are *Sebekia mississippiensis*, *S. oxycephalum, Subrtriquetra subtriquetra, S. rileyi, Leiperia cincinnalis, L. gracilis, Kiricephalus pattoni, Raillitiella* sp. and *Alofia* sp. Fish become infected when ingesting infective ova. Primary larvae migrate to viscera, muscles, swim bladder, or other tissues of the infected fish to encyst and develop into nymphs. The parasite burden may even kill the fish, especially small species. Fish may also be a source of infection for captive crocodilians (Paré, 2008).

The mosquitofish *Gambusia affinis affinis* showed a mild inflammatory response to developing nymphs of *Sebekia mississippiensis*, whereas the swordtails *Xiphophorus helleri* were observed to present an extensive granulomatous inflammatory reaction accompanied with granulomatous hemorrhage, myositis, and myodegeneration when infested with nymphs of this species (Boyce et al., 1987). Four African dwarf crocodile hatchlings in a zoological collection all died acutely of *Sebekia mississippiensis* infection when fed with bait fish harbouring nymphs (Adams et al., 2001).

In the atypical case of *Subtriquetra* species, fish become infected by transcutaneous penetration of primary larvae (Riley, 1986). The primary larvae is free-living only in this genus of pentastome, and they attach to the skin of passing fish by means of specialized hooks located at their caudal end (Riley, 1986). Larvae of *Subtriquetra* consequently appear to be particularly more detrimental to fish than those of other crocodilian pentastomes (Paré, 2008).

Pentastomes in amphibians; Species of *Raillietiella* infect the lungs of bufonid toads as adults, and use coprophagous insects, such as cockroaches, as intermediate hosts (Barton & Riley, 2004). Infection with adult pentastomes has yet to be documented in anurans other than bufonids, such as urodeles and caecilians (Paré, 2008). Cane toads, *Rhinella marina*, introduced in Hawaii, have become infected with *Raillietiella indica* and *R. hebitihamata*. Infection with *R. indica* and *R. rileyi* occurs in the black-spined toad, *Duttaphrynus melanostictus*, from southeast Asia (Paré, 2008). *R. bufonis* is reported only from the Puerto Rican crested toad, *Peltophryne lemur* (Barton & Riley, 2004). Larvae of *R. mediterranea* were found in *Amietophrynus mauritanicus* (Nicole, 1963). *Raillietiella freitasi* was identified in the lungs of *Rhinella schneideri* in Brazil (Almeida et al., 2006b). Pentastome ova, likely *Raillietiella*, were also observed in the feces of a captive *Rhaebo blombergi* (Paré, 2008).

On the other hand, several Australasian and Neotropical frogs and toads are the first of a series of intermediate hosts for *Kiricephalus pattoni*, the adults of which are found in the lungs of snakes (Riley, 1986). Finally, species of *Waddycephalus* and probably other pentastome genera (perhaps *Elenia*) may also cycle through frogs (Paré, 2008).

Pentastomes and pentasomiasis in reptiles; Reptiles are the most frequent definitive hosts of pentastomes. Crocodiles, some piscivorous chelonians, lizards, and the larger and constricting snake species, are affected (Paré, 2008). Infection of definitive hosts with more than one pentastome species is possible (Almeida et al., 2007).

Pentastomes are hematophagous, and, although anemia would be suspected in heavily parasitized reptilian hosts, this has yet to be documented. Morbidity is often associated with larval and nymphal migration and moulting, and by damage inflicted to the pulmonary lining by the hooks and mouth of feeding adults that often lead to secondary bacterial or fungal pneumonia and possible septicemia (Paré, 2008).

Crocodilians are host to six genera of pentastomes, all of which likely use fish as intermediate hosts (Paré, 2008). *Agema* is found in African dwarf crocodiles, *Osteolaemus tetraspis,* and slender-snouted crocodiles, *Mecistops cataphractus*. Species of *Alofia* infect African and Australasian crocodiles, gharials, *Gavialis gangeticus*, in India, and caimans in the Neotropics. *Leiperia* species are found in African and South American crocodiles and in both freshwater *Crocodylus johnsoni* and saltwater *C. porosus* in Australia. Females infect the bronchi, but males and immature parasites are found in the large vessels (aorta, pulmonary artery) of the heart. The monotypic *Selfia porosus* is a parasite of saltwater crocodiles in Australia. The genus *Sebekia* includes 15 species found in crocodilians worldwide. *Sebekia mississippiensis* and *S. oxycephalum* occur in North American alligators, *Alligator mississippiensis* (Junker & Boomker, 2006).

Subtriquetra subtriquetra is a parasite of spectacled caimans, *Caiman crocodilus,* and black caimans, *Melanosuchus niger*, whereas *S. megacephala* and *S. shipleyi* are found in muggers, *Crocodylus palustris*, and possibly other Indomalayan crocodilians (Junker & Boomker, 2006).

Pentastomids are more likely to cause clinical disease and pathology in captive reptiles, possibly because of stress. Pentastome infection are known to impact crocodile and alligator farming operations (Buenviaje et al., 1994; Ladds et al., 1995; Jacobson, 2007) because hatchling and young crocodilians appear more susceptible to disease (Adams et al., 2001).

Regarding Chelonia, carnivorous (piscivorous) turtles may be definitive hosts to pentastomes in two monotypic genera of pentastomes (Paré, 2008). *Diesingia* has been described from two Neotropical Chelidae, Geoffrey's toad-headed, or side-necked, turtle, *Phrynops geoffroanus*, and the Argentine snake-necked turtle, *Hydromedusa tectifera* (Junker et al., 2003). *Pelonia africana* infects the African helmeted turtle, *Pelomedusa subrufa subrufa,* and the serrated mud turtle, *Pelusios sinuatus* (Junker & Boomker, 2002). Snapping turtles, *Chelydra serpentina,* are experimentally and probably naturally susceptible to infection with *Sebekia oxycephalum*, a parasite of alligators (Riley, 1986).

Lacertilia may serve as definite or intermediate pentastome hosts. Most of the 41 species-level taxa of *Raillietiella* are relatively small and infect lizards (Paré, 2008). Infective nymphs are encysted in the fat bodies or on the surface of the viscera of insect intermediate hosts and insectivorous lizards such as geckos, skinks, teiids, agamas, chameleons, bearded dragons, while amphisbaenid worm lizards are definitive hosts (Riley, 1986). Imported gecko species, such as tokays, *Gekko gecko gecko*, and Mediterranean house geckos, *Hemidactylus turcicus turcicus*, are also commonly diagnosed with infections by species of *Raillietiella. Sambonia* species are found in both African and Asian varanid lizards, including the Komodo dragon, *Varanus komodoensis*. Pentastomes in the

genus *Elenia* are also adapted to monitor lizards (*Varanus*). The life cycles of both genera involve terrestrial vertebrates (Riley, 1986).

Ophidia are definitive hosts for many pentastomes but may also serve as intermediate hosts. Elapids (e.g., cobras, mambas), viperids (e.g., Gaboon vipers, rhinoceros vipers), and crotalids (e.g., rattlesnakes, cottonmouth) are common definitive hosts, and most of these animals in private or zoological collections are wild-caught, potentially infected specimens. Large pythons and boas are also well represented among ophidian definitive hosts (Paré, 2008).

Cephalobaena tetrapoda infects the lungs of Neotropical snakes, mostly viperids and crotalids. The cephalothorax is unmistakable, looking like an open hand (Almeida et al., 2006a), but intermediate hosts remain unknown.

Raillietiella bicaudata infects various colubrids in North America (Cosgrove et al., 1984). Thus snakes are included among definitive hosts, even though most species of *Raillietiella* are found in lizards (Paré, 2008).

Pentastomes may be translocated with their hosts to new geographical areas, and may then cross-infect new host species (Paré, 2008). This is best illustrated by Asian house geckos, *Hemidactylus frenatus,* introduced to Hawaii in the 1940s, which likely harbored *Raillietiella hebitihamata*. Subsequently, *R. hebitihamata* infected mourning geckos and brown anoles, *Norops sagrei,* having been found on the islands (Barton & Riley, 2004). Asian house geckos introduced to Australia have also been shown to be infected with *R. hebitihamata* (Barton, 2007).

Morbidity and mortality associated with progressive pneumonia from infection with adult *Raillietiella* were described in wild geckos located in Nigeria, suggesting that pentastomes may act as regulators of wild reptile populations under certain circumstances (Riley, 1986).

Imported wild-caught reptiles in private and zoological collections may also develop overt disease from pentastome infection. This was the case in Bosc's monitor lizards, *Varanus exanthematicus*, parasitized by a *Sambonia* species (Ladds et al., 1995; Flach et al., 2000; Paré, 2008).

Kiricephalus pattoni of Southeast Asia and *K. coarctatus* from the Americas are the two best known of the five species in the genus, all having a distinctive knob-head cephalothorax (Riley & Self, 1980). Indigo snakes, *Drymarchon corais corais* in the eastern United States are commonly infected with *K. coarctatus* (Jacobson, 2007), which is also found in other North American colubrids (e.g., *Thamnophis* spp., *Nerodia* spp., *Masticophis* spp.) (Cosgrove et al., 1984). All *Kiricephalus* species infect snakes, with the adults primarily located in the lungs, but they are occasionally found beneath the skin and other unusual locations. The eggs are infective to frogs, lizards, and mammals (Paré, 2008). Smaller snakes are the second intermediate hosts, and ophiophagous snakes are definitive hosts (Riley & Self, 1980).

Species of *Porocephalus* are restricted to American snakes. *Porocephalus crotali* in the United States is a common parasite of rattlesnakes, cottonmouths, *Agkistrodon piscivorus*, and copperheads, *Agkistrodon contortrix mokasen,* with rodents acting as intermediate hosts (Cosgrove et al., 1984). *Porocephalus clavatus* infects Neotropical boas and uses mammals such as callitrichid and cebid monkeys as intermediate hosts. *Porocephalus subuliferum* is found in the ophiophagous African file snakes, genus *Gonionotophis* (Riley, 1986).

Up to 100 adult *Porocephalus crotali* were recovered from the lung of a wild, apparently healthy rattlesnake (Riley, 1986). Infection of wild reptiles with pentastomes, even with large worm burdens, is generally subclinical (Paré, 2008).

Species of *Armillifer* are important parasites of snakes. They cycle through a number of mammalian prey species, but also accidentally infect nonprey species. Their body is cylindrical and conspicuously annulated. They are involved in most cases of human nymphal pentastomiasis (Paré, 2008).

The two *Cubirea* species are known mostly from African cobras, and possibly vipers, with birds most likely serving as intermediate hosts (Riley, 1986).

The monotypic *Gigliolella brumpti* infects the imported Madagascan tree boa, *Sanzinia madagascariensis madagascariensis*, causing pneumonia and death, and cycles through three species of Madagascan mammals, including lemurs (Slocombe & Budd, 1973; Riley, 1986).

The genus *Waddycephalus* consists of 10 species found in Australian snakes, although at least one species is reported from Southeast Asia and Oceania (Riley & Self, 1981a). Elapids are well represented among host species, in particular Australian copperheads, *Austrelaps superbus*, tiger snakes, *Notechis scutatus scutatus*, and red-bellied black snakes, *Pseudechis porphyriacus porphyriacus* (Riley & Self, 1981a). Mammals, lizards, and frogs may act as intermediate hosts (Riley, 1986).

The two *Parasambonia* species are restricted to Australian elapids, mostly red-bellied black and tiger snakes (Riley & Self, 1982). Intermediate hosts may also be mammals, lizards, or frogs (Riley, 1986).

Pentastomes in birds; Birds are often overlooked as hosts of pentastomid parasites, although infection of sea birds with species of *Reighardia* has long been described (Riley, 1986; Hoberg, 1987). *Reighardia sternae* is found in the air sacs of gulls, terns, and other larids, as well as skuas (Hoberg, 1987), whereas *R. lomviae* is found in guillemots, puffins, and other alcids (Riley, 1986). Both parasites appear to have a cosmopolitan distribution. Adult females of *Reighardia* are elongate and slender (7-8 cm) and have a particular knobby appearance imparted to them by tubercles on the cuticle (Riley et al., 2003). In this genus, the life cycle is direct, and transmission probably occurs through ingestion of vomited material, feces, or through regurgitation of food from parents to nestlings. Autoinfection also occurs, which is rare in pentastomids. Female *R. sternae* die shortly after laying ova, rather than laying eggs continually as do other species of pentastomids (Paré, 2008). *Reighardia sternae* infects mostly juvenile gulls, whereas *R. lomviae* is found in alcids of all ages, although clinical signs or morbidity have not been described (Riley, 1986). *Reighardia* was the only pentastome genus described from birds until *Raillietiella trachea* was recovered from the trachea of a single fledgling oriental white-backed vulture in Pakistan, *Gyps bengalensis* (Riley et al., 2003). Since then, *Hispania vulturis* was created to accommodate pentastomes collected from the air sacs of an injured Eurasian black vulture in Spain, *Aegypius monachus* (Martínez et al., 2004). The true prevalence of these two pentastomes in Old World vultures is unknown, and no signs were attributed to the parasites, which are small, and may thus be easily overlooked (Paré, 2008).

Birds are rarely involved as intermediate hosts for pentastomes, but encysted *Cubirea annulata* has been cited in the crane, *Grus virgo* (Shipley, 1898), while larvae of *C. pomeroyi* have been cited in the same host by Heymons (1940b), and nymphs of both

species have been described from a water hen, or gallinule, *Porphyrio* sp., in Africa (Riley, 1986). There are also occurrences of larvae of *Leiperia gracilis* in the blue heron, *Ardea cocoi* (Rego, 1984a), of *Armillifer armillatus* in the spotted eagle-owl, *Bubo africanus* (Heymons, 1940b) and in the honey-buzzard, *Pernis apivorus* (Natvig, 1932), and of *Linguatula serrata* in the nymph knots of the sea-gull, *Larus* (Bogdaschew, 1930).

Pentastomes and pentastomiasis in non-human mammals; Mammals are common intermediate hosts for many ophidian pentastomes (Paré, 2008). No less than seven species and subspecies of *Armillifer*, six of *Linguatula*, five of *Porocephalus*, two of *Sebekia*, two of *Kiricephalus*, as well as *Leiperia gracilis*, *Reighardia sternae*, *Yelirella petauri*, *Neolinguatula nuttalli*, *Gigliolella brumpti* and *Waddicephalus* sp. were registered above.

Yelirella petauri, the smallest known adult pentastome (1.5 mm long), likely has a direct life cycle and is a parasite of sugar gliders in Australia, *Petaurus breviceps breviceps* (Spratt, 2003). All adult male *Yelirella petauri* was found in the lungs, while females were found in the nasal sinuses (Paré, 2008).

Mammals are also definitive hosts for six species in the genus *Linguatula*, five of them parasites of carnivores (Riley, 1986). Among the *Linguatula* species is *L. nuttalli*, found in the nasal passages of African lions, *Panthera leo leo,* and leopards, *P. pardus*. It cycles through the wild artiodactylid ungulates on which the felines prey. *Linguatula arctica* is a parasite of semidomesticated reindeer, *Rangifer tarandus tarandus,* in Scandinavia, and is the only known pentastome to use a herbivore as a definitive host (Riley, 1986). Worms are found in the nasopharynx, nasal cavities, and sinuses of calves and young animals. Infection in reindeer appears to be self-limiting over the course of two years (Riley, 1986). The life cycle is still unresolved, but probably involves ingestion of infective ova by young calves grazing on pasture contaminated by second-year subadult reindeer (Paré, 2008). Lions have harbored up to 75 adult 7-cm-long *Linguatula* in their nasal passages and sinuses (Riley, 1986). Notwithstanding, how heavy worm burdens impact host health remains unknown (Paré, 2008).

Pentastomes and pentastomiasis in man; The most common infective stages of the pentastomids in man include the primary and third-stage larva. Humans become infected by ingestion of eggs contained in respiratory secretions, blood, saliva, or feces of the definitive hosts. The primary larvae penetrate the gastrointestinal tract of the intermediate host, migrating and encysting in various host tissues. The third-stage larvae can also encyst and migrate. Exclusive involvement of the heart has also been reported previously. The severity of human visceral pentastomiasis may vary, although this stage is usually asymptomatic; humans are usually highly tolerant to pentastomid infections (Abadi et al., 1996). Pentastomids in humans may assail the respiratory tracts, liver, pancreas, intestine, and lymphatic vessels, mainly in the form of encysted nymphs (Self et al., 1975; Riley, 1986. Although most visceral infections produce few or no symptoms, severe infestation has caused intestinal obstruction, pneumoanitis, meningitis, pericarditis, nephritis, peritonitis, obstructive jaundice and even death (Mapp et al., 1976). Pentastomiasis is usually an incidental finding in an autopsy, a radiological examination, or during a surgical intervention (Abadi et al., 1996). Thus only some parasites pose a risk to man, who can act as intermediate host (Adeoye & Ogunbanwo, 2007).

Man is only rarely infected by adult pentastomids. The most severe medical cases involve *Linguatula serrata*. This is the only species that infects man as adults, causing respiratory pentastomiasis. *Linguatula serrata* is a cosmopolitan parasite whose interme-

diate hosts are humans and other mammals but are often herbivores such as cattle, goats, sheep, and other ruminants that have ingested parasite eggs contained in contaminated plants (Alcala-Canto et al., 2007). Infective nymphs are typically found in mesenteric and bronchial lymph nodes, liver, and kidney (Paré, 2008). Adult worms are found in the nasal cavities, frontal sinuses, and tympanic cavity of dogs, wolves, foxes, jackals, and other canids (Riley, 1986; Drabick, 1987; Bowman, 1995; Alcala-Canto et al., 2007).

This pentastome is responsible for most cases of human pentastomiasis in which the life cycle does not involve reptiles (Paré, 2008). Linguatulosis is an infection that affects most ruminants during its larval stages. When affecting human beings, the pathophysiological complications involving larval linguatulosis most likely include invasion of the liver tissue. A major protease secreted by the larval stage of *L. serrata* exhibits properties to degrade the extracellular matrix, which may facilitate invasion of the intermediate host tissue (Alcala-Canto et al., 2007). In endemic areas, humans become infected by domestic dogs. Ova expelled by sneezing, in nasal discharge, or possibly in the feces, may contaminate food, fingers, and water sources. When ingested, eggs hatch and primary larvae exit the digestive tract to encyst on viscera, thus causing visceral linguatulosis. Larvae will sometimes lodge in the anterior chamber of the eye and cause uveitis, but visceral linguatulosis is usually associated with minimal symptoms or pathology (Paré, 2008).

Nasopharyngeal linguatulosis, on the other hand, can manifest much more dramatically, occurring when humans ingest raw or undercooked viscera, such as sheep, goat and camel liver, containing encapsulated infective nymphs. Third-stage larvae of *L. serrata* are responsible for a self-limited nasopharyngitis known as Marrara in Sudan or Halzoun syndrome in Lebanon (Khalil & Schacher, 1965; Abadi et al., 1996). Schacher & Biaggi (1966) found nymphs of *L. serrata* in goats in Mexico, thus indicating a propitious condition for the incidence of pentastomiasis in arid regions of Latin America. The infected nymphs encyst in the stomach and quickly migrate up the esophagus and pharynx. An acute and sometimes fatal condition is characterized by nausea, vomiting, dyspnea, sneezing, coughing, dysphagia, and edematous congestion of the pharynx (Khalil & Schacher, 1965). Linguatulosis is exacerbated in humans with prior exposure to the parasite (Riley, 1986; Drabick, 1987; Paré, 2008). A fatal human case caused by *L. serrata* was reported for Lièvre (Lucas et al., 1957).

Nymphal parasitism, on the contrary, is not rare in man (Fain, 1975). Visceral pentastomiasis is caused mainly by *Linguatula serrata* and *Armillifer armillatus.*

In Africa the larva most commonly parasitic in man is that of *A. armillatus* (the adult form of which is parasitic in the lungs of pythons and big vipers) and the cysts are usually located in the abdominal viscera, particularly the liver and omentum, but sometimes in the lung and other organs (Alcock, 1923). The third stage of *A. armillatus* may cause diverse clinical manifestations in humans, including intestinal obstruction, pneumonitis with lobar collapse of the lung, bile duct blockage, meningitis, and even prostatitis (Symmers, 1957). In man the infestation results generally from the consumption of contaminated pond water or food infected by feces or lung mucus of snakes or carnivores, more rarely by eating infected snake meat (Fain, 1975).

Both *Linguatula serrata* and *Armillifer armillatus* can invade the subconjuntiva and reach the anterior chamber of the human eye (Rendtorff et al., 1962; Abadi et al., 1996).

Ocular localization of *Armillifer armillatus* has been reported in a boy in Liberia (Gratama & Thiel, 1957) and in a woman in Ecuador (Lazo et al., 1999).

A source of pentastomiasis is the ingestion of slightly cooked snakes and lizards in West Africa and southern Asia, provoked by species of *Porocephalus* and *Armillifer* (Self et al., 1975). In South America, pentastomiasis is usually associated with the subsistence strategy of eating a variety of small lizards in destitute populations in northeast Brazil and Colombia (Gast-Galvis, 1960). In arid regions of West Africa and Brazil pentastomiasis may also be associated by water contamination by infected serpents (Self et al., 1975; Faria & Travassos, 1913a, b). There is thus a correlation between socioeconomical factors and the occurrence of pentastomiasis: poor populations in semi-arid regions of Western Africa and the Americas are especially prone to this disease (Almeida et al., 2005).

Besides the two most common species causing pentastomiasis in man, *Linguatula serrata* and *Armillifer armillatus*, another nine species have been recorded as producing visceral pentastomiasis in man by action of their larval stages (J.K. Baird et al., 1988; Mairena et al 1989; Junker, 2002).

Armillifer moniliformis moniliformis, occurring as adults in African and Asian pythons, has been reported in man by Herzog & Hare (1907, as *Pentastomum constrictum*), Waldow (1908, 1910), Sambon (1909), Faust (1927), Fain (1975), C.P. Qiu et al. (2004), Tappe & Büttner (2009), and Latif et al. (2011). *Armillifer grandis* is another parasite of the lungs of African pythons and vipers, having been reported as nymphs in the lungs of man by Fain (1961b, 1975), Fain & Salvo (1966), Ette et al. (2003), M.H. Qiu & Jiang (2007), and Tappe & Büttner (2009), and includes a case of lethal pentastomiasis (Cagnard et al., 1979). A disease report case of visceral pentastomiasis in China and Taiwan was reported for *Armillifer agkistrodontis* (Q.Y. Zhang et al., 1996), whose life cycles include snakes as adult hosts and mice, rats and primates as intermediate hosts (Chen et al., 2010; Mätz-Rensing et al., 2012).

Most *Armillifer* spp. infections are acquired when undercooked snake meat is consumed, but may also involve ingestion of water contaminated with snake feces. Humans become accidental intermediate hosts. Infective nymphs exit the digestive tract and develop in the liver, mesentery, and intestinal wall (Riley, 1986). The initial phase of the disease is typically transient, but may be associated with pyrexia and colic, yet usually goes undiagnosed. Humans are dead-end hosts and nymphs, even if longlived, eventually die and calcify so that infection is often identified serendipitously through examination of abdominal radiographs or during a postmortem examination. A recent case of pentastomiasis was described in one woman in China in whom nymphs were recovered from her diarrheic feces (M.H. Qiu et al., 2005).

Although pentastomes carry strong zoonotic potential, among those parasitizing reptiles, only species of *Armillifer* have been unquestionably associated with accidental human infections (Paré, 2008). Basic hygiene dictates that feces and other biological material from reptiles should be handled with sanitary precautions, but it is emphasized that zoonotic implications for practically all of the non- *Armillifer* pentastomes encountered in captive or wild reptiles remain unsubstantiated (Paré, 2008).

Raillietiella affinis occurs in Africa and the aetiology of human porocephalosis by first larvae was discussed by Awachie (1974). Ingestion of live lizards for therapeutic reasons by humans in southeast Asia was linked to subsequent subcutaneous pentasto-

mid infection called "creeping disease" and was tentatively attributed to *Raillietiella hemidactyli* (Dollfus & Canet, 1954; Drabick, 1987). Man can be infected with *Raillietiella* sp., by having their hands contaminated from the faeces or salive of the reptile, and accidentally ingesting the eggs (Nash, 2005). This pentastome may cause localized inflammation and intestinal infection in humans. Handling faecal contaminated water, dishes, and other equipment may also result in accidental transmission. Usually, there are no clinical signs; however, some people may develop localized inflammation. The larvae can encyst in various tissues, causing abdominal pain, vomiting, constipation, diarrhea, and a tender abdomen (Adeoye & Ogunbanwo, 2007). In isolated cases, septicemia may occur (Nash, 2005).

Porocephalus subuliferum, which as an adult is a parasite of certain African snakes, has been reported in man by Sambon (1922). *P. taiwana*, described from Taiwan on the basis of the morphology of the nymphs, causes porocephalosis taiwana in humans. Excystation of the nymphs was hypothesized to explain their presence in the feces, although there were no adult specimens to examine (M.H. Qiu et al., 2005). *Porocephalus crotali*, a parasite of rattlesnakes in America, has been doubtfully attributed as causing visceral pentastomiasis in man (Sambon, 1922a).

Recently a specific enzyme-linked immunoabsorbent assay (ELISA) based on isolates from the frontal glands of *Porocephalus crotali* has been used for the detection of pentastomid infections in intermediate hosts, specifically in rats (Abadi et al., 1996). These studies suggest that the ELISA can be readily adapted for serodiagnosis of human pentastomiasis (Jones & Ridley, 1991, Abadi et al., 1996).

Leiperia cincinnalis lives as an adult in the lungs of African crocodiles. The nymphs have been found in the connective tissue enveloping the intestine or in the muscles of various fishes. A nymph of this species was found in the feces of a European woman in Zaire (Fain, 1960, 1961). This patient has probably become infected by eating fish harbouring this larva. This case of parasitism was considered, therefore, to be purely accidental (Fain, 1975).

The last species reported for humans is *Sebekia* sp. A nymph of this unidentified species was recovered from a dermatitic lesion in a Costa Rican woman (Mairena et al., 1989).

Systematic discussion

Our review lists 144 recent species and subspecies of Pentastomida, which complements the 124 species accounted for in Poore (2012a). In part the higher number obtained herein reflects the inclusion of subspecies and doubtful species which have still not been synonymized with other taxa. On the other hand, some species added here were inadvertedly overlooked in the nomenclatural review of Poore (2012a). The detailed nomenclatural research invested in the previous review has been used as a baseline for contendious taxonomical issues, even though the paper was only published after our own review was completed and sent out for publication. The review process has served as an opportunity to reconsider many initial disagreements and contradictions in the final text.

Although this review is primarily an overview of the existing taxonomy of the group, we are interested in advancing phylogenetic insights for the clade Pentastomida.

We thus rely and summarize the very few phylogenetic approaches available for the group, including some of the results obtained in an unpublished a thesis work available online (Junker, 2002). The preliminary cladistic results on the Sebekidae presented in this landmark contribution unfortunately have not been published to date. Even though we have not gone so far as to present a complete phylogeny for group, we have been able to interpret some of the data used in traditional pentastomid taxonomy as hypothetical apomorphies. Apomorphic characters represent a phylogenetically informative portion of traditional diagnostic characters, and thus are not only valid, but scientifically preferable, for the diagnoses of taxa. We have thus used apomorphies not only to diagnose the hypothetical clades in the system, but also to present preliminary diuagrams on the tentative phylogenetic relationships existing among the resulting taxa.

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References

Heymons (1935) listed 218 references. Hill (1948) gathered 388 references, and Self (1969), 955. This list contains 1,465 references for Pentastomida.

Several older references to pentastomids appearing in works of general zoology, general, animal or human parasitology, faunal lists, parasite lists, checklists, many of which appear in Self (1969) and Riley (1986), are not cited below unless explicitly confirmed by us as citing formal taxa of Pentastomida.

It is not uncommon that some papers are press-released or distributed some time after their cover dates, sometimes years later, without clear clues of this in the published articles. Because determining the true availability date of a publication may be crucial for settling priority disputes over names, some authors have strived to give the correct date in their references, but the evidence for this is not always put clearly forward in print, unless a particular priority decision is in focus. We have usually provided the latest publication year when more than one date is listed in the literature, under the assumption that the authors indicating a year other than the printed publication

date in a published paper have had some indication that the paper was published in a year other than that indicated. On the other hand, we have accepted the authoritative conclusions of Poore (2012a) on the correct publication dates of papers when these are explicitly discussed in his text.

Abadi, M.A., G. Stephney & S.M. Factor, 1996. Cardiac pentastomiasis and tuberculosis: the worm-eaten heart.— Cardiovascular Patholology 5: 169-174.

Abele, L.G., W. Kim & B.E. Felgenhauer, 1989. Molecular evidence for inclusion of the phylum Pentastomida in the Crustacea.— Molecular Biology and Evolution 6: 685-691.

Abreu-Costa, N., P. Rodriguez Foronda, B. Valladares & J.C. Casanova, 2006. *Raillietiella morenoi* sp n. (Pentastomida) from *Gallotia atlantica* (Peters and Doria, 1882) (Lacertidae) in the Canary Islands.— Parasitology Research 98: 425-429. Doi: 10.1007/s00436-005-0068-9

Acha, P.N. & B. Szyfres, 2003. Pentastomiasis.— In: P.N. Acha & B. Szyfres (eds.), Zoonosis and communicable diseases common to man and animals (parasitosis), Pan American Health Organization, Scientific and Technical Publication Washington, DC: 3(580): 345-348.

Adams, L., R. Isaza & E. Greiner, 2001. Fatal pentastomiasis in captive African dwarf crocodile hatchings (*Osteolaemus tetraspis*).— Journal of Zoo and Wildlife Medicine 32: 500-502.

Adeoye, G.O. & O.O. Ogunbanwo, 2007. Helminth parasites of the African lizard *Agama agama* (Squamata : Agamidae) in Lagos, Nigeria.— Revista de Biologia Tropical 55: 417-425.

Agerth, E., 1907. Pentastomen in der Leber des Schweins.— Zeitschrift für Fleisch- und Milchhygiene 17: 391.

Ahman, R., 1962. Some aspects of parasites of east Pakistan.— Agriculture Pakistan 13: 109-114.

Ahyong, S.T., J.K. Lowry, M. Alonso, R. Bamber, G.A. Bosxhall, P. Castro, S. Gerken, G.S. Karaman, J.W. Goy, D.S. Jones, K. Meland, D.C. Rogers & J. Svavarsson, 2011. Subphylum Crustacea Brünnich, 1772.— In: Z.Q. Zhang (ed.), Animal biodiversity: an outline of higher-classification and survey of taxonomic richness. Zootaxa 3148: 164-191.

Aisen, S.O., A.D. Ugbo, A.N. Ilavbare & O. Ogunbor, 2001. Endoparasites of amphibians from southwestern Nigeria.— Acta Parasitologica 46: 299-305.

Aitken, W., 1865. On the occurrence of *Pentastomum constrictum* in the human body as a cause of painful disease and death.— In: W. Aitken (ed.), Handbook of the Science and Practice of Medicine, 4th edition, Appendix 1: 939-945. London.

Akyol, C.V., S.Z. Coskun, G. Sonmez & B. Senlik, 1995. *Linguatula serrata* infection in Bursa stray dogs and its importance from the point of public health.— Turkkiye Parazitologi Dergisi 19: 267-272.

Alcaino, H. & T. Gorma, 1999. Parasitos de los animales domesticos en Chile: 1-18.— Chile.

Alcala-Canto, Y., A. Alberti-Navarro & F. Ibarra-Velarde, 2007. Serine protease activity demonstrated in the larval stage of the pentastomid *Linguatula serrata*.— Parasitology Research 100: 1011-1014.

Alcock, A.W., 1923. Medical entomology: A retrospect. The Linguatulida or Pentastomida.— Tropical Disease Bulletin 20: 265-276.

Alessandrini, G., 1908. Contributo allo studio delle malattie parassitarie delle pecore. Nota preventiva.— Bollettino della Società Zoologica Italiana (2) 9: 392-400.

Alessandrini, G., 1929. Parassitologia dell' uomo e degli animali domestici: 1-574.— Torino.

Ali, J H. & J. Riley, 1983. Experimental life-cycle studies of *Raillietiella gehyrae* Bovien, 1927 and *Raillietiella frenatus* Ali, Riley and Self, 1981: pentastomid parasites of geckos utilizing insects as intermediate hosts.— Parasitology 86: 147-160.

Ali, J.H. & J. Riley, 1985. The distribution of cephalic sense organs in four species of *Raillietiella* (Pentastomida: Cephalobaenida).— Parasitology 90: 411-419.

Ali, J.H., J. Riley & J.T. Self, 1981. A revision of the taxonomy of the blunt-hooked *Raillietiella*, pentastomid parasites of African, South-East-Asian and Indonesian lizards, with a description of a new species.— Systematic Parasitology 3: 193-207.

Ali, J.H., J. Riley & J.T. Self, 1982a. A description of a new species of *Raillietiella* (Pentastomida: Cephalobaenida) from Egyptian lizards with a reassessment of the taxonomic status of *Raillietiella geckonis* (Diesing, 1850) Sambon, 1910 and *Raillietiella affinis* Bovien, 1927.— Systematic Parasitology 4: 169-180.

Ali, J.H., J. Riley & J.T. Self, 1982b. A revision of the taxonomy of *Raillietiella boulengeri* (Vaney and Sambon, 1910) Sambon, 1910, *R. orientalis* (Hett, 1915) Sambon, 1922 and *R. agconi* Tubangui & Masilungan, 1936 (Pentastomida: Cephalobaenida).— Systematic Parasitology 4: 285-301.

Ali, J.H., J. Riley & J.T. Self, 1982c. Amphibians as definitive hosts for pentastomids: *Raillietiella bufonis* n. sp. from *Bufo lemur* in Puerto Rico and a reassessment of *Raillietiella indica* Gedoelst, 1921.— Systematic Parasitology 4: 279-284.

Ali, J.H., J. Riley & J.T. Self, 1984a. Further observations of blunt-hooked raillietiellids (Pentastomida: Cephalobaenida) from lizards, with descriptions of three new species.— Systematic Parasitology 6: 147-160.

Ali, J.H., J. Riley & J.T. Self, 1984b. A revision of the taxonomy of pentastomid parasites (genus *Raillietiella*, Sambon, 1910) from American snakes and amphisbaenians.— Systematic Parasitology 6: 87-97.

Ali, J.H., J. Riley & J.T. Self, 1985. A review of the taxonomy and systematics of the pentastomid genus *Raillietiella* Sambon, 1910 with a description of a new species.— Systematic Parasitology 7: 111-123.

Ali-Kahn, Z. & E.J. Bowner, 1972. Pentastomiasis in western Canada: a case report.— American Journal of Tropical Medicine and Hygiene 21: 58-61.

Almeida, W.O., S.V. Brito, F.S. Ferreira & M.L. Christoffersen, 2006. [Almeida et al., 2006a] First record of *Cephalobaena tetrapoda* (Pentastomida: Cephalobaenidae) as a parasite on *Liophis lineatus* (Ophidia: Colubridae in northeast Brazil.— Brazilian Journal of Biology 66: 559-564.

Almeida, W.O. & M.L. Christoffersen, 1999. A cladistic approach to relationships in Pentastomida.— Journal of Parasitology 85: 695-704.

Almeida, W.O. & M.L. Christoffersen, 2002. Pentastomida.— In: J. Llorente-Bousquets. & J.J. Morrone (eds.), Biodiversidad, taxonomia y biogeografia de artrópodos de México: Hacia una síntesis de su conocimiento, volume 3: 187-202. Universidad Nacional Autonoma de Mexico, México.

Almeida, W.O., M.L. Christoffersen, D.S. Amorim & E.C.C. Eloy, 2008. [Almeida et al., 2008a]. Morphological support for the phylogenetic positioning of Pentastomida and related fossils.— Biotemas 21: 81-90. http://www.biotemas.ufsc.br/volumes/pdf/volume213/p81a90.pdf

Almeida, W.O., T.B.G. Costa, E.X.M. Freire & A. Vasconcellos, 2008. [Almeida et al., 2008c]. Pentastomid infection in *Philodryas nattereri* Steindachner, 1870 and *Oxybelis aeneus* (Wagler, 1824) (Squamata: Colubridae) in a caatinga of northeastern Brazil.— Brazilian Journal of Biology 68: 193-197.

Almeida, W.O., F.S. Ferreira, S.V. Brito & M.L. Christoffersen, 2006. [Almeida et al., 2006b]. *Raillietiella gigliolii* (Pentastomida) infecting *Amphisbaena alba* (Squamata, Amphisbaenidae): a first record for northeast Brazil.— Brazilian Journal of Biology 66: 1137-1139.

Almeida, W.O., F.S. Ferreira, S.V. Brito & A. Vasconcellos, 2005. Onicóforos e pentastomídeos: detalhes importantes da biodiversidade na biorregião do Araripe.— Província 21: 16-22.

Almeida, W.O., E.X.M. Freire & S.G. Lopes, 2008. A new species of Pentastomida infecting *Tropidurus hispidus* (Squamata: Tropiduridae) from Caatinga in northeastern Brazil.— Brazilian Journal of Biology 68: 199-203.

Almeida, W.O., S.C. Ribeiro, G.G. Santana, W.L.S. Vieira, L.A. Anjos & D.L. Sales, 2009. [Almeida et al., 2009b]. Lung infection rates in two sympatric Tropiduridae lizard species by pentastomids and nematodes in northeastern Brazil.— Brazilian Journal of Biology 69: 963-967.

Almeida, W.O., D.L. Sales, G.G. Santana, W.L.S. Vieira, S.C. Ribeiro, R.R.N. Alves & R.P. Nobrega, 2009. [Almeida et al., 2009a]. Prevalence and intensity of infection by *Raillietiella gigliolii* Hett, 1924 (Pentastomida) in *Amphisbaena alba* Linnaeus, 1758 and *A. vermicularis* Wagler, 1824 (Amphisbaenidae) from northeastern Brazil.— Brazilian Journal of Biology 69: 1183-1186.

Almeida, W.O., G.G. Santana, W.L.S. Vieira & I.C. Wanderley, 2008. [Almeida et al., 2008b]. Infection rates of pentastomids on lizards in urban habitats in the Brazilian northeast.— Brazilian Journal of Biology 68: 885-888.

Almeida, W.O., G.G. Santana, W.L.S. Vieira & S.C. Ribeiro, 2009. [Almeida et al., 2009c]. Rates of pulmonary infection by pentastomids in lizard species from a Restinga habitat in northeastern Brazil.— Brazilian Journal of Biology 69: 197-200.

Almeida, W.O., G.G. Santana, W.L.S. Vieira, I.C. Wanderley, E.X.M. Freire & A. Vasconcellos, 2008. [Almeida et al., 2008e]. Pentastomid, *Raillietiella mottae* Almeida, Freire and Lopes, 2008, infecting lizards in an area of caatinga, northeast, Brazil.— Brazilian Journal of Biology 68: 427-431.

Almeida, W.O., A.T. Silva-Souza & D.L. Sales, 2010. Parasitism of *Phalloceros harpagos* (Cyprinodontiformes: Poeciliidae) by *Sebekia oxycephala* (Pentastomida: Sebekidae) in the headwaters of the Cambe river, Paraná State, Brazil.— Brazilian Journal of Biology 70: 457-458.

Almeida, W.O., A. Vasconcellos, S.G. Lopes & E.X.M. Freire, 2007. Prevalence and intensity of pentastomid infection in two species of snakes from northeastern Brazil.— Brazilian Journal of Biology 67: 759-763.

Alsadi, H.I. & A.M. Ridha, 1994. Comparative pathology of the spleen and lymph-nodes of apparently normal cattle, sheep and goats at the time of normal slaughter.— Small Ruminant Research 14: 167-174.

Alvarez, V., 1960. Presencia de *Linguatula serrata* Frölich, 1789, en *Dusycion culpaeus* y de formas ninfales en *Octodon d. degus* y *Abrocama benetti*.— Boletin Chileno de Parasitologia 15: 22.

Ambrose, N.C. & J. Riley, 1998a. Fine-structural aspects of secretory processes in a pentastomid arthropod parasite in its mouse and rattlesnake hosts.— Tissue and Cell 20: 381-404.

Ambrose, N.C. & J. Riley, 1988b. Studies on the host-parasite interface during the development of a pentastomid arthropod parasite in rodent intermediate hosts, with observations on protective surface-membranes.— Tissue and Cell 20: 721-744.

Ambrose, N.C. & J. Riley, 1988c. Light microscope observations of granulomatous reactions against developing *Porocephalus crotali* (Pentastomida: Porocephalida) in mouse and rat.— Parasitology 97: 27-42.

Ambrose, N.C. & J. Riley, 1989. Further evidence for the protective role of sub-parietal cell membranous secretory product on the cuticle of a pentastomid arthropod parasite developing in its rodent intermediate host.— Tissue and Cell 21: 699-722.

American Ornitologists' Union, 2013. American Ornitologists' Union - checklist of North American birds. Web page: http://www.aou.org/checklist/north/index.php. Seen 4-1-2013.

AmphibiaWeb Database, 2012. AmphibiaWeb database. American Museum of Natural History. Web page: http://research.amnh.org/vz/herpetology/amphibia. Seen 29-3-2012.

Amy, D., P. Ranque, G. Discamps, A. Rougemont & M. Quilici, 1974. Pentastomid infestation in man.— Médicine Tropicale 34: 273-278.

Ancelle, T., P. Daireaux, F. Chemoul & J. Lapierre, 1988. A case of porocephaliasis revealed by ultrasonography during evaluation of hepatic amebiasis.— Presse Medicale 17: 437.

Anciaux de Faveaux, M. (see Faveaux, M.A. de)

Anderson, C., 1992. Classification of organisms: living & fossil: 1-69.— Golden Crowns Press, Lancaster, Ohio.

Anderson, W.B. & S. Roberts, 1962a. An unusual case of human porocephaliasis.—American Journal of Ophthalmology 54: 138-139.

Anderson, W.B. & S. Roberts, 1962b. An unusual case of human porocephaliasis.— Transactions of the American Academy of Ophthalmology and Otolaryngology 66: 96-98.

Andres, D., 1989. Phosphatisierte Fossilien aus dem unteren Ordoviz von Südschweden.— Abhandlungen der Berliner Geowissenschaftliche A 106: 9-19, pls. 1-3.

Andrews, C.L., W.R. Davidson & E.E. Provost, 1980. Endo-parasites of selected populations of cottontail rabbits (*Sylvilagus floridanus*) in the southeastern United States.— Journal of Wildlife Diseases 16: 395-401.

Anemaet, J.P.W., 1948. Levende pentastomen in de mesenteriale lymphklieren van een rund.— Tijdschrift voor Diergeneeskunde 73: 366.

Anjos, L.A., W.O. Almeida, A. Vasconcellos, E.M.X. Freire & C.F.D. Rocha, 2007. The alien and native pentastomids fauna of an exotic lizard population from Brazilian northeast.— Parasitology Research 101: 627-628.

Anjos, L.A., W.O. Almeida, A. Vasconcellos, E.M.X. Freire & C.F.D. Rocha, 2008. Pentastomids infecting an invader lizard, *Hemidactylus mabouia* (Gekkonidae) in northeastern Brazil.— Brazilian Journal of Biology 68: 611-615.

Anjos, L.A., & C.F.D. Rocha, 2008. The *Hemidactylus mabouia* Moreau De Jonnes, 1818 (Gekkonidae) lizard: an invasive alien species broadly distributed in Brazil.— Natureza & Conservação 6: 196-207.

Anonymous, 1922. The Linguatulidae as parasites of man.— Journal of Tropical Medicine and Hygiene 25: 389-390.

Arandas Rego, A. (see Rego, A.A.)
Ardran, G.M., 1948. *Armillifer armillatus*. A note on three cases of calcification of the cysts in man.— British Journal of Radiology New Series 21: 342-345.
Arnaud, L. & C.E. Joyeux, 1921. Note sur un arachnide vermiforme, parasite de l'intestin de l'homme, *Porocephalus armillatus* Wyman (Linguatulidae).— Bulletin de la Société des Sciences Naturelles et Physiques du Maroc 1: 25-27.
Arneberg, P., I. Folstad & A.J. Karter, 1996. Gastrointestinal nematodes depress food intake in naturally infected reindeer.— Parasitology 112: 213-219.
Arroyo, R., M. Vargas & S. Santamaria, 1986. Pentastomiasis in Costa Rica caused by *Linguatula serrata* and its differential disanosis from *L. recurvata*.— Revista Latinoamericana de Microbiologia 28: 157-166.
Austin, J.H. & J.R. Carpenter, 1914. Larva of *Linguatula rhinaria* recovered from human feces.— Proceedings of the Pathological Society of Philadelphia, New Series 16: 56.
Avibase, 2013. The world bird database. Web page: http://avibase.bsc-eoc.org/avibase.jps?pg=home &blogs=all. Seen 4-1-2013.
Awachie, J.B.E., 1974. On the pathogenic effects of *Raillietiella affinis* Bovien (Pentastomida) on the house wall gecko (*Hemidactylus brookii angulatus* Hallowell) with note on the aetiology of human porocephalosis in Africa.— Proceedings of the Third International Congress in Parasitology 2: 1024-1025.
Aydenizoz, M. & F. Guclu, 1997. The prevalence of *Linguatula serrata* (Frohlich, 1789) in Konya province.— Turkiye Parazitologi Dergisi 21: 75-78.
Azar, J.E., 1964. An unsuccessful trial on production of parasitic pharyngitis (halzoun) in human volunteeres.— Amererican Journal of Tropical Medicine and Hygiene 13: 582-583.
Azinge, N.O., E.G. Ogidi-Gbegbaje, J.A. Osunde & D. Oduah, 1978. *Armillifer armillatus* in Bendel State (midwest) Nigeria (a village study in Ayogwiri Village, near Auchi, 120 kilometers from Benin-City) Phase-1.— Journal of Tropical Medicine and Hygiene 81: 76-79.
Babes, V., 1889. Die Wanderungen des *Pentastomum denticulatum* beim Rinde.— Centralblatt für Bakteriologie und Parasitenkunde und Infektionskranken 5: 1-5.
Baer, J.G., 1952. Ecology of animal parasite: 1-224.— University of Illinois Press, Urbana.
Baird, J.K., L.J. Kassebaum& G.K. Ludwig, 1988. Hepatic granuloma in a man from North-America caused by a nymph of *Linguatula serrata*.— Pathology 20: 198-199.
Baird, W., 1853a. Catalogue of the species of Entozoa, or intestinal worms, contained in the collection of the British Museum: 1-132.— British Museum, London.
Baird, W., 1853b. Descriptions of some new species of Entozoa from the collection of the British Museum.— Proceedings of the Zoological Society of London 21: 18-25, pls 30-31.
Baird, W., 1862. Description of some new species of Entozoa.— Proceedings of the. Zoological Society of London 1862: 113-115.
Bakke, T.A., 1972. *Reighardia sternae* (Diesing, 1864), Ward, 1899 (Pentastomida: Cephalobaenida) from the common gull (*Larus canus* L.) in a Norwegian locality.— Norwegian Journal of Zoology 20: 273-277.
Balfour, F.M., 1880. A treatise on comparative embryology, Volume 1: 1-567.
Ball, W., 1948. Serological indications of the systematic relationship of the Linguatulida.— American Journal of Pharmacology 120: 250-266.
Banaja, A.A., 1975. Aspects of the biology of the pentastomid *Reighardia sternae* Diesing 1864. Ph.D. Thesis, University of Dundee.
Banaja, A.A., 1983. Scanning electron microscopy examination of larval *Linguatula serrata* Frolich (Linguatulidae: Pentastomida).— Zeitschrift für Parasitenkunde 69: 271-277.
Banaja, A.A., J.L. James & J. Riley, 1975. An experimental investigation of a direct life-cycle in *Rheighardia sternae* (Diesing, 1864), a pentastomid parasite in the herring gull (*Larus argentatus* Pontopp).— Parasitology 71: 493-503.
Banaja, A.A., J.L. James & J. Riley, 1976. Some observations on egg production and autoreinfection of *Reighardia sternae* (Diesing, 1864), a pentastomid parasite of the herring gull.— Parasitology, 72: 81-91.

Banaja, A.A., J.L. James & J. Riley, 1977. Observations on osmoregulatory system of pentastomids: tegumental chloride cells.— International Journal of Parasitology 7: 27-40.
Banaja, A.A. & J. Riley, 1974. Ultrastructual studies on muscle attachments in *Reighardia sternae* Dies. (Pentastomida).— Zeitschrift für Morphologie und Okologie der Tiere 79: 75-86.
Banaja, A.A. & J. Riley, 1976. Observations on osmoregulatory system of pentastomids - tegumental cuticular cells.— Parasitology 73: 29.
Bangham, R.V., 1939. Parasites of Centrarchidae from southern Florida.— Transactions of the American Fisheries Society 68: 263-268.
Barnes, R.D., 1987. Invertebrate Zoology. 5th edition: 1-893.— Saunders College Publishing, Philadelphia.
Barros, L.A., L.A.F. Mateus, D.T. Braum & J. Bonaldo, 2010. Ecological aspects of endoparasites in red piranha (*Pygocentrus nattereri* Kner, 1860) from Cuiaba River, Mato Grosso, Brazil.— Arquivos Brasileiros de Medicina Veterinária e Zootecnia 62: 228-231.
Barton, D.P., 2007. Pentastomid parasites of the introduced Asian house gecko, *Hemidactylus frenatus* (Gekkonidae), in Australia.— Comparative Parasitology 74: 254-259.
Barton, D.P. & J. Riley, 2004. *Raillietiella indica* (Pentastomida) from the lungs of the giant toad, *Bufo marinus* (Amphibia), in Hawaii, U.S.A.— Comparative Parasitology 71: 251-254.
Bassi, R., 1877. Il *Pentastoma moniliformis* (Dies.) della pantera.— Il Medico Veterinario, Giornale Teorico-Pratico della Regia Scuola di Medicina Veterinaria di Torino (4) 6: 529-532.
Bassi, R., 1878. Le *Pentasoma moniliforme* (Dies.) trouvé sur une panthère.— Archives Vétérinaires Publiées a l'École D'Alfort 3: 114.
Basson, P.A., R.M. McCully, S.P. Kruger, J.W. Van Niekerk, E. Young & V. de Vos, 1970. Parasitic and other diseases of the African buffalo in the Kruger National Park.— Onderstepoort Journal of Veterinary Research 37: 11-28.
Beauchamp, P.M. de, 1914. Sur quelques parasites provenant du Congo Belge.— Revue Zoologique Africaine 4: 109-116.
Beauchamp, P.M. de, 1918. Sur quelques parasites provenant du Congo Belge.— Bulletin de la Société Zoologique de France 43: 14-20.
Beaver, P.C., R.O.C. Jung & E.W. Cup, 1984. Crustacea, linguatulid, millipedes, centipedes, scorpions, spiders, ticks and mites. Clinical Parasitology, 9th edition: 572-573.— Lea and Febiger, Philadelphia.
Behn, F., 1938. Sobre la existencia de larvas de linguatula (nódulos de *Pentastomum denticulatum*) en el material de autopsias del Instituto de Anatomia Patológica de la Universidad de Concepción.— Boletín de la Sociedad de Biologia de Concepción 12: 39-40.
Beklemishev, V.N., 1958. Grundlagen der Vergleichenden Anatomie der Wiebellosen. Volume 1: 1-491.— Deutscher Verlag der Wissenschaften, Berlin.
Beklemishev, V.N., 1964. Osnovy sravnitel nof anatomii bespozvonochnykh. 3rd edition. Volume 1: 1-529.— Nauka, Moscow.
Beklemishev, V.N., 1969. Principles of the comparative anatomy of invertebrates. Volume 1. 3rd edition: 1-698.— Oliver & Boyd, Edinburgh.
Bell, F.J., 1880. On the *Pentastomum polyzonum* of Harley: with a note on the synonymy of the allied apecies.— Annals and Magazine of Natural History (5) 6: 173-176.
Bell, F.J., 1884. A second note on *Pentastomum polyzonum*.— Annals and Magazine of Natural History (5) 14: 92-93.
Beneden, P.J. van, 1848a. Recherches sur l'organisation et le développement des linguatules (*Pentastoma* Rud.).— Annales des Sciences Naturelles Zoologie (3) 9: 89-90.
Beneden, P.J. van, 1848b. [Linguatules].— Institut Section 1 Sciences Mathematiques Physiques et Naturelles 16: 161-162.
Beneden, P.J. van, 1848c. Sur l'organisation et le développement des linguatules.— Institut Section 1 Sciences Mathematiques Physiques et Naturelles 16: 348.
Beneden, P.J. van, 1848d. Untersuchungen über die Organisation und Entwicklung der Zungerwürmer (*Pentastoma* Rud.) und eine neue im Magen des Mandrills aufgefundenen Art dieser Thiere.— Neue Notizen aus dem Gebiete der Natur- und Heilkunde (3) 7: 71-72.
Beneden, P.J. van, 1848e. Recherches sur l'organisation et le dévelopment des linguatules (*Pentastoma* Rud.), accompagnées de la description d'une espèce provenant de la cavite abdominal du mandrill.—

Bulletin de l'Academie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique (3) Zoologie 15: 188-190.

Beneden, P.J. van, 1849, Recherches sur l'organisation et le dévelopment des linguatules (*Pentastoma* Rud.), suivies de la description d'une espèce nouvelle provenant de la cavite abdominal d'un mandrill.— Mémoires de l'Academie de Bruxelles (2) Zoologie 23: 1-38.

Beneden, P.J. van, 1854. Rapport sur des observations de M. Küchenmeister relatives à la *Linguatula ferox*.— Annales des Sciences Naturelles Zoologie (4) 2: 380-382.

Beneden, P.J. van, 1855. De la *Linguatula ferox* (*Pent. denticulatum* aut. *serratum*). Notice de M. Küchenmeister.— Bulletins de l'Academie Royale des Sciences des Lettres et des Beaux-Arts de Belgique (1) 22: 4-10.

Beneden, P.J. van, 1857a. Pentastomes.— Institut Section 1 Sciences Mathématiques Physiques et Naturelles 25: 250.

Beneden, P.J. van, 1857b. Note sur quelques pentastomes.— Bulletins de l'Academie Royale des Sciences des Lettres et des Beaux-Arts de Belgique (2) 2**:** 29-30.

Benedetti-Valentine, F., 1932. Pentastomiasi splenica. Studio clinico ed istopatologico.— Annali Italiani di Chirurgia 11: 1085-2007.

Bereiter-Hahn, J., A.G. Matolsty & K.S. Richards (eds.), 1984. Biology of the integument. 1, Invertebrates: 1-841.— Heidelberg: Springer Verlag, Berlin.

Berghe, P.L. van den, 1939. Observations nouvelles sur le développement des porocéphales.— Travaux de la Station Zoologique de Wimereux 13: 39-46, 1 pl.

Berlese, A., 1912. Gli Insetti, loro organizzazione, sviluppo, abitudini e rapporti coll'uomo. Volume 1. Embriologia e morfologia: 1-96, 88 figs— Societa Editrice, Milano.

Bernard, J., 1965. Note sur deux pentastomides trouvés en Tunisie.— Archives de l'Institut Pasteur de Tunis 42: 39-43.

Bertolini, G., 1892. Un caso di Pentastoma tenioide in una pecora.— Giornale di Veterinaria Militare 5: 352-355.

Bertolini, G., 1908. II. Di alcuni parassiti del bestiame dell' Agro Romano e della Sardegna. III. Nuove osservazioni sull' infestatione da linguatule larvali nei bovini e negli ovini dell' Agro Romano.— Nuovo Ercolani Archivio Quindicinale di Veterinaria e Zootecnia 13: 385-389, 405.

Besch, E.D., 1959. Demonstration of the nymph of *Linguatula serrata* Frölich, 1789, in *Sylvilagus floridanus* from north central Oklahoma.— Journal of the American Veterinary Medical Assocication 134: 544-545.

Bilharz, T., 1856. Über *Pentastoma constrictum*. (Aus einem Schreiben an Prof. Siebold).— Zeitschrift für Wissenschaftliche Zoologie 7: 329-330, pl. 17.

Birdlife International, 2013. The birdlife international - checklist of birds of the world with conservation status and taxonomic sources. Web page: http://www.birdlife.org/datazone/species. Seen 4-1-2013.

Bisset, N., 1926. A case of fascioliasis in cattle. With a note on the occurrrence of the larva of *Linguatula serrata*.— Veterinary Journal 82: 202-205.

Blagburn, B.L., C.M. Hendrix & W.L. Current, 1983. Canine linguatulosis.— Canine Practice 10: 54-55.

Blainville, H.M.D., 1823. Linguatule, linguatella.— Dictionnaires des Sciences Naturelles 26: 509-512.

Blainville, H.M.D. de, 1824. Appendice.— In: J.G. Bremser, H.M.D. de Blainville & A. Grundler (eds), Traité zoologique et physiologique sur les vers intestinaux de l'homme/ par M. Bremser. Traduit de l'allemand par M. Grundler. Rev. et augm. De notes par M. de Blainville. Avec un atlas compose de douze planches in-quatro: 501-553. Atlas pls 1-2.— C.L.F. Panckoucke, Paris.

Blainville, H.M.D., 1828. Vers.— In: Dictionnaire des sciences naturelles, dans lequel on traite méthodiquement des différens ętres de la nature, considérés soit en eaux-męmes, d'après l'état actuel de nos connoissances, soit relativement a l'utilité qu'en peuvent retirer la médicine, l'agriculture, le commerce et les arts. Suivi d'une bibliographie des plus célèbres naturalistes. Volume 57: 1-628. [Pentastomida, p. 365-628].— Levrault, Strasbourg.

Blake, R.T. & D.J. Overend, 1982. The prevalence of *Dirofilaria immitis* and other parasites in urban pound dogs in northeastern Victoria.— Australian Veterinary Journal 58: 111-114.

Blanchard, É., 1850a. Organisation et rapports naturels des linguatules.— Institut Section 1 Sciences Mathématiques Physiques et Naturelles 18: 188.

Blanchard, É., 1850b. De l'organization et des rapports naturels des linguatules.— Comptes Rendus Hebdomadaires des Séances de l'Academie des Sciences 30: 645-647.
Blanchard, M., 1914. [Larves de porocéphale sur les cadavres].— Bulletin de la Société de Pathologie Exotique 7: 501.
Blanchard, R., 1890. Traité de Zoologie médicale. Volume 2: 47, 261-275, 425, fig. 574-575.— J.B. Ballière, Paris.
Blazéjewski, F., 1965. [The systematic position of the Pentastomida].— Przeglad Zoologiczny 9: 361-366. [in Polish].
Boavida, M., 1954. Acerca de linguatulose - na Madeira.— Frutas de Madeira 14**:** 131, 134-135.
Boch, J., 1957. Ein Beitrag zur Kenntnis der Pentastomiasis (*Armillifer moniliformis*) bei Rhesusaffen.— Zeitschrift für Parasitenkunde 17: 424-429.
Bochefontaine, R., 1877. Pentastomes denticulés provenant du poumon d'un cobaye.— Comptes Rendus des Séances de la Société de Biologie (6) 3: 261.
Böckeler, W., 1979. Zum Vorkommen des Luftsackparasiten *Reighardia sternae* (Pentastomida) in Möwen nach Untersuchungen auf der Insel Helgoland und in Kiel.— Abhandlungen aus der Gebiede und Vogelkunde 6: 135-138.
Böckeler, W., 1980. Aspects of developmental biology of *Reighardia sternae* (Pentastomida).— Praktische Tierartz 61: 330-331.
Böckeler, W., 1982a. Experimentelle, licht- und elektronenmikroskopische Untersuchungen zur Parasitologie und Ontogenie von *Reighardia sternae* (Cephalobaenidae), zugleich ein Beitrag zur systematischen Stellung der Pentastomida: 1-159.— Habilitationsschrift, Universität Kiel, Kiel.
Böckeler, W., 1982b. Die Ontogenese des ZNS bei *Reighardia sternae* (Pentastomida: Cephalobaenida).— Verhandlungen der Deutsche Zoologisch Gesellschaften 75: 301.
Böckeler, W., 1983a. Die Entwicklung der Embryonalhullen und des Dorsalorgans bei *Reighardia sternae* (Pentastomida).— Verhandlungen der Deutsche Zoologisch Gesellschaften 76: 270.
Böckeler, W., 1983b. New systematical aspects of the Pentastomida based on recent ontogenetic investigations of *Reighardia sternae*.— Zentralblatt für Bakteriologie Mikrobiologie und Hygiene Series A Medical Microbiology Infectious Diseases Virology Parasitology 256: 264.
Böckeler, W., 1984a. Embryogenese und ZNS-Differenzierung bei *Reighardia sternae*, Licht- und elektronenmikroskoposche Untersuchungen zur Tagmosis und systematischen Stellung der Pentastomiden.— Zoologische Jarbücher Abteilung Anatomie 111: 297-342.
Böckeler, W., 1984b. Ovarmorphologie und Oogenese bei *Reighardia sternae*. Ein Beitrag zur Frage der systematischen Stellung der Pentastomida.— Zoologische Jarbücher Abteilung Anatomie 111: 175-193.
Böckeler, W., 1984c. Entwicklung und Ultrastruktur des weiblichen Genitaltraktes von *Reighardia sternae* (Pentastomida).— Zoologische Jarbücher Abteilung Anatomie 111: 409-432.
Böckeler, W., 1984d. Der Entwicklungszuklus von *Reighardia sternae* (Pentastomida) nach Untersuchungen an natürlich und experimentell infestierten Möwen.— Zoologischer Anzeiger 213: 374-394.
Böckeler, W., 1986. Vergleichende anatomische Studien an den 3 Cephalobaenidengattungen (*Cephalobaena, Raillietiella, Reighardia*) als Beitrag zur Frage der Evolution der Pentastomida.— Verhandlungen Deutsche Zoologische Gesellschaft 79: 164-165.
Böckeler, W., 2007. Die Bedeutung von Pentastomiden als Parasiten von Reptilien und als Zoonose-Erreger: 6-9.— Tiergarten Schönbrum, Elefantenhaus, Wien.
Böckeler, W. & W. Böhme, 1987. Pentastomiden-Untersuchungen an Schlangen Paraguays.— Salamandra 23: 52-62.
Böckeler, W. & H.P. Dreyer, 1982. Half- und klammerorgane von Binnenschmarotzern im rasterelektronenmikroskopischen Bild.— Mikrokosmos 71: 257-262.
Böckeler, W. & V. Storch, 1990. Ultrastructural analysis of the male genital system of *Cephalobaena tetrapoda* Heymons, 1922 (Pentastomida).— Parasitology Research 76: 270-277.
Böckeler, W. & E. Vauk-Hentzelt, 1979. Die Mantelmöve (Larus marinus) als neuer Wirt des Luftsackpiraten *Reighardia sternae* (Pentastomida).— Zoologischer Anzeiger 203: 95-98.
Bogdaschew, N., 1930. Zur Frage der Verbreitung des *Pentastomum denticulatum* bei Rindern in USSR und die Histologie der durch diesen Parasiten in den Mesenteriallymphkoten bei Rindern hervorgerufenen Veränderungen.— Archiv für Wissenschaftliche und Praktische Tierheilkunde 61: 252-263.

Bogdaschew, N., 1931. Über die Verbreitung von *Pentastomum denticulatum* in den Mesenteriallymphknoten des Schafes in den Sowjetunion.— Tierärztliche Rundschau 37: 401-403.

Bonis, T. de (see De Bonis, T.)

Borgsteede, F.H.M., 1997. Parasitology of marine birds.— Bulletin de la Société Royale des Sciences de Liege 66: 91-108.

Bosc, L.A.G., 1811. Sur un nouveau genre dans la classe des vers intestinaux nommé tétragule.— Nouveau Bulletin des Sciences par la Société Philomatique de Paris 2: 269-270, pl. 262.

Bosch, H., 1984. Esperimental life-cycle studies on three pentastomid species.— Zentralblatt für Bakteriologie Mikrobiologie und Hygiene Series A Medical Microbiology Infectious Diseases Virology and Parasitology 258: 409-410.

Bosch, H., 1986. Experimental life-cycle studies of *Raillietiella* Sambon, 1910 (Pentastomida, Cephalobaenida) - the 4th-stage larva is infective for the definitive host.— Zeitschrift für Parasitenkunde - Parasitology Research 72: 673-680.

Bosch, H., 1987. Vergleichende experimentelle Untersuchungen zur Biologie der Pentastomidengattungen *Raillietiella* (Cephalobaenida) und *Elenia* (Porocephalida) unter Berücksichtigung der Erforschungsgeschichte der Pentastomiden.— Ph.D. Thesis, Faculty of Biology, Universität Hohenheim.

Bosch, H., 1991. The pentastome *Elenia* Heymons, 1932, a parasite genus specific of monitors from the Australian region - biology and aspects of host specificity.— Mertensiella 2: 50-56.

Bosch, H. & W. Frank, 1986. The Australian pentastomid genus *Elenia* Heymons, 1932 - development in the intermediate and definitive host: 673.— Proceedings of the VI International Congressin Parasitology Brisbane.

Bouckaert, L. & A. Fain, 1959. Een geval van nymphale porocephalose met dodelijk verloop.— Annals de la Société Belge de Médicine Tropicale 39: 793-798.

Boulenger, G.A., 1913. The snakes of Europe: 1-356.— Methusen & Co., London. Electronic reprint, 2000, www.harper.com/ebooks.

Bovien, P., 1927a. Ueber einige Pentastomen aus Java.— Berichtigung Videnskabelige Meddelelser fra den Dansk Naturhistoriske Forening i Kjøbenhavn 84: 1-12.

Bovien, P., 1927b. Berichtigung zu der Abhandlung von P. Bovien: Über einige Pentastomen aus Java.— Videnskabelige Meddelelser fra Dansk Naturhistorisk Forening i Kjøbenhavn 84: 289.

Bowman, D.D., 2000. Respiratory system parasites of the dog and cat (Part I): nasal mucosa and sinuses, and respiratory parenchyma.— In: D.D. Bowman (ed.), Companion and exotic animal parasitology. International Veterinary Information Service. www.ivis.org.

Bowman, D.D., R.C. Lynn & M.L. Eberhard, 2004. Georgis Parasitología para veterinarios, 8th edition. Elsevier, Spain.

Boyce, W.M., 1985. The prevalence of *Sebekia mississippiensis* (Pentastomida) in American alligators (*Alligator mississippiensis*) in North Florida and experimental infection of paratenic hosts.— Proceedings of the Helminthological Society of Washington 52: 278-282.

Boyce, W.M., P. Cardeilhac, T. Lane, C. Buergelt & M. King, 1984. Sebekiosis in captive alligator hatchlings.— Journal of the American Veterinary Medical Assocication 185: 1419-1420.

Boyce, W.M., C.H. Courtney, S.R. Wing & E.W. Kurose, 1987b. In vitro maintainance of the pentastome *Sebekia mississippiensis*.— Proceedings of the Helminthological Society of Washington 54: 265-266.

Boyce, W.M. & E.A. Kazacos, 1991. Histopathology of nymphal pentastomid infections (*Sebekia mississippiensis*) in paratenic hosts.— Journal of Parasitology 77: 104-110.

Boyce, W.M., E.A. Kazacos, K.R. Kazacos & J.A. Engelhardt, 1987a. Pathology of pentastomid infections (*Sebekia mississippiensis*) in fish.— Journal of Wildlife Diseases 23: 689-692.

Boyko, C.B., 1996. Catalog of recent type specimens in the Department of Invertebrates, American Museum of Natural History, III. 'Parasitica" (Phyla Platyhelminthes, Rhombozoa, and Pentastomida) and Gastrotricha (Supplement).— American Museum Novitates 3174: 1-59.

Braun, M., 1908. Die Tierischen Parasiten des Menschen. Ein Handbuch für Studierende und Aertze. 4th edition: 1-475.— A. Stuber's Verlag, Würzburg.

Braun, M. & M. Lühe, 1910. A handbook of practical parasitology: 1-208.— William Wood and Company, New York.

Breinl, A. & E. Hindle, 1910. A new *Porocephalus* (*Porocephalus cercopitheci* n. sp.).— Annals of Tropical Medicine and Parasitology 2: 321-322.

Bremser, J.G., 1824. Icones Helminthum systema Rudolphii entozoologicum illustrantes: 1-12.— A. Strauss, Wien.

Bretland, P.M., 1962. *Armillifer armillatus* infestation. Radiological diagnosis in two Ghanaian soldiers.— British Journal of Radiology, New Series 35: 603-608.

Brito, S.V., W.O. Almeida, L.A. Anjos & R.J. Silva, 2012. New hosts of Brazilian pentastomid species.— Brazilian Journal of Biology 72: 393-396.

Broberg, G. & M. Ghafghasi, 1964. Observations on abdominal changes in sheep caused by *Linguatula serrata*.— Nordisk Veterinarermedicin 16: 846-848.

Brock, A.P., A.E. Gallagher, H.D.S. Walden, J.L.Owen, M.D. Dunbar, H.L. Wamsley, A.B. Schoeller, A.L. Childress, & J.F.X. Wellehan Jr., 2012. *Kiricephalus coarctatus* in an Eastern Indigo snake (*Drymarchon couperi*); endoscopic removal, identification, and phylogeny.— Veterinary Quarterly 32: 107-112.

Broden, A. & J. Rodhain, 1908. Contribution à l'étude de *Porocephalus moniliformis*.— Annals of Tropical Medicine and Parasitology 1: 493-504.

Broden, A. & J. Rodhain, 1909. Contribution à l'étude du *Porocephalus moniliformis*.— Annals of Tropical Medicine and Parasitology 2: 303-313.

Broden, A. & J. Rodhain, 1910. Contribution à l'étude de *Porocephalus moniliformis*.— Annals of Tropical Medicine and Parasitology 4: 167-176.

Brookins, M.D., J.F.X. Wellehan, J.F. Roberts, K. Allison, S.S. Curran, A.L. Childress & E.C. Greiner, 2009. Massive visceral pentastomiasis caused by *Porocephalus crotali* in a dog.— Veterinary Pathology 46: 460-463.

Brosens, L., T. Jauniaux, U. Siebert, H. Benke & F. Coignoul, 1996. Observations on the helminths of harbour porpoises (*Phocoena phocoena*) and common guillemots (*Uria aalge*) from the Belgian and German coasts.— Veterinary Record 139: 254-257.

Brown, H.W. & F.A. Neva, 1983. Basic clinical parasitology.— Appleton-Century-Crofts, Norwalk.

Brown, S.G., S. Kwan & S. Shero, 1995. The parasitic theory of sexual reproduction - parasitism in unisexual and bisexual geckos.— Proceedings of the. Royal Society of London (B) Biological Sciences 260: 317-320.

Bruckmüller, A., 1869. Lehrbuh der Pathologischen Zootomie der Hausthiere: 1-900.— Wien.

Brues, C.T., 1942. Occurrence of *Porocephalus crotali* Humboldt in Florida.— Ohio Journal of Science 42: 112.

Brues, C.T. & A.L. Melander, 1932. Classification of insects. A key to the known families of insects and other terrestrial arthropods. Order Pentastomida.— Bulletin of the Museum of Comparative Zoology Harvard College 73: 579-581.

Brumpt, E.J.A., 1936. Précis de Parasitologie, volume 2: 1101-1106.— Masson, Paris.

Brumpt, E.J.A., 1949. Pentastomida. Précis de Parasitologie, 6th edition: 1060-1065.— Masson, Paris.

Brygoo, E.R., 1963. Contribution à la connaissance de la parasitologie des caméléons malgaches.— Annales de Parasitologie Humaine et Comparée 38: 149-334, 525-739 [Pentastomida p. 195-203].

Buchanan, G., 1967. Surgical aspects of porocephalosis.— Transactions of the Royal Society of Tropical Medicine and Hygiene 61: 746-747.

Buchvarov, G., 1963. [*Rheigardia sternae* (Pentastomida) found in the silver sea gull (*Larus argentatus* L.)].— Bulgarscka Akademiia na Naukite Izvestiia na Tsentralnata Khelmintologichna Laboratoriia 8: 145-146. [in Bulgarian].

Buckle, A.C., D.P. Knox & J. Riley, 2002. Proteins and proteinases in the in vitro released products (Ivrp) of the tissue-invasive and lung-dwelling larvae of the pentastomid *Porocephalus crotali*.— Parasitology 124: 391-399.

Buckle, A.C., J. Riley & G.F. Hill, 1997. The *in vitro* development of the pentastomid *Porocephalus crotali* from the infective instar to the adult stage.— Parasitology 115: 503-512.

Budd, G.E., 1998. Stem group arthropods from the Lower Cambrian Sirius Ps.— In: R.A. Fortey & R.H. Thomas (eds), Arthropod relationships. Systematics Association Special Volume, 55: 125-138.— Chapman & Hall, London.

Buenviaje, G.N., P.W. Ladds, L. Melville & S.C. Manolis, 1994. Disease-husbandry associations in farmed crocodiles in Queensland and the Northern-Territory.— Australian Veterinary Journal 71: 165-173.

Büttner, D.W. & D. Tappe, 2009. Diagnosis of human visceral pentastomiasis. — PLOS Neglegted Tropical Diseases 5: 320.

Bugge, G., 1927a. Vortrag über die sogenannten Pentastomenknötchen bei den Gekrös-Lymphknoten der Rinder. — Tierärztliche Rundschauer 33: 124-125.

Bugge, G., 1927b. Übertragung von Linguatula denticulata auf einen Hund. — Deutsche Tierärtliche Wochenschrift 35: 345-349.

Bugnion, E., 1910. Le pentastome du python (*Porocephalus moniliformis* Dies.). — Bulletin de la Société Vaudoise des Sciences Naturelles (5) 46: 467-472.

Buljevic, S.M. & D. Rendic, 1958. Jedan nalaz *Linguatula serrata* u jetri goveda. — Veterinarski Glasnik 12: 544.

Buri, R., 1912a. Ein Fall von Pentastomatosis beim Rind. — Mitteilungen der Naturforschenden Gesellschaft in Bern 22: 16-20.

Buri, R., 1912b. Die Bekämpfung des Rindfleischbandwurms (*Taenia saginata* Göze) durch die Fleischbeschau sowie Häuigkeit des Auftretens von *Pentastoma denticulatum* biem Schlachtvieh. — Mitteilungen der Naturforschenden Gesellschaft in Bern, 22: 20-29.

Buri, R., 1913. Beitrag zur Kenntnis der lokalen Verbreitung von *Pentastoma denticulatum* beim Rindvieh. — Schweizer Archiv für Tierheilkunde 15: 585-611.

Bursey, C.R. & S.R. Goldberg, 1999. *Skrjabinodon piankai* sp n. (Nematoda: Pharyngodonidae) and other helminths of geckos (Sauria: Gekkonidae: *Nephrurus* spp.) from Australia. — Journal of Helminthological Society of Washington 66: 175-179.

Bursey, C.R. & S.R. Goldberg, 2004. A new species of Spinicauda (Nematoda: Heterakidae) and other endoparasites in *Platymantis pelewensis* (Anura: Ranidae) from the Palau Islands, Republic of Belau, Oceania. — Journal of Parasitology 90: 1428-1433.

Bursey, C.R., S.R. Goldberg & F. Kraus, 2005. Endoparasites in *Sphenomorphus jobiensis* (Sauria: Scincidae) from Papua New Guinea with description of three new species. — Journal of Parasitology 91: 1385-1394.

Bursey, C.R., S.R. Goldberg, & F. Kraus, 2008. A new species of *Proteocephalus* (Cestoda: Proteocephalidae), description of the male of *Desmogathiema papuensis* (Nematoda: Quimperiidae), and other endoparasites in *Sylvirana supragirisea* (Anura: Ranidae) from Papua New Guinea. — Comparative Parasitology 75: 33-48.

Buslau, M., U. Kuhne & W.C. Marsch, 1990. Dermatological signs of nasopharyngeal linguatulosis (Halzoun, Marrara Syndrome) - the possible role of major basic-protein. — Dermatologica 181: 327-329.

Butler, C.S., 1924. *Linguatula* in dogs and cattle. — Journal of Parasitology 1194: 544.

Bygbjerg, I.C. & M.P. Rask, 1978. Pentastomiasis and cancer of the colon. — Transactions of the Royal Society of Tropical Medicine and Hygiene 72: 54-55.

Cagnard, V., J. Nicolas-Randegger, A. Dagoakribi, B. Rain, J.P. Nozais, P. Essohnomel, M. Ette, J. Doucet & G. Assalendri, 1979. A fatal diffuse case of *Armillifer grandis* pentastomiasis. — Bulletin de la Société de Pathologie Exotique 72: 345-352.

Calandruccio, S., 1890. Parassiti dei polmoni del majale e del bue. — Bollettino Mensile dela Accadademia Gioena di Science Naturali in Catania (2) 2: 8-9.

Campos, C.M. de, V.E. de Fonseca, R.M. Rakemoto & F.R. de Moraes, 2010. Parasitic fauna of cachara *Pseudoplatystoma fasciatum* (Siluriforme: Pimelodidae) from the Aquidauana river, in the Pantanal of Mato Grosso do Sul State, Brazil. — Acta Scientarum Biological Sciences 32: 79-81.

Cannon, D.A., 1942. Linguatulid infestation of man. — Annals of Tropical Medicine and Parasitology 36: 160-167.

Canstatt, 1852. *P. constrictum.* — Jahresbericht Vereins in Deutschen Gesellschaft Medizin, 1852: 206.

Cappuccinelli, P. & P. Martinetto, 1972. Disc-electrophoretic fractionation of homogenates of a pentastomid (*Armillifer armillatus* Wyman 1847) in the nymphal stage. — Parassitologia 14: 251-254.

Carnevalini, C., 1931. Sulla presenza della *Linguatula rhinaria* nei bovini dell'Agro Romano. — Rendiconti del Istitut di Clinica Veterinaria 54: 71-80.

Castellani, A., 1919. Linguatulida. Manual of tropical medicine: 732-738. — New York.

Castellani, C., M. Andreas, D. Waloszek & J.T. Haug., 2011. New pentastomids from the Late Cambrian of Sweden - deeper insight of the ontogeny of fossil tongue worms. — Paleontographica, Abteilung A 293: 95-145.

Castellani, G., 1958. Sulla pigmentazoine e sulle alterazioni delle linfoghiandole mesenteriche del bufalo nell'infestione da *Linguatula serrata.*— Atti della Società Italiana delle Scienze Veterinarie 12: 505-508.

Cavalieri, F., 1967. Sobre un nuevo genero y nueva especie de Linguatulida, *Bothropsiella bicornuta* gen. et sp. nov., hallada en *Bothrops alternata* Duméril et Bibron, 1854, Cephalobaenida: Cephalobaenidae.— Neotropica 13: 67-72, figs 1-10.

Cavalieri, F., 1970. Contribution al conocimiento de *Cephalobaena tetrapoda* Heymons, 1922 (Linguatulida, Cephalobaenida).— Physis 30: 291-299.

Cave, L. delle, E. Insom & A.M. Simonetta, 1998. Advances, diversions, possible relapses and additional problems in understanding the early evolution of the Articulata.— Italian Journal of Zoology 65: 19-38.

Chabaud, A.G. & M.T. Choquet, 1954. Nymphes du pentastome *Gigliolella* (n. gen.) *brumpti* (Giglioli, 1922) chez un lémurien.— Rivista di Parassitologia Italiana 15: 331-336.

Chabert, P., 1782. Traité des maladies vermineuses dans les animaux, 1st édition: 1-194.— Imprimerie Royale, Paris.

Chabert, P., 1787. Traité des maladies vermineuses dans les animaux, 2e édition: 1-194.— Imprimerie Royale, Paris.

Chabert, P., 1789. Abhandlung von den Wurm-Krankheiten der Europäischen Hausthiere, aus der Säughthier-Klasse: 1-168.— Göttingen.

Challier, A., R. Gidel & S. Traore, 1967. Porocephalosis caused by *Armillifer* (*Nettorhynchus*) *armillatus*, Wyman 1847, (Pentastomida) chez un bovin et un porcin (Mali et Haute-Volta).— Revue d' Élevage et de Médicine Vétérinaire des Pays Tropicaux 20: 255-259.

Chalmers, A.J., 1899. A case of *Pentastoma constrictum.* Lancet 153: 1715-1716.

Chandler, A.C., 1936. Pentastomida. Animal parasites and human disease: 429-436.— New York.

Chapin, E.A., 1926. On the presence of *Linguatula serrata* Froel. in the caribou.— Journal of Parasitology 12: 180.

Chartres, J.C., 1965. Radiological manifestations of parasitims by the tongue worms, flat worms and the round worms more commonly seen in the tropics.— British Journal of Radiology 38: 503-511.

Chatin, J., 1881. Sur le mode de locomotion et de pénétration des Linguatules.— Comptes Rendus Hebdomadaires des Séances et Mémoires de la Société de Biologie (7) 3: 66-67.

Chatin, J., 1882. Notes anatomiques sur une linguatule orbservée chez l'*Alligator lucius.*— Annales des. Sciences Naturelles Zoologie (6) 14: 1-30, pl. 19a.

Chauvrat, J., 1890. Linguatules ténioïdes dans les cavité nasales et nématodes dans les bronches et les gnaglions bronchiques d' un chien abbatu comme suspect de rage.— Recueil de Médicine Véterinaire (7) 7: 489-498.

Cheah, T.S., C. Rajamanickam & K. Lazarus, 1989. Natural infection of *Armillifer moniliformis* in a smooth otter (*Lutrogale perspicillata perspicillata*).— Tropical Biomedicine 6: 139-140.

Chen, H.Y., 2003. Two cases of pentastomiasis.— Zhonghua Xiao Hua Za Zhi 23: 619.

Chen, S.H., Q. Liu, Y.N. Zhang, J.X. Chen, H. Li, Y. Chen, P. Steinmann & X.N. Zhou, 2010. Multi-host model-based identification of *Armillifer agkistrodontis* (Pentastomida), a new zoonotic parasite from China.— PLOS Neglected Tropical Diseases 4: e647.

Cherry, R.H. & A.L. Ager, 1982. Parasites of American alligators (*Alligator mississippiensis*) in south Florida.— Journal of Parasitology 68: 509-510.

Chesunov, A.V. (see Tchesunov, A.V.)

Chieffi, G., 1951. Sur un caso di linguatulosi umana.— Acta Medica Italalica 6: 212-218.

Chitwood, M.B.H. & J.R. Lichtenfels, 1972. Identification of parasitic Metazoa in tissue sections.— Experimental Parasitology 32: 407-519.

Chooi, K.F., 1986. Melioidosis and nymphal pentastomiasis in a cat.— Veterinary Record 119: 311.

Chooi, K.F., A.R. Omar & J.Y. Lee, 1982. Melioidosis in a domestic cat, with concurrent infestation by nymphs of the cat pentastome, *Armillifer moniliformis.*— Kajian Veterinarian 14: 41-43.

Choudhary, M.U.A. & M.L. Dewan, 1967. Immature linguatulasis in a murrah buffalo.— Pakistan Journal of Veterinary Science 1: 73-75.

Christodoulou, T. & K. Trarlatzis, 1951. Pronymphicg péntastomosis goy probatoy.— Deltion Ellenikes Kteniatrikes Etaireias (B) 4: 147-151.

Christoffersen, M.L. & J.E. de Assis, in preparation. Class Eupentastomida Waloszek, Repetski & Maas, 2006.— In: J.C. Von Vaupel Klein (ed.), Treatise of Zoology (Traité de Zoologie). Volume 6. Chapter 45A. Brill, Leiden.

Claus, C.F.W., 1872. Grundzüge der Zoologie. Zum gebrauche an universitäten und höheren kehrstalten sowie zum slbestudium. Second Edition: 1-1170.— N.G. Elwert'sche Universität, Marburg.

Cleland, J.B., 1912. On the possible relationship between endemic redwater of bovines and pentastomes.— Reports of the Government Bureau of Microbiology 2: 120-122.

Cleland, J.B. & T.H. Johnston, 1911. A note on the occurrence of pentasomes in Australian cattle.— Reports of the Government Bureau of Microbiology 1: 119-120.

Cobbold, T.S., 1861a. List of entozoa, including pentastomes, from animals dying at the Society's menagerie, between the years 1857-1860 inclusive, with descriptions of several new species.— Proceedings of the Zoological Society of London 1861: 117-127, pl. 20.

Cobbold, T.S., 1861b. Further observations on entozoa, with experiments.— Transactions of the Linnean Society of London 23: 349-358.

Cobbold, T.S., 1862. *Pentastoma denticulatum.*— Transactions of the Linnean Society of London 23: 350-352, pl. 33 figs 3-6.

Cobbold, T.S., 1864. Entozoa. An introduction to the study of helminthology with reference more particularly to the internal parasites of man: 1-480. [Pentastomida, pp. 394-402, 414, pl. 21 fig. 82].— Goombridge and Sons, London.

Cobbold, T.S., 1866. Catalogue of the specimens of Entozoa in the Museum of the Royal College of Surgeons of England: 1-24.— Hardwicke, London.

Cobbold, T.S., 1867. On the prevalence of entozoa in the dog, with remarks on their relation to public health.— Journal of the Linnean Society of London 9: 281- 293.

Cobbold, T.S., 1879. Parasites; a treatise on the entozoa of man and animals, including some account of the Ectozoa: 1-508.— J. and A. Churchill, London.

Coker, A.O., R.D. Isokpehi, B.N. Thomas, A.F. Fagbenro-Beyioku & S.A. Omilabu, 2000. Zoonotic infections in Nigeria: overview from a medical perspective.— Acta Tropica 76: 59-63.

Colin, G.C., 1824. Des vers trouvés dans le larynx et les cavités nasales d'un chien et d'un loup.— Recueil de Médecine Véterinaire Publié par le Corps Enseignant de l'École d' Alfort 1: 1-8.

Colin, G.C., 1861a. Recherches sur une maladie vermineuse du mouton due à la présence d'une linguatule dans les ganglions mésentériques.— Recueil de Médecine Véterinaire Publié par le Corps Enseignant de l'École d' Alfort (4) 8: 676-688.

Colin, G.C., 1861b. Sur la présence d'une Linguatule dans les ganglions mésentériques du mouton et sur la transformation dans les nez du chien en pentastome ténioide.— Revue et Magasin de Zoologie Pure et Appliquée (2) 13: 275-276.

Colin, G.C., 1861c. Über das *Pentastoma* in den Gekrösdrüsen der Schafe.— Repertorium der Thierheilkunde 22: 37-38.

Colin, G.C., 1861d. Researches on a parasite malady of the sheep due to the presence of a *Linguatula* in the mesenteric glands.— Edinburgh Veterinary Review and Annals of Comparative Pathology 3: 682-687.

Colin, G.C., 1862a. Sur le développement de la linguatule des ganglions mésentériques.— Recueil de Médecine Véterinaire Publié par le Corps Enseignant de l'École d' Alfort (4) 9: 342-343.

Colin, G.C., 1862b. Eine *Linguatula* aus der Mesenterialdruse des Schafes und Dromedars als sweites ungesche Stadium von *Pent. taenioides.*— Notizen aus dem Gebiete der Natur- und Heilkunde 1: 127-128.

Colin, G.C., 1863a. Recherches sur le pentastome ténioïde des cavités nasales du chien, et nouvelles observations sur les échanges de ce ver entre les carnassiers et les herbivores.— Recueil de Médecine Véterinaire Publié par le Corps Enseignant de l'École d'Alfort (4) 10: 721-736.

Colin, G.C., 1863b. Communication sur le développement de la linguatule des ganglions mésentériques.— Bulletin de la Société Centrale de Médecine Vétérinaire (2) 7: 22.

Colin, G.C., 1864. Recherches sur le pentastome des cavités nasales du chien.— Bulletin de la Société Centrale de Médecine Vétérinaire (2) 8: 108.

Corin, G., 1914. Présence de larves de porocephale chez *Tragelaphus scriptus* (antilope rayée commune).— Bulletin de la Société de Pathologie Exotique 7: 497-502.

Correia Silva, T.M. (see Silva, T.M.C.)

Corroller, Y. Le & J.L. Pierre, 1960. Sur un cas de linguatulose humaine au Maroc. — Bulletin de la Société de Pathologie Exotique 52: 730-735, pl. 2.
Cosgrove, G.E., B.M. Nelson & J.T. Self. 1970. The pathology of pentastomid infection in primates. — Laboratory of Animal Care 20: 354-360.
Coster, P. de, J.M. Andrien, H. Prevot & M. Parent, 1967. A propos de quatre cas de pentastomose nymphale découverts radiographiquement. — Annales de la Société Belge de Médecine Tropicale de Parassitologie et de Mycologie 47: 257-263.
Coster, P. de & J. Rodhain, 1951. Localisation oculaire de nymphes de porocéphales chez un enfant indigène. — Annales de la Société Belge de Médecine Tropicale 31: 331-336.
Coulibaly, N., P. Delporte, P. Delormas, E. Saracino & J. Doucet, 1972. Pentastomosis in respiratory pathology in Africa. — Annals of the University of Abidjan, Medicine 6: 236-238.
Couliboeuf, J. & J.L. Frézil, 1978. Discussion of a case of massive pentastoma infection in the Congo. — Rapport Final de la Conférence Technique-Organisation de Coordination pour la Lutte Contre les Endémies en Afrique Centrale 1978: 222-227.
Coy, A., G. Nayla & L. Ventosa, 1998. Primer registro de pentastomidos (Pentastomida) en reptiles cubanos. — Cocuyo 7: 8-9.
Creplin, F.C.H., 1829. Novae observationes de Entozois: 1-134. [Pentastomida, p. 76]. — Ferdinandum Dummlerum, Berlin.
Creplin, F.C.H., 1849. Nachträge von Creplin zu Gurlt's Verzeichnisse der Thiere, in welchen Endozoen gefunden worden sing. Dritter Nachtrag. — Archiv für Naturgeschichte 1: 52-80.
Cristi, J.A., 1957. Linguatulosis nasel en el perro. — Anales de la Facultad de Veterinaria 7: 83-86.
Csokor, J., 1887. Über Pentastomen und *P. denticulatum* aus der Leber des Pferdes. — Österreichische Vierteljahresschrift für Wissenschaftliche Veterinärkunde 1: 1-22.
Cuénot, L. 1949. Les Pentastomides. — In: P.P. Grassé (ed.), Traité de Zoologie, Volume 6: 61-75. [reprinted 1968]. Masson et Éditeurs, Paris.
Cunnington, W.A., 1920. The fauna of the African lakes: A study in comparative limnology with special reference to Tanganyika. — Proceedings of the Zoological Society of London 1920: 507-622.
Curasson, G., 1929. Sur le mode de développement et sur quelques hôtes nouveaux de porocéphales. — Bulletin de la Société de Pathologie Exotique 22: 255-257.
Cuvier, G.A., 1817. Le règne animal distribué d'aprés son organization, pour servir de base à l'histoire naturelle des animaux et d'introduction a l'anatomie comparée. First Edition. Volume 4: i-viii, 1-255. [Pentastomida, Volume 4, pp. 35]. — Deterville, Paris.
Da Fonseca, F. (see Fonseca, F. da)
Daiber, M., 1921. Linguatulida (Pentastomida). Zungenwürmer. — In: A. Lang (ed.), Handbuch der Morphologie der wirbellosen Tiere, Volume 4, Arthropoda: 784.
Dakubo, J.C.B., V.K. Etwire, R. Kumoji & S.B. Naaeder, 2006. Human pentastomiasis: a case report. — West African Journal of Medicine 25: 166-168.
Dakubo, J.C.B., S.B. Naaeder & R. Kumodji, 2008. Totemism and the transmission of human pentastomiasis. — Ghana Medical Journal 42: 165-168.
Dallbert, M., 1928. Pentastomides de Normande. — Bulletin de la Société Linnéenne de Normandie (7) 10: 62-63.
Dang, T.T., 2000. [Ecological and biological characteristcs of *Raillietiella orientalis* (Hett, 1915) Sambon, 1922 (Pentastomida)] paraziting in snakes]. — Tap Chi Hoc 22: 27-32. [In Vietnamese].
Dang, T.T., 2001. [Morphological characterisitcs of *Raillietiella orientalis* (Hett, 1915) Sambon, 1922 (Pentastomida)]. — Tap Chi Hoc 23: 11-14. [In Vietnamese].
Darling, S.T., 1912. A note on the presence of *Linguatula serrata* Fröhlich 1789 in man in Central America. — Bulletin de la Société de Pathologie Exotique 5: 118-119.
Darling, S.T. & H.C. Clark, 1912a. *Linguatula serrata* (larva) in a native Central American. — The Archives of Internal Medicine 9: 401-405.
Darling, S.T. & H.C. Clark, 1912b. *Linguatula serrata* (larva) in a native Central American. — Proceedings of the Canal Zone Medical Association 4: 11-14.
Da Silva Motta, C. (see Motta, C. da Silva)
Daukes, S.H., 1923. Heavy infestation with larvae of *Porocephalus* in specimens of hedgehog from Gold Coast. — Transactions of the Royal Society of Tropical Medicine and Hygiene 17: 8.

Dawydoff, K.N., 1928. Traité d'embryologie comparée des invertébrés: 1-930. [Pentastomida, p. 398-402].— Masson et Cie, Paris.
Deakins, D.E., 1969. *Raillietiella orientalis* (Pentastomida) hyperinfection in *Naja naja philippinensis* (Reptilia: Serpentes).— M.Sc. thesis, University of Oklahoma.
Deakins, D.E., 1971. Pentastomes from Blackbeard Island, Georgia, with notes on North-American pentastomes.— Journal of Parasitology 57: 1197.
Deakins, D.E., 1972. Pentastome pathology in captive reptiles.— Ph.D. thesis, University of Oklahoma.
Deakins, D.E., 1973. Occurrence of encysted larval *Raillietiella* (Pentastomida) in an adult female.— Transactions of the American Microscopical Society 92: 287-288.
De Beauchamp, P. (see Beauchamp, P. de)
De Blainville, H.H.D. (see Blainville, M.H.D. de)
De Campos, C.M. (see Campos, C.M. de)
De Coster, P. (see Coster, P. de)
De Faria, G. (see Faria, G. de)
De Faveaux, A.M. (see Faveaux, A.M. de)
De Fillipi, F. (see Filippi, F. de)
De Jonge, G.W.K. (see Jonge, G.W.K. de)
De Lamarck, J.B. (see Lamarck, J.B. de)
Delle Cave, L. (see Cave, L. delle)
Delorme, G., G. Cabanieu, C.J. Boget & J. Pivetaud, 1978. An observation of disseminated thoracic calcification evoking a pentastomosis.— Bordeaux Medical 11: 1611-1614.
De Meneghi, D. (see Meneghi, D. de)
Deschiens, R., L. Lamy, J. Levaditi, F. Sénéchal & N. Rist, 1954. Sur un cas de linguatulose nymphale du cobaye.— Bulletin de la Société de Pathologie Exotique 47: 840-841.
Detterline, J.L., J.S. Jacob & W.E. Wilhelm, 1984. A comparison of helminth endo-parasites in the cottonmouth (*Agkistrodon piscivorus*) and three species of water snakes (*Nerodia*).— Transactions of the American Microscopical Society 103: 137-143.
De Vega, N.G. (see González de Vega, N.)
Devos, R., 1939. Deux porocéphales des crocodiles du Luapula.— Annales de la Société Belge de Médicine Tropicale Bruxelles 19: 193-195, 2 pls.
De Waldheim, G.F. (see Fischer von Waldheim, G.F.)
Deweese, M.W.W., F. Murrah & S.B. Caruthers, 1962. Case report of a tongue worm (*Linguatula serrata*) in the anterior chamber.— Archives of Ophthalmology 68: 587-589.
Dias, E.J.R., D. Vrcibradic & C.F.D. Rocha, 2005. Endoparasites infecting two species of whiptail lizard (*Cnemidophorus abaetensis* and *C. ocellifer*; Teiidae) in a 'restinga' habitat of northeastern Brazil.— Herpetological Journal 15: 133-137.
Dias, V.S., 1942. Infestação da cobaia pelo *Armillifer armillatus* (Wyman, 1847).— Boletim da Sociedade Portuguesa de Ciências Naturais, Suplemento 3, 13: 762-764.
Diesing, K.M., 1836. Versuch einer Monographie der Gattung Pentastoma.— Annalen des Wiener Museums der Naturgeschichte 1: 1-32, 4 pls.
Diesing, K.M., 1850. Systema Helminthum, Volume 1: 1-679. [Pentastomida, p. 609-617].— Wilhelmum Braumüller, Vindobonae.
Diesing, K.M., 1856. Zwanzig Arten von Cephalocotyleen.— Denckschriften Kaiserlichen Akademie der Wissenschaften Mathematisch-Naturwissenschaftliche Classe 12: 23-38.
Diesing, K.M., 1864. Revision der Cephalocotyleen. Abteilung Paramecocotyleen.— Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften Mathematisch-Naturwissenschaftliche Classe 48-49: 200-345.Web page: http://biodiversitylibrary.org/page/6444711. Seen 26/12/2012.
Dikmans, G., 1936a. Linguatulid infestation of bovine livers and mesenteric nymph glands.— Bureau Veterinarian 12: 1-2.
Dikmans, G., 1936b. Linguatulid infestation of bovine livers and mesenteric nymph glands.— Bureau Veterinarian 12: 3.
Dinçer, S., 1982. Prevalence of *L. serrata* in stray dogs and animals slaughtered at Elazing abattoir (Turkey).— Veterinary Facultesi Dergisi Ankara Universitesi 29: 324-330.

Discamps, G. & J.P. Albert, 1974. La pentastomose. À propos de 4 cas recents. — Médicine Tropicale 34: 279-285.

Doby, J.M., M.P. Ramee & C. Guiguen, 1985. A nymph of *Linguatula* (Pentastomidea) observed in a púlmonar nodular formation of a man in Brittany. — Bulletin de la Société Française de Parasitologie 2: 85-88.

Dönges, J., 1966. Parasitäre Abdominalcysten bei Nigerianern. — Zeitschrift für Tropenmedizin und Parasitologie 17: 252-256.

Dolley, C.S., 1894. Synonymatic table of the animals parasites of man and of the animals commonly associated with him. — In: M.G. Gould, (ed.), Dictionary Medicale: 978-1021. Phildadelphia.

Dollfus, R.P., 1950. *Armillifer* L.W. Sambon 1922 tombe en synonymie de *Nettorhynque* H.-D. de Blainville 1824. — Annales de Parasitologie Humaine et Comparée 25: 112-114.

Dollfus, R.P., 1959. Porocéphales d'un chiroptère frugivore de Bamako-sur-Niger (Sudan Française). — Bulletin du Muséum National d'Histoire Naturelle (2) 30: 517-521, pl. 1.

Dollfus, R.P. & J. Canet. 1954. Sur un pentastomide: *Raillietiella* (*Heymonsia*) *hemidactyli* M.L. Hett 1934 supposé susceptible de parasiter l'homme consécutivement a l'ingestion thérapeutique de lézards vivants. — Bulletin de la Société de Pathologie Exotique 47: 401-408.

Dopf, A., 1937. Un cas de pneumonie à *Porocephalus armillatus* chez un indigène du Dahomey. — Annales de la Faculté Française de Médecine et de Pharmacie Beyrouth 6: 112-115.

Dorny, P., N. Praet, N. Deckers & S. Gabriel, 2009. Emerging food-borne parasites. — Veterinary Parasitology 163: 196-206.

Doucet, J.-P., 1960a. Pentastomidae. — Institut des Parcs Nationaux du Congo Belge Exploration du Parc National de la Garamba Mission H. De Saeger 18: 3-5.

Doucet, J.-P., 1960b. Pentastomida. — Institut des Parcs Nationaux du Congo Belge Exploration du Parc National de l'Upemba Mission G.F. De Witte 59: 3-7.

Doucet, J.-P., 1961. Pentastomida. — Institut des Parcs Nationaux du Congo Belge Exploration du Parc National Albert (2) 12: 3-6.

Doucet, J.-P., 1962. Pentastomes de l'Angola. — Publicações Culturais da Companhia de Diamantes de Angola 54: 115-120.

Doucet, J.-P., 1965. Contribution a l'étude anatomique, histologique et histochemique des pentastomes (Pentastomida). — Mémoires de l'Office de la Recherche Scientifique et Technique Outre-Mer 14: 1-50.

Doucet, J.-P., 1966. Données nouvelles sur l'anatomie et l'histologie des péntastomes. — In: A. Corradetti (ed.), Proceedings of the First International Congress of Parasitology, Volume 1: 621. Pergamon Press, Oxford.

Drabick, J.J., 1987. Pentastomiasis. — Reviews of Infectious Diseases 9: 1087-1094.

Drury, R.A.B., 1962. Larval granulomata in the liver. — Gut 3: 289-294.

Duarte, A.T. (see Taborda-Duarte, A.)

Dubinina, M.N. & L.A. Smogorzhevskaya, 1956. [On *Reighardia sternae* Dies. (Pentastomida), described as *Squamofilaria macroovata* Serkowa (Nematoda)]. — Parasitologischeski Sbornik. Akademiia Nauk SSSR. Zoologicheskii Institut, Moskow and Leningrad 16: 213-216. [In Russian].

Dujardin, F., 1845. Histoire naturelle des helminthes ou vers intestinaux: 1-654, pls 1-12. [Pentastomida, p. 299-309]. — Libraire Encyclopédique de Roret, Paris.

Dukes, G.H., Jr., R.M. Shealy & W.A. Rogers, 1971. *Sebekia oxycephala* (Pentastomida) in largemouth bass from Lake St John, Concordia Parish, Louisiana. — Journal of Parasitology 57: 1028.

Dulac, C. & R. Ralaimkhoatra, 1962. First case in Madagascar of human parasitization by *Moniliformis moniliformis*. — Archives de l'Institut Pasteur Madagascar 30: 159-160.

Du Plessis, V. (see Plessis, V. du)

Durden, L.A., D.L. Sly & A.T. Buck, 1985. Parasitic arthropods of bushbabies (*Galago senegalensis* and *G. crassicaudatus*) recently imported to the USA. — Laboratory Primate Newsletter 24: 5-6.

Dutta, N. & B. Manna, 1992. Variation in the rate of infection of *Raillietiella gehyrae* Bovien, 1927 (Pentastomida: Cephalobaenida) in *Calotes versicolor* in nature. — Proceedings of the Zoological Society of Calcutta, Supplement A, 45: 99-102.

Dutta, N. & B. Manna, 1995. Pathogenic changes in lungs of *Calotes versicolor* Boulenger infected with *Raillietiella gehyrae* Bovien, 1927 (Pentastomida: Cephalobaenida). — Indian Journal of Animal Health 34: 79-81.

Dyck, J., 1975. *Reighardia lomviae* sp. nov., a new pentastomid from the guillemot. — Norwegian Journal of Zoology 23: 97-109.

Edgecombe, G.D., 2010. Palaeomorphology: fossils and the inference of cladistic relationships. — Acta Zoologica 91: 72-80.

Ehrenford, F.A. & J.W. Newberne, 1981. An aid to clinical-diagnosis of tongue worms (*Linguatula serrata*) in dogs. — Laboratory Animal Science 31: 74-76.

Eiras, J.C. & A.A. Rego, 1989. Histopatologia em peixes resultantes de infecções parasitárias. — Publicações do Instituto de Zoologia Dr. Augusto Nobre Facculdade de Ciencias do Porto 208: 1-12.

Elbadawi, El K.S., E.L.A.Y. Gezuli, A.M. Eisa & N.K. Slepnev, 1978. *Linguatula serrata* nymph in a goat in the Sudan. — Veterinary Record 102: 171.

Eldredge, L.G., 2000. Number of Hawaiian species. Supplement 5. Records of the Hawaii Biological Survey for 1999. — Bishop Museum Occasional Papers 63: 3-8.

Eldredge, L.G., 2006. Number of Hawaiian species for 2003-2005. — Bishop Museum Occasional Papers 88: 62-79.

El-Hassan, A.M., I.A. El Toum & B.M. El-Asha, 1991. The Marrara syndrome: isolation of *Linguatula serrata* nymphs from a patient and the viscera of goats. — Transactions of the Royal Society of Tropical Medicine and Hygiene 85: 309.

Ellis, M., 1937. A case of porocephalosis. — West African Medical Journal 9: 41.

El-Refaii, A.H. & S.A. Michael, 1988. *Linguatula serrata* Fröhlich, 6789 - a case report of larvae among sheep and goats in Egypt. — Journal of the Egyptian Society of Parasitology 18: 353-354.

El-Sherry, M.I. & A.A. Sakla, 1984. On a linguatulid parasite, *Linguatula serrata* (Pentastomida: Arthropoda) from an Egyptian goat. — Assiut Veterinary Medical Journal 12: 123-128.

Enigk, K. & D. Düwel, 1957. Festellung und Behandlung des *Linguatula*-Befalles beim Hund. — Deutsche Tierärztliche Wochenschrift 64: 401-403.

Enyinihi, U.K., 1978. Pentastomiasis. — African Journal of Medicine and Medical Sciences 7: 183-185.

Eschmeyer, W.N. (ed.), 1998. Catalog of fishes: Volumes 1. Introductory materials. Species of fishes (A-L). Volume 2. Species of fishes (M-Z). California Academy of Sciences, California: Volume 1: 1-958; Volume 2: 959-1820.

Esmaeilzadeh, S., B. Mohammadian & A. Rezaei, 2008. *Linguatula serrata* nymph in a cat. — Iranian Journal of Veterinary Research 9: 387-389.

Esmail-Nia, K., S. Hadizadeh-Moalen, A. Drakhshanfar & G. Moatamedi, 2000. A study on the prevalence of *Linguatula serrata* infestation in small ruminants of Mazandaran province in Babol abbattoir. — Pajouhesh Va Sazandeji 45: 94-95.

Esslinger, J.H., 1960. The development of *Porocephalus crotali* Humboldt (Pentastomida) in experimental intermediate hosts. — Journal of Parasitology 46: 5.

Esslinger, J.H., 1962a. Hepatic lesions in rats experimentally infected with *Porocephalus crotali* (Pentastomida). — Journal of Parasitology 48: 631-638.

Esslinger, J.H., 1962b. Development of *Porocephalus crotali* (Humboldt, 1808) (Pentastomida) in experimental intermediate hosts. — Journal of Parasitology 48: 452-456.

Esslinger, J.H., 1962c. Morphology of the egg and larva of *Porocephalus crotali* (Pentastomida). — Journal of Parasitology 48: 457-462.

Esslinger, J.H., 1968. Morphology of the egg and larva of *Raillietiella furcocercum* (Pentastomida) from a Colombian snake (*Clelia clelia*). — Journal of Parasitology 54: 411-416.

Esslinger, J.H., 1985. Arthropods as agents and vectors. Arthropods and human disease. — In: P.C. Beaver & R.C. Jung (eds.), Animal agents and vectors of human disease, 5th edition: 201-205. Lea & Febiger, Philadelphia.

Ette, H.L., L. Yapo., K.D. Fanton, K. Adou Bryn, K. Botti, K. Koffi & D. Malicier, 2003. Human pentastomiasis discovered postmortem. — Forensic Science International 137: 52-54. Doi: 10.1016/S0379-0738(03)00281-0

Fain, A., 1960a. Diagnosis de deux nouveaux pentastomidés du Congo Belge. — Revue de Zoologie et Botanique Africaine 61: 117-118.

Fain, A., 1960b. La pentastomose chez l'homme. — Bulletin de l'Academie Royale de Médecine de Belgique (6) 25: 516-532.

Fain, A., 1961. Les pentastomides de l'Afrique Centrale. — Annales Musée Royale de l'Afrique Centrale (8) Sciences Zoologiques 92: 1-115, pls 1-6.

Fain, A., 1964. Observations sur le cycle evolutif du genre *Raillietiella* (Pentastomida). — Bulletin de la Classe des Sciences de l'Academie Royale de Belgique (5) 50: 1036-1060.

Fain, A., 1966. Observations sur le cycle évolutif du genre *Raillietiella* (Pentastomida). — In: A. Corradetti (ed.), Proceedings of the First International Congress of Parasitology, Volume 1: 623-624. Pergamon Press, Oxford.

Fain, A., 1966. Pentastomida of snakes - their parasitological role in man and animals. — Memórias do Instituto Butantan, Simpósio Internacional 33: 167-174.

Fain, A., 1975. The Pentastomida parasitic in man. — Annales de la Société Belge de Médecine Tropicale 55: 59-64.

Fain, A. & J. Mortelmans. 1960. Observations sur le cycle évolutif de *Sambonia lohrmanni* chez le varan. Preuve d'un developpment direct chez les Pentastomida. — Bulletin de la Classe des Sciences de l'Academie Royale de Belgique (5) 46: 518-531.

Fain, A. & G. Salvo. 1966. Pentastomose humaine produite par des nymphes d'*Armillifer grandis* (Hett) en République démocratique du Congo. — Annales de la Société Belge de Médecine Tropicale 46: 675-682.

Faisy, C., B. Boye, A. Blatt, P. Boutes & J. Lloumbou, 1995. La porocéphalose, parasitose méconnue revue de la littèrature à propos d'un cas. — Médecine Tropicale 55: 258-262.

Fantham, H.B., J.W.W. Stephens & F.V. Theobald. 1916. The animal parasites of man: 1-900. — John Bale, Sons and Danielsson, London.

Fard, S.R.N., R. Kheirandish, E.N. Asl & S. Fathi, 2011. Mesenteric and mediastinal lymph node infection with *Linguatula serrata* nymphs in sheep slaughtered in kerman slaughterhouse, southeast Iran. — Tropical Animal Health Production 43: 1-3.

Fard, S.R.N., R. Kheirandish, E.N. Asl & S. Fathi, 2010. The prevalence of *Linguatula serrata* nymphs in goats slaughtered in kerman slaughterhouse, Kerman, Iran. — Veterinary Parasitology 171: 176-178.

Faria, G. de & L.P. Travassos, 1913a. Nota sobre a presença de larva de *Linguatula serrata* Frölich no intestino do homem no Brasil, seguida de notas sobre os linguatulídeos da coleção do Instituto. — Memórias do Instituto Oswaldo Cruz 5: 123-128.

Faria, G. de & L.P. Travassos, 1913b. Nota sobre a presença de larva de *Linguatula serrata* Frölich no intestino do homem no Brasil. — Brazil-Médico 27: 31.

Farid-e-Tonekaboni, T., 1966. Linguatulosis in dog and slaughtered animals. — Unpublished DVM Thesis, University of Tehran.

Faust, E.C., 1927a. Linguatulids (order Acarina) from man and other hosts in China. — American Journal of Tropical Medicine and Hygiene 7: 311-325, pls 1-2.

Faust, E.C., 1927b. Four species of linguatulid nymphs from man and other hosts in China. — Journal of Parasitology 13: 285.

Faust, E.C., 1928. Linguatulids in China. — China Medical Journal 42: 107-108.

Faust, E.C., 1929. The animal parasites of the dog and the cat in China. — Lingnan Science Journal 8: 27-44.

Faveaux, M. Anceaux de, 1984. Les parasites des chiropteres du continent Africain. — Koninklijk Museum voor Midden-Afrika Tervuren, België, Annalen Zoologische Wetenschappen 244: 1-92.

Ferenc, S.A., T.L. Tallevast & C.H. Courtney, 1986. Experimental-infection of the brown water snake, *Nerodia taxispilota*, with *Sebekia mississippiensis* (Pentastomida). — Proceedings of the Helminthological Society of Washington 53: 296-297.

Fernando, W., 1953. Notes on two larval (nymphal) linguatulids from Ceylon. — Ceylon Journal of Science, Section B, Zoology 25: 155-156, pls. 34-35.

Filippi, F. de, 1861. Quelques observations relatives à des parasites nouveaux. — Atti della Società Elvetica di Scienze Naturali 44: 18-20.

Filippi, F. de, 1862. Note zoologiche. 3. Nuova *Linguatula* con embrioni di particular forma. — Archivio per la Zoologia l'Anatomia e la Fisiologia 1: 62-68, pl. 6 fig. 1-3.

Fisch, A., J. Leport, F. Bloch, A. Sebag, J. Frija & J.P. Petite, 1985. Human pentastomiasis - clinical, radiologic and computed tomographic study of one case. — Gastroenterologie Clinique et Biologique 9: 263-265.

Fischer, W., 1930. Linguatuliden. In: F.S. Henke & O. Lubarsch (eds.), Handbuch der Speziellen Pathologischen Anatomie und Histologie: Volume 5: 1-760. Julius Springer, Berlin.

Fischer Von Waldheim, G. (see Waldheim, Fischer G. von)

FishBase, 2012. FishBase: A global information system on fishes. Web page: http://www.fishbase.org/search.php?lang=portuguese. Seen 15-3-10.

Flach, E.J., J. Riley, A.G. Mutlow & I.A.P. McCandlish, 2000. Pentastomiasis in Bosc's monitor lizards (*Varanus exanthematicus*) caused by an undescribed *Sambonia* species. — Journal of Zoo and Wildlife Medicine 31: 91-95.

Flook, W.H., 1907. *Linguatula taenioides* in the dog. — Veterinary Record 19: 648.

Foldenauer, U., N. Pantchev, S. Simova-Curd, O.M. Jurado & J.M. Hatt, 2008. Pentastomosis in *Boa constrictor* - Diagnosis and endoscopical removal. — Tieraerztliche Praxis Ausgabe Kleintiere Heimtiere 36: 443-449.

Folstad, I., P. Arneberg & A.J. Karter, 1996. Antlers and parasites. — Oecologia 105: 556-558.

Fonseca, F. da, 1938. Observações sôbre o ciclo evolutivo de *Porocephalus clavatus*, especialmente sobre o seu tropismo em cobaias. — Boletim Biológico São Paulo, Nova Série 3: 157-165.

Fonseca, F. da, 1939. Observações sobre o ciclo evolutivo de *Porocephalus clavatus*, especialmente sobre o seu orquidotropismo em cobaias. — Memórias do Instituto Butantan 12: 185-190, 4 pls.

Fonseca, F. da & J.M. Ruiz. 1956. Was ist eigentlich *Pentastoma megastomum* Diesing, 1836? (Porocephalida, Porocephalidae). — Senckenbergiana Biologica 37: 469-485, pls. 59-64.

Fontanel, A., J. Doucet & R. Loubiere, 1972. Pentastomose conjuntivale. À propos d'un cas. — Nouvelle Presse Medicale 1: 3123-324.

Fornara, L., 1924. Note sur un cas de localisation sous-arachnoïdienne d'une larve de porocéphale. — Annales de la Société Belge de Médecine Tropicale 3: 233-236.

Forrester, D.J., R.M. Shealy & S.H. Best, 1970. *Porocephalus crotali* (Pentastomida) in South Carolina. — Journal of Parasitology 56: 977.

Foster, G.W., J.M. Kinsella, P.E. Moler, L.M. Johnson & D.J. Forrester, 1998. Parasites of Florida softshell turtles (*Apalone ferox*) from southeastern Florida. — Journal of the Helminthological Society of Washington 65: 62-64.

Foster, G.W., P.E. Moler, J.M. Kinsella, S.P. Terrell & D.J. Forrester, 2000. Parasites of eastern indigo snakes (*Drymarchon corais couperi*) from Florida, USA. — Comparative Parasitology 67: 124-128.

Frederickson, R.G., D.E. Haines & J.E. Hall, 1985. Pentastomid nymph from the brain of a squirrel-monkey (*Saimiri sciureus*). 2. Morphology of the host response. — Journal of Medical Primatology 14: 209-223.

Fredes, F. & E. Raffo, 2005. Hallazgo de *Raillietiella* sp. en culebra chilena de cola larga (*Philodryas chamissonis*) de un zoológico de la región metropolitana. — Parasitologia LatinoAmericana 60: 189-191.

Frölich, J.A. von, 1789. Beschreibungen einiger neuer Eingeweidewürmer. — Der Naturforscher 24: 101-162, pl. 4.

Frölich, J.A. von, 1791. Beiträge zur Naturgeschichte der Eingeweidewürmer. — Naturforscher 25: 52-113.

Fülleborn, F., 1908. *Porocephalus (Pentastomum*) aus den Organen eines west-afrikanischen Negers. — Archiv für Schiffs- und Tropenhygiene 12: 169-170.

Fülleborn, F., 1914. Über die Entwicklung von *Porocephalus*. — Transactions of the Seventeenth International Congress of Medicine London Section 21 Tropical Medicine and Hygiene Part 2: 297-298.

Fülleborn, F., 1919a. Über die Entwicklung von *Porocephalus* und dessen pathologische Bedeutung. — Beihefte zum Archiv für Schiffs- und Tropenhygiene 23: 5-36.

Fülleborn, F., 1919b. Über die Entwicklung von Porozephalus und dessen Pathogene Bedeutung: 1-33. — J.A. Barth, Leipzig.

Gaevskaya, A.V., 2005. [Anisakid nematodes and diseases caused by them in animals and man]. ESOKI-Gidrofisika: 1-223. [In Russian]

Gaiger, S.H., 1909. *Linguatula taenioides*. — Journal of Tropical Veterinary Science 4: 528-531.

Gaiger, S.H., 1911. *Linguatula tanoides*. — Veterinary News 8: 634, 636.

Gajardo-Tobár, R., 1943. Observaciones acerca de la *Linguatula serrata*. — Medicina Moderna 16: 295-298.

Gajardo-Tobár, R., 1944. *Linguatula serrata* en Chile. — Boletín de la Oficiana Sanitaria Pan-americana 23: 354.

Galli-Valerio, B., 1936. Notes de parasitologie. 1. Un cas de *Linguatula rhinaria* Pilger chez un chien.— Schweizer Archiv für Tierheilkunde 78: 577-581.

Ganin, M., 1869. Beitrage zur Erkenntnis der Entwicklungsgeschichte bei den Insekten (Kleimstreifen der Pentastomiden).— Zeitschrift für Wissenschaftliche Zoologie 19: 381-451.

Ganzorig, S., D. Sumiya, N. Batsaikhan, R. Schuster, Y. Oku & M. Kamiya, 1998. New findings of metacestodes and a pentastomid from rodents in Mongolia.— Journal of the Helminthological Society of Washington 65: 74-81.

Garbayo González, M. (see González, M.G.)

Gardiner, C.H., J. Dyke & S.F. Shirley, 1984. Hepatic granuloma due to a nymph of *Linguatula serrata* in a woman from Michigan: a case report and review of the literature.— American Journal of Tropical Medicine and Hygiene 33: 187-189.

Garedaghi, Y., A.P.R. Saber, A. Naghizadeh & M. Nazeri, 2011. Survey on prevalence of sheep and goats lungworms in Tabriz Abattoir, Iran.— Journal of Animal Veterinary Advances 10: 1460-1468.

Gast-Galvis, A., 1960. *Linguatula serrata* en un hígado humano.— Boletín Chileno de Parasitologia 15: 15-16.

Gedoelst, L., 1911. Synopsis de parasitologie de l'homme et des animaux domestiques: 1-332.— Lierre.

Gedoelst, L., 1921. Un linguatulide nouveau parasite d'un batracien.— Records of the Indian Museum 22: 25-26.

Gellé, 1877a. Pentastoma taeniöide dans l'oreille du chien.— Gazette Médicale de Paris, Séries 4: 545.

Gellé, 1877b. Pentastome taenioïde trouvé dans la caisse tympanique d'un chien.— Tribune Médicale 9: 539.

Gelormini, N. & R.J. Roveda, 1938. *Linguatula serrata.*— Publicación Instituto de Parasitologia y Enfermedades Parasitarias 1: 1-12, 4 pls.

Gentilini, M. & B. Duflo, 1988. Porocéphaloses.— Médicine Tropicale Flammarion Médicine/Sciences: 628-629.

Gerlach, A.C., 1869. *Pentastomum denticulatum* bei zwei Ziegen.— Jahresbericht der Kongl. Tierarzneischule zu Hannover 2: 73-80.

Gervais, P., 1847. *Nettorhynchus.*— In: C.D. D'Orbigny (ed.), Dictionnaire universal d'histoire naturelle: résumant et complétant tous les faits presents par les encyclopédies, les anciens dictionnaires scientifiques, les oeuvres completes de Buffon … Volume 8: 630. Renard Martinet et cie., Paris.

Giard, A., 1896. Sur le *Pentastomum constrictum* v. Siebold, parasite du foie dês nègres.— Comptes Rendus Hebdomadaires dês Séances et Mémoires de la Société de Biologie (10) 3: 469-471.

Giard, A., 1898. Sur le *Pentastomum constrictum* Siebold, parasite du foie des nègres.— Centralblatt für Bakteriologie, Parasitenkunde und Infektionskrankheiten. Erste Abteilung 23: 1098-1099.

Gicik, Y., M. Kara, B. Sari, K. Kilic & M.O. Arslan, 2009. Intestinal parasites of red foxes (*Vulpes vulpes*) and their zoonotic importance for humans in Kars Province.— Kafkas Universitesi Veteriner Fakultesi Dergisi 15: 135-140.

Giglioli, G.S., 1922a. The new genus *Alofia* of the family Linguatulidae. An anatomical account of *A. ginae.*— Journal of Tropical Medicine and Hygiene 25: 371-377.

Giglioli, G.S., 1922b. *Armillifer brumpti* n. sp., nouvelle espèce de l'linguatulidé de Madagascar.— Bulletin de la Société de Pathologie Exotique 15: 565-572.

Giglioli, G.S., 1923. On the linguatulid arachnid *Raillietiella furcocercum* (Diesing 1835) Sambon 1922.— Proceedings of the Zoological Society of London Part 1 1923: 15-18.

Giglioli, G.S., 1927a. Notes on some neotropical species of tongue worms. Human porocephaliasis in tropical America.— Journal of Tropical Medicine and Hygiene 30: 33-39.

Giglioli, G.S., 1927b. Observations sur la morphologie de l'oeuf et de l'embryon chez *Porocephalus clavatus* (Wyman, 1845, Sambon, 1910).— Bulletin de la Société de Pathologie Exotique 20: 260-270, pl. 4.

Gill, H.S., B.V. Rao & R.C. Chhabra, 1968. A note on the occurrence of *Linguatula serrata* (Frölich, 1789) in domesticated animals.— Transactions of the Royal Society of Tropical Medicine and Hygiene 62: 506-508.

Gilyarova, M.S. & F.N. Pravdina, 1984. [Animal life. Volume 3. Arthropoda: Trilobita, Chelicerata, Tracheata, Onychophora. 2nd edition, revised] [In Russian]: 1-463.— Prosveshchenie, Moscow.

Ginzburg, G.R. & V.P. Koriazhnov, 1928. K voprosu o tak nazyvaemykh lingvatul'nykh (pentastomnykh) uzelkakh v bryzheechnykh zhelezakh uboïnogo rogatogo skota. — Trudy Gosudarstvennogo Instituta Eksperimentl'Noi Veterinarii 5: 58-62.

Giribet, G., S. Carranza, J. Baguna, M. Riutort & C. Ribeira, 1996. First molecular evidence for the existence of a Tardigrada + Arthropoda clade. — Molecular Biology and Evolution 13: 76-84.

Giribet, G., S. Richter, G.B. Edgecombe & W.C. Wheeler. 2005. The position of crustaceans within Arthropoda - evidence from nine loci and morphology. — In: S. Koenemann & R.A. Jenner (eds), Crustacea and arthropod relationships. Crustacean Issues 16: 307-352. A.A. Balkema, Rotterdam.

Glage, F., 1915. Fünflochlarven in den Lungendrüsen beim Rinde. — Deutsche Fleischbeschauerzeitung 12: 155-156.

Glover, W.E., 1928. *Porocephalus armillatus*. — West African Medical Journal 2: 107.

Gmelin, J.F., 1791. Caroli a Linné. Systema naturae per regana tria naturae; secundum classes, ordines, genera, species, cum characteribus, differentiis, synonymis, locis (13th ed.) Vol. 1 (6): 3021-3910. — Georg Emanuel Beer, Lipsiae.

Gmelin, J.F., 1800. — In: C. Linnaeus (ed.), Systema Naturae per Regna Tria Naturae, secundum classes, Ordines, Genera, Species cum Characteristibus, Differentiis, Synonymis, Locis. Copenhagen. [Pentastomida, p. 3069]

Godeau, P., J.C. Piette & S. Herson, 1982. Porocéphalose: 2195.— Traité de médicine. Flammarion.

Goeze, J.A.E., 1800. Einige Beobachtung über die Erzeugung der Eingeweidewürmer. — In: J.G.H. Zeder (ed.), Erster Nachtrag zur Naturgechichte der Eingeweidewürmer: 317-320. Leipzig.

Goldberg, S.R. & C.R. Bursey, 1997. New helminth records for the mourning gecko, *Lepidodactylus lugubris* (Gekkonidae) from Hawaii. — Bishop Museum Occasional Papers 49: 54-56.

Goldberg, S.R. & C.R. Bursey, 2000. Transport of helminths to Hawaii via the brown anole, *Anolis sagrei* (Polychrotidae). — Journal of Parasitology 86: 750-755.

Goldberg, S.R. & C.R. Bursey, 2004. Coelomic metazoan endoparasites of 15 colubrid and two elapid snake species from Costa Rica. — Caribbean Journal of Science 40: 62-69.

Goldberg, S.R., C.R. Bursey & K.R. Beaman, 2003. First reported occurrence of *Porocephalus crotali* (Pentastomida: Porocephalida) in the Santa Catalina Island rattleless rattlesnake. — California Fish and Game 89: 51-53.

Goldberg, S.R., C.R. Bursey & F. Kraus, 2002. Seasonal variation in the helminth community of the brown anole, *Anolis sagrei* (Sauria: Polychrotidae), from Oahu, Hawaii. — American Midland Naturalist 148: 409-415.

Goldberg, S.R., C.R. Bursey & F. Kraus, 2009a. Gastrointestinal helminths from fifteen species of *Litoria* and *Nyctimystes* (Anura: Hylidae) from Papua New Guinea. — Journal of Natural History 43: 509-522.

Goldberg, S.R., C.R. Bursey & F. Kraus, 2009b. Endoparasites in 12 species of *Sphenomorphus* (Squamata: Scincidae) from Papua New Guinea. — Comparative Parasitology 76: 58-83.

Goldberg, S.R., C.R. Bursey & F. Kraus, 2010. Metazoan endoparasites of 14 species of skinks (Squamata: Scincidae) from Papua New Guinea. — Journal of Natural History 44: 447-467.

Goldberg, S.R., C.R. Bursey & M. Morando, 2004. Metazoan endoparasites of 12 species of lizards from Argentina. — Comparative Parasitology 71: 208-214.

Goldberg, S.R., C.R. Bursey & S.R. Telford, 2003. Metazoan endoparasites of 11 species of lizards from Pakistan.— Comparative Parasitology 70: 46-54.

Goldberg, S.R., C.R. Bursey & S.R. Telford, 2005. Metazoan endoparasites of four species of lizards, *Gehyra mutilata, Hemidactylus frenatus* (Gekkonidae), *Mabuya cumingi, Mabuya multifasciata* (Scincidae), and one species of snake, *Ramphotyphlops braminus* (Typhlopidae), from the Philippine Islands. — Comparative Parasitology 72: 88-101.

Goldsmid, J.M. & M.H. Melmed, 1973. A brief review of human porocephaliasis with a report of the first case of human infection with *Armillifer* spp. in Rhodesia. — Central African Journal of Medicine 19: 213-216.

Gomes, D.C., 1979. Contribuição ao conhecimento dos helmintos parasitos de marsupiais no Brazil, da coleção helmintológica do Instituto Oswaldo Cruz (Cestoda, Archiacanthocephala e Linguatulida). — Revista Iberica de Parasitologia 39: 587-599.

Gomes, D.C. & C. da S. Motta. 1968. Sôbre uma nova espécie do gênero *Travassostulida* Motta & Gomes, 1968 (Cephalobaeniformes, Linguatulida). — Atas da Sociedade de Biologia do Rio de Janeiro 12: 57-58, figs 1-9.

Gomes de Faria, J. (see Faria, G. de)

Gomez, L., 1945. Artroparásitos de la région penibética. — Revista Ibérica de Parasitología, Tomo Extraordinário: 73-105, pls. 1-2.

Gomez-Puerta, L.A., M.T. Lopez-Urbina & A.E. Gonzalez, 2011. Presence of *Porocephalus clavatus* (Arthropoda: Porocephalidae) in Peruvian Boidae snakes. — Veterinary Parasitology 181: 379-381.

González, M.G., 1970. Pulmonary pentastomiasis (1 case). — Revista Clinica Espanola 118: 283-286.

González de Vega, N., C. Gómez-Moreno Vilar & M. Rodrígues-Aguilar, 1962. Sobre algunos casos de probable linguatulosis pulmonar. (Pentastomiasis, procephalosis). — Revista Ibérica de Parasitologia 22: 213-254.

Google, 2012. Google Brasil. Web page: http: //www.google.com.br. seen 28-12-2012.

Gorecki, P., 1958. Contribution à l'étude de la porocéphalose nymphale. — Presse Médicale 66: 1516.

Gorokhov, V.V., 2003. Forgotten parasitic diseases. — Medisinskaia Parazitologiia i Parazitarnye Bolezni 1: 33-36.

Gorokhov, V.V., A.S. Moskvin, L.N. Romanenko, L.D. Migacheva, D.B. Vasilev & A.N. Volihev, 2000. [On the discovery of pentastomiasis in Russia]. — Veterinariya 4: 7-10. [In Russian].

Goss, L.J., 1939. Snake parasites in man. — Bulletin of the New York Zoological Society 42: 178-179.

Gottheil, W.S., 1889. *Pentastoma moniliforme*, a rare parasite with remarks on the Pentastomidae. — Journal of Comparative and Microscopical Science 10: 42-46.

Gould, S.J., 1995. Of tongue worms, velvet worms, and water bears. — Natural History 104: 6-15.

Gowri, N., P.S. Subbaiyan & G. Sundara Rajulu, 1982. Neurosecretory system of a tongue worm *Raillietiella gowrii* (Pentastomida). — Indian Zoology 6: 117-120.

Graber, M., 1981a. Parasites internes des vertebres domestiques et sauvages, autres que les primates de la republique Democratique du Congo (d'apres la collection Cassard-Chambrom 1956-1960). Role pathogene-diagnostic prophylaxie. — Revue Elevage Medicale et Veterinaire des Pays Tropicales 34: 155-167.

Graber, M., 1981b. Endoparasites in domestic and wild animals of the Central African Republic (CAR). — Bulletin of Animal Health Production Africaine 29: 25-53.

Graber, M. & J.P. Gevrey. 1981. Parasites internes des primates de la Republique Democratique du Congo (d'apres la collection Cassard-Chambrom 1956-1960). Role pathogene-diagnostic prophylaxie. — Revue Elevage Medicale et Veterinaire des Pays Tropicales 34: 27-41.

Graff, L. von, 1877. Das genus *Myzostoma* (Leuckart): 1-82, 11 pls. — Engelmann, Leipzig.

Gratama, S. & P.H. van Thiel, 1957. Ocular localization of *Armillifer armillatus*. — Documenta de Medicina Geographica et Tropica 9: 374-376.

Gretillat, S. & E.R. Brygoo, 1959. *Raillietiella chamaeleonis* n. sp. première espèce de Cephalobaenidae (Pentastomida) signalée à Madagascar. — Annales de Parasitologie Humaine et Comparée 34: 112-120.

Gretillat, S. & E.R. Brygoo, 1961. Les "dilatateurs de copulation" chez *Raillietiella* (*Heymonsia*) *hemidactyli*, et valeur taxonomique possible de ces organes chez les Pentastomida. — Archives Institut Pasteur Madagascar 29: 71-74.

Gretillat, S., E.R. Brygoo, & C.A. Domergue, 1962. Pentastomes de reptiles malagaches. — Annales de Parasitologie Humaine et Comparée 37: 295-313.

Gretillat, S. & G. Thiéry. 1960. Porocéphalose à *Nettorhynchus* (*Armillifer*) *armillatus* (Wyman, 1845), chez un chat. — Revue d'Élevage et de Médicine Vétérinaire des Pays Tropicaux 13: 305-308.

Grevé, B.A., 1818. Erfahrungen und Beobachtungen über die krankheiten der Hausthiere, im Vergleich mit den Krankheiten des Menschen: 124, 184. — Oldenburg.

Grevé, B.A., 1877. *Pentastomum ténioide* dans l'oreille du chien. — Comptes Rendus de la Societè de Biologie de Paris, 175: 455-458.

Greve, J.H. & W.C. Russell. 1974. The brown hyaena (*Hyaena brunnea*), a new host for nymphal *Armillifer armillatus* (Pentastomida: Porocephalidae). — Journal of Parasitology 60: 52.

Griffiths, R.B. & K.B. Sinclair, 1953. The fox as a reservoir of *Linguatula serrata* in Great Britain. — Transactions of the Royal Society of Tropical Medicine and Hygiene 47: 5.

Gros, G., 1849. Fragments d'helminthologie et de physiologie microscopique. Bulletin de la Société Impériale des Naturalistes de Moscou 22: 549-573.

Gros, H., 1919. Fréquence des porocéphales chez les noirs de l'Afrique occidentale. — Bulletin de la Société de Pathologie Exotique 12: 92-93.

Guardia, S.N., H. Sepp, T. Scholten & I. Morava-Protzner, 1991. Pentastomiasis in Canada. — Archives of Pathology and Laboratory Medicine 115: 515-517.

Guidelli, G.M., A. Isaac, R.M. Takemoto & G.C. Pavanelli, 2003. Endoparasite infracommunities of *Hemisorubium platyrhynchos* (Valenciennes, 1840) (Pisces: Pimelodidae) of the Baia River, Upper Parana River floodplain, Brazil: Specific composition and ecological aspects. — Brazilian Journal of Biology 63: 261-268.

Guidry, E.V. & N.O. Dronen, 1980. Hatching, locomotion, and migration notes on the primary larva of *Kiricephalus coarctatus* (Diesing 1850) Sambon 1922 (Pentastomida, Porocephalidae). — Journal of Parasitology 66: 686-688.

Gurler, A.T. & A. Doganay, 2007. Helmints of digestive and respiratory system of rabbits in Ankara and Districts. — Ankara Universitesi Veteriner Fakultesi Dergisi 54: 105-109.

Gurr, L., 1953. A note on the occurrence of *Linguatula serrata* (Frölich, 1789) in the wild rabbit, *Oryctolagus cuniculus* in New Zealand. — New Zealand Journal of Science and Technology, Section B, 35: 49-50.

Gyorkos, T.W. & D.K.M. Kevan, 1979. Pentastomida. — Memoirs of the Entomological Society of Canada 108: 290-291.

Haan, J. de, 1821. *Linguatula taenioides*. — Tijdschrift voor Diergeneeskunde 48: 290.

Haddadzadeh, H.R., S.S. Athari, R. Abedini, S.K. Nia, P.K. Nia, S. Nabian & B. Haji-Mohamadi, 2010. One-humped camel (*Camelus dromedarius*) infestation with *Linguatula serrata* in Tabriz, Iran. — Iranian Journal of Arthropod-Borne Diseases 4: 54-59.

Haddadzadeh, H.R., S.S. Athari, & B. Hajimohammadi, 2009. The first record of *Linguatula serrata* infection of two-humped camel (*Camelus bactrinus*) in Iran. — Iranian Journal of Parasitology 4: 59-61.

Haffner, K. von, 1922a. Beiträge zur Kenntnis der Linguatuliden. I. Ovarium und Eibildung von *Porocephalus armillatus* (Wyman). — Zoologischer Anzeiger 54: 162-170.

Haffner, K. von, 1922b. Beiträge zur Kenntnis der Linguatuliden. II. Zur Eireifung von *Porocephalus armillatus* (Wyman). — Zoologischer Anzeiger 54: 170-177.

Haffner, K. von, 1924a. Beiträge zur Kenntnis der Linguatuliden. VII. Die systematische Stellung der Linguatuliden. — Zoologischer Anzeiger 61: 209-218.

Haffner, K. von, 1924b. Beiträge zur Kenntnis der Linguatuliden. IV. Die Körpermuskulatur von *Porocephalus armillatus*. — Zoologischer Anzeiger 59: 270-276.

Haffner, K. von, 1924c. Beiträge zur Kenntnis der Linguatuliden. V. Die Drüsen von *Porocephalus armillatus*. — Zoologischer Anzeiger 60: 126-136.

Haffner, K. von, 1924d. Beiträge zur Kenntnis der Linguatuliden. VI. Über das Nervensystem von *Porocephalus armillatus*. — Zoologischer Anzeiger 61: 183-186.

Haffner, K. von, 1924e. Beiträge zur Kenntnis der Linguatuliden. III. Über den Hoden und die Spermatocystenbildung von *Porocephalus moniliformis*. — Zoologischer Anzeiger 58: 285-290.

Haffner, K. von, 1925. Linguatulida, Zungenwürmer. *Linguatula serrata* Frölich (*Pentastomum taenioides* Rud.; *Linguatula rhinaria* Raillet. — In: P. Schultze, Biologie der Tiere Deutschlands No. 16, Part 13: 1-8. Borntraeger, Berlin.

Haffner, K. von, 1926a. Die Sinnesorgane der Linguatuliden, nebst einer Betrachtung über die systematische Stellung dieser Tiergruppe. — Zeitschrift für Wissenschaftliche Zoologie 128: 201-252, pl. 22.

Haffner, K. von, 1926b. Sinnesorgane und Metamerie der Linguatuliden. — Zoologischer Anzeiger, Supplementband Verhandlungen der Deutschen Zoologischen Gesellschaft 31: 136-141.

Haffner, K. von, 1927. Ergebnisse einer zoologischen Forschungsreise in Brasilien 1913-1914 von Prof. Dr. E. Bresslau. Linguatuliden als Parasiten von *Marmosa*. — Abhandlungen Herausgegeben von der Senckenbergischen Naturforschenden Gesellschaft 40: 359-365.

Haffner, K. von, 1964. Ein Beitrag zur Kenntnis der Pentastomidea. Der Hakernapparat, die Hautmuskulatur und die Parapodiallappen von *Railietiella affinis* Bouvien, 1927. — Mitteilungen aus dem Staatsinstitut und Zoologischen Museum in Hamburg, Kosswig-Festschrift 1964: 51-58.

Haffner, K. von, 1967. Neues über die Organisation von *Reighardia sternae* Diesing. — Zoologische Jahrbücher Abteilung für Anatomie und Ontogenie der Tiere 84: 1-24.

Haffner, K. von, 1971. Das Pentastomidenproblem (Tagmosis, Metamerie, Organisation, Evolution, systematische Stellung). — Mitteilungen aus dem Staatsinstitut und Zoologischen Museum in Hamburg 67: 53-107.

Haffner, K. von, 1972. Die Musksulatur und Ortsbewegung der Stachellarven (= Wanderlarven Nymphen) von *Neolinguatula nuttalli* (Pentastomida). — Zoologischer Anzeiger 189: 235-244.

Haffner, K. von, 1973. Über die Entwicklung, vergleichende Anatomie und Evolution der Extremitäten von Pentastomiden. — Zeitschrift für Zoologische Systematik und Evolutionsforschung 11: 241-268.

Haffner, K. von, 1974. Über die Bedeutung der Zungwürmer (Pentastomida), einer Grüppe wenig bekannter tierischer Parasiten. — Abhandlungen und Verhandlungen des Naturwissenschaftlichen Vereins in Hamburg (NF) 17: 139-151.

Haffner, K. von, 1977. Über die systematische Stellung und die Vorfahren der Pentastomida auf Grund neuer vergleichender Untersuchungen. — Zoologischer Anzeiger 199: 353-370.

Haffner, K. von & G. Rack, 1965. Neues über die Entwicklung der Pentastomide, *Reighardia sternae* (Diesing, 1864). — Zoologische Jahrbücher, Abteilung für Anatomie und Ontogenie der Tiere 82: 419-444.

Haffner, K. von & G. Rack, 1971. Beitrag zur Anatomie, Entwicklung und systematischen Stellung der *Cephalobaena tetrapoda* Heymons, 1922 (Pentastomida). — Zoologisches Jahrbücher Abteilung Anatomie 88: 505-526.

Haffner, K. von, G. Rack & R. Sachs, 1969. Verschiedene Vertreter der Familie Linguatulidae (Pentastomida) als Parasiten von Säugetieren der Serengeti (Anatomie, Systematik, Biologie). — Mitteilungen aus dem Staatsinstitut und Zoologischen Museum in Hamburg 66: 93-144.

Haffner, K. von, R. Sachs & G. Rack, 1967. Das Vorkommen von Stachellarven aus der Familie der Linguatulidae (Pentastomida) in afrikanischen Huftieren und ihr Parasitismus. — Zeitschrift für Parasitenkunde 29: 329-355.

Hahn, L., 1899. Pentastome ou linguatule. — Grande Encyclopédie, Inventaire Raissonné des Sciences, des Lettres et des Arts par une Societé de Savants et de Gens de Lettres 26: 316-317.

Hahn, L. & E. Lefèvre. 1885. Pentastome ou Linguatule. — Dictionnaire Encyclopédique des Sciences Médicales (2) 22: 704-708.

Haldeman, S.S., 1851. Invertebrates. — In: S.F Baird (ed.), Outlines of general zoology (reprinted from the Zoological portion of the work entitled "Iconographic Encyclopeida of Sciences, Liteature and Art. Systematically arranged by J.G. Heck, translated from the German with additions, and edited by Spencer F. Baird, A.M., M.D., Professor of Natural Sciences in Dickinson College, Carlisle, Pa…": 220-400. Rudolph Garrigue, New York.

Hall, J.E., D.E. Haines & R.G. Frederickson. 1985. Pentastomid nymph from the brain of a squirrel-monkey (*Saimiri sciureus*). 1. Morphology of the nymph. — Journal of Medical Primatology 14: 195-208.

Halvorsen, O., 1986. Epidemiology of reindeer parasites. — Parasitology Today 2: 334-339.

Hami, M., S.R. Naddaf, I. Mobedi, M. Zare-Bidaki, S.S. Athari, B. Hajimohammadi & G. Anaraki-Mohammadi, 2009. Prevalence of *Linguatula serrata* infection in domestic bovids slaughtered in Tabriz Abattoir, Iran. — Iranian Journal of Parasitology 4: 25-31.

Hanley, K.A., K. Petren & T.J. Case, 1998. An experimental investigation of the competitive displacement of a native gecko by an invading gecko: no role for parasites. — Oecologia 115: 196-205.

Harley, G., 1857. On the anatomy of a new species of *Pentastoma* found in the lung and air-sac of an Egyptian cobra. — Proceedings of the Zoological Society of London 25: 115-122, pls 146-147.

Harvey, T.H.P. & N.J. Butterfield, 2008. Sophisticated particle-feeding in a large Early Cambrian crustacean. — Nature 452: 868-871.

Hasegawa, H., 1985. [Helminth parasites of reptiles from Okinawa, Japan]. — Biological Magazine 23: 1-11. [In Japanese].

Hassan, A.M.E, (see El Hassan, A.M.)

Hassett, D. & T.K. McCarthy, 1983. The occurrence of *Reighardia sternae* (Diesing, 1864) Ward, 1899 (Pentastomida: cephalobaenida) in Ireland. — Irish Naturalist Journal 21: 172-173.

Haugerud, R.E., 1987. Om *Linguatula arctica*, reinens bihulemark. — Rangifer 1: 80-87.
Haugerud, R.E., 1988a. Human pentastomiasis. — Tidskrift for den Norske Laegeforening 1: 28-31.
Haugerud, R.E., 1988b. A life history approach to the parasite-host interaction *Linguatula arctica* Riley, Haugerud and Nilssen, 1987 - *Rangifer tarandus* (Linnaeus, 1758).— Ph.D. Thesis, University of Tromso, Norway.
Haugerud, R.E., 1989. Evolution in the pentastomids. — Parasitology Today 5: 126-132.
Haugerud, R.E. & A.C. Nilssen, 1985. *Linguatula* sp. (Pentastomida) in reindeer, a new species with a direct life cycle? — Proceedings of the 12th Symposium of the Scandinavian Society for Parasitology 18: 51.
Haugerud, R.E. & A.C. Nilssen, 1987. The life cycle of the reindeer sinus worm *Linguatula arctica* (Pentastomida). An adaptation to arctic conditions? — Proceedings of the 13th Symposium of the Scandinavian Society for Parasitology 19: 1.
Haugerud, R.E., A.C. Nilssen & A. Rognmo, 1993. On the efficacy of ivermectin against reindeer sinus worm *Linguatula arctica* (Pentastomida), with a review on ivermectin in reindeer. — Rangifer 13: 157-162.
Hayek, G. von, 1881. Handbuch der Zoologie, Volume 2: 131-133, figs 1080, 1089-1093.— C. Gerold's Sohn, Wien.
Hazen, T.C., J.M. Aho, T.M. Murphy, G.W. Esch & G.D. Schmidt, 1978. The parasite fauna of the American alligator (*Alligator mississippiensis*) in South Carolina. — Journal of Wildlife Diseases 14: 435-439.
Heideman, N.J.L., 2002. The occurrence of the arthropod endoparasite, *Raillietiella namibiensis* (Pentastomida: Cephalobaenida), in the lungs of agamid lizards, Windhoek, Namibia. — Herpetological Journal 12: 37-38.
Hering, E.A. von (see Von Hering, E.A.)
Henry, A. & C.E. Joyeux, 1920. Contribution à la faune helminthologique de la Haute-Guinée française. — Bulletin de la Société de Pathologie Exotique 13: 176-182.
Herzog, M. & C.B. Hare, 1907. *Porocephalus constrictus* in a native Filipino. — Transactions of the American Microscopical Society 27: 41-45.
Herzog, U., P. Marty & F. Zak, 1985. Pentastomiasis - Case-report of an acute abdominal emergency. — Acta Tropica 42: 261-271.
Hes, O. & V. Vrabec, 2002. Pentastomiaza u *Bitis gabonica*. — Akvarium Terrarium 45: 60-63. [In Czech].
Hett, M.L., 1915a. On some new pentastomids from the Zoological Society's Gardens, London. — Proceedings or the Zoological Society of London 1915: 115-121.
Hett, M.L., 1915b. On a new species of pentastomid from a N. African snake, *Zamenis ravergieri*. — Quarterly Journal of Microscopical Science New Series 61: 185-200.
Hett, M.L., 1921. Notes on a small collection of pentastomids from the Indian Museum, Calcutta. — Records of the Indian Museum 22: 163-164.
Hett, M.L., 1924a. On the family Linguatulidae. — Proceedings or the Zoological Society of London Part 1 1924: 107-159.
Hett, M.L., 1924b. Zoological results of the third Tanganika expedition, conducted by Dr. W.A. Cunnington 1904-1905. Report on the Linguatulidae. — Proceedings or the Zoological Society of London Part 1 1924: 161.
Hett, M.L., 1924c. On a new species of linguatulid from Palestine (*Raillietiella spiralis*). — Records of the Indian Museum 25: 301-302.
Hett, M.L., 1934. On a collection of linguatulids (Pentastomida) from Burma, with description of a new subgenus. — Proceedings of the Zoological Society of London Part 2 104: 425-431.
Heuschele, W.P., 1961. Internal parasitism of monkeys with pentastomid, *Armillifer armillatus*. — Journal of the American Veterinary Medical Association 139: 911-912.
Heymons, R., 1922. Beitrag zur Systematik und Morphologie der Zungenwürmer (Pentastomida). — Zoologischer Anzeiger 55: 154-167.
Heymons, R., 1926a. Beiträge zur Kenntnis der Gattung *Raillietiella* Samb. (Pentastomida). — Zoologischer Anzeiger 67: 45-56.
Heymons, R., 1926b. Pentastomida. — In: W. Kukenthal & T. Krumbach (eds), Handbuch der Zoologie; eine Naturgeschichte der Stämme des Tierreichs. Volume 3, Part 1: 69-128. Walter de Gruyter & Co., Berlin.

Heymons, R., 1926c. Über das Dorsalorgan der Pentastomiden. — Sitzungsberichte der Gesellschaft Naturforschender Freunde zu Berlin 1: 22-24.
Heymons, R., 1927. Pentastomida. — In: W. Kükenthal (ed.), Handbuch der Zoologie, eine Naturgeschichte der Stämme des Tierreichs, Volume 3, Part 1: 69-131. Walter De Gruyter & Co., Leipzig.
Heymons, R., 1928. Ordnung: Zungenwürmer, Pentastomida (Linguatulida). — In: P. Brohmer, P. Ehrmann & G. Ulmer (eds.), Die Tierwelt Mitteleuropas. Volume 3(1): 1-2. Quelle und Meyer, Leipzig.
Heymons, R., 1930. Pentastomida der Deutschen Limnologischen Sunda Expedition. — Archiv für Hydrobiologie Supplementband 8: 193-196.
Heymons, R., 1932a. Ein Beiträg zur Kenntnis der Pentastomiden Australiens und benachbarter Gebiete. — Zeitschrift fürWissenschaftliche Biologie, Abteilung F, Zeitschrift für Parasitenkunde 4: 409-430.
Heymons, R., 1932b. Eine neue Pentastomide von den Philippinen. — Zoologischer Anzeiger 97: 295-299.
Heymons, R., 1933. Über das Vorkommen von Zungerwürmern in Vögeln. — Ornithologische Monatsberichte 41: 75-76.
Heymons, R., 1935. Pentastomida. — In: H.G. Bronn (ed.), Klassen und Ordnungen des Tierreichs, Volume 5, Section 4, Book 1, Arthropoda, Arachnoidea: 1-268. Akademische Verlagsgesellschaft M.B.H., Leipzig.
Heymons, R., 1939a. Beiträge zur Systematik der Pentastomiden. II. Einige bemerkenswerte Pentastomiden aus Lacertiliern. — Zeitschrift für Parasitenkunde 10: 675-690.
Heymons, R., 1939b. Beiträge zur Systematik der Pentastomiden. III. Pentastomiden mit spiralig gekrümmten Körperformen. — Zeitschrift für Parasitenkunde 11: 77-94.
Heymons, R., 1940a. Zur Kenntnis der Häutung von Samboniden und Sebekiden nebst Bemerkungen über die Gattung *Raillietiella* (Pentastomida). — Zoologischer Anzeiger 130: 89-91.
Heymons, R., 1940b. Ueber Afrikanische Pentastomida mit besonderer Berücksightignung der neueren Funde ihres Vorkommens im Belgischen Kongo Staat und in Kamerun. — Revue de Zoologie et de Botanique Africaines 33: 201-224.
Heymons, R., 1941a. Beiträge zur Systematik der Pentastomiden. IV. Zur Kenntnis der Sambonidae. — Zeitschrift für Parasitenkunde 12: 317-329.
Heymons, R., 1941b. Beiträge zur Systematik der Pentastomiden. V. Die Typpenexemplare von *Diesingia megastomum*. — Zeitschrift für Parasitenkunde 12: 330-339.
Heymons, R., 1941c. Über die Lebensweise der in Krokodilen vorkommenden Pentastomida. — Sitzungsberichte der Gesellschaft Naturforschender Freunde zu Berlin 8-10: 253-263.
Heymons, R., 1942a. Der Nasenwurm des Hundes (*Linguatula serrata* Frölich), seine Wirte und Beziehungen zur Europäischen Tierwelt, seine Herkuntfung praktische Bedeutung auf Grund unserer bisherigen Kenntnisse. — Zeitschrift für Parasitenkunde 12: 607-638.
Heymons, R., 1942b. Beiträge zur Systematik der Pentastomiden. VI. Die Arten der Gattung *Alofia* im vergleich mit *Sebekia* I, Ubersicht über Arten. — Zeitschrift für Parasitenkunde 12: 419-432.
Heymons, R., 1943. Pentastomida. Institut des Parcs Nationaux du Congo Belge. — Exploration du Parc National Albert Mission G. de Witte (1933-35) 43: 3-4.
Heymons, R. & H.G. Vitzhum, 1935a. Beiträge zur Systematik der Pentastomiden. — Zeitschrift für Parasitenkunde 8: 1-103.
Heymons, R. & H.G. Vitzhum, 1935b. Neue und wenig bekannte Pentastomiden aus Amerika. — Zoologischer Anzeiger 109: 150-158.
Heymons, R. & H.G. Vitzhum, 1939. Beiträge zur systematik der pentastomiden II. Einige Bemerkenswerte Pentastomiden aus Lacertilien. — Zeitschrift für Parasitenkunde 10: 675-690.
Hidalgo Toleto, J.C., 2004. Estudio de la fauna parasitaria del intestino grueso, hígado y pulmón de bovinos (*Bos taurus*) beneficiados en el matadero de Nueva Imperial, IX región, Chile. — Tesis de Grado.
Hill, H.R., 1935a. The occurrence of linguatulids in pythons. — Bulletin of the Southern California Academy of Sciences 33: 117-122, 4 pls.
Hill, H.R., 1935b. New host records of the linguatulid, *Kiricephalus coarctatus* (Diesing) in the United States. — Bulletin of the Southern California Academy of Sciences 34: 226-227.

Hill, H.R., 1937. The taxonomy and morphology of the Linguatulidae. Abstracts of Dissertations for the Degree of Doctor of Philosophy, with the Titles of Theses accepted for Masters' Degrees 1937: 11-12.— University of Southern California.

Hill, H.R., 1948. Annotated bibliography of the Linguatulida.— Bulletin of the Southern California Academy of Sciences 47: 56-73.

Hirji, K.N., 1980a. Prevalence of pentastomids in *Mabuya striata* (Scincidae) from Dar-Es-Salaam, Tanzania.— South African Journal of Zoology 15: 58-68.

Hirji, K.N., 1980b. Evidence for a direct life cycle of *Raillietiella gehyrae* (Pentastomida: Cephalobaenida) in the lungs of *Mabuya striata* (Reptilia: Scincidae).— University Science Journal Dar-Es-Salaam 6: 99-106.

Hirst, S., 1922. On a new linguatulid from the Adriatic.— Annals and Magazine of Natural History (9) 10: 289.

Hoberg, E.P., 1987. *Rheighardia sternae* (Diesing, 1864) (Pentastomida) from seabirds in Antarctica.— Canadian Journal of Zoology 65: 1289-1291.

Hobmaier, A. & M. Hobmaier, 1940. On the life cycle of *Linguatula rhinaria.*— American Journal of Tropical Medicine 20: 199-210.

Holl, F.J., 1928. A linguatulid parasite from North American fishes.— Journal of Parasitology 15: 63-66.

Holl, F.J., 1932. The ecology of certain fishes and amphibians with special reference to their helminth and linguatulid parasites.— Ecological Monographs 2: 83-107.

Hollis, P.D., 1979a. The histochemical demonstration of alkaline-phosphatase activity in *Porocephalus crotali* Humboldt 1811 (Pentastomida).— Journal of Parasitology 65: 461-463.

Hollis, P.D., 1979b. The neuroanatomy of *Porocephalus crotali* Humboldt, 1811 (Pentastomida).— Transactions of the American Microscopical Society 98: 114-122.

Hopps, H.C., H.L. Keegan, C.L. Price & J.T. Self, 1971. Pentastomiasis.— In: R.A. Marcial-Rojas (ed.), Pathology of protozoal and helminthic disease: 970-989. Williams & Wilkins, Baltimore.

Horak, I.G., J. Boomker, V. Devos & F.T. Potgieter, 1988. Parasites of domestic and wild animals in South-Africa. 23. Helminth and arthropod parasites of warthogs, *Phacochoerus aethiopicus*, in the eastern Transvaal Lowveld.— Onderstepoort Journal of Veterinary Research 55: 145-152.

Horak, I.G., J. Boomker, A.M. Spickett & V. Devos, 1992. Parasites of domestic and wild animals in South-Africa 30. Ectoparasites of kudus in the eastern Transvaal lowveld and the eastern Cape Province.— Onderstepoort Journal of Veterinary Research 59: 259-273.

Horak, I.G., V. Devos & M.R. Brown, 1983. Parasites of domestic and wild animals in South-Africa .16. Helminth and arthropod parasites of blue and black wildebeest (*Connochaetes taurinus* and *Connochaetes gnou*).— Onderstepoort Journal of Veterinary Research 50: 243-255.

Horvath, K., 1971. Experimental lizard hosts of pentastomids.— Texas Journal of Science 22: 429.

Hoyle, W.E., 1883. On a new species of *Pentastomum* (*P. protelis*) from the mesentery of *Protelis cristatus*; with an account of its anatomy.— Transactions of the Royal Society of Edinburg, Part 1, 32: 165-191, pls 27-28.

Hoyle, W.E., 1884. On a new entozoan (*Pentastomum protelis*) from the mesentery of *Proteles cristatus* Sparrmann.— Proceedings of the Royal Society of Edinburgh 12: 219-222.

Huber, J.C., 1898. Sur le *Pentastomum constrictum* Siebold du foie des negres.— Centralblat der Bakteriologie und Parasitologie 23: 1098-1099.

Huchzermeyer, F.W., 2003. Crocodiles. Biology, husbandry and diseases.— CABI Publishing, Wallingsford, UK: 1-337.

Humboldt, A.F.W. von, 1808. Ansichten de Natur mit Wissenschaftlichen Erläuterungen und sechs farbtaften, nach Skizzen des autors, Volume 1: 1-344. [Pentastomida, 1st ed., pp. 162, 277; 2nd ed., pp. 6, 73; 3rd ed., p. 8, 75].— J.G. Cotta, Stuttgart.

Humboldt, A.F.W. von, 1809. Recueil d'observations de zoologie et d'anatomie comparee, Volume 1: 289-304, pl. 26 fig. 1-4. [Pentastomida, p. 298-303].— Paris.

Humboldt, A.F.W. von, 1812. Sur un ver intestin trouvé dans les poumons du serpent à sonettes, de Cumana.— In: A. Von Humboldt & A. Bonpland (eds.), Voyage de Humboldt, Partie F. Recueil d'observations de zoologie et d'anatomie comparée, faites dans l'Océan Atlantique, dans l'intérieur du nouveau continent et dans le mer du sud pendant les années 1799, 1800, 1801, 1802 et 1803. Volume 1: 298-304, pl. 26. F. Schoell et G. Dufor, Paris.

Humboldt, A.F.W. von, 1849. Ansichten der Natur; mit wissenschaftlichen Erläuterungen. Third Edition, Volume 1: 1-407.— Cotta, Stuttgart.

Humboldt, A.F.W. von & A. Bonpland, 1818. *Pentastomum.*— In: Voyage de Humboldt, Volume 2, Part 1: 301. F. Schoell et G. Dufor, Paris.

Hunter, W.S. & R.P. Higgins, 1960. An unusual case of human porocephaliasis.— Journal of Parasitology 46: 68.

Huxley, T.H., 1869. An introduction to the classification of animals: 1-147.— John Churchill & Sons, London.

Ihle, J.E.W., 1899. Über einige Verbesserungen im System der Arthrozoen, II. Über die systematische Stellung der Pentastomen.— Biologisches Zentralblatt 19: 608-614.

Ikuta, K. & T. Makioka, 1997. Structure of the adult ovary and oogenesis in *Argulus japonicus* Thiele (Crustacea: Branchiura).— Journal of Morphology 231: 29-39.

Ikuta, K. & T. Makioka, 1999. Ovarian structure and oogenesis in the myodocopid ostracod *Vargula hilgendorfii.*— Journal of Crustacean Biology 19: 730-737.

Ikuta, K. & T. Makioka, 2004. Structure of ovary and oogenesis in the halocyprid ostracod *Conchoecia imbricata.*— Journal of Crustacean Biology 24: 72-80.

Inder Singh, K. (see Singh, K.I.)

Itakura, H., 1995. Environmental diseases in the tropics.— In: W. Doerr & G. Seifert (eds.), Tropical pathology, 2nd edition: 1283-1317. [porocephalosis: 1283-1285]. Springer, Berlin.

IT IS Standard Report Page, 2012. Web site: www.itis.gov. Seen 26/12/2012.

IUCN, 2013. The International Union for Conservation of Nature. Web page: http://www.iucn.org. Seen 4-1-2013.

Ivanov, K., 1933a. Untersuchungen über die sog. Pentastomen- oder trematodenknötchen in den Gekröslymphknoten von Rind und Büffel.— Zeitschrift für Infektionskrankheiten, Parasitäre Krankheiten und Hygiene der Haustiere 45: 157-190.

Ivanov, K., 1933b. Izledvaniia vurkhu lingvatulozata (linguatulosis) na mezenterialnitye limfni vazli na govedoto i bivola v" Bulgariia s"ogled" na t. h. pentastomni i trematodni ofnishta.— Godishnik na Sofiiskiia Universitet VIII Veterinarno-Medisinski Fakultet 9: 203-268.

Ivanov, K., 1937a. Über die Verbreitung der Linguatulose unter den Ziegen in Bulgarien.— Zeitschrift für Infektionskrankheiuten Parasitäre Krankheiten und Hygiene der Haustiere 52: 79-84.

Ivanov, K., 1937b. Izsledvaniia vurkhu khistogenezata na lingvatulnitye izmyeneniia. Edna eksperimentalna studiia.— Godishnik na Sofiiskiia Universitet VII Veterinarno-Meditsinski Fakultet 13: 445-475.

Ivanov, K., 1937c. Über die Verbreitung der *Linguatula serrata* unter den Hunden in Bulgarien.— Zeitschrift für Infektionskrankheiten Parasitäre Krankheiten und Hygiene der Haustiere 51: 192-202.

Ivanov, K., 1938a. Izsledvaniia vurkhu razprostranenieto na lingvatulozata po kuchetata u nas.— Godishnik na Sofiiskiia Universitet VII Veterinarno-Meditsinski Fakultet 14: 157-172.

Ivanov, K., 1938b. Izsledvaniia vurkhu razprostranenieto na lingvatulozata po kozitye u nas.— Godishnik na Sofiiskiia Universitet VII Veterinarno-Meditsinski Fakultet 14: 291-300.

Ivanov, K. & I. Emanuilov, 1938. Izsledvaniia vurkhu lingvatulozata na mezenterialnitye limfni vuzli na ovtsata u nasnas.— Godishnik na Sofiiskiia Universitet VII Veterinarno-Meditsinski Fakultet 12: 119-134.

Ives, J.E., 1889. *Linguatula diesingii* from the sooty mangabey.— Proceedings of the Academy of Natural Sciences of Philadelphia 1: 31.

Iwanoff, X., 1937. Über die Verbreitung der *Linguatula serrata* unter den Hunden in Bulgarien.— Jahresbericht Veterinär-Medizin Jahrbüch der Veterinär-Medizin Fakultat Sofia 63: 481.

Iwanoff, X., 1939. Untersuchungen über die Linguatulose unter den Ziegen in Bulgarien.— Veterinärmedicin Jahrsbericht Jahrbüch der Veterinär-Medizin Fakultat Sofia 66: 40.

Jacob, R.M., 1962. Unsere Leser berichten - ein interessanter Parasit: der Zungenwurm.— Kosmos 58: 412.

Jacquart, H., 1866. Mécanisme de la rétratction des ongles des félis et des crochets des linguatules trouvées dans les poumons des serpents.— Journal de l'Anatomie et de la Physiologie Normales et Pathologiques de l'Homme et des Animaux 3: 383-402.

Jamieson, B.G.M. & V. Storch, 2000. Pentastomida. — In: K. Adiyodi & R.G. Adiyodi (eds.), Reproductive biology of invertebrates Vol. 9 Part C: 97-115. Wiley, Chichester.

Jefferey, J., M. Krishnasamy, P. Oothuman, J. Ali, A.E. Baker & I. Singh, 1985. Preliminary observations on the cockroach intermediate host of a house gecko railietiellid in Peninsular Malaya. — Malaysian Journal of Medical and Laboratory Sciences 2: 83-84.

Jeffery, J., M. Abdullah, S. Zahedi & M. Krishnasamy, 1997. *Gekko smithi*, a new lizard host of the pentastomid, *Raillietiella* sp. (Pentastomida: Cephalobaenida) in Peninsular Malaysia. — Tropical Biomedicine 14: 145-146.

Jezhikov, J., 1939. [Zur Morphologie des *Pentastomum denticulatum*]. — Trudy Instituta Evolucionnoj Morphologii Akademii Nauk SSSR 2 5: 3-22. [In Russian].

Jezhikov, J., 1940. Zur Morphologie von *Pentastomum denticulatum*. — Zoologischer Anzeiger 132: 263-279.

Jisieike-Onuigbo, N.N., C.U. Odenigbo, O.A. Kalu & K.C. Eze, 2011. *Armillifer armillatus* infection. — Nigerian Journal of Clinical Practice 14: 501-503.

Job, T.T. & A.R. Cooper, 1917. Notes on *Porocephalus globicephalus*. — Journal of Parasitology 3: 138.

John, M.V. & A.M. Nadakal, 1985. Observations on new hosts and their probable role in the life-cycle of *Kiricephalus pattoni* (Stephens, 1908), Sambon, 1922 (Pentastomida). — Zoologischer Anzeiger 214: 333-336.

John, M.V. & A.M. Nadakal, 1986. Juvenile precocity in a pentastome, *Kiricephalus pattoni* (Stephens, 1908) Sambon, 1922, in the reptilian host *Tropidonotus piscator*. — Journal of Parasitology 72: 194-195.

John, M.V. & A.M. Nadakal, 1987. Transplantation of the nymphs of *Kiricephalus pattoni* (Stephens, 1908) Sambon, 1922 into challenging habitat. — Comparative Physiology and Ecology 12: 67-70.

John, M.V. & A.M. Nadakal, 1988. Juvenile precocity and maintenance of juvenile features in the males of the pentastome *Kiricephalus pattoni* (Stephens, 1908) Sambon, 1922. — International ournal of Invertebrate Reproduction and Development 14: 295-298.

John, M.V. & A.M. Nadakal, 1989. In vitro culture of the péntastome, *Kiricephalus pattoni* (Stephens, 1908) Sambon, 1922. — Indian Journal of Parasitology 13: 201-204.

Johnson, T.H., 1910. Note on a new *Linguatula*. — Transactions and Proceedings Report of the Royal Society of South Australia 34: 248-250, pl. 46.

Johnston, T.H., 1912. A census of Australian reptilian Entozoa. — Proceedings of the Royal Society of Queenland 23: 233.

Johnston, T.H., 1916. The endoparasites of the dingo, *Canis dingo*, Blumb. — Proceedings of the Royal Society of Queensland 28: 96-100.

Johnston, T.H. & J.B. Cleland, 1910. A note on the occurrence of pentastomes in Australian cattle. — Journal of the Proceedings of the Royal Society of New South Wales 44: 315-318.

Johnston, T.H. & J.B. Cleland, 1912. A note on the occurrence of pentastomes in Australian cattle. — Reports from the Government Bureau of Microbiology Sydney, New Series, 2: 199.

Jones, D.A.C., R.J. Henderson & J. Riley, 1992. Preliminary characterization of the lipid and protein-components of the protective surface-membranes of a pentastomid *Porocephalus crotali*. — Parasitology 104: 469-478.

Jones, D.A.C. & J. Riley, 1991. An ELISA for the detection of pentastomid infections in the rat. — Parasitology 103: 331-337

Jones, D.A.C., J. Riley, N.W. Kerby & D.P. Knox, 1991. Isolation and preliminary characterization of a 48-kilodalton metalloproteinase from the excretory secretory components of the frontal glands of *Porocephalus* pentastomids. — Molecular and Biochemical Parasitology 46: 61-72.

Jones, H.I., 2010. Dwarf monitor lizards (Varanidae: *Varanus*, *Odatria* s. gen.) as definitive and paratenic hosts for physalopteran nematodes. — Australian Journal of Zoology 58: 69-75.

Jonge, G.W.K. de, 1906. Nadere inlichtingen over de *Porocephalus moniliformis* (Diesing). — Geneeskundig Tijdschrift voor Nederlandsch-Indië 46: 524-527.

Junker, K., 1996. Untersuchungen zur Biologie und Lebensweise der in Crocodilia parasitierenden Pentastomida in Südafrika. — MSc Thesis, University Fridericiana.

Junker, K., 2002. A study of the Pentastomida parasiting crocodilian and chelonian final hosts, with special emphasis on the South African pentastome fauna. — Dissertation, Universität Karlsruhe.

Junker, K. & J. Boomker, 2002. Description of *Pelonia africana* n. g., n. sp. (Pentastomida: Sebekidae) from the lungs of *Pelomedusa subrufa* and *Pelusios sinuatus* (Chelonia) in South Africa. — Onderstepoort Journal of Veterinary Research 69: 53-59.

Junker, K. & J. Boomker, 2006. A check-list of the pentastomid parasites of crocodilians and freshwater chelonians. — Onderstepoort Journal of Veterinary Research 73: 27-36.

Junker, K., J. Boomker & L.A. Bolton, 1999. Pentastomid infections in Nile crocodiles (Ond. J. Vet. Res., Onderstepoort,) in the Kruger National Park, South Africa, with a description of the males of *Alofia simpsoni*. — Onderstepoort Journal of Veterinary Research 66: 65-71.

Junker, K., J. Boomker & D.G. Booyse, 1998a. Pentastomid infections in cichlid fishes in the Kruger National Park and the description of the infective larva of *Subtriquetra rileyi* n. sp. — Onderstepoort Journal of Veterinary Research 65: 159-167.

Junker, K., J. Boomker & D.G. Booyse, 1998b. Experimental studies on the life-cycle of *Sebekia wedli* (Pentastomida: Sebekidae). — Onderstepoort Journal of Veterinary Research 65: 233-237.

Junker, K., J. Boomker, D. Swanepoel & H. Taraschewski, 2000. *Leiperia cincinnalis* Sambon, 1922 (Pentastomida) from Nile crocodiles *Crocodylus niloticus* in the Kruger National Park, South Africa, with a description of the male. — Systematic Parasitology 47: 29-41.

Junker, K., J. Riley & J. Boomker, 2003. Redescription of *Diesingia megastomum* (Diesing, 1836) Sambon, 1922, a pentastomid parasite from the South American terrapin *Hydromedusa tectifera* Cope. — Systematic Parasitology 56: 211-218.

Kästner, A., 1968. Phylum Pentastomida, tongue worms. — In: A. Kaestner. (ed.), Invertebrate Zoology, Volume 2. Arthropod relatives, Chelicerata, Myriapoda: 28-37. Interscience Publishers, New York.

Kagei, N., 1973. The endoparasites of snakes in Japan. — The Snake 5: 141-150.

Kagei, N. & S. Shichiri, 1990. [Parasites of imported animal to Japan V. *Armillifer armillatus* nymphs in thick-tailed bush baby, *Galago crassicaudatus*, from Africa]. — Japanese Journal of Tropical Medicine 18: 17-22. [In Japanese].

Karstad, L., 1970. A partly annotated bibliography on infections, parasites, and diseases of African wild animals. — IDRC, Ottawa: 1-111.

Karuppaswamy, S.A., 1977. Occurrence of ß-chitin in the cuticle of a pentastomid *Raillietiella gowrii*. — Experientia 33: 735-736.

Karuppaswamy, S.A. & G. Sundara Rajulu. 1978. Phylogeny of Pentastomida. — Journal of Animal Morphology and Physiology Silver Jubilee Volume 1978: 1-13.

Kauffmann, W., 1847. Analecta de tuberculorum et entozoorum cognitione: pls 1-2. — Berlin.

Keegan, H.L., 1943a. Observations on the pentastomid, *Kiricephalus coarctatus* (Diesing) Sambon 1910. — Transactions of the Amererican Microscopical Society 62: 194-199.

Keegan, H.L., 1943b. Some host records from the parasitological collection of the state University of Iowa. — Bulletin of the Brooklyn Entomological Society, New Series, 38: 54-57.

Keegan, H.L., S. Toshioka, T. Matsui & H. Suzuki. 1969. On a collection of pentastomids from East and South East Asia. — Japanese Journal of Sanitary Zoology 20: 147-157.

Kelehear, C., G.P. Brown & R. Shine, 2012. Size and sex matter: infection dynamics of an invading parasite (the pentastome *Raillietiella frenatus*) in an invading host (the cane toad *Rhinella marina*). — Parasitology 139: 1596-1604.

Kelehear, C., D.M. Spratt, S. Dubey, G.P. Brown & R. Shine, 2011. Using combined morphological, allometric and molecular approaches to identify species of the genus *Raillietiella* (Pentastomida). — PLOS One 6(9), e24936. Doi: 24910.21371/journal.pone.0024936

Khalafalla, R.E., 2011. A survey study on gastrointestinal parasites of stray cats in northern region of Nile Delta, Egypt. — PLOS One 6: e20283.

Khalidi, R.H., 1972. *Linguatula serrata* (a case report with a description of its life-cycle). — Jordan Medical Journal 8: 159-161.

Khalil, G.M., 1970. Incidence of *Linguatula serrata* infection in Cairo mongrel dogs. — Journal of Parasitology 56: 485.

Khalil, G.M., 1972. *Linguatula serrata* (Pentastomida) parasitizing humans and animals in Egypt, neighbouring countries, and elsewhere: a review. — Journal of the Egyptian Public Health Association 47: 363-369.

Khalil, G.M., 1973. *Linguatula serrata* from mongrel dogs in El-Dakhla-oasis (Egypt). — Journal of Parasitology 59: 288.

Khalil, G.M., 1976. Prevalence of *Linguatula serrata* infection in animals from Cairo abattoir. — Journal of Parasitology 62: 126.

Khalil, G.M. & J.F. Schacher, 1965. *Linguatula serrata* in relation to halzoun and the marrara syndrome. — American Journal of Tropical Medicine and Hygiene 14: 736-746.

Khouri, A., 1905. Le halzoun. — Archives de Parasitologie 9: 78-94.

Kiewiet de Jonge, G.W. (see Jonge, G.W.K. de)

Kikuchi, S., K. Saito, T. Oshima, T. Seichi & Y. Okuyama, 1979. [Morphology of pentastomes parasitic in a reticulated python by scanning electron microscopy]. — The Snake 11: 226-233. [In Japanese].

Kinsella, J.M., 1974. Seasonal incidence of *Porocephalus crotali* (Pentastomida) in rice rats, *Oryzomys palustris*, from a Florida salt-marsh. — Journal of Medical Entomology 11: 116.

Kirk, R., 1958. Notes on a form of parasitic pharyngitis in the Middle East known as "halazoun". — Ál Hakeim Khartoum 4: 6-11.

Kishida, K., 1927. Arachnoidea. — In: S. Uchida (ed.), Nippon-dobutsu-zukan (Figuraro Japanaj Bestoj) [Illustrated Encyclopedia of the Fauna of Japan]. Volume 1: 925-991. Hokuryouwan, Tokyo.

Kishida, K., 1928. A new linguatulid, *Armillifer yoshidae*, with notes on the Porocephalidae. — Annotationes Zoologicae Japonensis 11: 397-405, 1 pl.

Klauber, L.M., 1972. Rattlesnakes: 1-1533. — University of California Press, California.

Koch, M., 1906. Zur Kenntnis des Parasitismus der Pentastomen. Biologische und experimentelle Untersuchungen über den Parasitismus der *Linguatula rhinaria* Pilger und ihrer Larve. In: J. Orth (ed.), Zur Feier der Vollendung der Instituts, Neubauten, Berlin. — Verhandlungen der Deutschen Pathologischen Gesellschaft 10: 265-348, 2 pls.

Koch, M., 1912. Über den Parasitismus der *Linguatula rhinaria* Pilger (*Pentastomum taenioides*) im Vergleich zu dem der tropischen Porozephalen. — Archiv für Schiffs- und Tropen-Hygiene, Beihefte 16: 381.

Koehsler, M., J. Walochnik, M. Georgopoulos, C. Pruente, W. Boeckeler, H. Auer & T. Barisani-Asenbauer, 2011. *Linguatula serrata* tongue worm in human eye, Austria. — Emerging Infectious Diseases 17: 870-872.

Kolte, S.W., D.K. Maske, M.S. Dhakate & B.M. Gahlod, 2002. A note on the occurrence of *Linguatula serrata* in dogs. — Indian Veterinary Journal 79: 195.

Korschelt, E. & K. Heider, 1936. Vergleichende Entwicklungsgeschichte der Tiere. Band II. 27. Pentastomida. — In: E. Korschelt & K. Heider (eds.), Vergleichende Entwicklungsgeschichte der Tiere. Volume 2: 565-570. G. Fischer, Jena.

Kozlowski, S., B. Mirski & Z. Zolowski, 1958. An instance of generalized porocephalosis in monkey caused by nymphs of the species *Armillifer moniliformis* (Diesing, 1836). — Wiadomosci Parazytologiczne 4: 755-757.

Krefft, G., 1871. On Australian Entozoa, with description of a new species. — Transactions of the Entomological Society of New South Wales 2: 214.

Krishna, L., K. Kalicharan & O.P. Paliwal, 1975. A pathological study on the larval forms of *Linguatula serrata* infection in goats. — Indian Veterinary Journal 50: 317-318.

Krishnasamy, M., J. Jeffery, K.I. Singh & P. Oothuman, 1995. *Raillietiella rileyi*, a new species of pentastomid from the lung of toad, *Bufo melanosticum* from Malaysia. — Tropical Biomedicine 12: 31-38.

Krishnasamy, M. & J.T. Self, 1981. *Kiricephalus tortus* (Pentastomida), rediscovery from the cat shark *Hemiscillium indicum*. — Journal of Parasitology 67: 750.

Krishnasamy, M., I. Singh, S. Ambu & P. Ramachandran, 1980. Seasonal prevalence of the helminth fauna of the wood rat *Rattus tiomanicus* (Miller) in West Malaysia. — Folia Parasitologica 27: 231-235.

Küchenmeister, G.F., 1855a. Linguatules vivant en parasites dans le foie de l'homme et de plusieurs mammiferes. — L'Institut Series 1 Sciences Mathématiques Physiques et Naturelles 23: 127-128.

Küchenmeister, G.F., 1855b. De la *Linguatula ferox* (*Pentastoma denticulatum* aut *serratum*). — Bulletins de L'Accadémie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique 22: 21-22.

Küchenmeister, G.F., 1855c. De la *Linguatula ferox*. — Bulletin de l'Academie de Belgique 22: 4-10, figs 1-6.

Küchenmeister, G.F., 1857a. Sur les metamorphoses du *Pentastomum*.— L'Institut Series 1 Sciences Mathématiques Physiques et Naturelles 25: 29-32.

Küchenmeister, G.F., 1857b. *Pentastomum denticulatum* als Jugendzustand.— Zeitschrift für Rationelle Medizin 3: 777-782.

Kugi, G., 1977. *Armillifer moniliformis heymonsi* (Pentastomoidea: Porocephalidae) from the reticulate python, *Python reticulatus*.— Journal of the Japan Veterinary Medical Association 30: 152-153.

Kulagin, N.M., 1895. Über den Bau des Darmkanals von *Pentastomum taenioides*.— Zoologischer Anzeiger 18: 499-500.

Kulagin, N.M., 1898. Zur Naturgeschichte des *Pentastomum denticulatum* Lam.— Centralblatt für Bakteriologie Parasitenkunde und Infektionskrankheit Erste Abteilung 24: 489-500, 525-534.

Kuntz, R.E., 1982. Significant infections in primate parasitology.— Journal of Human Evolution 11: 185-194.

Ladds, P.W., H. Mangunwirjo, D. Sebayang & P.W. Daniels, 1995. Diseases in young farmed crocodiles in Irian-Jaya.— Veterinary Record 136: 121-124.

Ladds, P.W. & L.D. Sims, 1990. Diseases of young captive crocodiles in Papua-New-Guinea.— Australian Veterinary Journal 67: 323-330.

Laengner, H., 1906. Über *Pentastomum denticulatum* beim Menschen.— Centralblat für Bakteriologie ParasitenKunde und Infektionskrankheiten Erste Abteilung Originale 40: 368-371.

Lahile, F., 1920. Enumeración sistemática de los pedicúlidos, malófagos, pulícidos, linguatúlidos y ácaros. Part 1: 1-41.— Buenos Aires.

Lai, C., X.Q. Wang, L. Lin, D.C. Gao, H.X. Zhang, Y.Y. Zhang & Y.B. Zhou, 2010. Imaging features of pediatric pentastomiasis infection: a case report.— Korean Journal of Radiology 11: 480-484.

Laluque, P. & G. Fillaudeau, 1965. La porocéphalose. A propos de 6 nouveaux cas.— Médecine Tropicale 25: 258-261.

Lamarck, J.B. de, 1816. Histoire naturelle de animaux sand vetèbres présentant les caracteres généraux et particuliers de ces animaux, lur distribution, leurs classes, leurs families, leurs genres, et la citation des principales espèces qui s'y rapportent; précédée d'une Introduction offrant la détermination des caractères essentiels de l'animal, sa distinction du végétal et des autres corps naturels, enfin, l'exposition des principes fondamenteux de la zoologie. First Edition, Volume 3: 1-586.— Verdière, Paris.

Lamarck, J.B. de, 1845. Histoire naturelle de animaux sand vetèbres présentant les caracteres généraux et particuliers de ces animaux, lur distribution, leurs classes, leurs families, leurs genres, et la citation des principales espèces qui s'y rapportent; précédée d'une Introduction offrant la détermination des caractères essentiels de l'animal, sa distinction du végétal et des autres corps naturels, enfin, l'exposition des principes fondamenteux de la zoologie. 2nd Edition: 193-201.— Verdière, Paris.

Lameere, A., 1930. Précis de Zoologie, Volume 2. Les Coelomates (caractères fondamentaux): les Vers orthosomes dioïquess [Tardigrada, Linguatulida, Onychophora] y compris les Molluscoides, les Enteropneustes et les Echinodermes.— Records of the Institute of Zoology Torley-Rousseau Bruxelles Supplement 2: 146-150. [Pentastomida, p. 146-150].

Land, A., 1888. Lehrbuch der Vergleichenden Anatomie der Wirbellosen Thiere: 1-197.— G. Fischer, Jena.

Landois, H., 1886. *Pentastomum taenioides*.— Jahresbericht Westfälischer Provinzial-Vereins für Wissenschaft und Kunst Münster 15: 17-18.

Lang, Y., H. Garzozi, Z. Epstein, S. Barkay, D. Gold & J. Lengy, 1987. Intraocular pentastomiasis causing unilateral glaucoma.— British Journal of Ophthalmology 71: 391-395.

Lapage, G., 1965. *Linguatula serrata*.— In: G. Lapage (ed.), Monning's veterinary helminthology and entomology, 5th edition: 1-530. Baillare Tindall and Casell, London.

Larrousse, F., 1925. Larve de Linguatulidae parasite de *Bufo mauritanicus*.— Archives de l'Institut Pasteur de Tunis 14: 101-104.

Latif, B., E. Omar, C.C. Heo, N. Othman & D. Tappe, 2011. Case report: human pentastomiasis caused by *Armillifer moniliformis* in Malaysian Borneo.— Amererican Journal of Tropical Medicine and Hygyene 85: 878-881.

Latrive, J.P., T.D. Hy, H.T. Sang, M. Huguier & Y. Lequintrec, 1980. Liver-abscess and visceral linguatulosis with *Linguatula serrata* - case-report with radiologic and histologic-studies.— Seminaires des Hopitaux 56: 567-569.

Laudon, E., 1878. Ein Kasuistischer Beitrag zur Aetiologie der Nasenblutungen.— Berliner Klinische Wochenschrift, Berlin, 15: 730-731.

Lavarde, V. & P. Fornes, 1999. Lethal infection due to *Armillifer armillatus* (Porocephalida): a snake-related parasitic disease.— Clinical Infectious Diseases 29: 1346-1347.

Laveran, C.L.A. & A. Pettit, 1909. Sur une hémogrégarine du *Python sebae.*— Comptes Rendus Hebdomadaires des Séances de L'Académie des Sciences 148: 1142-1146.

Lavoipierre, M.M. & M. Lavoipierre, 1965. The American cockroach *Periplaneta americana* as an intermediate host of the pentastomid *Raillietiella hemidactyli.*— Medical Journal of Malaya 20: 72-73.

Lavoipierre, M.M. & M. Lavoipierre, 1966. An arthropod intermediate host of a pentastomid.— Nature 210: 845-846.

Lavoipierre, M.M. & C. Rajamanickam, 1973. Experimental studies on the life cycle of a lizard pentastomid.— Journal of Medical Entomology 10: 301-302.

Lavrov, D.V., W.M. Brown & J.L. Boore, 2004. Phylogenetic position of the Pentastomida and (pan)crustacean relationships.— Proceedings of the Royal Society of London, Series B, Biological Sciences 271: 537-544. Doi: 10.1098/rspb.2003.2631. http://www.eeob.iastate.edu/faculty/LavrovD/publications/PDF_files/pentastomida.pdf

Layne, J.N., 1967. Incidence of *Porocephalus crotali* (Pentastomida) in Florida mammals.— Bulletin of the Wildlife Disease Association 3: 105-109.

Lazo, R.F., E. Hidalgo, J.E. Lazo, A. Bermeo, M. Llaguno, J. Murillo & V.P.A. Teixeira, 1999. Ocular linguatuliasis in Ecuador: Case report and morphometric study of the larva of *Linguatula serrata.*— American Journal of Tropical Medicine and Hygiene 60: 405-409.

Lechner, G., 1965. *Porocephalus* - Infektion beim Menschen.— Deutsche Medizinische Wochenschrift 90: 488-491.

Le Corroller, Y. (see Corroller, Y. le)

Lee, C.C., Z. Zainal-Zahari & M. Krishnasamy, 1986. New host record of *Armillifer moniliformis* (Diesing, 1835) Sambon, 1922 in a Malayan tapir (*Tapirus indicus*).— Kajian Veterinary 18: 195-197.

Legendre, R., 1967. Morphologie, histologie et developpement des pentastomides.— Fortschritte der Zoologie 18: 337-349.

Leidy, J., 1850. Contributions to helminthology (*Ligula tritonis*, *Pentastomum euyzonum*, *P. proboscidium*, *Echinorhynchus ovatus*, etc.).— Proceedings of the Academy of Natural Sciences of Philadelphia 5: 96-98.

Leidy, J., 1856. A synopsis of entozoa and some of their ectocongeners observed by the author.— Proceedings of the Boston Society of Natural History 8: 42-58.

Leidy, J., 1884. *Pentastomum proboscideum.*— Proceedings of the Academy of Natural Sciences of Philadelphia 36: 140.

Leidy, J., 1890. Notices on entozoa.— Proceedings of the Academy of Natural Sciences of Philadelphia (3) 20: 410-418.

Lemaire, M.N. (see Neveu-Lemaire, M.)

Leschnik, M., M. Löwenstein, R. Edenhofer & G. Kirtz, 2008. Imported non-endemic, arthropod-borne and parasitic infectious diseases in Austrian dogs.— Wiener Klinische Wochenschrift, Supplement 4, 120: 59-62.

Lesse, A.S., 1911. *Linguatula* larva and peritonitis.— Journal of Tropical Veterinary Science 6: 268-270.

Leuckart, C.G.F.R., 1857a. Démonstration par voie experimentale, de l'identité specifique du *Pentastoma denticulatum* et du *Pentastomum taenioides.*— Bulletin de l'Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique, New Serie 2, 2: 30-33.

Leuckart, C.G.F.R., 1857b. Extrait d'une lettre à M. van Beneden, sur la transformation des Linguatules denticulées en Linguatules tenioides.— Bulletin de l'Académie Royale des Sciences, des Letres et des Beaux-Arts de Belgique, Série 2, 3: 444-446.

Leuckart, C.G.F.R., 1857c. *Pentastomum denticulatum*, der Jugendzustand vom *P. taenioides.* Eine vorl. Mittheilung.— Zeitschrift für Rationelle Medicin 3: 48-60.

Leuckart, C.G.F.R., 1857d. Sur les métamorphoses du Pentastoma.— L'Institut Section 1 Sciences Mathémathiques Physiques et Naturelles 23: 25.

Leuckart, C.G.F.R., 1857e. Sur la *Pentastomum taenioides*, prouvenant du parcage de *Pentastomum denticulatum.*— Bulletin de l'Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique, New Series, 3: 163-165.

Leuckart, C.G.F.R., 1857f. Transformation du *Pentastomum denticulatum* du lapin, en *Pentastomum taeniodes* des fosses nasales du chien.— L'Institut Section 1 Sciences Mathémathiques Physiques et Naturelles 25: 250.

Leuckart, C.G.F.R., 1857g. Troisième communication sur le pentastomum taenioides, provenant du parcage de *Pentastomum denticulatum.*— Bulletins de l'Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique, Series 2, 3: 163-165.

Leuckart, C.G.F.R., 1857h. Sur la transformation des linguatules denticulées en linguatules téniodes.— Bulletins de l'Académie Royale des Sciences, des Lettres et des Beaux-Arts de Belgique, New Series, 3: 4-6.

Leuckart, C.G.F.R., 1858a. De ontwikkelingsgeschiedenis van *Linguatula denticulata.*— Nederlandsch Tijdschrift voor Geneeskunde, Tevens Orgaan der Nederlandsche Maatschappij tot de Bevordering der Geneeskunst. Volume 2: 566-569.

Leuckart, C.G.F.R., 1858b. *Pentastomum denticulatum*, der Jugendzustand von *Pent. taenioides.*— Zeitschrift für Rationelle Medicin (3) 2: 48-60.

Leuckart, C.G.F.R., 1858c. Weitere Beobachtungen über die Jugendzustände und die entwickelungsgeschichte von *Pentastomum taenioides.*— Zeitschrift für Rationelle Medicin (3) 4: 78-101.

Leuckart, C.G.F.R., 1859a. *Pentastomum denticulatum*, der Jugendzustand von *Pent. taenioides.*— Quarterly Journal of Microscopical Science 7: 182-193.

Leuckart, C.G.F.R., 1859b. *Pentastomum denticulatum*, der Jugendzustand von *Pent. taenioides.*— Annals of Natural History (3) 3: 320.

Leuckart, C.G.F.R., 1860a. Bau und Entwicklungsgeschichte der Pentastomen nach Untersuchungen besonders von *Pentastomum taenioides* und *P. denticulatum*: 1-166.— C.F. Winterische Verlagshandung, Leipzig.

Leuckart, C.G.F.R., 1860b. *Pent. denticulatum* als Jugendstadium von *P. taenioides.*— Neue Notizen aus dem Gebiete der Natur und Heilkunde 4: 222-231, 241-249, 277-280.

Leuckart, C.G.F.R., 1863. Die menschlichen parasite und die von ihnen herrührenden krankheitend, Ein Hand- und Lehrbuch für Naturforscher und Aertze: 1-766 [Pentastomen: 78].— C.F. Winters'sche Verlangshandlung, Leipzig.

Leuckart, C.G.F.R., 1879. Die Parasiten des Menschen. Ein Hand- und Lehrbuch für Naturforscher und Aerzte. 2nd edition, Volume 1: 1-856.— Leipzig.

Leunis, J., 1886. Synopsis der Thierkunde, Volume 2, 3rd edition: 620-621.— H. Ludwig, Hannover.

Li D.S., 1985. [New reocord of *Kiricephalus pattoni* in China].— Annual Bulletin of the Society of Parasitology of the Guangdong Provinve 7: 42-43. [in Chinese].

Li, Z.S., X.J. Yu, X.Q. Wan & H. Lou, 1998. [A case of human *Linguatula serrata* infection in China].— Chinese Journal of Parasitic Disease Control 11: 238. [In Chinese].

Lia, R., E. Tarsitano & O. Orsini, 2000. Rischio di zoonosi da pentastomidi i segnalazione di *Porocephalus clavatus* Sambon, 1922 in un *Boa constrictor* in Puglia.— Rivista di Idrobiologia 38: 63-71.

Lim, B.L. & H.S. Yong, 1977. Pentastomid infections in house geckoes from Sarawak, Malaysia.— Medical Journal of Science Malaysia 32: 59-62.

Lim, J.T. & U.W. Hwang, 2006. The complete mitochondrial genome of *Pollicipes mitella* (Crustacea, Maxillopoda, Cirripedia): Non-monophylies of Maxillopoda and Crustacea.— Molecules and Cells 22: 314-322.

Lindemann, C., 1870a. Die Pentastomen.— Die Deutsche Zeitschrift für Staatsarzneikunde NF 1870: 436-448.

Lindemann, C., 1870b. Die Pentastomen.— Die Deutsche Zeitschrift für die Staatsarzneikunde (3) 28: 36-48.

Lindner, R.R., 1965. Retrospective X-ray survey for porocephalosis.— Journal of Tropical Medicine and Hygiene 68: 155-156.

Linstow, O. von, 1906. Parasites from the ghavial (*Gavialis gangeticum* Geoffr.). — Journal and Proceedings of the Asiatic Society of Bengal, New Series, 2: 269-271, pl. 3.

Liu, J., Han. J., A.M. Simonetta, S. Hu, Z. Zhang, Y. Yao & D. Shu, 2006. New observations of the lobopod-like worm *Facivermis* from the early Cambrian Chengjiang Lagerstätte. — Chinese Science Bulletin 51: 358-363.

Lloyd, S., 1998. Occasional and miscellaneous zoonoses and opportunistic infections. — In: S.R. Soulsby, L. Palmer & D.I.H. Simpson (eds.), Zoonoses: biology, clinical practice, and public health control: 921-933. Oxford University Press, Oxford.

Löhlein, M., 1912. Beiträge zur Pathologie der Eingeborenen von Kamerun: Porocephaliasis. — Beihefte zum Archiv für Schiffs- und Tropenhygiene 16: 58-72, 639-746.

Lohrmann, E., 1889. Untersuchungen über den anatomischen Bau der Pentastomen. — Archiv für Naturgeschichte 1: 303-337, pl. 16 fig. 1-14.

Lok, J.B. & C.E. Kirkpatrick, 1987. Pentastomiasis in captive monkeys. — Laboratory Animal Science 37: 494-496.

Loos, A., 1905. Von Würmern und Arthropoden hervorgerufene Krankheiten. Volume 1: 77-194. — In: Handbuch der Tropenkrankheiten. First edition. Mense, Leipzig.

Lopes, S.G. & W. de O. Almeida, 2006. Ameaças à biodiversidade de répteis na biorregião do Araripe, Ceará. — A Província 23: 92-99.

Loukin, 1878. Piatioustnik (*Pentastoma denticulatum*, Linguatula). — Meditsinskiia Pribavlenia Kmorskomu Sborniku 18: 389. [In Russian].

Low, G.C. & G.R.M. Cordiner, 1935. A case of *Porocephalus* infection in a West African Negro. — Transactions of the Society of Tropical Medicine and Hygiene 28: 535-536, 1 pl.

Lucas, A., L. Toucas & M. Laroche, 1957. Infestation pulmonaire nortelle à *Linguatula serrata* chez le lièvre. — Recueil de Médecine Vétérinaire de l'Écol d'Alfort 133: 159-162.

Lukmanova, G.I. & A.A. Gumerov, 2007. A case of concomitant hepatic lesion in a child with cystic hydatid disease and Arthropoda larva (nymph). — Meditsinskaia Parazitologiia i Parazitarnye Bolezni 1: 54-55.

Lungu, V., E. Stoican & V. Nesterov, 1961. Linguatulozoa preimaginală la iepurele salbatic (*Lepus timidus*). — Anuarul Institutul de Patologie si Igiena Animala Bucharest 9: 131-135.

Lungwitz, J.M., 1893. Ein Fall von massenhafter Pentastomen-Invasion beim Rinde. — Zeitschrift für Fleisch- und Milchhygiene 3: 218-219.

Luque-Forero, G., 1957. La *Linguatula serrata* (Frölich, 1789) primeira comprobación de las ninfas de esta especie en Colombia. — Revista de la Facultad de Medicina Veterinaria y de Zootéchnica de la Universidad Bogotá 21: 595-596.

Lurje, M Z., 1929. Gewebsveränderungen bei *Pentastomum denticulatum.* — Zeitschrift für Infektionskrankheiten Parasitäre Krankheiten und Hygiene der Haustiere 36: 193-196.

Luus-Powell, W.J., A. Jooste & K. Junker, 2008. Pentastomid parasites in fish in the Olifants and Incomati river systems, South Africa. — Onderstepoort Journal of Veterinary Research 75: 323-329.

Ma, K.C., M.H. Qiu & Y.L. Rong, 2002. Pathological differentiation of suspected cases of Pentastomiasis in China. — Tropical Medicine and International Health 7: 166-177.

Maas, A., G. Mayer, R.M. Kristensen & D. Waloszek, 2007. A Cambrian micro-lobopodian and the evolution of arthropod locomotion and reproduction. — Chinese Science Bulletin 52: 3385-3392.

Maas, A. & D. Waloszek, 2001. Cambrian derivatives of the early arthropod stem lineage, pentastomids, tardigrades and lobopodians - An 'Orsten' perspective. — Zoologischer Anzeiger 240: 451-459.

MacAlister, A., 1874. *Pentastomum proboscideum*, Diesing. — Quarterly Journal of Microscopical Science, New Series, 14: 425.

MacAlister, A., 1877. On two new species of *Pentastoma.* — Proceedings of the Royal Irish Academy of Science (2) 2: 62-66.

MacFie, J.W.S. & J.E.L. Johnston, 1913. A note on five cases of porocephaliasis in man from southern Nigeria. — The Lancet 2: 1387-1389.

Machado, M.A.C., F.F. Makdissi, L.F. Canedo, R.B. Martino, F. Crescentini, P.P. Chieffi, T. Bacchella & M.C.C. Machado, 2006. Unusual case of pentastomiasis mimicking liver tumor. — Journal of Gastroenterology and Hepatology 21: 1218-1220.

Mackie Reid, A. (see Reid, A.M.)
Macko, J.K., 1964. [Contribution to the knowledge of the nematodes and Pentastomida of sea swallows and sea gulls in Czechoslovakia]. — Biologia Bratislava 19: 118-122. [In Czechoslovakian].
Mätz, K., K. Lampe, G. Rohde, C. Roos & F.-J. Kaup, 2012. Massive visceral pentastomiasis in a long-tailed macque – an incidental finding. — Journal of Medical Primatology 41: 210-213.
Magnino, S., P. Colin, E. Dei-Cas, M. Madsen, J. Mclauchlin, K. Nockler, M.P. Maradona, E. Tsigarida, E. Vanopdenbosch & C. Van Peteghem, 2009. Biological risks associated with consumption of reptile products. — International Journal of Food Microbiology 134: 163-175.
Mahon, J., 1954. A new species of *Raillietiella*, a pentastomid from the bearded lizard, *Amphibolurus barbatus* (Cuv.). — Proceedings of the Zoological Society of London, (B) 124: 509-516.
Mairena, H., M. Solano & W. Venegas, 1989. Human dermatitis caused by a nymph of *Sebekia*. — American Journal of Tropical Medicine and Hygiene 41: 352-354. http://www.ajtmh.org/cgi/content/abstract/41/3/352
Maleky, F., 2001. A case report of *Linguatula serrata* in human throat from Tehran, central Iran. — Indian Journal of Medical Science 55: 439-441.
Mallatt, J. & G. Giribet, 2006. Further use of nearly complete, 28s and 18s Rrna genes to classify Ecdysozoa: 37 more arthropods and a kinorhynch. — Molecular Phylogenetics and Evolution 40: 772-794.
Malloch, D., 1995. Fungi with heteroxenous life-histories. — Canadian Journal of Botany-Revue Canadienne de Botanique 73: S1334-S1342.
Manna, B. & N. Dutta, 1991. Adult *Kiricephalus pattoni* (Sephens, 1908; Sambon, 1922) in thigh muscle of *Bufo melanostictus* in West Bengal, India. — Indian Journal of Animal Health 30: 171-172.
Manna, B. & N. Dutta, 1992. *Calotes versicolor* a new host of *Porocephalus clavatus* (Wyman, 1845) Sambon, 1910 (Porocephalidae: Pentastomida) from West Bengal, India. — Indian Journal of Animal Health 31: 87-88.
Manson-Bahr, P.H., 1931. The Linguatulidae (Pentastomidae) in Manson's tropical diseases: 799-803. — New York.
Manuwa, S.L.A., 1928. Notes on a case of porocephalosis. — West African Medical Journal 2: 109-110.
Manuwa, S.L.A., 1935. Notes on some cases of interest. 2. Porocephalosis. — West African Medical Journal 8: 15-16.
Manuwa, S.L.A., 1947. Porocephalosis. — Transactions of the Royal Society of Tropical Medicine and Hygiene 40: 507-508.
Mapp, E.M., H.M. Pollack & L.H. Goldman, 1976. Roetgen diagnosis of *Armillifer armillatus* infestation (porocephalosis) in man. — Journal of the National Medical Association 68: 198-200.
Marambio, J.A., 1946. Contribución al estudio de los metazoos parásitos del perró. — Agricultura Técnica Chile 4: 59-71.
Martin, J.W. & G.E. Davis (eds.), 2001. An updated classification of the Recent Crustacea. Natural History Museum of Los Angeles County Science Series 39: 1-132. http://atiniui.nhm.org/pdfs/3839.pdf Seen July 18, 2012.
Martin, J.W. & M.S. Laverack, 1992. On the distribution of the crustacean dorsal organ. — In: G.A. Boxshall, J.O. Strömberg & E. Dahl (eds.), The Crustacea: origin and evolution. Proceedings of a workshop held at Kristineberg Marine Biological Station, 1993: 357-368.
Martínez, F.A., 1982. Nymphs of *Porocephalus crotali* Humboldt, 1808 (arachnid, Pentastomida) in edentates in Argentina. — Boletin Chileno de Parasitologia 37 : 74-75.
Martínez, F.A., J.C. Troiano, L. Gauna Añasco, A. Duchene, J. Juega Sicardi, M.R. Stuncato, S. Nuñez, N. Fesciana & D. Jara, 2000 [Martinez et al., 2000a]. Frecuencia de infestación por pentastomidos en ofídios: 1-3.
Martínez, F.A., J.C. Troiano, L. Gauna Añasco, N. Fescina & D.N. Jara, 2000 [Martinez et al., 2000b]. Infestacion por ninfas de pentastómidos del gênero *Porocephalus* (Humboldt, 1811) en *Hydrodinastes gigas* (Ophidia - Colubridae). — Analecta Veterinaria 20: 39-42.
Martínez, J., Á. Criado-Fornelio, P. Lanzarot, M. Fernández-García, F. Rodríguez-Caabeiro & S. Merino, 2004. A new pentastomid from the black vulture. — Journal of Parasitology 90: 1103-1105. Doi: 10.1645/ge-269r
Martinez-Gomez, F., S. Hernandez-Rodriguez, J.C. Rey, T. Moreno-Montanez & I. Acosta. 1987. Parasitocoenosis of *Lepus capensis* in the south of Spain. — Erkranken der Zootiere 29: 347-352.

Martínez Rivera, C.C., A. González Nefrón, M. Bertrand & J. Acosta, 2003. *Hemidactylus mabouia* (Sauria: Gekkonidae), host of *Geckobia hemidactyli* (Actinedida: Pterygosomatidae), throughout the Caribbean and South America. — Caribbean Journal of Science 39: 321-326.

Maskey, T.M., T. Kolle, R. Hoffmann, C.C. Anders & H.H. Schleich, 1998. Disastrous impact of intestinal infection in captive bred gharial hatchlings. — In: H.H. Schleich & W. Kastle (eds.), Contributions to herpetology of South-Asia (Nepal, India): 1-320. Fuhlrott Museum, Wuppertal.

Matsuo, K. & Y. Oku, 2002. Endoparasites of three species of house geckos in Lampung, Indonesia. — Journal of Helminthology 1: 53-57.

Matsuo, K., G. Sumiya, Y. Oku & M. Kamiya, 2001. Parasitic helminths from amphibians and reptiles in Osaka Municipal Tennoji zoo. — Japanese Journal of Zoo and Wildlife Medicine 6: 35-44.

Mattei, X., B. Marchand & C. Mattei, 1985. Crystallization of reptile hemoglobin during its digestion in a pentastomide. — Journal of Ultrastructure Research 92: 63-71.

Mayer, C., 1851. Über *Pentastoma proboscideum* Reid, *Porocephalus humboldtii* und über Einteilung der Eingeweidewürmer. — Froriep's Tagesberichte über die Fortschritte der Natur-und Heilkunde 2: 130-131.

Mazza, F., 1892. Contribuzione all' anatomia macro- e microscopica del *Pentastomum moniliforme* Dies. — Atti della Reale Universita di Genova 11: 51-93, 2 pls.

McAllister, C.T., C.R. Bursey & P.S. Freed, 2010. Helminth parasites (Cestoidea, Nematoda, Pentastomida) of selected herpetofauna from Cameroon, West Africa. — Acta Parasitologica 55: 90-93.

McAllister, C.T., C.R. Bursey & P.S. Freed, 2011. Endoparasites (Cestoidea, Nematoda, Pentastomida) of reptiles (Sauria, Ophidia) from the Republic of Namibia. — Comparative Parasitology 78: 140-151.

McAllister, C.T., J. Riley, P.S. Freed & D.A. Freed, 1992. *Raillietiella* (Pentastomida: Cephalobaenida) from a Malagasy chamaeleon, *Chamaeleo verrucosus* (Sauria: Chamaeleonidae) from Madagascar. — Texas Journal of Science 44: 492-493.

McAllister, C.T., J. Riley, P.S. Freed & D.A. Freed, 1993. Endoparasites of some Malagasy colubrids (Reptilia: Serpentes) with descriptions of two new species of *Raillietiella* (Pentastomida: Cephalobaenidae). — Transactions of the American Microsopical Society 112: 35-42.

McCall, J.M., 1892a. Notes on a case of *Linguatula taenioides*, or so-called *Pentastoma taenioides,* in a collie dog. — Veterinary Journal and Annals of Comparative Pathology 35: 168-170.

McCall, J.M., 1892b. Notes on a case of *Linguatula taenioides*, or so-called *Pentastoma taenioides*, in a collie dog. — Veterinarian (4) 38: 503-505.

McHardy, P., J. Riley & J.F. Huntley, 1993. The recruitment of mast-cells, exclusively of the mucosal phenotype, into granulomatous lesions caused by the pentastomid parasite *Porocephalus crotali* - Recruitment is irrespective of site. — Parasitology 106: 47-54.

McKie Reid, A. (see Reid, A. McKie)

Mégnin, J.P., 1880. Les parasites et les maladies parasitaires (Insectes, Arachnides, Crustacés) chez l'homme, lês animaux domestiques et lês animaux sauvages avec lesquels peuvent ètre em contact: 1-478. [Pentastomida, p. 443-456]. — Paris.

Mégnin, J.P., 1883. Note sur les helminthes rapportés des côtes de la Laponie par M. le Prof. Pouchet et en particulier sur un nouveau pentastome, le *Pentastoma lari* Mégnin. — Bulletin de la Société Zoologique de France 8: 153-156, pl. 7.

Mehlhorn, H., J.F. Dubremetz, M. Franz, M. Gustafsson, W. Peters, H. Taraschewski, V. Walldorf & W.P. Voigt, 1988. Morphology. — In: H. Mehlhorn (ed.), Parasitology in focus: facts and trends: 161-311. Springer-Verlag, Berlin.

Mehlhorn, H. & V. Walldorf, 1988. Life cycles: 1-148. — In: H. Mehlhorn (ed.), Parasitology in focus: facts and trends: 1-924. Springer-Verlag, Berlin.

Mehlis, E., 1860. Briefliche Mittheilung an Fr. S.C.G.F.R. Leuckart 1831. Erschien in R.C.G.F.R. Leuckart's Bau und Entwicklung der Pentastomen: 3-7.

Mendeloff, J., 1965. Healed granulomas of the liver due to tongue worm infection. — American Journal of Clinical Pathology 43: 433-437.

Mendy, J.B., 1930. Peligro de los zoológicos en la introducción y transmisión de enfermedades tropicales. Parásitos exóticos en monos africanos del Jardin Zoológico de Buenos Aires. Oesofagostomosis, porocefalosis, filariosis, peritoneal y hemática. Peligro para la salud pública. Necesidades de lãs

cuarentenas y exámenes microsópicos de sangre y materiales fecales en dichos animales. — Universidad Nacional Revista de la Facultad de Medicina Veterinaria Tercera Época 3: 387-451.

Meneghi, D. de, 1999. Pentastomes (Pentastomida, *Armillifer armillatus* Wyman, 1848) in snakes for Zambia. — Parassitologia 41: 573-574.

Meshgi, B. & O. Asgarian, 2003. Prevalence of *Linguatula serrata* infestation in stray dogs of Shahrekord, Iran. — Journal of Veterinary Medicine, Series B, Infectious Diseases and Veterinary Public Health 50: 466-467.

Meyer, F.A., 1789. Abhandlungen von der Wurm-Krankheiten der europäischen Haustiere aus der Säugtier-Klasse: besonders der pferde, des hornviehs, der schafe und hunde: 1-168. — J.C. Dietrich, Göttingen.

Meyers, W.M., R.C. Neafie & D.H. Connor, 1976. Pentastomiasis. — In: C.H. Binford & D.H. Connor (eds.), Pathology of tropical and extraordinary diseases, Volume 2: 546-550. Armed Forces Institute of Pathology, Washington D.C.

Michelson, V., 1959. *Reighardia sternae* Diesing, 1864 in der Lettischen SSR. — Latvijas Padomju Socialistiskas Republikas Zinatnu Akademija Trudy Biologijas Instituts 12: 335-336.

Miclaus, V., A.D. Mihalca, O. Negrea & L. Oana, 2008. Histological evidence for inoculative action of immature *Linguatula serrata* in lymph nodes of intermediate host. — Parasitology Research 102: 1385-1387.

Migone, L.E., 1916. Parasitología de ciertos animales del Paraguay. — Bulletin de la Société de Pathologie Exotique 1916: 573-576.

Mill, P.J. & J. Riley, 1972. An ultrastructural study of the body wall muscles of the pentastomid *Reighardia sternae* Dies. 1864 parasitic on the herring gull *Larus argentatus* Pontopp. — Zeitschrift für Zellforschung und Mikroskopische Anatomie 130: 12-17.

Min, G.S., S.H. Kim & W. Kim, 1998. Molecular phylogeny of arthropods and their relatives: Polyphyletic origin of arthropodization. — Molecules and Cells 8: 75-83.

Mir, M.S., M.M. Darzi, A.Q. Mir & H.U. Malik, 2004. Report on occurrence of *Linguatula serrata* in a cow in Kashmir. — Proceedings of the National Symposium on "Advances in Pathological Techniques in Diagnosis of Animal Bird and Fish Diseases" and XXI Annual Conference of IAVP 23-25 November West Bengal University of Animal and Fishery Sciences Kolkata W.B.: 88.

Mir, M.S., M.M. Darzi, I. Hussain & S.A. Wani, 2009. Concurrent occurrence of visceral linguatulosis and paratuberculosis in alpine cross goats (*Capra hircus*). — Veterinarski Arhiv 79: 301-314.

Miram, C.E. (ed.), 1835. Beitrag zu einer Anatomie des *Pentastoma taenioides* R. — Nova Acta Physica-Medica Academiae Caesareae Leopoldino-Carolinae Naturae Curiosorum 17: 623-646.

Miram, C.E., 1836. Beitrage zur Anatomie des *Pentastoma taenioides* R. — Annales des Sciences Naturelles, Série 2, Zoologie 6: 135-151, pl. 8a.

Miyazaki, K. & W. Dieter, 2005. A curious form of a pentastomid from a lung of a New Guinean gecko. — Zoological Science 22: 1433.

Møller, O.S., 2009. Branchiura (Crustacea) - survey of historical literature and taxonomy. — Arthropod Systematics & Phylogeny 67: 41-55.

Møller, O.S., J. Olesen, A. Avenant-Oldewage, P.F. Thomsen & G. Høeg, 2008. First maxillae suction discs in Branchiura (Crustacea): Development and evolution in light of the first molecular phylogeny of Branchiura, Pentastomida, and other "Maxillopoda". — Arthropod Structure and Development 37: 333-346. Doi: 10.1016/J.asd.2007.12.002

Moens, Y. & M. Tshamala, 1986. Nymphal pentastomiasis in a cat. — Veterinary Record 119: 44.

Moghadam, A. Yeganeh, S.A. Talari & R. Dehghani, 2001. A case of human *Linguatula serrata* infestation in Kashan. http://www.sid.ir.

Mohammadi, G. Anaraki, I. Mobedi, M. Ariaiepour, Z. Pourmohammadi & M.Z. Bidaki, 2008. A case report of nasopharyngeal linguatuliasis in Tehran, Iran and characterization of the isolated *Linguatula serrata*. — Iranian Journal of Parasitology 3: 53-55.

Mohammed, A.N., 1974. A note on the occurrence of *Armillifer armillatus* (Wyman, 1845) (Phylum: Pentastomida, order Porocephalida) in a cat. — Nigerian Journal of Sciences 6: 139-142.

Molina, S.S. & J.R. Cordero, 1995. Linguatúlido. Hallazgo incidental en un paciente com adenocarcinoma gástrico. — Patologia 33: 239-241.

Mones, A. & S. Martinez, 1982. Estudios sobre la familia Hydrochoeridae (Rodentia). 13. Parasitos y patologias de *Hydrochoerus* Brisson, 1762.— Revista de La Facultad de Humanidades e Ciencias (Ciencias Biologicas) 1: 297-329.

Moniez, R., 1891. *Linguatula rhinaria.*— Revue Biologique du Nord de la France 3: 160.

Montañez, T.M. (see Moreno Montañez, T.)

Montazeri, A., R. Jamali & A. Kazemi, 1997. Two case reports of *Linguatula serrata* (Halazoun syndrome) in human, in Tabriz, Iran.— Proceedings of the Second National Congress of Parasitic Diseases.

Montgomery, C.E., S.R. Goldberg, C.R. Bursey & K.R. Lips, 2006. Two new tropical colubrid snake hosts for the pentastomid worm, *Kiricephalus coarctatus* (Pentastomida : Porocephalidae) from Panama.— Texas Journal of Science 58: 277-280.

Monziols, C. & J. Roy, 1920. Un cas díctère grave suivi de mort et causé chez un sénégalais, par le *Porocephalus armillatus* Wyman, 1848.— Comptes Rendus Hebdomadaires des Séances et Mémoires de la Société de Biologie 83: 28-29.

Moore, E.R. & G.C. Moore, 1947. The helminth parasites of cottontail rabbits in Alabama, with notes on the arthropod, *Linguatula serrata.*— Journal of Mammalogy 28: 279-284.

Moreland, A.F., D.J. Forrester & M.F. Delany, 1989. *Sebekia mississippiensis* (Pentastomida) from juvenile American alligators in north central Florida.— Proceedings of the Helminthological Society of Washington 56: 42-43.

Moreno Montañez, T., C. Becerra Martekkm & I.N. Lopez-Cozar, 1979. Contribution al conocimiento de los parasitos de la liebre *Lepus capensis.*— Revista Ibérica de Parasitologia 39: 383-393.

Morgen, B., 1901. Beitrag zur Pentastomatosis beim Rinde.— Zeitschrift für Fleisch- und Milchhygiene 11: 416.

Moritz, M., 1982. Stamm Pentastomida (syn. Linguatulida, Zungenwürmer).— In: A. Kästner & H.E. Gruner (eds.), Lehrbuch der Speziellen Zoologie Band I Wirbellose Tiere, Part III: 516-545. Fischer, Stuttgart.

Morsy, T.A., M. El-Sharkawy & A.H. Lashin, 1999. Human nasopharyngeal linguatulosis (Pentastomida) caused by *Linguatula serrata.*— Journal of the Egyptian Society of Parasitology 29: 787-790.

Mosler, K.F. & E. Peiper, 1894. Thierische Parasiten, first edition: 1-376.— Wien.

Motta, C. da S., 1963a. Considerações sôbre a sistemática de Linguatulida.— Atas da Sociedade de Biologia do Rio de Janeiro 7: 9-10.

Motta, C. da S., 1963b. Considerações sôbre o gênero *Cephalobaena* Heymons 1922 (Linguatulida). *Cephalobaena tetrapoda* Heymons 1922.— Atas da Sociedade de Biologia do Rio de Janeiro 7: 7-8.

Motta, C. da S., 1963c. Considerações sôbre o gênero *Cephalobaena* Heymons 1922 (Linguatulida).— Atas da Sociedade de Biologia do Rio de Janeiro 7: 12-13.

Motta, C. da S., 1963d. Considerações sôbre o gênero *Raillietiella* Sambon, 1910.— Atas da Sociedade de Biologia do Rio de Janeiro 7(3): 8-10.

Motta, C. da S., 1963e. Novas considerações sôbre o gênero *Raillietiella* Sambon 1910 (Linguatulida).— Atas da Sociedade de Biologia do Rio de Janeiro 7(4): 8-10.

Motta, C. da S., 1964. Considerações sôbre o gênero *Leiperia* Sambon 1922 (Linguatulida).— Atas da Sociedade de Biologia do Rio de Janeiro 8: 62-63.

Motta, C. da S., 1965. Considerações sôbre o gênero *Mahafaliella* Gretillat, Brygoo and Domergue, 1962 (Linguatulida).— Atas da Sociedade de Biologia do Rio de Janeiro 9: 6-8.

Motta, C. da S. & D.C. Gomes, 1968a. Sôbre um novo gênero e uma nova espécie de Cephalobaenidae (Linguatulida, Cephalobaeniformes).— Atas da Sociedade de Biologia do Rio de Janeiro 12: 7-9.

Motta, C. da S. & D.C. Gomes, 1968b. Ciclo evolutivo de *Leiperia gracilis* (Diesing, 1835) (Linguatulida, Porocephaliformes).— Atas da Sociedade de Biologia do Rio de Janeiro 12: 125-127.

Motta, C. da S. & D.C. Gomes, 1968c. Novo hospedeiro intermediário de *Leiperia gracilis* (Diesing, 1835) (Porocephaliformes, Linguatulida).— Atas da Sociedade de Biologia do Rio de Janeiro 12: 67-68.

Mouchet, R., 1913. Notes anatomiques et medicales sur la pathologie du Moyen Congo.— Archiv für Schiffs- und Tropenhygiene 17: 657.

Mouchet, R., 1914. Note sur *Porocephalus moniliformis* in Kamerun.— Bulletin de la Societé de Pathologie Exotique 7: 497-501.

Mourra, N., M. Huerre & E. Tiret, 2010. Liver pentastomiasis associated with rectal adenocarcinoma. — Colorectal Disease 12: 261-262.

Moussu, G., 1910. Linguatulose spontanée mortelle chez la chèvre, leçon clinique. — Recueil de Médicine Véterinaire 87: 153-158.

Mulder, K., 1989. Pentastomiasis (Porocephalosis). — Deutsche Medizinische Wochenschrift 114: 1921-1923.

Mumcuoglu, Y. & T. Rufli, 1981. Pentastomida-tongue worms. — Rundschau für Medizin Praxis 70: 1923-1926.

Muraleedharan, K. & S. Zaki, 1975. Occurrence of *Linguatula serrata* (Frölich, 1789) in cattle. — Current Science 44: 430.

Murie, O.J., 1935. Alaska-Yukon caribou. — United States Department of Agriculture Bureau of Biological Survey North American Fauna 54: 1-93.

Muzaffar, S.B. & I.L. Jones, 2004. Parasites and diseases of the auks (Alcidae) of the world and their ecology - a review. — Marine Ornitology 32: 121-146.

Nadakal, A.M. & A. Mohandas, 1975, Histochemical studies on the reptilian pentastomid *Kiricephalus pattoni* (Stephens, 1908) Sambon, 1922 (Porocephalidae: Pentastomidae). — Rivista di Parassitologia 36: 197-206.

Nadakal, A.M. & K.K. Nayar, 1968. Transplantation of pentastomids from reptilian to amphibian hosts. — Journal of Parasitology 54: 189-190.

Nafria, J.M.N. (see Nieto Nafria, J.M.)

Nair, K.K.N., 1967. A new species of *Raillietiella* (Pentastomida) from the water snake *Tropidonotus piscator.* — Zoologischer Anzeiger 179: 463-465.

Narayan, R., M. Anant & S.V. Mudallar, 1932. Larvae of *Porocephalus* sp. in the muscle of a freshwater fish. — Veterinary Journal 9: 10.

Nash, H., 2005. Life cycles, symptons, diagnosis, and treatment of pentastomes in reptiles: respiratory parasites. http://www.peteducation.com/article.cfm?cls=17&cat=1831&articleid=2754 [seen 23-12-09].

Nattan-Larrier, 1920. [*Porocephalus armillatus*]. — Bulletin de la Société de Pathologie Exotique 13: 659.

Natvig, L.R., 1932. En porocephal som fakultativ parasit hos norsk hvepsehoek. — Norsk Entomologisk Tidskrift 3: 123-128.

Neave, S.A., 1939. Nomenclator Zoologicus. A list of the names of the genera and subgenera in zoology from the tenth edition of Linneus 1758 to the end of 1935. Volume 1: 1-957. — Zoological Society of London, London.

Neumann, L.G., 1888. Traité des maladies parasitaires non microbiennes des animaux domestiques. 1 ed: 1-673. [Pentastomida, pp. 491-499]. — Asselin et Houzeau. Paris.

Neumann, L.G., 1899. Sur les porocéphales du chien et de quelques mammifères. — Archives de Parasitologie 2: 356-361.

Neveu-Lemaire, M., 1900. Description d'une nouvelle espèce de *Linguatula* (*Porocephalus seurati*). — Bulletin du Muséum d'Histoire Naturelle 6: 111-112.

Newmann, W.A., 2005. Origin of the Ostracoda and their maxillopodan and hexapodan affinities. — Hydrobiologia 538: 1-21.

Nicoli, R.M., 1963. Phylogenèse et systématique. Le phylum des Pentastomida. — Annales de Parasitologie Humaine et Comparée 38: 483-516.

Nicoli, R.M., 1964. Rapport sur les problèmes de parasitologie générale posés par les Pentastomides. — In: A. Corradetti (ed.), Proceedings of the First International Congress of Parasitology Rome, Volume 1: 622-623. Pergamon Press, Oxford.

Nicoli, R.M. & Y. Golvan, 1959. Sur une petite collection de Porocephalidae (Pentastomida) en provenance de l'Angola. Première note. — Bulletin de la Société de Pathologie Exotique 52: 145-146.

Nicoli, R.M. & Y. Golvan, 1963. Pentastomides de l'Angola. — Museo de Dando Publicações Culturais da Companhia de Diamantes de Angola, Lisboa 66: 141-162.

Nicoli, R.M., P. Latourelle & M. Quilici, 1965 [Nicoli et al., 1965a]. Problèmes de nomenclature: *Armillifer* L.W. Sambon, 1922 ou *Nettorhynchus* (H.D. de Blainville, 1824) J.C. Zenker, 1827 emend.?. — Annales de Parasitologie Humaine et Comparée 40: 238-240.

Nicoli, R.M. & J. Nicoli, 1966. Biologie des pentastomides. — Annales de Parasitologie Humaine et Comparée 41: 255-277.

Nicoli, R.M., M. Quilici & P.F. Battaglini, 1965. [Nicoli et al., 1965b]. Un parasite fabuleux et enigmatique: "the extraordinary worm" de John Paisley (1734) ou "Nettorhynque" de Henry Ducrotay de Blainville (1824). — Biologie Médicale 56: 513-528.

Nieto Nafria, J.M. & M.P.M. Durante, 1985. Tratado de entomologia: 1-599. — Ediciones Omega, Barcelona.

Nilssen, A.C., R.E. Haugerud & I. Folstad, 1998. No interspecific covariation in intensities of macroparasites of reindeer, *Rangifer tarandus* (L.). — Parasitology 117: 273-281.

Noc, F., 1922. Infestation massive naturell de la genette du Sénégal par des larves de porocéphales. — Bulletin de la Société de Pathologie Exotique 15: 621-631, pls 1-3.

Noc, F., 1923. Sur l'embryon acariforme et les stades larvaires des Linguatulidés. — Bulletin de la Societé de Pathologie Exotique 16: 340-346, 1 pl.

Noc, F. & G. Curasson, 1920. Contribution a l'étude de l'évolution biologique de *Porocephalus armillatus* Wyman. — Bulletin de la Societé de Pathologie Exotique 13: 656-659.

Noc, F. & G.S. Giglioli, 1922. Linguatulids parasitic in monitors. The new genus *Sambonia*. — Journal of Tropical Medicine and Hygiene 25: 276-280.

Noc, F. & M.L. Nogue, 1919. Note sur un cas de porocéphalose. — Buletin de la Société Medico-Chirurgicale Française Ouest Africaine 1: 6-9.

Noc, F. & M.L. Nogue, 1920. Un nouveau cas de porocéphalose humaine. — Bulletin de la Société Medico-Chirurgicale Française Ouest Africaine 2: 284-286.

Nørdmann, A. von, 1832. Mikrographische Beiträge zur Naturgeschichte der Wirbellosen Thiere, 2 volumes. — G. Reimer, Berlin. [Pentastomida, p. 141]

Nørrevang, A., 1972. Oogenesis in Pentastomida. — Acta Zoologica, Stockholm 53: 57-72.

Nørrevang, A., 1983. Pentastomida. — In: K.G. Adiyodi & R.G. Adiyodi (eds.), Reproductive biology of invertebrates, Volume 1: 521-533. John Wiley, Chichester.

Noosten, H.H., 1941. *Porocephalus* in pythons. — Natuurwetenschappelijk Tijdschrift voor Nederlandsch-Indië 101: 148-149.

Norval, G., C.R. Bursey, S.R. Goldberg & J.J. Mao, 2009. The first record of *Kiricephalus pattoni* Stephens, 1908 as a parasite of *Lycodon rushtrati rushtrati* Fischer, 1886 from Chiayi County, Taiwan. — Herpetology Notes 2: 79-80.

Nozais, J.P., V. Cagnard & J. Doucet, 1982. La pentastomose. Enquète sérologique chez 193 Ivoiriens. Pentastomiasis. A serological study of 193 Ivorians]. — Médecine Tropicale 42: 497-499.

Nsengwa, G.R.M. & M.M.M. Otaru, 1987. *Linguatula serrata* infection in a hunting dog. — Bulletin of Animal Health Production Africaine 35: 81-82.

Numan, A., 1840. Over wormen, voorkomende in de oogen van sommige dieren en den mensch, vergezeld van eene waarneming omtrent een bijzonderen, tot dus ver niet beschreven, worm, verwijderd uit het oog van een paard, door de opening van het hoornvlies. — Tijdschrift voor Natuurlijke Geschiedenis en Physiologie 7: 358-390, pl. 10.

Nzeh, D.A., J.K. Akinlemibola & G.C. Nzeh, 1996. Incidence of *Armillifer armillatus* (pentastome) calcification in the abdomen. — Central African Journal of Medicine 42: 29-31.

Oakwood, M. & D.M. Spratt, 2000. Parasites of the northern Quoll, *Dasyurus hallucatus* (Marsupialia: Dasyuridae) in tropical savanna, Northern Territory. — Australian Journal of Zoology 48: 79-90.

Obafunwa, J.O. & N.E.J. Busuttila, 1992. Sudden death due to disseminated porocephalosis. — International Journal of Legal Medicine 105: 43-46.

Obengui, M.G., A. Mbika-Cardorelle & C. Assambo-Kieli, 1999. La porocéphalose: un diagnostic encore d'exception. — Cahiers Santé 9: 357-360.

Ogunsusi, R.A. & A.N. Mohammed, 1978. Chimpanzee (*Pan troglodytes*), a new host for nymphal *Armillifer armillatus* (Pentastomida, Porocephalidae) in West Africa. — Revue d'Elevage et de Medicine Veretinaire des Pays Tropicaux 31: 361-362.

Ohbayashi, M. & K. Ohshima, 1954. On a case of linguatuliasis and its role as the intermediate host. — Japanese Journal of Veterinary Research 2: 47-54.

Oken, L., 1815. Lehrbuch der Naturgeschichte, Part 3, Section 1. Zoologie 1. Fleischlose Thiere: 1-850. [Pentastomida, p. 166]. — Jena and Leipzig.

Olson Jr., A.C. & G.E. Cosgrove, 1982. Pentastomida. — In: S.H. Hurlbert & A. Villalobos-Figueroa (eds.), Aquatic biota of Mexico, Central America and the West Indies: 172-174. San Diego State University, San Diego, CA.

Ong, H.C., 1974. Unusual case of pentastomiasis of fallopian-tube in an aborigine woman. — Journal of Tropical Medicine and Hygiene 77: 187-189.

Ooi, H.K. & M. Ohbayashi, 1982. *Reighardia sternae*, a pentastomid from a slaty-backed gull in Hokkaido, Japan. — Japanese Journal of Veterinary Research 30: 112-114.

Ortlepp, R.J., 1934. Note on the occurrence of the tongue-worm *Linguatula serrata* in a dog in South Africa. — Journal of the South African Veterinary Medical Association 5: 113-114.

Oryan, A., M. Khordadmehr & V.R. Ranjbar, 2011. Prevalence, biology, pathology, and public health importance of linguatulosis of camel in Iran. — Tropical Animal Health Production 43: 1225-1231.

Oryan, A., N. Moghaddar & M.R. Hanifepour, 1993. Arthropods recovered from the visceral organs of camel with special reference to their incidence and pathogenesis in Fars Province of Iran. — Indian Journal of Animal Science 63: 290-293.

Osche, G., 1959. "Arthropodencharaktere" bei einen Pentastomiden-Embryo (*Reighardia sternae*). — Zoologischer Anzeiger 163: 169-178.

Osche, G., 1963. Die systematische Stellung un Phylogenie der Pentastomida - embryologische und vergleichend-anatomische Studien an *Reighardia sternae*. — Zeitschrift für Morphologie und Ökologie der Tiere 52: 487-596.

Ostertag, R. von, 1892. Über das Vorkommen von Pentastomen in den Lymphdrüsen des Rindes. — Zeitschrift für Fleisch- und Milchhygiene 2: 63-69.

Ostertag, R. von, 1927. Über die sog. Pentastomenknötchen in den Gekröslymphknoten des Rindes. — Zeitschrift für Fleish- und Milchhygiene 37: 196.

Ouwens, P.A., 1906. De *Porocephalus moniliformis* (Diesing) niet alleen tot Afrika beperkt. — Geneeskundig Tijdschrift voor Nederlandsch-Indië 46: 37-56.

Overstreet, R.M., J.T. Self & K.A. Vliet, 1985. The pentastomid *Sebekia mississippiensis* sp.n. in the American alligator and other hosts. — Proceedings of the Helminthological Society of Washington 52: 266-277.

Owen, R., 1835. On the anatomy of *Linguatula taenioides*, Cuv. — Transactions of the Zoological Society of London 1: 325-330, pl. 41.

Owen, R., 1837. Anatomie der *Linguatula taenioides*. — Isis.

Owsjannikoff, P., 1870. [On the development of *Petromyzon fluviatilis*]. — Bulletin de l'Académie Impériale des Sciences de Saint Petersbourg 7: 166-175. [In Russian].

Paisley, J., 1734. An account of an extraordinary worm. — Medical Essays and Observations revised and published by a Society in Edinburgh 2: 333-339, pl. 4.

Paisley, J., 1742. Description d'un vers extraordinaire par M.J. Paisley, chirurgien à Glascow. Ess. Obs. Med. Soc. Edinburgh Translated from English, Volume 2, Article 26: 416-423, pl. 4 fig. 1-2. — Paris.

Pal, S S., M. Bhargava, A. Kumar, N. Mahajan, S. Das, K. Nandi, S. Guha, M. Raman, N. Jeyathilakan & J. Biswas, 2011. An unusual intraocular tongue worm in anterior chamber: a case report. — Ocular Immunology and Inflammation 19: 442-443.

Palles, L. & M. Pouderoux, 1934. *Porocephalus armillatus* et pneumococcie. — Bulletin de la Société de Pathologie Exotique 27: 51.

Palmer, A.R., 1993. Whither Pentastomida. — Nature 361: 214.

Pampiglione, S., A. Gentile, P. Maggi, A. Sattone & F. Sollitto, 2001. A nodular pulmonary lesion due to *Linguatula serrata* in an HIV-positive man. — Parassitologia 43: 105-108.

Pan, C.M., H.-F. Tang, M.-H. Qiu & Q.-X. Xiong, 2005. Heavy infection with *Armillifer moniliformis*: a case report. — Chinese Medical Journal 118: 262-264.

Panaiotova, M., T. Mutafova, V. Radev, I. Kanev & M. Nestorov, 1999. Some data of the morphology of *Linguatua serrata* Froelich, 1789 and clinical symptons of disease. — Experimental Pathology and Parasitology 2: 55-59.

Pandey, V.S., A. Dakkak & M. Elmamoune, 1987. Parasites of stray dogs in the rabat region, Morocco. — Annals of Tropical Medicine and Parasitology 81: 53-55.

Pantchev, N. & D. Tappe, 2011. Pentastomiasis and other parasitic zoonoses from reptiles and amphibians. — Berliner und Münchener Tierärztliche Wochenschrift 124: 528-835.

Papadakis, A.M., 1958. Human infestation with *Linguatula serrata*. — Transactions of the Royal Society of Tropical Medicine and Hygiene 52: 307.

Papadakis, A.M. & A.N. Hourmonziadis, 1958. Human infestation with *Linguatula serrata*. — Transactions of the Royal Society of Tropical Medicine and Hygiene 52: 454-455.

Paramananthan, D.C., 1960. On the occurrence of nymphal stages of *Linguatula serrata* Frölich, 1789, in goats from the slaughterhouse, Colombo. — Ceylon Veterinary Journal 8: 93-94.

Paramananthan, D.C., 1961. Nymphs of *Armillifer moniliformis moniliformis* Sambon 1922 in civet cats and wild boar. — Proceedings of the Ceylon Association for the Advancement of Science 17: 8.

Paramananthan, D.C., 1962. Nymphs of *Armillifer moniliformis moniliformis* Sambon 1922 in civet cats and wild boar in Ceylon. — Ceylon Journal of Medical Sciences 11: 23-27, pl., figs 1-2.

Paré, J.A., 2008. An overview of pentastomiasis in reptiles and other vertebrates. — Journal of Exotic Pet Medicine 17: 285-294. Doi: 10.1053/j.jepm.2008.07.005

Parenzan, P. & G. Chieffi, 1951. Primo caso clinico di infestazione umana da *Linguatula serrata* in Italia. — Acta Medica Italica 6: 67-69.

Parodi, S. & S. Mazza, 1928. Note sobre la *Linguatula serrata* Fröhlich. Cuarta Reunion de la Sociedad Argentina de Patologia Regional del Norte, Buenos Aires. — Boletín del Instituto de Clínica Quirúrgica de la Facultad de Ciencias Medicas 4: 642-643.

Parona, C., 1890. Sopra due specie del genere *Pentastomum*, Rud. (*P. crocidurae*, n. sp. e *P. gracile*, Dies.). — Annali del Museo Civico di Storia Naturale di Genova (2) 9 [for year 1887]: 69-78, pl. 3.

Pearse, A.S., 1920. The fishes of Lake Valencia, Venezuela. — University of Wisconsin Studies in Science 1: 1-51.

Pence, D.B., 1973. *Reighardia sternae* (Cephalobaenidae: Rheighardiidae) a pentastome from gulls and terns in Louisiana. — Proceedings of the Helminthological Society of Washington 40: 164-165.

Pence, D.B. & A.G. Canaris, 1973. Observations on the pentastome *Raillietiella gehyrae* Bovien, 1927 (Cephalobaenida: Cephalobaenidae) from *Mabuya homalocephala* in Kenya. — Zeitschrift für Parasitenkunde 41: 1-10.

Pence, D.B. & K.W. Selcer. 1988. Effects of pentastome infection on reproduction in a southern Texas population of the Mediterranean gecko, *Hemidactylus turcicus*. — Copeia 3: 565-572.

Penn, G.H., Jr., 1940. Observations on the life cycle of a linguatulid, *Porocephalus crotali* (Humboldt, 1808). — Anatomical Record Supplement 1940: 125.

Penn, G.H., Jr., 1942. The life history of *Porocephalus crotali*, a parasite of the Louisiana muskrat. — Journal of Parasitology 28: 277-283.

Penn, G.H., Jr. & E.C. Martin. 1941. The occurrence of porocephaliasis in Louisiana muskrat. — Journal of Wildlife Management 5: 13-14.

Pereira, W.L.A., R.N.M. Benigno & K.S.M. Silva, 2010. Fatal infections in a captive *Pithecia irrorata* (Primate) by *Porocephalus* sp. (Pentastomida). — Veterinary Parasitology 173: 358-361.

Peruzzi, M., 1929. Sulla biologia e l'anatomia patologica della porocefalosi. — Annales de Medicine Navale te Coloniale 1: 1-19, 4 pls.

Peruzzi, M., 1930. Un apparato valvolare nelle ghiandole stigmatiche del *Porocephalus armillatus*. — Annali di Medicina Navale de Coloniale 1: 278-285.

Peruzzi, M., 1932. Sulla biologia e l'anatomia patologica della porocefalosi. — Comptes Rendus Congrès International de Médecine Tropicale et d'Hygiène le Caire 4: 213-221.

Peterson, T., 1866. [Über Pentastomen bei Menschen, 3 p.] [In Russian].

Pflugfelder, O., 1980. Protoarthropoda. — In: F. Seidel (ed.), Morphogenese der Tiere, Part 1, Lieferung 4: J-I: 1-121. [Pentastomida, pp. 11-124]. Gustav Fischer, Stuttgart.

Piéron, R., Y. Mafart, B. Lesobre & D. Meyniel, 1982. [Two cases of pentastomiasis observed in Paris]. — Semimaire des Hopitaux 58: 1047-1048.

Pilger, F., 1803. Systematisches Handbuch der theoretisch-practischen Veterinär- Wissenschaften. Volume 2: 480-1394. [*Taenia rhinaria*, p. 1284-1285]. — Heyer, Giessen.

Pillars, N. 1929. *Linguatula serrata* in the nasal cavity of a dog. — Veterinary Journal 85: 307-309.

Pillers, A.W.N., 1925a. *Linguatula serrata* Frolich, 1789, in the nasal cavity of a bull bitch. — Veterinary Journal 81: 126-130.

Pillers, A.W.N., 1925b. *Linguatula serrata* Frölich in bovine mesenterie lymphatic glands. A lesion of interest to the meat inspector. — Veterinary Journal 81: 444-447.

Pillers, A.W.N., 1929. *Linguatula serrata* in the nasal cavity of a dog.— Veterinary Journal 85: 307-309.
Pineda-López, R. & L. García-Magaña, 1991. Hallazgo de ninfas de pentastomídeos en *Ictalurus meridionalis* en Río San Pedro, Balancán, Tabasco. Nota de investigación.— Universita de Ciencias: 97-100.
Pinto, C.F., 1938. Zoo-parásitos de interesse médico e veterinário: 1-376, pls 1-112.— P. de Mello y Cia, Rio de Janeiro.
Pivetaud, J., 1977. *Pentastomum* parasitosis - new occupational-disease.— Archives des Maladies Professionnelles de Médecine du Travail et de Sécurité Sociale 38: 958-963.
Plessis, V. du, A.J. Birnie, I. Eloff, H. Reuter & S. Anronikou, 2007. Pentastomiasis (*Armillifer armillatus* infestation).— South African Medical Journal 97: 928-930. Web site: http://blues.sabinet.co.za/webz/authorize?seeeionid=o:autho=pubmed:password=pubmed2004&/AdvancedQuery?&format=F&next=images/ejour/m_samj/m_samj_v97_h10_a8.pdf. Seen 26/12/2012.
Plum, N., 1925. Et Tilfaelde af Cardiaspasme hos en Hund. rimeligvis fremkaldt af en *Pentastomum taenioides*.— Maandesskrift der Dyrling in Kjobenhavn 35: 509-523.
Polderman, A.M. & W.A. Manschot, 1979. *Armillifer armillatus* located within the lacrimal caruncle.— Acta Leidensia 47: 71-77.
Poly, W.J., 2008. Global diversity of fishlice (Crustacea: Branchiura: Argulidae) in freshwater.— Hydrobiologia 595: 209-212.
Pons, R. & F. Noc, 1992. Porocéphaliase ganglionnaire et lymphadénie tuberculose à évolution rapide chez un tirailleur Sénégalais.— Bulletin de la Société de Pathologie Exotique 15: 951-954.
Ponthus, P. & F.N. Boustany, 1951. Un cas probable de porocephalose humaine (multiples kystes parasitaires calcifiés dans le péritoine).— Revue Médicale du Moyen-Orient 8: 255-257.
Poore, G.C.B., 2012a. The nomenclature of the Recent Pentastomida (Crustacea), with a list of species and available names.— Systematic Parasitology 82: 211-240. Doi: 210.1007/s11230-11012-19363-x
Poore, G.C.B., 2012b. The nomenclature of the Recent Pentastomida (Crustacea), with a list of species and available names.— Systematic Parasitology 83: 249. Doi: 10.1007/s11230-012-9382-7
Poore, G.C.B. & D.M. Spratt, 2011. Pentastomida. Australian Faunal Directory. Australian Biological Resources Study, Canberra. Web site: http://www.environment.gov.au/biodiversity/abrs/online-resources/fauna/afd/taxa/Pentastomida. Seen June 13, 2012.
Porter, A., 1928. Note on a porocephalid found in a Shangaan in South Africa.— South African Journal of Science 25: 359-363.
Pouder, D.B., E.W. Curtis & P.E. Yanong, 2005. Comon freshwater fish parasites pictorial guide: acanthocephalans, cestodes, leeches, & pentastomes: 1-7.— University of Florida IFAS Extension.
Pourjafar, M., H. Azizi, S. Darabi & M. Khosravi, 2007. The prevalence of nymphal stage of *Linguatula serrata* in camels (*Camelus dromedarius*) in Najafabad, Iran.— Journal of Camel Practice and Research 14: 171-173.
Powell, R., P.J. Hall, D.D. Smith & J. Riley, 1993. The occurrence of *Raillietiella* sp. (Pentastomida: Cephalobaenida) in *Hemidactylus* sp. (Lacertilia: Gekkonidae) from Hispaniola.— Caribbean Journal of Science 2: 51-53.
Prathap, K., 1981. Pentastomiasis.— Annals of the Academy of Medicine of Singapore 10: 132-135.
Prathap, K., K.S. Lau & J.M. Bolton, 1969. Pentastomiasis: a common finding at autopsy among Malaysian aborigines.— American Journal of Tropical Medicine and Hygiene 18: 20-27.
Prowazek, S. von, 1918. Haemogregarinen aus *Porocephalus moniliformis*.— Zoologischer Anzeiger 33: 465-466.
Prüner, E., 1847. Die Krankheiten des Orient's vom Standpunkte der Vergleichenden Nosologie: 1-472. [Pentastomida, 243-250, pl. 2 figs 1-2.].— Erlangen.
Prüner, E., 1852. *P. constrictum*.— Krankheiten des Orients 4: 19, pl. 5.
Pujatti, D., 1949. *Nesocia bandicota* Bechstein (Muridae) opiste intermedio della *Linguatula serrata* Frölich.— Natura Rivista di Scienze Naturali 40: 18-22.
Pujatti, D., 1951. Intorno alla *Raillietiella orientalis* Hett (Pentastomida) e a un suo nuovo ospite intermedio.— Rivista di Biologia Coloniale (1949-1950) 10: 23-26.
Pullar, E.M., 1936. A note on the occurrence of *Linguatula serrata* (Fröhlich, 1789) in Australia.— Australian Veterinary Journal 12: 61-64.

Qiu, C.P., Z.S. Chang, X.M. Tong & Y.N. Zhang, 2004. [Case report: a boy infected with *Armillifer moniliformis*]. — Zhongguo Ji Sheng Chong Xue Yu Ji Sheng Chong Bing Za Zhi 22: 273. [In Chinese].

Qiu, M.H. & M.L. Chen, 1999. [Misidentification of a pentastomida parasite in a case of human pentastomiasis in China]. — Journal of Parasitology and Parasitic Diseases 17: 188. [In Chinese].

Qiu, M.H. & Y.Y. Jiang, 2006. Advances in studies of human pentastomidosis. — International Journal of Medical Diseases 33: 281-287.

Qiu, M.H. & Y.Y. Jiang, 2007. Distinguishing of *Armillifer* and a correction on pathogenic misidentification from a reported case. — Acta Scientarum - Biological Sciences 25: 510-511.

Qiu, M.H., K.C. Ma, P.C. Fan & S.S. Lu, 2005. Discovery of a new species of the pentastom genus *Porocephalus* (Humboldt, 1811) from Taiwan, China and its pathogenic features. — Zhongguo Ji Sheng Chong Xue Yu Ji Sheng Chong Bing Za Zhi 23: 69-72.

Radchenko, N.M., 1971. [A new species of Pentastomida]. — Zoologischeskii Zhurnal 50: 935-936. [In Russian].

Radfar, M.H., S. Fathi, H.A. Nezhad & E.N. Asl, 2010. Prevalence of *Linguatula serrata* nymphs in one-humped camel in southeast of Iran. — Journal of Camel Practice and Research 17: 139-142.

Radhakrishnan, S., S.P. Kurup & P.S. Banerjee, 2009. Endoparasitism in captive wild-caught snakes indigenous to Kerala, India. — Zoo Biology 28: 253-258.

Raebigher, A., 1910. Geisterkrankheit bei einem Kamerunneger Bedingt durch Porozephaliasis. — Archiv für Schiffs- und Tropenhygiene 14: 170-174.

Ragab, H.A.A. & S. Samuel, 1955. Human infection with *Linguatula* in Egypt. — Journal of the Egyptian Medical Association 38: 229-231.

Rahman, H. & K.N. Soliman, 1971. A preliminary study on the occurrence of *Linguatula serrata* in street dogs of Bangladesh. — Bangladesh Veterinary Journal 5: 65-67.

Rail, G.A., 1967. Porocephaliasis: A description of two cases in Sabah. — Transactions of the Royal Society of Tropical Medicine and Hygiene 61: 715-717.

Railliet, A., 1883. Linguatule. — Nouveau Dictionnaire Pratique de Médecine de Chirurgie et d'Hygiène Vétérinaires 12: 26-46.

Railliet, A., 1884. *Linguatule denticulee* chez le surmulot. — Bulletin et Mémoires de la Société Centrale de Médecine Vétérinaire, New Series, 2: 81.

Railliet, A., 1886. Élements de Zoologie Médicale et Agricole. Linguatula. Nouveau dictionnaire vétérinaire: 444-452. — Asselin et Houzeau, Paris.

Railliet, A., 1900. Sur une observation ancienne de *Linguatula rhinaria* (Pilger, 1803) chez le chien. — Archives de Parasitologie 3: 199-202.

Rajalu, G.S. & M.V. Rajendran, 1970. A new species of *Raillietiella* (Pentastomida) from South India. — Zoologischer Anzeiger 184: 130-133.

Rajamanickam, C. & M.M.J. Lavoipierre, 1965. *Periplaneta australasiae* as an intermediate host of the pentastomid *Raillietiella hemidactyli*. — Medical Journal of Malaysia 20: 171.

Ramachandran, P., 1977. Observations on pentastomids in reptiles of Kerala, India .1. First contyribution with notes on cytology and transplantation of *Raillietiella gehyrae* in *Rana hexadactyla*. — Zoologischer Anzeiger 198: 84-88.

Ramollo, P.P., W.J. Luus-Powell, A. Jooste & K. Junker, 2009. Pentastomid infection in fish intermediate hosts. — Journal of the South African Veterinary Association-Tydskrif van die Suid-Afrikaanse Veterinere Vereniging 80: 121-122.

Ranque, P., 1972. First study concerning fluorescene and precipitant antibodies in gelose against *Armillifer armillatus* Wyman 1827 (Pentastomida). — Comptes Rendus et Hebdomadaires des Seances de l'Academie des Sciences, Serie D, 275: 437-439.

Ranque, P., 1974. Le phylum des Pentastomida. Position systematique, etudes experimentales, considerations epidemiologiques. — Bulletin de l'Association des Naturalistes du Mali 1974: 22-30.

Ranque, P., D. Amy, G. Discamps, X. Mattei & M. Quilici, 1974. Pentastomiosis by *Armillifer armillatus*. — Zeitschrift für Parasitenkunde 44: 329-338.

Rao, K.H. & J.B. Jennings, 1959. The alimentary system of a pentastomid from the Indian water-snake *Natrix piscator* Schneider. — Journal of Parasitology 45: 299-300.

Rao, M.A.N. & S.V. Maduliar, 1932. Larvae of *Porocephalus* species in the muscle of a fresh water fish. — Indian Veterinary Journal 9: 10.

Rao, S.R. & L.S. Hiregaudar, 1962. Some internal parasites from reptiles in Bombay.— In: R.V. Seshaiya & B. Chauhan (eds), Proceedings of the First All-India Congress of Zoology, 24-28 October, 1959. Part 2: Scientific Papers. Volume 2: 447-459. Zoological Society of India, Calcutta.

Rataj, A.V., R. Lindtner-Knific, K. Vlahovic, U. Mavri & A. Dovc, 2011. Parasites in pet reptiles.— Acta Veterinaria Scandinavica 53: 1-20.

Rátz, I. von, 1892a. A *Pentastomum denticulatum* aktiv vándorlásáról (Kazuistikus közleménuek a kórboneztan köréböl. VI) .— Veterinarius Budapest 15: 305-310.

Rátz, I. von, 1892b. Von der aktiven Wanderung des *Pentastomum denticulatum*.— Centralblatt für Bakteriologie und Parasitenkunde 12: 329-333.

Rátz, I. von, 1910. [Über das Vorkommen von *Linguatula rhinaria* in Ungarn].— Állattani Közlem Budapest 9: 137-144, 154-155.

Rátz, I. von, 1913. Über den Parasitismus der *Linguatula rhinaria* und ihr Vorkommen in Ungarn.— Zeitschrift für Tiermedizin, New Series, 17: 400-411.

Rauther, M., 1909. Morphologie und Verwandtschaftsbeziehungen der Nematoden und einiger ihnen nahegestellter Vermalien.— Ergebnisse und Fortschritte der Zoologie 1: 491-596.

Ravindran, R., B. Lakshmanan, C. Ravishankar & H. Subramanian, 2008. Prevalence of *Linguatula serrata* in domestic ruminants in South India.— Southeast Asian Journal of Tropical Medicine and Public Health 39: 808-812. http://www.tm.mahidol.ac.th/seameo/2008_39_5/05-4185.pdf

Razavi, S.M., S.S. Shekarforoush & M. Izadi, 2004. Prevalence of *Linguatula serrata* nymphs in goats in Shiraz, Iran.— Small Ruminant Research 54: 213-217.

Reavill, D., 2005. Selected topics in reptle clinical pathology. Lecture Given at the U.C. Davis Avian/Exotic Animal Symposium 1994: 1-12.

Reed, C., 2008. Import risk analysis: specified members of the order: Squamata from government approved zoological collections in Australia. Final Report: 1-10. http://www.biosecurity.govt.nz/regs/imports/ihs/risk

Refaii, A.H. el (see El-Refaii, A.H.)

Regier, J.C., J.W. Shultz, A. Zwick, A. Hussey, B. Ball, R. Wetzer, J.W. Martin & C.W. Cunningham, 2010. Arthropod relationships revealed by phylogenomic analysis of nuclear protein-coding sequences.— Nature 463: 1079-1084.

Rego, A.A., 1980. Pentastomídeos de mamíferos da coleção helmintológica do Instituto Oswaldo Cruz.— Revista Brasileira de Biologia 40: 783-791.

Rego, A.A., 1983a. Pentastomídeos de répteis do Brasil: revisão dos Cephalobaenidae.— Memórias do Instituto Oswaldo Cruz 78: 399-411.

Rego, A.A., 1983b. Notas sobre alguns pentastomídeos de répteis.— Memórias do Instituto Butantan 44/45: 233-238.

Rego, A.A., 1983c. Sobre a indentificação das espécies de *Porocephalus* (Pentastomida) que ocorrem em ofídios da América Tropical.— Memórias do Instituto Butantan 44-45: 219-231.

Rego, A.A., 1984a. Sinopse dos pentastomídeos da região neotropical.— Garcia de Orta, Série Zoologia 11: 45-56.

Rego, A.A., 1984b. Pentastomíase em roedor da Bahia, identificação de *Porocephalus* larvares.— Memórias do Instituto Oswaldo Cruz 79: 393-394.

Rego, A.A., 1987. Observações ao microscópio eletrônico de varredura de algumas espécies de Pentastomídeos de serpentes.— Parasitologia al Dia 11: 72-73.

Rego, A.A. & J. Eiras. 1989. Identificação das larvas de *Sebekia* e *Leiperia* (Pentastomida). Histopatologia em peixes de rios.— Revista Brasileira de Biologia 49: 591-596.

Rego, A.A., G. Schaeffer & C. Strussman. 1987. *Leiperia gracile* (Diesing, 1835) pentastomid parasite from trachea of South American alligator, *Caiman crocodilus*. Taxonomy and pathogenic action.— Ciência e Cultura 39: 864-867.

Rego, A.A. & J.J. Vicente, 1972. Sobre as larvas de *Porocephalus crotali* (Humboldt, 1811) (Pentastomida) em mamíferos do Brasil.— Atas da Sociedade de Biologia do Rio de Janeiro 15: 65-66.

Rego, A.A. & J.J. Vicente, 1988. Excursão científica à zona do Pantanal, Estado de Mato Grosso, para coletas de helmintos.— Ciência e Cultura 40: 65-68.

Rego, A.A., J.J. Vicente, & D.C.C. Gômes. 1979. List of holotypes in the helminthological collection of the Oswaldo Cruz Institute.— Atas da Sociedade de Biologia do Rio de Janeiro, Suplemento 19: 1-29.

Rehbinder, C. & M. Nordkvist, 1982. *Linguatula serrata* in Swedish reindeer. — Rangifer 2: 45-46.
Reichenbach-Klinke, H.-H., 1977. Krankheiten der Reptilien: 1-228. — Gustav Fischer Verlag, Stuttgart.
Reid, A. McKie & E. Jones, 1963. *Porocephalus armillatus* - Larven im Auge. — British Journal of Ophthalmology 47: 169.
Reis, R.E., S.O. Kullanderr & C.J. Ferraris, Jr., 2003. Check list of the freshwater fishes of South America and Central America: 1-729. — Editora da Pontífícia Universidade Católica do Rio Grande do Sul, Porto Alegre.
Rendtorff, R.C., M.W. Deweese & W. Murrah, 1962. Occurrence of *Linguatula serrata*, a pentastomid, within human eye. — American Journal of Tropical Medicine and Hygiene 11: 762-764.
Reptile Database, 2012. Reptile database. Web page: http://www.reptile-database.org. Seen 2-1-2013.
Rezaee, M., 1998. The study on the occurrence of *L. serrata* in goats and dogs in Shiraz, Iran. — Unpublished DVM. Thesis, Shiraz University, Shiraz.
Rezaei, F., M. Tavassoli & A. Mahmoudian, 2011. Prevalence of *Linguatula serrata* infection among dogs (definitive host) and domestic ruminants (intermediate host) in the north west of Iran. — Veterinary Medicine 56: 561-567.
Rhind, W., 1830. Description of a species of worm found in the frontal sinus of a sheep. — Edinburg Journal of Natural and Geographical Sciences 1: 29-31, pl. 2 figs 1-5.
Ribeiro, S.C., F.S. Ferreira, S.V. Brito, D.A. Teles, R.W. Avila, W.O. Almeida, L.A. Anjos & M.C. Guarnieri, 2012. Pulmonary infection in two sympactric lizards, *Mabuya arajara* (Scincidae) and *Anolis brasiliensis* (Polychrotidae) from a cloud forest in Chapada do Araripe, Ceará, northeastern Brazil. — Brazilian Journal of Biology 72: 929-933.
Richardson, D.J., W.B. Owen & D.E. Snyder, 1992. Helminth parasites of the raccoon (*Procyon lotor*) from north-central Arkansas. — Journal of Parasitology 78: 163-166.
Richter, S., O.S. Møller & C.S. Wirkner, 2009. Advances in crustacean phylogenetics. — Arthropod Systematics and Phylogeny 67: 275-286.
Richter-Okyere, J.K., 1993. Experimentelle Untersuchungen an Eiern von Cephalobaeniden (Pentastomida). — Thesis, Universität Kiel.
Riding, D., 1926. A case of porocephalosis. — Annals of Tropical Medicine 20: 143-144, 1 pl.
Riehl, R. & V. Walldorf, 1985a. Associations of mitochondria with desmosome-like structures in the oocytes of *Raillietiella aegypti* (Pentastomida, Cephalobaenida). — Zeitschrift für Naturforschung C-A Journal of Biosciences 40: 748-750.
Riehl, R. & V. Walldorf, 1985b. Oogenesis in the pentastomid *Raillietiella aegypti* (Cephalobaenida). 2. The egg-shell. — Zeitschrift für Parasitenkunde 71: 125-133.
Riley, J., 1969. Histochemical and ultrastructural observations on digestion in pentastomid *Reighardia sternae*. — Parasitology 59: 6.
Riley, J., 1972a. Histochemical and ultrastructural observations on feeding and digestion in *Reighardia sternae* (Pentastomida-Cephalobaenida. — Journal of Zoology 167: 307-318.
Riley, J., 1972b. Some observations on the life cycle of *Reighardia sternae* Diesing 1864 (Pentastomida). — Zeitschrift für Parasitenkunde 40: 49-59.
Riley, J., 1973a. A redescription of *Reighardia sternae* Diesing 1864 (Pentastomida: Cephalobaenidae) with some observations on the glandular systems of pentastomids. — Zeitschrift für Morphologie der Tiere 76: 243-259.
Riley, J., 1973b. Question of pentastomid phylogeny. — Parasitology 67: 26.
Riley, J., 1973c. The structure of the buccal cavity and pharynx in relation to the method of feeding of *Reighardia sternae* Diesing, 1864 (Pentastomida). — International Journal for Parasitolology 3: 149-156.
Riley, J., 1974. Some ultrastructural observations on cuticle of pentastomids. — Parasitology 69: 3.
Riley, J., 1976. Some observations on egg production and autoreinfection of *Reighardia sternae* (Diesing, 1864), a pentastomid parasite of the herring gull. — Parasitology 72: 81-91.
Riley, J., 1978. Surface-active material in pentastomids in possible evasion of host immune-response. — Parasitology 77: R29-R30.
Riley, J., 1979. Contrasting reproductive strategies in the Pentastomida. — Parasitology 79: 20-21.
Riley, J., 1981. An experimental investigation of the development of *Porocephalus crotali* (Pentastomida: Porocephalida) in the western diamond back rattlesnake (*Crotalus atrox*). — International Journal of Parasitolology 11: 127-131.

Riley, J., 1983. Recent advances in our understanding of pentastomid reproductive biology. — Parasitology 86: 59-83.
Riley, J., 1986. The biology of pentastomids. — Advances in Parasitology 25: 45-128.
Riley, J., 1988. Pentastomida. — In: K.G. Adiyodi & R.G. Adiyodi (eds.), Reproductive biology of invertebrates. Volume 3. Accessory sex glands: 1-511. John Wiley & Sons, Chichester.
Riley, J., 1992a. Pentastomida. — In: K.G. Adiyodi & R.G. Adiyodi (eds.), Reproductive biology of invertebrates. Volume 5. Sexual differentiation and behavior: 401-411. John Wiley & Sons, Chichester.
Riley, J., 1992b. Pentastomids and the immune response. — Parasitology Today 8: 133-137.
Riley, J., 1993. Pentastomida. — In: K.G. Adiyodi & R.G. Adiyodi (eds.), Reproductive biology of invertebrates. Volume 6, Part B. Asexual propagation and reproduction: 293-307. John Wiley & Sons, Chichester.
Riley, J., 1994. A revision of the genus *Alofia* Giglioli, 1992 and a description of a new monotypic genus, *Selfia*: Two genera of pentastomid parasites (Porocephalida: Sebekidae) inhabiting the bronchioles of the marine crocodile *Crocodylus porosus* and other crocodilians. — Systematic Parasitology 29: 23-41.
Riley, J., 1996. Pentastomids: 1659-1660. — In: G.C. Cook (ed.), Manson's tropical diseases. 20th edition. Saunders, London.
Riley, J. & J.H. Ali, 1980. A new look at the taxonomy of pentastomids. — Parasitology 81: R24-R25.
Riley, J. & A.A. Banaja, 1975. Some ultrastructural observations on the integument of a pentastomid. — Tissue and Cell 7: 33-50.
Riley, J., A.A. Banaja, & J.L. James, 1978. The phylogenetic relationships of the Pentastomida: the case for their inclusion within the Crustacea. — International Journal for Parasitolology 8: 245-254.
Riley, J., R.E. Haugerud & A.C. Nilssen, 1987. A new species of pentastomid from the nasal passages of the reindeer (*Rangifer tarandus*) in northern Norway, with speculation about its life-cycle. — Journal of Natural History 21: 707-716.
Riley, J. & N.J.L. Heideman, 1998. A new blunt-hooked pentastomid belonging to the genus *Raillietiella* Sambon, 1910, from two species of agamid lizards in Namibia. — Systematic Parasitolology 41: 41-46.
Riley, J. & R.J. Henderson, 1999. Pentastomids and the tetrapod lung. — Parasitology, Supplement 119: 89-105.
Riley, J., G.F. Hill & F.W. Huchzermeyer, 1997. A description of *Agema*, a new monotypic pentastomid genus from the lungs of African dwarf and slender-snouted crocodiles. — Systematic Parasitolology 37: 207-217.
Riley, J. & F.W. Huchzermeyer, 1995a. Pentastomid parasites of the family Sebekidae Fain, 1961 in West Africa dwarf crocodiles *Osteolaemus tetraspis* Cope, 1851 from the Congo, with a description of *Alofia parva* n. sp. — Onderstepoort Journal of Veterinary Research 62: 151-162.
Riley, J. & F.W. Huchzermeyer, 1995b. Descriptions of four species of pentastomid parasites belonging to the genus *Alofia* Giglioli, 1922 and *Sebekia* Sambon, 1922, from a single Nile crocodile *Crocodylus niloticus* from Botswana. — Systematic Parasitolology 31: 221-238.
Riley, J. & F.W. Huchzermeyer, 1996. A reassessment of the pentastomid genus *Leiperia* Sambon, 1922, with a description of a new species from both the IndoPacific crocodile *Crocodylus porosus* and Johston's crocodile *C. johnstoni* in Australia. — Systematic Parasitolology 34: 53-66.
Riley, J. & F.W. Huchzermeyer, 2000. Diet and lung parasites of swamp forest dwarf crocodiles (*Osteolaemus tetraspis osborni*) in the northern Congo Republic. — Copeia 2: 582-586.
Riley, J., J.L. James & A.A. Banaja, 1979. The possible role of the frontal and sub-parietal gland systems of the pentastomid *Reighardia sternae* (Diesing, 1864) in the evasion of the host immune response. — Parasitology 78: 53-66.
Riley, J., C.T. McAllister & P.S. Freed, 1988. *Raillietiella teagueselfi* n. sp. (Pentastomida: Cephalobaenida) from the Mediterranean gecko, *Hemidactylus turcicus* (Sauria: Gekkonidae), in Texas. — Journal of Parasitolology 74: 481-486.
Riley, J., J.L. Oaks & M. Gilbert, 2003. *Raillietiella trachea* n. sp., a pentastomid from the trachea of an oriental white-backed vulture *Gyps bengalensis* taken in Pakistan, with speculation about its life-cycle. — Systematic Parasitology 56: 155-161.

Riley, J., R. Powell & D.D. Smith, 1991. Further observations of blunt-hooked pentastomids belonging to the genus *Raillietiella* Sambon, 1910, infecting *Hemidactylus brookii* (Sauria: Gekkonidae) in Africa and the Caribbean: Comparison with closely related *Raillietiella* spp. from an African skink (*Mabuya perrotetii*). — Systematic Parasitology 20: 47-57.

Riley, J. & J.T. Self, 1979. On the systematics of the pentastomid genus *Porocephalus* (Humboldt, 1811), with descriptions of new species. — Systematic Parasitology 1: 25-42.

Riley, J. & J.T. Self, 1980. On the systematics and life cycle of the pentastomid genus *Kiricephalus* (Sambon, 1922), with descriptions of three new species. — Systematic Parasitology 1: 127-140.

Riley, J. & J.T. Self, 1981a. A redescription of *Waddycephalus teretiusculus* (Baird, 1862) Sambon, 1922 and a revision of the taxonomy of the genus *Waddycephalus* (Sambon, 1922), pentastomid parasites of Asian, Australian and Indonesian snakes, with descriptions of eight new species. — Systematic Parasitology 3: 243-257.

Riley, J. & J.T. Self, 1981b. Some observations on the taxonomy and systematics of the pentastomid genus *Armillifer* (Sambon, 1922) in south east Asian and Australian snakes. — Systematic Parasitology 2: 171-179.

Riley, J. & J.T. Self, 1982. A revision of the pentastomid genus *Parasambonia* Stunkard & Gandal, 1968: a new generic character, a description of the male and a new species. — Systematic Parasitology 4: 125-133.

Riley, J. & D.M. Spratt, 1987. Further observations on pentastomids (Arthropoda) parasitic in Australian reptiles and mammals. — Records of South Australian Museum 21: 139-148.

Riley, J., D.M. Spratt & P.J.A. Presidente, 1985. Pentastomids (Arthropoda) parasitic in Australian reptiles and mammals. — Australian Journal of Zoology 33: 39-53.

Riley, J., D.M. Spratt & J.M. Winch, 1990. A revision of the genus *Sebekia* Sambon, 1922 (Pentastomida) from crocodilians with descriptions of five new species. — Systematic Parasitology 16: 1-25.

Riley, J. & L.S. Walters, 1980. *Porocephalus dominicana* n. sp. from the Dominican boa (*Constrictor constrictor nebulosus*). — Systematic Parasitology 1: 123-126.

Riley, J. & J.M. Winch, 1984. The role of leaf-cutter ants in the transmission of a pentastomid parasite of worm-lizards. — Parasitology 89: R5-R6.

Riley, J., J.M. Winch, A.F. Stimson & R.D. Pope, 1986. The association of *Amphisbaena alba* (Reptilia, Amphisbaenia) with the leaf-cutting ant *Atta cephalotes* in Trinidad. — Journal of Natural History 20: 459-470.

Rivas, D., 1920. Human parasitology: 1-715. [Pentastomida, pp. 476-478]. — W.B. Saunders Company, Philadelphia.

Rizzo, G., 1977. Su di un raro caseo di infestazione umana da ninfe di *Linguatula serrata*. — Rivista di Parassitologia 38: 313-317.

Roberts, P.P., 1988. Parasitic infections of the pleural space. — Seminars in Respiratory Infections 3: 362-382.

Rodhain, J. & C. Vuylsteke, 1932. Contribution à l'étude des porocéphales des crocodiles africains. — Révue de Zoologie et de Botanique Africaines 23: 1-11.

Rodrick, G.E., 1974. The ontogenetic study of lactate dehydrogenase in *Porocephalus crotali* (Pentastomida). — Proceedings of the Third International Congress of Parasitology 2: 1022.

Rodrick, G.E., 1976. An ontogenetic study of lactate-dehydrogenase in *Porocephalus crotali* (Pentastomida). — Comparative Biochemistry and Physiology B-Biochemistry & Molecular Biology 53: 325-328.

Roe, H.E., 1922. *Linguatula taenioides*: 1-30. — Term Paper University of California Department of Zoology.

Röhlig, D., J.A. Dunlop, J.H. Grau & A. Friederichs, 2010. An annotated catalogue of the tongue worms (Pentastomida) held in the Museum für Naturkunde Berlin. — Zoosystematics and Evolution 86: 129-154.

Rojers, K.S., G. Miller, A.K. Prestwood, D.E. Bjorling & K.S. Latimer, 1985. Aberrant nymphal pentastomiasis in a dog. — Journal of American Animal Hospital Association 21: 417-420.

Rokiki, J., 1987. Pentastomida. — In: J. Razowski (ed.), Checklist of animals of Poland. Volume 4, Part 1-31. Porifera-Symphyla: 145. Wydawnictwa Instytutu Systematyki i Ewolucji Zwierzat PAN, Krakow.

Rokni, M.B., 2008. The present status of human helminthic diseases in Iran.— Annals of Tropical Medicine and Parasitology 102: 283-295.

Rompaey, H. van, 1988. Diseases and parasites of the binturong. Robinson, P. Regional studybook of the binturong (*Arctictis binturong*) on the British Isles. Number one: 1987 edition: 1-41.— Merseyside, published by the author, Southport.

Roveda, R.J., 1948. *Pentastoma gracile*, Diesing 1835.— Revista da Facultad de Agronomia Veterinaria 12: 47-50.

Roy, D.N. & S.K. Ganguly, 1940. Linguatulid infection in man.— Indian Medical Gazette 75: 478.

Rudolphi, C.A., 1805. Bemerkungen aus dem Gebiet der Naturgeschichte, Medicin und Thierarzneykunde, auf einer Reise durch einen Theil von Deutschland, Holland und Frankreich. Zweiter Theil: 1-222.— Realschulbuchhandlung, Berlin.

Rudolphi, C.A., 1808. Entozoorum Synopsis cui acceduni mantissa duplex et indices locupletissimi, volume 1: 1-637.— Augustus Rücker, Berlin.

Rudolphi, C.A., 1809. Entozoorum, sive vermium intestinalium: historia naturalis. Volume 2, Part 1: 1-457, pl. 12.—Animadversiones in genera et species entozoorum. Sumtibus Tabernae Librariae et Artium, Amstelaedami.

Rudolphi, C.A., 1810. Entozoorum Synopsis cui acceduni mantissa duplex et indices locupletissimi. Volume 2, Part 1: 432-447, pl. 12 figs 8-12.— Augustus Rücker, Berlin.

Rudolphi, C.A., 1812. Erster Nachtrag zu meiner Naturgeschichte der Eigenweidewürmer.— Berliner Magazin für die Neuesten Entdeckungen in der Gesammten Naturkunde 6-7: 83-113. [Pentastomida, p. 106-107]

Rudolphi, C.A., 1819. Entozoorum Synopsis cui accedunt mantissa duplex et indices locupletissimi, Volume 2, Part 1: 1-811, 3 pls : 432-435. [Pentastomida, pp. 14-15, 577-578, 584-593, 637, 687].— Augustus Rücker, Berlin.

Sacchi, L., F. Barbagli & C. Valeri, 2001. Infestazione da *Armillifer armillatus* (Wyman, 1848) (Pentastomida) in una *Bitis gabonica rhinoceros* (Schlegel, 1855) importata dal Ghana.— Pianura 13: 89-92.

Sachs, R., G. Rack & M.H. Woodford, 1973. Observations on pentastomid infestation of East African game animals.— Bulletin of Epizootic Diseases in Africa 21: 401-409.

Sadjadi, S.M., S.M. Ardehali & A. Shojaei, 1998. A case report of *Linguatula serrata* in human pharynx from Shiraz, southern Iran.— Medical Journal of the Islamic Republic of Iran 12: 193-194.

Sagredo, N.P., 1924. *Linguatula-rhinaria*-Larve (*Pentastoma denticulatum*) in den Lungen des Menschen.— Virchow's Archiv für Pathologische Anatomie und Physiologie und für Klinische Medizin 251: 608-615.

Sagredo, N.P., 1928. [*Linguatula rhinaria* - larva (Pentastoma denticulatum) in human beings].— Vrachebnoe Delo 11: 314-316. [in Russian].

Saint Raymond-Moynaty, D.J., 2008. Les affections cutanees des reptiles. La Faculte de Medecine de Creteil.

Saiyari, M., B. Mohammadian & R.N. Sharma, 1996. *Linguatula serrata* (Frolich 1789) nymphs in lungs of goats in Iran.— Tropical Animal Health and Production 28: 312-314.

Salazar, N.P., 1964. A newly reported arthropod parasite in the lungs and body cavity of some Philippine snakes.— The Philippine Journal of Science 93: 171-178.

Salazar, N.P., 1965. Human pentastomiasis in the Philippines, with notes on a Taiwan species.— Acta Medica Philippina Series *2* 1: 157-162.

Salgado-Maldonado, G., R. Pineda-Lopez, V.M. Vidal-Martinez & C.R. Kennedy, 1997. A checklist of metazoan parasites of cichlid fishes from Mexico.— Journal of the Helminthological Society of Washington 64: 195-207.

Saling, T., 1925. Der Stand unserer Kenntnisse von den Linguatuliden, besonders in hygienischer Beziehung.— Zeitschrif für Desinfektions- und Gesundheitswesen 17: 109-115, 149-156.

Salm, A., 1907a. *Porocephalus moniliforme* (Diesing, 1836) et *Pentastomum constrictum* (Bilh.- v. Sieb., 1851).— Gazette Hebdomadaire des Sciences Médicales de Bordeaux 28: 464.

Salm, A., 1907b. Drie gevallen van *Porocephalus moniliformis*.— Geneeskundig Tijdschrift voor Nederlandsch-Indie 47: 11-13.

Salman, H.E. & Y. Mahdi, 1955. The marrara syndrome at Abu Deleig.— Sudanese Medical Journal 1: 1-4.

Salvador, A., 2009. Lagarto atlántico - *Gallotia atlantica* (Peters y Doria, 1882). — In: A. Salvador & A. Marco (eds.), Enciclopedia Virtual de los Vertebrados Españoles: 1-10. Museo Nacional de Ciencias Naturales, Madrid.

Sambon, L.W., 1909. Remarks on Drs. Broden and Rodhains paper on "a new *Porocephalus*". — Journal of Tropical Medicine and Hygiene 12: 79-81.

Sambon, L.W., 1910a. Preliminary notes in three new species of tongue worms (Linguatulidae) in the collection of the "Museum d'Histoire Naturelle", Paris. — Transactions of the Society of Tropical Medicine and Hygiene 3: 134-154.

Sambon, L.W., 1910b. Polycephaliasis in man. — Journal of Tropical Medicine and Hygiene 13: 17-24, 212-217, 258-263.

Sambon, L.W., 1912. Polycephaliasis in man. — Journal of Tropical Medicine and Hygiene 15: 258-271, 321-327, 371-374.

Sambon, L.W., 1913. Polycephaliasis in man. — Journal of Tropical Medicine and Hygiene 16: 98-100.

Sambon, L.W., 1918. Polycephaliasis in man. — Journal of Tropical Medicine and Hygiene 21: 321-325.

Sambon, L.W., 1922a. A synopsis of the family Linguatulidae. — Journal of Tropical Medicine and Hygiene 25: 188-206.

Sambon, L.W., 1922b. A synopsis of the family Linguatulidae. — Journal of Tropical Medicine and Hygiene 25: 391-428.

Sambon, L.W., 1928. The parasitic acarians of animals and the part they play in the causation of the eruptive fevers and other diseases of man. Preliminary considerations based upon an ecological study of typhus fever. — Annals of Tropical Medicine and Parasitology of Liverpool 22: 67-132.

Sandon, H., 1951. *Pentastoma gracile* (Linguatulidae) as a human parasite. — Parasitology 41: 60-62.

Sanecal, L., P. Monahan, B. Ward, K. Kazacos, R. Armstrong & G. Hughes, 1996. Intraocular pentastomiasis: human subretinal invasion of *Linguatulata serrata*: a case study. — Investigative Ophthalmology and Visual Science, Supplement 37: 3555.

Sangwan, A.K., S.S. Chaudhri & R.S. Bisla, 2009. Visceral pentastomiasis in a goat. — Crop Science 49: 83-84.

Sani, R.A., 1987. A review of helminths affecting domestic animals in Malaysia. — Tropical Biomedicine 4: 83-91.

Sathyanarayana, M.C. & P. George, 1994. The endoparasites of *Calotes versicolor* in Mannampandalk and Porayar areas of Tamil Nadu, India. — Hamadryad 19: 71-75.

Saupe, E., 1930. Verkalke parasiten (*Pentastomum denticulatum*) in der Milz. — Röntgenpraxis 2: 401-405.

Schacher, J.F. & F. Biagi, 1966. Primer hallazgo de *Linguatula serrata* en México. — Revista de Investigacion en Salud Publica 26: 279-281.

Schacher, J.F., G.M. Khalil & S. Salman, 1965. A field study of halzoun (parasitic pharyngitis) in Lebanon. — Journal of Tropical Medicine and Hygiene 68: 226-230.

Schacher, J.F., S. Saab, R. Germanos & N. Boustany, 1969. The aetiology of halzoun in Lebanon . Recovery of *Linguatula serrata* nymphs from two patients. — Transactions of the Royal Society of Tropical Medicine and Hygiene 63: 854-858.

Schäfer, H., 1912. Über das Vorkommen von *Porocephalus moniliformis* in Kamerun. — Archiv für Schiffs- und Tropenhygiene 14: 109, 113, 506-514.

Schilling, V., 1937. Ein Fall von *Porocephalus*-infektion im Röntgenbild bei einem Europäer. — Archiv für Schiffs- und Tropenhygiene 41: 303.

Schilling, V. & F. Kuhlmann. 1937. Porocephalosis im Röntgenbild. — Fortschritte auf dem Gebiete der Röntgenstrahlen 56: 321-325.

Schlegel, M., 1911a. Bericht über die Tägigkeit des tierhygienischen Institutes der Universität Freiburg i. Br. im Jahre 1910. — Zeitschrift für Thiermedicin 15: 207-263.

Schlegel, M., 1911b. Massenhafte Invasionen des *Pentastomum denticulatum* in die Gekröslumphknoten bein Rind. — Zeitschrift für Thiermedicin 15: 91-94.

Schmitt, T. & H. Pohlmann, 1935. Ein Beitrag zur Vorkommen der Larven von *Linguatula rhinaria* (*Pentastomum denticulatum*) bei der Ziege. — Deutsche Tierärztliche Wochenschrift 43: 435.

Schornagel, H., 1921. *Linguatula rhinaria* bij den hond in Nederland. — Tijdschrift voor Diergeneeskunde 48: 154-172.

Schouten, H., 1930. Les porocéphales des serpents. — Bulletin du Cercle Zoologique Congolais 6: 109-110.
Schouten, H., 1933. Un beau porocéphale. — Bulletin du Cercle Zoologique Congolais 10: 40.
Schrank, F. von P., 1796. Sammlung Naturhistorischer und Physicalischer Aufsätze. *Linguatula* oder Zungenwurm, eine neue Gattung der Eingeweidewürmer: 1-456. — Nürnberg.
Schubärt, T.D., 1853. Über die Entwicklung des *Pentastomum taenioides*. — Zeitschrift für Wissenschaftliche Zoologie 4: 117-118, pls 117-118.
Schulze, P., 1932. *Linguatula*, Zungerwürmer. — In: P. Brohmer (ed.), Fauna von Deutschland. Ein Bestimmungsbuch unserer Heimischen Tierwelt, 4th edition: 459. Quell & Meyer, Leipzig.
Schwab, D., 1985. Tongue worms (Pentastomida) in a northern copperhead (*Agkistrodon contortrix mokasen* (Daudin)) from the Great Dismal swamp, Virginia. — Catesbeiana 5: 14.
Scott, T.P., S.R. Simcik & T.M. Craig, 1997. Endohelminths of American alligators (*Alligator mississippiensis*) from southeast Texas. — Journal of the Helminthological Society of Washington 64: 258-262.
Scott, T.P., S.R. Simcik & T.M. Craig, 1999. A key to some pentastome, nematode and trematode parasites of the American alligator. — Texas Journal of Science 51: 127-138.
Scott-Macfie, J.W. (see McFie, J.W.S.)
Seidel, G.K., 1957. Beitrag zum Vorkommen der Pentastomiden in Indonesia. I. *Linguatula serrata* Frölich, 1789. — Herma Zoa 64: 153-162.
Seiffert, H., 1908. *Porocephalus moniliformis* Diesing 1836 bei einem Kamerunneger von Regierungsarzt Dr. Waldow. — Archiv für Schiffs- und Tropen-Hygiene 12: 320.
Seiffert, H., 1910a. Ein Beiträg sur Kenntnis des *Porocephalus moniliformis*. — Archiv für Schiffs- und Tropen-Hygiene 14: 101-110.
Seiffert, H., 1910b. Weitere Funde von *Porocephalus moniliformis* in Kamerun. — Archiv für Schiffs- und Tropen-Hygiene 14: 506-514.
Selcer, W.K., 1987. Factors affecting reproductive output of Mediterranean geckos, *Hemidactylus turcicus* (Sauria: Gekkonidae). — Dissertation Abstracts International B Sciences and Engineering 47: 4036.
Self, J.T., 1947. *Porocephalus crotali* Humboldt (Pentastomida) in Oklahoma. — Journal of Parasitology, Supplement 1947: 18.
Self, J.T., 1951a. Biological relationships of the Pentastomida: A bibliography of the Pentastomida. — Transactions of the American Microscopical Society 70: 255-256.
Self, J.T., 1951b. The auxiliary hooks in *Porocephalus crotali* Humboldt. — Transactions of the American Microscopical Society 70: 257-261.
Self, J.T., 1961. Pentastomida. — In: P. Gray (ed.), The Encyclopedia of the Biological Sciences: 748. Reinhold Publishing Corporation, New York.
Self, J.T., 1969. Biological relationships of Pentastomida: a bibliography on the Pentastomida. — Experimental Parasitology 24: 63-119.
Self, J.T., 1972. Pentastomiasis: host responses to larval and nymphal infections. — Transactions of the American Microscopical Society 91: 2-8.
Self, J.T., 1982a. Pentastomida. — In: S.P. Parker (ed.), Synopsis and classification of living organisms: 726-728. McGraw Hill, New York.
Self, J.T., 1982b. Pentastomiasis. — In: G.V. Hilleyer & C.E. Hopla (eds.), CRC Handbook Series in Zoonosis, 2nd edition, Section C, Parasitic zoocenoses Volume 3: 269-274. Florida CRC Press, Boca Raton.
Self, J.T., 1983. Pentastomida. — In: K.G. Adiyodi & R.G. Adiyodi (eds.), Reproductive biology of invertebrates, Volume 3: 478-490. John Wiley, Chichester.
Self, J.T., 1990. Pentastomida. — In: K.G. Adiyodi & R.G. Adiyodi (eds.), Reproductive biology of invertebrates. Volume 4, part B. Fertilization, development and parental care: 157-163. John Wiley & Sons, Chichester.
Self, J.T. & G.E. Cosgrove, 1968. Pentastome larvae in laboratory primates. — Journal of Parasitology 54: 969.
Self, J.T. & G.E. Cosgrove, 972. Pentastomida. — In: R.N.T.W. Fiennes (ed.), Pathology of simian primates II: 194-204. Karger, Basel.
Self, J.T. & J. Garcia-Diaz, 1961. *Raillietiella* (*Heymonsia*) *hemidactyli* Hett, 1934 from *Hemidactylus mabouia* in Puerto Rico, with a correction of the identity of *R. hebitihamata* Self & Kunz, 1961. — Journal of Parasitology 47: 912.

Self, J.T., H.C. Hopps & A.D. Williams, 1972. Porocephaliasis in man and experimental mice. — Experimental Parasitology 32: 117-126.

Self, J.T., H.C. Hopps & A.D. Williams, 1975. Pentastomiasis in Africans. — Tropical Geographical Medicine 27: 1-13.

Self, J.T. & R.E. Kuntz, 1956. Pentastomids from African reptiles and mammals and from reptiles of Florida Island, British Solomon Islands (South Pacific). — Journal of Parasitology 42: 33.

Self, J.T. & R.E. Kuntz, 1957. Pentastomids from African reptiles and mammals and from reptiles of Florida Island, British Solomon Islands (South Pacific). — Journal of Parasitology 43: 194-200.

Self, J.T. & R.E. Kuntz, 1961. Pentastomida from reptiles of Lan Yii Island (Taiwan), with a description of *Raillietiella hebitihamata* n. sp. — Journal of Parasitology 46: 885-887, pl. 1.

Self, J.T. & R.E. Kuntz, 1966a. The Pentastomida - a review. — In: A. Corradetti (ed.), Proceedings of the First International Congress of Parasitology, Volume 1: 620-621. Pergamon Press, Oxford.

Self, J.T. & R.E. Kuntz, 1966b. New Pentastomida. *Sambonia parapodium* n. sp. from *Varanus salvator* and *Armillifer agkistrodontis* n. sp. from *Agkistrodon acutus*. — Transactions of the American Microscopical Society 85: 256-260, pl. 1.

Self, J.T. & R.E. Kuntz, 1967. Host-parasite relations in some Pentastomida. — Journal of Parasitology 53: 202-206.

Self, J.T. & F.B. McMurry, 1948. *Porocephalus crotali* Humboldt (Pentastomida) in Oklahoma. — Journal of Parasitology 34: 21-23.

Self, J.T. & A.A. Rego, 1985. Reassessments and revisions of certain genera and species of the family Sebekidae (Pentastomida) including description of *Sebekia microhamus* n. sp. — Journal of Parasitology 7: 33-41.

Sellier, P., Y.J.F. Garin, J. Frija, A. Aubry & P. Soyer, 2004. Multiple thoracoabdominal calcifications in a healthy west African man. — Clinical Infectious Diseases 39: 1475-1476, 1524-1526.

Senadhira, M.A.P., 1967. A bibliographical guide to the animal parasites and arthropod pests of Ceylon. — Ceylon Journal of Science Biological Sciences 6: 39-216.

Senner, E., 1870. *Strongylus armatus* e *Pentastomum denticulatum* nel vessuto connettico dei puledri. — Giotnarl di Anatomie und Fisioliologie Parte degli Animali, Pisa 2.

Serdyukov, A.M. & V.A. Marchenko, 1985. [Imaginal form of *Linguatula serrata* Frolich, 1789 in a sheep from altai]: 4-10. — In: G.S. Zolotarenko (ed.), [Arthropods of Siberia and the Soviet Far East]: 1-219. Nauka, Novosibirsk. [In Russian].

Sergiev, V.P., V.V. Gorokhov & N.A. Romanenko, 1998. [Pentastomids - a "forgotten" class of parasites]. — Medical Parazitology 2: 48-54. [In Russian].

Sergiev, V.P., V.V. Gorokhov, N.A. Romanenko, A.S. Moskvin, L.N. Romanenko, L.D. Migacheva, D.B. Vasil'ev & A.N. Volichev, 2000. [Detection of pentastomes in Russia]. — Medical Parazitology 4: 53-57. [In Russian].

Shakerian, A., S.S. Shekarforoush & H.G. Rad, 2008. Prevalence of *Linguatula serrata* nymphs in one-humped camel (*Camelus dromedarius*) in Najaf-Abad, Iran. — Research in Veterinary Science 84: 243-245.

Sharpilo, V.P., M.D. Sonin & O.I. Lisitsina, 1996. [Paratenic parasitism: its distribution and expression regularities]. — Vestnik Zoologii 6: 3-12. [In Russian, English Distr.].

Shekarforoush, S.S. & P. Arzani, 2001. The study of prevalence rate of *Linguatula serrata* nymphs in liver of sheep, goat and cattle in Shahrekord, Iran. — Iranian Journal of Veterinary Research 2: 57-62.

Shekarforoush, S.S., S.M. Razavi & M. Izadi, 2004a. Prevalence of *Linguatula serrata* nymphs in sheep in Shiraz, in Iran. — Journal of Veterinary Research 17: 67-68.

Shekarforoush, S.S., S.M. Razavi & M. Izadi, 2004b. Prevalence of *Linguatula serrata* nymphs in sheep in Shiraz, Iran. — Small Rumininant Research 52: 99-101.

Shen, J.Y. et al., 1988. [The histopathological study of pentastomid infection in tamarin (*Saguinus mystax*)]. — Chinese Journal of Zoology 23: 26-28. [In Chinese].

Sherkov, S.N. & Y.E. Rabie, 1976. A survey of *Linguatula serrata* (*Pentastomum denticulatum)* in domestic animals in Jordan. — Egyptian Journal of Veterinary Science 13: 89-97.

Shin, J.W., C.Y. Chen & S.N. Chen, 1990. Immune responses of the first human case of pentastome infection in Taiwan. — Proceedings of Asian Pacific Congress for Parasitic Zoonoses 1990: 117-121.

Shipley, A.E., 1898. An attempt to revise the family "Linguatulidae". — Archives de Parasitologie 1: 52-80.
Shipley, A.E., 1900. Linguatulidae. — In: A. Willey (ed.), Zoological Results, based on material from New Britain, New Guinea, Loyalty Islands, and elsewhere, collected during the years 1895, 1896, and 1897. Volume 5: 563-565, 1 pl.
Shipley, A.E., 1905. Notes on ento-parasites from the Zoological Gardens, London, and elsewhere. — Proceedings of the Zoological Society of London 1: 248-253.
Shipley, A.E., 1909. Tardigrada and Pentastomida. — In: S.F. Harmer & A.E. Shipley (eds.), The Cambridge Natural History, Volume 4: 488-497. McMillan & Co., London.
Shipley, A.E., 1910. Report on two small collections of pentastomids with the description of a new species of *Porocephalus*. — Parasitology 3: 275-278, pl. 20.
Siavashi, M.R., M. Assmat & A. Vatankhah, 2002. Nasopharyngeal pentastomiasis (Halzoun): Report of 3 cases. — Iranian Journal of Medical Sciences 27: 191-192.
Siebold, C.T. von, 1853. Ein Beitrag zur Helminthographia humana. — Zeitschrift für Wissenschaftliche Zoologie 4: 53-72. Web site: http://biodiversitylibrary.org/page/14275188. Seen 26/12/2012.
Siebold, C.T. von & E. Rolando, 1845. *Linguatula*. — Archiv für Naturgeschichte 2: 254.
Sielfeld, W., 2000. Clase Pentastomida. Guías de identificación y biodiversidad fauna Chilena. — Apuntes de Zoologia, Universidad Arturo Prat 2000: 1-3.
Sievers, H., 1926. La *Linguatula serrata* (Froehlich) y su esistencia en Chile. — Revista Chilena de Historia Naturale 30: 306.
Silva, T.M.C. & A. de A. Barbosa Jr., 1984. Pentastomiase em roedor no Estado da Bahia. Nota sobre o encontro de *Armillifer moniliformis* (Diesing, 1835) Sambon, 1922. — Memórias do Instituto Oswaldo Cruz 79: 139-142.
Silva-Motta, C. da (see Motta, C. da Silva)
Simonsen, P.E. & R.K. Sada, 1985. Helminth and arthropod parasites of *Hemidactylus mabouia* from Tanzania. — Journal of Herpetology 19: 428-430.
Sinclair, K.B., 1954. The incidence and life-cycle of *Linguatula serrata* (Frolich, 1789) in Great Britain. — Journal of Comparative Pathology and Therapeutics 64: 371-383.
Singh, K.I., M. Krishnasamy & T.M. Ho, 1987. Collection of small vertebrates and their endoparasites from Ulu Endau, Jahore, Malaysia. — Malay Naturalist Journal 4: 349-356.
Singh, S.P., O.P. Paliwal & K.P. Singh, 1973. *Linguatula serrata* (Frolich, 1789) infestation in goat. — Indian Journal of Animal Health 12: 181.
Sinha, A.K. & R. Nikhil, 1985. Pulmonary pathology of *Calotes versicolor* (Daudin) infected with the arthropod worm *Raillietiella hemidactyli* (Hett) (Pentastoma: Cephalobaenidae). — Indian Journal of Parasitology 9: 175.
Sivakumar, P., M. Sankar, R.A. Nambi, P.E. Praveena & N. Singh, 2005. The occurrence of nymphal stage of *Linguatula serrata* in water buffaloes (*Bubalus bubalis*): Nymphal morphometry and lymph node pathology. — Journal of Veterinary Medicine Series A-Physiology Pathology Clinical Medicine 52: 506-509.
Slais, J., 1960. Histologischer Nachweis von Parasiten in nekrotischen und verkalten Gebilden (*Linguatula*, *Cysticercus*). — Zentralblatt für Allgemeine Pathologie und Anatomie 101: 200-207.
Slais, J., 1963. Histologický prukaz odumrelých larev jazycnatky (*Linguatula serrata* Frölich, 1789) v játrech cloveka [Histologischer Nachweis Abgestorbener Zungenwurlarven (*Linguatula serrata* Frölich 1789) in der Leber des Menschen. — Ceskoslovenska Parasitologie 10: 163-169, pls 1-2. [In Czech].
Slais, J., 1967. Pentastomida. — Fauna CSR 17: 191-214.
Slaughter, L.J., A.W. Dade, C. Chineme & E.J. Andrews, 1974. *Pentastoma* larvae in a squirrel-monkey. — Journal of the American Veterinary Medical Association 164: 711.
Slocombe, J.O. & J. Budd, 1973. *Armillifer brumpti* (Pentastomida) in a boa in Canada. — Journal of Wildlife Diseases 9: 352-355.
Smith, J.A., B. Oladiran, E. Lagundoye, A.L. Lawson & T.I. Francis, 1975. Pentastomiasis and malignancy. — Annals of Tropical Medicine and Parasitology 69: 503-512.
Solov'ev, B., 1929. [Zur Frage über die Linguatulose der Nasenböhle des Hundes]. — Zhurnal Nauchnoi i Prakticheskoi Veterinariarnoi Meditsiny Izdavaemyi Iurévskim Veterinarnoi Meditsiny Izdavaemyi Iur'Evskim Veterinarnym Institutom 10: 29-33. [In Russian].

Sonobe, K., 1927a. Über Linguatuliden-Larven Knötchen (sog. Pentastomen-Knötchen) der Leber des Menschen. Nebst Bemerkungen zu der Veröffentlichung von N. Sagredo in Bd. 251.— Virchow's Archivs für Pathologie 46: 1-13.

Sonobe, K., 1927b. Über Linguatuliden-Larven Knötchen (sog. Pentastomenknötchen) der Leber der Menschen. Nebst Bemerkungen zu Veröffentlichung von N. Sagrebo in Bd. 251 dieser Archivs.— Virchow's Archiv für Pathologische Anatomie und Physiologie und für Klinische Medizin 263: 753-768.

Soriano, S.V., N.B. Pierangeli, I. Roccia, H.F.J. Bergagna, L.E. Lazzarini, A. Celescinco, M.S. Saiz, A. Kossman, P.A. Contreras, C. Arias & J.A. Basualdo, 2010. A wide diversity of zoonotic intestinal parasites infects urban and rural dogs in Neuquen, Patagonia, Argentina.— Veterinary Parasitology 167: 81-85.

Southwell, T., 1924. On a collection of linguatulids in the Liverpool School of Tropical Medicine.— Annals of Tropical Medicine and Parasitology 18: 515-531.

Southwell, T. & A.W.N. Pillers. 1929. A note on a nymphal linguatulid - *Leiperia cincinnalis* Sambon from the musculature of the fish *Tilapia nilotica*.— Annals of Tropical Medicine and Parasitology 23: 130.

Spencer, W.B., 1889. On the presence of a *Pentastomum* parasitic in the lung of the coperhead snake (*Hoplocephalus superbus*).— Proceedings of the Royal Society of Victoria, New Series 1: 110-111.

Spencer, W.B., 1893. The anatomy of *Pentastomum teretiusculum* (Baird).— Quarterly Journal of Microcsopical Science, New Series 34: 1-73, pl. 1-9.

Spratt, D.M., 2003. *Rileyella petauri* gen. nov., sp. nov. (Pentastomida: Cephalobaenida) from the lungs and nasal sinus of *Petaurus breviceps* (Marsupialia: Petauridae) in Australia.— Parasite Journal de la Societe Francaise de Parasitologie 10: 235-241.

Spratt, D.M., 2010. *Yelirella* nomen novum for *Rileyella* Spratt, 2003 (Pentastomida: Cephalobaenida), a junior homonym of *Rileyella* Townsend, 1909 (Diptera: Tachinidae).— Parasite, Journal de la Société Française de Parasitologie 17: 319.

Sprehn, C., 1928a. Pentastomida (Linguatulida), Zungenwürmer.— In: F. Dahl (ed.), Die Tierwelt Deutschlands und der Angrenzenden Meeresteile nach ihren Merkmalen und nach ihrer Lebensweise. Volume 8, Part 8, Numb. 3: 84-94. G. Fischer, Jena.

Sprehn, C., 1928b. Die Pentastomiden des arktischen Gebiets.— In: F. Römer & F. Schaudinn (eds.), Fauna Arctica. Eine Zusammenstellung der Arktischen Tieformen, mit besonderer Berücksichtigung des Spitzbergen-Gebietes auf Grund der Ergebnisse der Deutschen Expedition in das Nördliche Eismeer im Jahre 1898. Volume 5, Number 3: 853-854. G. Fischer, Jena: 853-854.

Sprehn, C., 1930. Wichtige Helminthen einiger Laboratoriums-Tiere. Nematoda, Trematoda, Cestoda, Acanthocephala, Linguatulida.— In: W. Junk (Ed.), Tabulae Biologicae, Volume 6: 244-276. Berlin.

Stabler, R.M. & J.T. Self, 1967. The binturong: A new host for the nymphs of *Armillifer moniliformis* (Diesing, 1836).— Journal of Parasitology 53: 923.

Steinbach, H.L. & H.G. Johstone, 1957. The roentgen diagnosis of *Armillifer* infection (porocephalosis) in man.— Radiology 68: 234-237.

St Symmers, W.S.C. (see Symmers, W.S.C. St)

Stender-Seidel, S., 1995. Untersuchungen zur Ontogenese von *Raillietiella* sp. (Pentastomida: Cephalobaenida) im Labormodell: Die Drüsen.— Dissertation, Universität Kiel.

Stender-Seidel, S. & T. Gabrielle, 1997. Investigation of different ontogenetic stages of *Raillietiella* sp. (Pentastomida: Cephalobaenida): The embryonic gland-glandula embryonalis - or dorsal organ.— Parasitology Research 83: 157-162.

Stender-Seidel, S., G. Thomas & W. Böckeler, 1997a. Investigation of different ontogenetic stages of *Raillietiella* sp. (Pentastomida: Cephalobaenida): Hypodermal gland cells.— Parasitology Research 83: 269-272.

Stender-Seidel, S., G. Thomas & W. Böckeler, 1997b. Investigation of different ontogenetic stages of *Raillietiella* sp. (Pentastomida: Cephalobaenida): Accessory genital glands.— Parasitology Research 83: 264-268.

Stender-Seidel, S., G. Thomas & W. Böckeler, 1999. Investigation of different ontogenetic stages of *Raillietiella* sp. (Pentastomida: Cephalobaenida): ionical glands.— Parasitology Research 85: 373-386.

Stender-Seidel, S., G. Thomas & W. Böckeler, 2000. Investigation of diferent ontogenetic stages of *Raillietiella* sp. (Pentastomida: Cephalobaenida): suboral gland and frontal gland.— Parasitology Research 86: 385-400.

Stephens, J.R.C., 1928. *Porocephalus armillatus*. William E. Glover correspondence. — West African Medical Journal 2: 107.

Stephens, J.W.W., 1908. Two new human cestodes and a new linguatulid. — Annals of Tropical Medicine and Parasitology 1: 549-554, pl. 1.

Stiles, C.W., 1891a. Sur la biologie des linguatules. — Comptes Rendus Hebdomadaires des Séances et Mémoires de la Société de Biologie, (9) 3: 348-353.

Stiles, C.W., 1891b. Bau und Entwicklungsgeschichte von *Pentastomum proboscideum* Rud. et *Pentastomum subcylindricum* Dies: 1-78. — W. Englemann, Leipzig.

Stiles, C.W., 1891c. Bau und Entwicklungeschichte von *Pentastomum proboscidium* Rud. und *P. subcylindricum* Dies. — Zeitschrift für Wissenschaftlichen Zoologie 52: 85-157, pls 7-8.

Stiles, C.W., 1895. On the recent occurrence of *Linguatula rhinaria* Railliet, 1886, and *Taenia echinococcus* v. Siebold, 1853, in the United States of North America. — Transactions of the First Pan-American Medical Congress Washington 2: 1163-1165.

Stiles, C.W., 1927. Notes in Society Business. — Journal of Parasitology 14: 54-72. [*Linguatula rhinaris* Meyer 1789 and *L. serrata* (Froelich 1789), p. 61].

Stiles, C.W., 1928. Priority of *Linguatula serrata* Frölich, 1789, over *L. rhinaris* (Meyer, 1789). — Journal of Parasitology 14: 61.

Stiles, C.W. & A. Hassall, 1905. The determination of generic types, and a list of round worm genera, with their original and type species. — Bulletin of the United States Department of Agriculture Bureau of Animal Industry 79: 1-150.

Stock, F.E., 1946. Collapse of the lung and porocephalosis. — Transactions of the Royal Society of Tropical Medicine and Hygiene 40: 101-102.

Storch., O. 1895. Pentastomenknötchen in einer Oschsenlunge. Berlin. — Berliner Tierärztliche Wochenschrift 12: 135.

Storch, V., 1979. Contributions of comparative ultrastructural research to problems of invertebrate evoluton. — American Zoologist 19: 637-645.

Storch, V., 1984. Pentastomida. — In: J. Bereiter-Hahn, A.G. Matoltsy & K.S. Richards (eds.), Biology of the integument. 1. Invertebrata: 709-713. Springer: Berlin.

Storch, V., 1993. Pentastomida. — In: F.W. Harrison & M.E. Rice (eds.), Microscopic anatomy of invertebrates, vol. 12. Onychophora, Chilopoda, and lesser Protostomata: 115-142. Wiley-Liss, New York.

Storch, V. & W. Böckeler, 1979. Electron microscopic observations on the sensilla of the pentastomid *Reighardia sternae* (Diesing, 1864). — Zeitschrift für Parasitenkunde 60: 77-86.

Storch, V. & W. Böckeler, 1982. Zur Ultrastruktur der Terminalanhäge larvaler *Reighardia sternae* (Pentastomida). — Zeitschrift für Parasitenkunde 68: 103-107.

Storch, V., W. Böckeler & J. Riley. 1990. Microscopic anatomy and ultrastructure of the male genital system in *Porocephalus crotali* and *P. stilesi* (Pentastomida: Porocephalida). — Parasitology Research 76: 610-618.

Storch, V. & B.G.M. Jamieson, 1992. Further spermatological evidence for including the Pentastomida (tongue worms) in the Crustacea. — International Journal of Parasitology 22: 95-108.

Straub, M., 1936. De besmetting met *Pentastomum denticulatum* bij den mensch te Amsterdam. — Nederlandsch Tijdschrift Voor Geneeskunde 80: 1468-1471.

Ströse, A., 1898. *Pentastomum denticulatum* in einer Schweineleber. — Zeitschrift für Fleisch- und Milchhygiene 8: 1-3.

Strong, R.P. , G.C. Shattuck & R.E. Wheeler, 1926. Medical report of the Hamilton Rice seventh expedition to the Amazon, in conjunction with the Department of Tropical Medicine of Harvard University, 1924-1925. Part 1. — Contributions from the Harvard Institute for Tropical Biology and Medicine 4: 1-154.

St Symmers, W.S.C. (see Symmers, W.S.C. St)

Stunkard, H.W. & C.P. Gandal, 1968. The pentastomes *Waddycephalus terestiusculus* (Baird, 1862) Sambon, 1922 and *Parasambonia bridgesi* n. gen., n. sp., from the lungs of the Australian snake *Pseudechis porphyriacus*. — Zoologica 53: 49-56.

Sudhaus, W., 1985. Classis: Pentastomida. Lehrbuch der Zoologie Systematik: 755-762. — Gustav Fischer, Stuttgart.

Sulaiman, A., J. Jeffery, P. Oothuman, C. Shekhar & D. Zahedi, 1995. Cockroaches and house lizard trapped from Maly and Orang Asli villages in Endau, Jahore, Malaysia.— Tropical Biomedicine 12: 177-178.

Sweatman, G.K., 1962. Parasitic mites of non domesticated animals in New Zealand.— New Zealand Entomologist 3: 15-23.

Sweatman, G.K., 1971. Pentastomes.— In: J.W. Davis & R.C. Anderson (eds.), Parasite diseases of wild mammals: 51-64. Iowa University Press, Iowa.

Sweet, G., 1907. List of Australian Linguatulidae.— Proceedings of the Royal Society of Victoria, New Series 21: 391.

Sweet, G., 1909. The endoparasites of Australian stock and native fauna. Part I. Introduction, and census of forms recorded up to date.— Proceedings of the Royal Society of Victoria, New Series 21: 454-502.

Syed-Arnez, A.S.K. & S.N. Mohd Zain, 2006. A study on wild rats and their endoparasite fauna from the Endau Rompin National Park, Johor.— Malaysian Journal of Science 25: 19-39.

Symmers, W.S.C. St., 1957. Two cases of eosinophilic prostatitis due to metazoan infestation (with *Oxyuris vermicularis*) and with a larva of *Linguatula serrata*.— Journal of Pathology and Bacteriology 73: 549-555.

Symmers, W.S.C. St. & K. Valteris. 1950. Two cases of human infestation by larvae of *Linguatula serrata*.— Journal of Clinical Pathology 3: 212-219.

Sysak, N. & W. Bykow, 1930. Zur Kenntnis der pathologischen Veränderungen bei *Linguatula rhinaria* Pilger.— Archiv für Wissenschaftliche und Praktische Tierheilkunde 61: 114-117.

Taborda-Duarte, A. & L.D.B. Borges-Ferreira, 1957. Identificação da *Linguatula serrata* (forma ninfal) em bovinos autóctones.— Revista de Ciências Veterinárias 52: 149-152.

Taborda-Duarte, A. & J.M.P. Lino de Sousa, 1952. A linguatulose nos bovinos açorianos.— Revista de Medicina Veterinária 47: 14-29.

Tafti, A.K., M. Makeki & A. Oryan, 2001. Pathological study of intestines and mesenteric lymph nodes of camels (*Camelus dromedarius*) slaughtered in Iran.— Journal of Camel Practical Research 8: 213.

Tafti, A.K. & K. Rashidi, 2000. The pathology of goat paratuberculosis: gross and histopathological lesions in the intestines and mesenteric lymph nodes.— Journal of Veterinary Medicine Series B-Infectious Diseases and Veterinary Public Health 47: 487-495.

Tagle, I., 1938. *Linguatula serrata* Frölich, 1789.— Boletín del Ministerio de Agricultura Santiago de Chile 5: 108-110.

Tajik, H., M. Tavassoli, S. Javadi & H. Baghebani, 2008. The prevalence rate of *Linguatula serrata* nymphs in Iranian river buffaloes.— Asian Journal of Animal and Veterinary Advances 3: 174-178.

Tajik, H., M. Tavassoli, H. Khani & S. Javadi, 2007. Prevalence of *Linguatula serrata* nymphs in slaughtered camels of Iran.— Journal of Camel Practice and Research 14: 69-71.

Tappe, D. & D.W. Büttner, 2009. Diagnosis of human visceral pentastomiasis.— PLOS Neglected Tropical Diseases 3: 1-7.

Tappe, D., M. Meyer, A. Oesterlein, A. Jaye, M. Frosch, C. Schoen & N. Pantchev, 2011. Transmission of *Armillifer armillatus* ova at snake farm, the Gambia, West Africa.— Emerging Infectious Diseases 17: 251-254.

Tappe, D., R. Winzer, D.W. Büttner, P. Ströbel, A. Stich, H. Klinker & M. Frosch, 2006. Linguatuliasis in Germany.— Emerging Infectious Diseases 12: 1034-1036.

Tartakovskii, M.G., 1901. Linguatulosis u morskikh "svinok".— Arkiv Veterinarnykh Nauk 31: 1049-1053.

Tasan, E., 1987. Elazig kirsal yore kopeklerinde *Linguatula serrata* (Frolich, 1789) nin Yaylasi.— Doga Veterinaii ve Hayvancilk 11: 86-89.

Tavassoli, M., S. Javadi & M. Hadian, 2000. Canine linguatulosis in Urmia, West Azarbaidjan of Iran.— Proceedings of the WSAVA-FECAVA Voorjaarsdagen Congress: 528. Amsterdam, The Netherlands.

Tavassoli, M., S. Javadi & M. Hadian, 2001. Experimental infection and study of life cycle of *Linguatula serrata* in dogs.— Journal of the Faculty of Veterinary Medicine of the University of Tehran 56: 4.

Tavassoli, M., H. Tajic, B. Dalir-Naghadeh & F. Hariri, 2007. Prevalence of *Linguatula serrata* nymphs and gross changes of infected mesenteric lymph nodes in sheep in Urmia, Iran.— Small Ruminant Research 72: 73-76.

Tchesunov, A.V., 2002. [A case of tongueworms (Pentastomida): a peculiar problem in context of the modern phylogenetics]. — Zhurnal Obshchei Biologii 633: 209-226.
Tempel, L.M., 1898. Pentastomenlarven in der Lunge einer Ziege. — Zeitschrift für Fleisch- und Milchhygiene 8: 187-188.
Tenquist, J.D. & W.A.G. Charleston, 2001. A revision of the annotated checklist of ectoparasites of terrestrial mammals in New Zealand. — Journal of the Royal Society of New Zealand 31: 481-542.
Tessé, G., 1913. Frequentissimi casi di *Linguatula denticulata* nei gangli mesenterici dei bovini sardi. — Clinica Veterinaria 36: 147-157.
The, D.T. (see Dang T.T.)
Thiel, P.H. van, 1926. Eine ungelöste *Porozephalus* frage. — Archiv für Schiffs- und Tropen-Hygiene 30: 585-594.
Thiel, P.H. van, 1927. Eine ungelöste Porozephalus frage. — Acta Leidensia 2: 208-218.
Thiroux, P.H. van, 1905. Un cas de *Pentastomum constrictum* observé au Sénégal. — Comptes Rendus Hebdomadaires des Séances et Mémoires de la Société de Biologie 59: 78-80.
Thomas, G., 1991. Ultrastrukturelle und lichtmikroskopische Untersuchungen am Intestinaltrakt von Pentastomiden. — Universität Kiel.
Thomas, G., 1995. Untersuchungen zur Ontogenese von *Raillietiella* sp. (Pentastomida: Cephalobaenida) im Labormodell: Der Darmtrakt. — Dissertation, Universität Kiel.
Thomas, G. & W. Böckeler, 1992a. Light and electron microscopical investigations of the midgut epithelium of different Cephalobaenida (Pentastomida) during digestion. — Parasitology Research 78: 587-593.
Thomas, G. & W. Böckeler, 1992b. Light and electron microscopical investigations on the feeding mechanism of *Reighardia sternae* (Pentastomida; Cephalobaenida). — Zoologische Jahrbücher Abteilung Anatomie 122: 1-12.
Thomas, G. & W. Böckeler, 1994. Investigation of the intestinal spherocrystals of different Cephalobaenida (Pentastomida). — Parasitology Research 80: 420-425.
Thomas, G. & S. Stender-Seidel, 1996. Investigation of different ontogenetic stages of *Raillietiella* sp. (Pentastomida: Cephalobaenida): Structure of the foregut and considerations about the feeding process. — Parasitology Research 82: 459-467.
Thomas, G., S. Stender-Seidel & W. Böckeler, 1999a. Considerations about the ontogenesis of *Reighardia sternae* in comparison with *Raillietiella* sp. (Pentastomida: Cephalobaenida). — Parasitology Research 85: 280-283.
Thomas, G., S. Stender-Seidel, & W. Böckeler, 1999b. Investigation of different ontogenetic stages of *Raillietiella* sp. (Pentastomida: Cephalobaenida): excretory functions of the midgut. — Parasitology Research 85: 274-279.
Thomas, G., S. Stender-Seidel & W. Böckeler, 1999c. Investigation of different ontogenetic stages of *Raillietiella* sp. (Pentastomida: Cephalobaenida): the midgut in nutrition and digestion. — Parasitology Research 85: 312-319.
Thomas, J.W.T., 1920. *Porocephalus* in a hernial sac. — Journal of the Royal Army Medical Corps 34: 154.
Thompson, G.M., 1922. The naturalisation of animals and plants in New Zealand: 1-607. — Cambridge University Press, Cambridge.
Thurston, J., 1972. Heavy infestation of pentastomid nymphs in a bush genet. — East African Medical Journal 49: 791-792.
Tiendrebeogo, H., D. Levy & D. Schmidt, 1982. La pentastomose humaine a Abidjan. A propos de 29 observations. — Revue Française des Maladies Respiratoires 10: 351-358.
Tischler, W., 1988. Stamm: Pentastomida (Linguatulida), Zungenwurmer. 17th revised edition. — In: P. Brohmer (ed.), Fauna von Deutschland: 1-586. Quelle & Meyer, Heidelberg.
Tisserant, H., 1870. Pentastome ténioïdes ou mieux linguatule taenioïde cause de mort chez la chien. — Compte-rendus des travaux de la Société de Médecine de Nancy: 50-64.
Tobie, J.E., J.H. Edgcomb & E.J. Freireich, 1957. Tongue worm (*Linguatula serrata*) infestation in a patient with acute leukemia. — American Journal of Clinical Pathology 28: 628-633.
Todenhofer, H. & E. Jacob, 1961. Bildbericht *Linguatula serrata* Frölich 1789. — Kleintier-Praxis 6: 237.
Trainer, J.E. Jr., J.T. Self & K.M. Richter, 1975. Ultrastructure of *Porocephalus crotali* (Pentastomida) cuticle with phylogenetic implications. — Journal of Parasitology 61: 753-758.

Travassos, L., 1924. *Sebekia* du poumon des crocodiles d'Amerique. — Comptes Rendus Hebdomadaires des Séances et Mémoires de la Société de Biologie et de ses Filiales 90: 239-240.

Travassos, L. & A.C. Pereira, 1928. Fauna helminthologica dos peixes de agua doce do Brasil. — Arquivos do Instituto Biológico 1: 5-68.

Treadgold, C.H., 1920. On a filaria, *Loa papionis* n. sp., parasite in *Papio cynocephalus*. — Parasitology 12: 113-135.

Treutler, F.A., 1793. Observationes pathologico-anatomicae, auctarium ad helminthologiam human corporis continentes: [1], I-IV [= 1-4], [1], 1-44, Tab. I-IV [= 1-4]. — Ch. F. Ludwig, Lipsiae.

Trotti, G.C. & M. Trentini, 2000. Pentastomida (Linguatulida): importanti pasassiti dei rettili e potenzialmente dell'uomo. Giacoma, Cristina Atti I Congresso Nazionale della Societas Herpetologica Italica (Torino, 2-6 Octobre 1996): 1-821. — Museo Regionale di Scienze Naturali Torino.

Tubangui, M.A., 1924. Two larval parasites from the Philippine palm civet cat (*Paradoxurus philippensis*). — The Philippine Journal of Science 24: 749-753.

Tubangui, M.A. & V.A. Masiluñgan, 1936. Notes on Philippine linguatulids. — Philippine Journal of Science 60: 399-405.

Turnbull, N.S., 1928. *Porocephalus armillatus*. — West African Medical Journal 1: 84.

Tutt, J.F.D., 1913. Two cases of *Pentastomum taenioides*. — Veterinary Record 26: 124.

Unat, E.K. & V. Sahin, 1950. *Linguatula serrata* sur felerile husule gelen bir infestasiyon hastaligi dolaysile. — Istanbul Universitesi tip Facultesi Mecmuasi, New Series 13: 362-369.

Vaidova, S.M. & N.A. Feizullaev, 1959. [The first case of nymphs of *Linguatula serrata* Frölich, 1789, found in birds]. — Doklady Academii Nauk Azerbaidzhanskoi SSR 15: 423-424.

Valenzuela, G., M. Bascunan, L. Bayer & S. Ernst, 1995. *Linguatula serrata* (Frohlich, 1789) infections in cattle livers. — Archivos de Medicina Veterinaria 27: 29-34.

Valerio, B.G. (see Galli-Valerio, B.)

Valero Lopez, A, J. Romeno Rodriguez & D. Guevara Pozo, 1980. Linguatulosis caprina en Granada (España). — Revista Ibérica de Parasitologia 40: 565-566.

Van Beneden, P.J. (see Beneden, P.J. van)

Vandel, M., 1949. Embranchement des arthropodes. Généralités. — In: P.P. Grassé (ed.), Traité de Zoologie, volume 6: 79-158. Masson, Paris.

Van den Berghe, P.L. (see Bergue, P.L. van den)

Vaney, M.C. & L.W. Sambon, 1910. Preliminary notes on three new species of tongue worms (Linguatulidae). In the collection of the "Muséum d'Histoire Naturelle", Paris. — Transactions of the Royal Society of Tropical Medicine and Hygiene 3: 129-154 [Sambon alone, p. 134-154].

Van Thiel, P.H. (see Thiel, P.H. van)

Van Thiroux, P.H. (see Thiroux, P.H. van)

Van Wymeersch, H. (see Wymeersch, H. van)

Vargas, S.G., G. Duarte, F. Lobo & R. Brenes, 1980. Primer caso humano de *Linguatula serrata* en Costa Rica. — Revista Costariquenha de Ciencias Médicas 1: 75-80.

Vargas V., M., 1970a. Los dilatadores de copulación de *Porocephalus clavatus* y *Porocephalus stilesi* (Pentastomida). — Revista de Biologia Tropical 16: 241-245.

Vargas V., M., 1970b. A contribution to the morphology of the egg and nymphal stages of *Porocephalus stilesi* Sambon, 1910 and *Porocephalus clavatus* (Wyman, 1847) Sambon, 1910 (Pentastomida). — Revista de Biologia Tropical 17: 27-89.

Vargas V., M., 1971. Hallazgo de *Subtriqueta subtriqueta* Sambon, 1922 (Pentastomida) en Costa Rica y su redescription. — Revista Latinoamericana de Microbiologia 13: 137-146.

Vargas V., M., 1974. The biology and taxonomy of *Sebekia* and *Subtriqueta*. — Proceedings of the Third International Congress in Parsitology 2: 1021.

Vargas V., M., 1975. Descripcion del huevecillo, larva y ninfa de *Subtriqueta subtriqueta* Sambon, 1922 (Pentastomida), y algunas observaciones sobre su ciclo de vida. — Revista de Biologia Tropical 23: 67-75.

Vatsya, S., P.S. Banerjee, C.L. Yadav & R.R. Kumar, 2011. Prevalence of *Linguatula serrata* infection in small ruminants in and around Pantnagar, Uttarakhand. — Indian Journal of Animal Sciences 81: 249-250.

Vega, G. de N. (see González de Vega, N.)
Velásquez, J., E. Avalos, J.A. Morales, R. Meléndez & R. Zeledón, 1982. *Linguatula serrata* en perros de Costa Rica.— Libro de Resúmenes IV Congresso Nacional de Microbiologia y Patologia Clinica de San José, Costa Rica 1982: 76.
Velu, H., 1914. Sur la linguatulose nodulaire du boeuf au Maroc.— Bulletin de la Société Centrale de Médecine Vétérinaire 68: 137-139.
Venard, C.E. & R.V. Bangham, 1941. *Sebekia oxycephala* (Pentastomida) from Florida fishes and some notes on the morphology of the larvae.— Ohio Journal of Science 41: 23-28, 1 pl.
Vicente, J.J., 1977. Helmintos de *Tropidurus* (Lacertilia, Iguanidae) da coleção helmintológica do Instituto Oswaldo Cruz. I. Trematoda, Cestoda, Acanthocephala, Linguatulida.— Atas da Sociedade de Biologia do Rio de Janeiro 19: 71-78.
Virey, J.J., 1823. Usage de l'écorce de la racine de grenadier comme vermifuge, et description du pentastome, genre nouveau de ver solitaire du corps humain.— Journal de Pharmacie et des Sciences Accessoires 9 : 219-220.
Vitková, M., J. Kral, W. Traut, J. Zrzavy & F. Marec, 2005. The evolutionary origin of insect telomeric repeats, (TTAGG)(n).— Chromosome Research 13: 145-156.
Voblikova, N.V., 1961. [Cases of parasitism of adult Pentastomida in the reindeer].— Zoologicheskii Zhurnal 40: 129-130. [In Russian].
Vogt, C., 1851. Zoolog. Briefe: Naturgeschichte lebenden und untergegangen en Thiere, für Lehrer, höhere Schulen und Gebildete aller Stände, Volume 1: 1-719.— Literarische Anstalt, Frankfurt am Main.
Von Frölich, J.A. (see Frölich, J.A. von)
Von Haffner, K. (see Haffner, K. von)
Von Hayek, G. (see Hayek, G. von)
Von Humboldt, A.F.W. (see Humboldt, A.F.W. von)
Von Linstow, O. (see Linstow, O. von)
Von Nørdmann, A. (see Nørdmann, A. von)
Von Ostertag, R. (see Ostertag, R. von)
Von Paula Schrank, F. (see Schranck, F. von Paula)
Von Prowazek, S. (see Prowazek, S.)
Von Ratz I. (see Ratz, I. von)
Von Ratz, S. (see Ratz, S. von)
Von Siebold, C.T. (see Siebold, C.T. von)
Von Waldheim, G.F. (see Fischer von Waldheim, G.)
Von Zenker, F.A. (see Zenker, F.A. von)
Vrba, J. & J. Marusiak, 1960. Vzácné parazitární onemocneni - pentastomióza.— Ceskoslovenska Roentgenologie 14: 297-299.
Vrcibradic, D., C.F.D. Rocha, C.R. Bursey & J.J. Vicente, 2002. Helminth communities of two sympatric skinks (*Mabuya agilis* and *Mabuya macrorhyncha*) from two 'restinga' habitats in southeastern Brazil.— Journal of Helminthology 76: 355-361.
Vrhovec, M.G., N. Pantchev, C. Norden & A. Kilo, 2005. *Linguatula serrata* infestation in four imported dogs.— Kleintierpraxis 50: 779-784.
Wagner, E., 1856. *Pentastomum denticulatum* in der Niere.— Archiv für Physiologische Heilkunde 15: 581-582.
Wagner, E., 1862. *Pent. denticulatum* der Milz.— Archiv der Heilkunde 3: 478.
Wahba, A.A., G.J. Shebab & M.A.H. El-Refaii, 1997. Some parasitological and pathological studies on two camel parasites, *Dicrocoelium dendriticum* (Rudolphi, 1819) and *Linguatula serrata* (Frolich, 1789) in Egypt.— Assiut Veterinary Medical Journal 36: 153-166.
Waldheim, G.F. Von, 1840. Notata quaedam de enthelminthis una cum recensione specierum, duarumque novarum, a C. Miram Museo Academico donatarum.— Bulletin de la Société Impériale des Naturalistes de Moscou 2: 139-163.
Waldow, H., 1908. *Porocephalus moniliformis* Dies. bei einem Kamerunneger.— Archiv für Schiffs- und Tropen-Hygiene 12: 321-324.

Waldow, H., 1910. *Porocephalus moniliformis* Diesing, 1836 bei einem Kaneruun-Neger.— Archiv für Schiffs- und Tropen-Hygiene 14: 101, 506.

Wall, F., 1921. *Ophidia taprobanica* or the snakes of Ceylon.— Colombo: 1-581.

Walldorf, V., 1987. Helminth infection of *Hemidactylus brooksi* freshly imported from Togo.— In: J.J. Ven Gelder, H. Strihbosch, and P.J.M. Bergers (eds.), Proceedings of the 4th Ordinary General of the Societas Europaea Herpetologica: 441-444. Societas Europaea Herpetologica, Faculty of Sciences, Nijmegen.

Walldorf, V., 1988. Pentastomida.— In: H. Mehlhorn (ed.), Parasitology in focus. Facts and trends: 119-124, 224-229, 260, 266-267, 276-277, 288-291, 311, 356-358. Springer, Berlin.

Walldorf, V. & H. Mehlhorn, 1984. On the fine-structure of pentastomids.— Zentralblatt für Bakteriologie Mikrobiologie und Hygiene Series A - Medical Microbiology Infectious Diseases Virology Parasitology 258: 413-414.

Walldorf, V. & R. Riehl, 1985. Oogenesis in the pentastomid *Raillietiella aegypti* (Cephalobaenida). 1. Previtellogenic and vitellogenic stages.— Zeitschrift für Parasitenkunde 71: 113-124.

Waloszek, D., 2003. The 'Orsten' window - a three-dimensionallyu preserved Upper Cambrian meiofauna and its contribution to our understanding of the evolution of Arthropoda.— Paleontological Research 7: 71-88.

Waloszek, D. & A. Maas, 2005. The evolutionary history of crustacean segmentation: a fossil-based perspective.— Evolution and Development 7: 515-527.

Waloszek, D. & K.J. Müller, 1993. Die Wirbeltierparasiten Pentastomida-lebten im Altpalaeozoikum im Meer.— Verhandlungen der Deutschen Zoologischen Gesellschaft 86: 148.

Waloszek, D., and K.J. Müller, 1994. Pentastomid parasites from the Lower Palaeozoic of Sweden.— Transactions of the Royal Society of Edinburgh, Earth Sciences 85: 1-37.

Waloszek, D., J.E. Repetski & A. Maas, 2006. A new Late Cambrian Pentastomid and a review of the relationships of this parasitic group.— Transactions of the Royal Society of Edinburgh Earth Sciences 96: 163-176. Doi: 10.1017/S026359330000/280

Waloszek, D., J.E. Repetski & K.J. Müller, 1994. An exceptionally preserved parasitic arthropod, *Heymonsicambria taylori* n. sp. (Arthropoda incertae sedis: Pentastomida), from Cambrian-Ordovician boundary beds of Newfoundland, Canada.— Canadian Journal of Earth Sciences 31: 1664-1671.

Walton, A.C., 1946. Miscellaneous parasites of the Bufonidae (Amphibia).— Journal of Parasitology 32 Section 2: 18-19.

Walton, A.C., 1947. Parasites of the Ranididae (Amphibia). II. Journal of Parasitology 33: 25-27.

Ward, H.B., 1899. On *Reighardia*, a new genus of Linguatulidae.— Proceedings of the American Association for the Advancement of Science 48: 254.

Watson, J.M. & R. Abdel-Kerim, 1956. Observations on forms of parasitic pharyngitis known as "halzoun" in the Middle East.— Journal of Tropical Medicine and Hygiene 59: 147-154.

Weber, H., 1949. Grundriss der Insektenkunde: 1-322.— Gustav Fischer, Jena.

Wedl, C., 1861. Zur Helminthenfauna Ägyptens.— Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften in Wien Mathematisch-Naturwissenschaftliche Classe 44: 225-240, pl. 2.

Wedl, C., 1863. Über ein Pentastomum einer Löwinn.— Sitzungsberichte der Kaiserlichen Akademie der Wissenschaften in Wien Mathematisch-Naturwissenschaftliche Classe 48: 408-415.

Weidner, H., 1959. Die entomologischen Sammlung des Zoologischen Staatsinstituts und Zoologischen Museums Hamburg I Teil. Pararthropoda und Chelicerata I.— Mitteilungen aus dem Hamburgischen Zoologischen Museum und Institut 57: 89-142.

Weinberg, M., 1906. Nodules à pentastomes dans la paroi intestinale du chimpanzé.— Bulletins et Mémoires de la Société Anatomique de Paris (6) 81: 534.

Weinland, D.F., 1860. Tod einer Kuhantilope (*Antilope bubalis*), wahrscheinlich verursacht durch eine Hakenmilbe (*Pentastomum taenioides*).— Der Zoologischen Garten Leipzig 2: 17-22.

Weiser, F., 1942. Zur Differentialdiagnose der parasitären Lungenerkrankungen. Cysticercose-Pentastomiasis.— Beiträge zur Klinik der Tuberkulose und zur Spezifischen Tuberkuloseforschung 98: 239-254.

Weiss, A., 1927. Linguatulidae - porocéphales nouveaux de Tunisie.— Association Française pour l'Avancement des Sciences, Comptes Rendus Session 51: 566-567.

Welch, F.H., 1872. The presence of an encysted *Echinorhynchus* in man.— Lancet 2: 703-705.

Wheeler, W.M., 1915. A new linguatulid from Ecuador.— In: R.P. Strong, E.E. Tyzzer, C.T. Brues, A.W. Sellards & J.C. Gatiaburu (eds), Report of the first expedition to South America 1913. Appendix: 207-208. Harvard School of Tropical Medicine, Cambridge, Massachusetts.

Whitney, R.A. & S.M. Kruckenberg, 1967. Pentastomid infection associated with peritonitis in mangabey monkeys.— Journal of the American Veterinary Medical Association 151: 907-908.

Whittick, R.J. 1943. Pentastomida. Tongue worms.— In: J. Smart (ed.), Handbook identification of insects of medical importance: 254. London.

Wikipedia, 2012. The free encyclopedia. http://en.wikipedia.org/wiki. Seen Jul. 19, 2010.

Wilson, A.H., 1913. Notes on two cases of *Porocephalus armillatus* infection occurring in man.— Southern Nigeria Annual Medical Report 1913: 71.

Wilson, A.H., 1915. Notes on two cases of *Porocephalus armillatus* infection occurring in man.— Tropical Diseases Bulletin 6: 420.

Wilson, D.E. & D.A. Reeder (eds.), 2005. Mammal species of the world. A taxonomic and geographic reference, third edition. Johns Hopkins University Press. Available at: http:www.bucknell.edu/msw3. Seen 11-3-10.

Winch, J.M. & J. Riley, 1985. Experimental studies on the life-cycle of *Raillietiella gigliolii* (Pentastomida: Cephalobaenida) in the South American worm-lizard *Amphisbaena alba*: a unique interaction involving two insects.— Parasitology 91: 471-481.

Winch, J.M. & J. Riley, 1986a. Studies on the behavior, and development in fish, of *Subtriquetra subtriquetra* - a uniquely free-living pentastomid larva from a crocodilian.— Parasitology 93: 81-98.

Winch, J.M. & J. Riley, 1986b. Morphogenesis of larval development of *Sebekia oxycephala* (Pentastomida) from a South-American crocodilian (*Caiman sclerops*) in experimentally infected fish.— Zeitschrift für Parasitenkunde 72: 251-264.

Wingstrand, K.G., 1972. Comparative spermatology of a pentastomid, *Raillietiella hemidactyla*, and a branchiuran crustacean, *Argulus foliaceus*, with a discussion of pentastomid relationships.— Det Kongelige Danske Videnskabernes Selskab Biologiske Skrifter 19: 1-72, pls 1-23.

Witenberg, G., 1944. What is the cause of the parasitic laryngopharyngitis in the Near East "halzoun".— Acta Medica Orientalia 3: 191-192.

Woithelet, G., 1956. Porocéphalose et radiologie.— Médecine Tropicale 16: 379-385.

Wolfe, J.L., 1982. *Oryzomis palustris*.— Mammalian Species 176: 1-5.

Wong, M.M. & H.C. Conrad, 1978. Prevalence of metazoan parasite infections of five species of Asian macaques.— Laboratory Animal Sciences 28: 412-416.

Woodland, W.N.F., 1921. On a remarkable new species of *Porocephalus* (*P. pomeroyi* sp. n.) from the foregut of a Nigerian cobra.— Parasitology 12: 337-340.

Woodland, W.N.F., 1923. A justification of *Porocephalus pomeroyi* Woodland 1921.— Parasitology 15: 39-42.

Wrangham, R.W., 2009. Catching fire: how cooking made us human: 1-309.— Basic Books.

Wright, K., 1997. Invermectin for treatment of pentastomids in the standing's day gecko, *Phelsuma standingi*.— Bulletin of the Association of Reptilian and Amphibian Veterinarians 7: 5.

Wrisberg, H.A., 1765. Observationum de Animalculis Infusoriis Satura quaea in Societatis Regiae Scientiarum … Consessu Praemium Reportavit. Bericht über die Tätigkeit des Offenbacher Vereins für Naturkunde: 1-110.— Göttingen.

Wyman, J., 1845. Notice of two species of *Linguatula*.— Boston Journal of Natural History 5: 294-296, pl. 215.

Wyman, J., 1848. Two species of *Linguatula*.— Proceedings of the Boston Journal of Natural History 2: 59.

Wyman, J., 1861. *Linguatula* and *Gordius*.— Proceedings of the Boston Society of Natural History 7: 278.

Wyman, J., 1863. On *Pentastoma armillata* Wyman, from the lungs of the *Python sebae*.— Proceedings of the Boston Society of Natural History 5: 173, 179-180, 186, 294.

Wymeersch, H. van & M. Wanson, 1954. La porocéphalose nymphale et son image radiologique.— Annales de la Société Belge de Médecine Tropicale 34: 517-522.

Wymeersch, H. van & M. Wanson, 1955. La porocéphalose nymphale et son image radiologique.— Journal de Radiology d'Électrologie et Archives d'Électricité Médicale 36: 22-24.

Xie, Q.G., Y.Z. Liao, Y.L. Liu & Z. Du, 2002. One case of pentastomiasis.— Zhonggou Ji Sheng Zhong Bing Fang Zhi Za Zhi 15: 31.

Yagi, H., S. Elbahari, H.A. Mohamed, El R.S. Ahmed, B. Mustafa, M. Mahmoud, M.B.A. Saad, S.M. Sulaiman & A.M. El Hassan, 1996. The Marrara syndrome: a hypersensitivity reaction of the upper

respiratory tract and buccopharyngeal mucosa to nymphs of *Linguatula serrata*. — Acta Tropica 62: 127-134. Doi: 10.1016/S0001-706X(96)00017-4

Yakhchali, M. & A.A. Tehrani, 2011. Pathological changes in mesenteric lymph nodes infected with *L. serrata* nymphs in Iranian sheep. — Revue de Medicine Vetérinaire 162: 396-399.

Yamamoto, H., S. Toshioka, S. Mishima, M. Kobayashi & N. Ogura, 1978. [A study of the pentastomids in Japan, with a key to the order and genera]. — The Snake 10: 143-150. [In Japanese]

Yamashita, J. & M. Ohbayashi, 1954. [On a tongue worm, *Linguatula serrata* Frölich, 1789, showing the same parasitism as in the intermediate host within a dog body]. — Hokkaido Daigaku Nogakubu Hobun Kiyo 2: 146-148. [In Japanese]

Yao, M.H., F. Wu & L.F. Tang, 2008. Human pentastomiasis in China: case report and literature review. — Journal of Parasitology 94: 1295-1298. Doi: 10.1645/GE-1597.1

Yapo Ette, H.L. (see Ette, H.L.Y.)

Young, E., 1975. Pentastomiasis (*Armillifer* and *Linguatula* sp.) infestations of wild animals in the Kruger National Park. — Journal of the South African Veterinary Assocication 46: 335-336.

Yutuc, L.M., 1954. The occurrence of a nymphal linguatulid (Arthropoda, Pentastomida) in the lungs of the domestic cat. — Philippine Journal of Science 83: 119-121, pl. 1.

Zakarian, B., 1981. An aberrant intracranial location of *Linguatula serrata* in a dog. — Journal of Veterinary Faculty University of Tehran 36: 35-45.

Zaman, V., 1983. Scanning electron microscopy of medially important parasites: 1-107. — ADIS Health Science Press, Sydney.

Zeder, J.G.H., 1800. Erster Nachtrag zur Naturgeschichte der Eigeweidewürmer, mit Zufässen und Anmerkungen heraus-gegeben: 1-320, pls 1-6. — Seigfried Lebrecht Crusius, Leipzig.

Zeder, J.G.H., 1803. Einleitung zur Naturgeschichte der Eigenweidewürmer. — Komptoir der Zeitung, Bamberg: 1-432, pls 1-4. [Pentastomida, p. 230, 372]

Zenker, F.A. von, 1854. Über einen neuen tierischen Parasiten des Menschen (*Pent. denticulatum*). — Zeitschrift für Rationelle Medicin (2) 5: 212-234, pl. 8 fig. 1-2.

Zenker, F.A. von, 1856. *Pentastomum denticulatum* in der Niere. — Archiv für Physiologie der Heilkunde 1856: 581.

Zenker, F.A. von, 1860. Bemerkung über *Pentastomum denticulatum*. — Amtlicher Bericht über die Versammlung des Gesellschaft Deutscher Naturforscher und Aerzte 31: 192.

Zenker, F.A. von, 1862. *Pentastomum* in di Milz. — Archiv für Physiologie der Heilkunde 3: 478.

Zenker, J.C., 1827. Parasitae corporis humani internae seu vermes intestinalis hominis: 1-112. — Hofmeister, Lipsiae.

Zhang, Q.Y., B. Wang, M. Huang & T.T. Cheng, 1996. [*Armillifer agkistrodontis* disease: report of a case]. — Zhonghua Nei Ke Za Zhi [Chin. J. Int. Med.] 35: 747-749. [In Chinese]

Zhang, Y., S. Zhang, K. Li, H. Chen & H. Zie, 1988. Reports on pentastomiasis in *Gekko gecko* in China. — Journal Guangxi Agricultural College 7: 61-64.

Zoega (in Muller), 1776 (see Müller, O.F., 1776).

Zrzavý, J., 2001. The interrelationships of metazoan parasites: a review of phylum- and higher-level hypotheses from recent morphological and molecular phylogenetic analyses. — Folia Parasitologica 48: 81-103. http://faculty.uml.edu/rochberg/hochberglab/courses/parasite/PDF%20papers/parasitology%20papers/interrelationships%20of%metazoan%20parasites.pdf

Zukovic, M., 1953a. Parasiten der Meereschweinchen (*Cavia cobaya*). — Bulletin Jugoslovenska Akademija Znanosti i Umjetnosti, New Series 9: 155-157.

Zukovic, M., 1953b. Parasiti zamorceta (*Cavia cobaya*). — Rad Jugoslovense Academiji Znanosti i Umjetnosti, New Series 91: 251-256.

Zumpt, F., 1961. The arthropod parasites of vertebrates in Africa south of the Sahara (Ethiopian region). Vol. 1 (Chelicerata). — Publications of the South African Institute for Medical Research 9: 1-457.

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