

Types of Recent Cephalopoda in the National Museum of Natural History, Leiden

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A list is given of five name-bearing taxa in the collection of the National Museum of Natural History in Leiden. There is also a brief discussion of purported type material and a summary of new information updating the types list of Sweeney & Roper, 1998.

Introduction

The list of cephalopod types in the Nationaal Natuurhistorisch Museum, Leiden, previously the Rijksmuseum van Natuurlijke Historie, is not long but is nevertheless worth noting. The types derive from three publications: Joubin (1898) on several cephalopods then already in the Leiden Museum; Adam (1950) on *Pholidoteuthis boschmai*, a new genus and species of squid collected by the Snellius Expedition; and Voss (1974) on *Loligo surinamensis*. Previous attempts to designate type material for *Octopus areolatus* de Haan in d'Orbigny, 1841, are here shown to have been invalid.

Abbreviations: coll. = collected; exp. = expedition; ML = dorsal mantle length in mm; RMNH = Rijksmuseum van Natuurlijke Historie, now Nationaal Natuurhistorisch Museum, Leiden; sta. = station; TL = total length in mm.

List of type material

Loligo surinamensis Voss, 1974

Holotype.— RMNH 9010, male ML 118, coll. W. Vervoort & C. Cornet, R/V "Coquette" sta. 9: Suriname, 30 miles Northeast of lightship "Suriname Rivier," depth 110 ft (37 m), trawled, 30.vi.1966.

Paratypes.— RMNH 9011, 7 males ML 88-114, 6 females ML 75-118, same data as holotype.

RMNH 9012, 2 males ML 84-85, coll. C.O. Van Regteren Altena, R/V "Coquette," Suriname, 5 miles Northwest of lightship "Suriname Rivier," 102-106 ft (31-32 m), dredged, 19.ii.1963. Another paratype is in the Rosenstiel School of Marine and Atmospheric Science, University of Miami (Voss, 1974).

Assigned to the genus *Doryteuthis* Naef, 1912, as restricted by Brakoniecki (1986), by Anderson (2000). However, this use of the name *Doryteuthis* could cause confusion due to discrepancies between Naef's and Brakoniecki's definitions of this group and problems in the designation of types (M. Vecchione, in Anderson, 2000: 621)

Sepioteuthis sieboldi Joubin, 1898

Syntypes.— RMNH 552, 2 specimens, Japan, coll. Ph.F. von Siebold. Joubin (1898) also cites two specimens from Waigeou [Irian Jaya], coll. H.A. Bernstein, one of which, RMNH 553, is in the collection.

Synonymised with *Sepioteuthis lessoniana* Férussac in Lesson, 1831, by Wülker (1913) and Adam (1939).

Pholidoteuthis boschmai Adam, 1950

Holotype.— RMNH 8949, female ML 273 mm, Snellius Exp. 1929/30 sta. 192: 05°58.0'S 121°32.0'E, Banda Sea south of Sulawesi, Indonesia, depth 0-2000 m, 16.ii.1930.

Type species of the genus *Pholidoteuthis* Adam, 1950. A new family, Pholidoteuthidae, was created for this genus by Voss (1956), who described a second species, *P. adami* Voss, 1956.

Octopus horsti Joubin, 1898

Holotype.— RMNH 492, Djeddah, Red Sea, coll. J.A. Kruyt, 1880.

Synonymised with *Octopus cyanea* Gray, 1849 (see, for example, Robson, 1929: 94; Norman, 1991: 21).

Octopus hoeki Joubin, 1898

Holotype.— RMNH 495, mature female in poor condition (I.G. Gleadall unpublished, July 1994), TL 230 (Joubin, 1898: 24), Amboine [Ambon, Moluccas], coll. Schoorel.

Toll & Voss (1998: 501) have recently considered this species to be a *nomen dubium*. However, since the specimen is mature, it is clear that the only problem is the current lack of knowledge of the octopod fauna in the Indonesian area (cf. problems with the genus *Amphioctopus*, based on an immature female type in poor condition; Gleadall, 2002, and in prep.). As the quality and quantity of Indonesian octopod specimens known to science improves, future confirmation of the identity of *O. hoeki* is anticipated.

Purported type material

Octopus areolatus de Haan in d'Orbigny, 1841

[d'Orbigny, 1839-1841 ("1835-1848"): see Tillier & Boucher-Rodoni, 1994, p. 100 re Livraison 13].

There has been great confusion concerning this species (Gleadall & Goud, 1993). Most recently, Toll & Voss (1998: 495) stated that they had designated a "lectotype" from "the type series" (three specimens obtained on loan from RMNH). However, for a number of reasons this designation is invalid. Firstly, they did not identify either their "lectotype" (described as "RNHL, male, 49 mm ML, not traced") or the "syntype" specimens. Secondly, no type material was designated by de Haan (a former

Curator of Invertebrates at RMNH) or d'Orbigny and there is no record of de Haan having made identifications at the species level. His specimen labels and entry of molluscs from the Siebold Collections in the RMNH records state merely the genus name "*Octopus*". Thirdly, it seems that d'Orbigny (responsible for publishing the name, 1839-1841: 65) never visited Leiden (nor was he visited by de Haan; Gleadall & Goud, 1993) and did not see any of the cephalopod material present in the RMNH. The material from the Siebold Collections includes eight octopus specimens comprising three different species (IGG, unpublished) and the original description is insufficient to identify any of these as *Octopus areolatus* (see Gleadall & Goud, 1993). Therefore it is not possible to designate any syntypes for this species and consequently no lectotype can be designated. Similar arguments apply to a previous attempt at designating a type for *O. areolatus*: Robson (1929: 118) attempted to deduce the identity of a "type" specimen (a male, which he identified in his publication as "Orbigny 2"). Recent inspection suggests that it probably corresponds to specimen RMNH 490, a mature male, ML 50 mm, identified as *Amphioctopus fangsiao* (d'Orbigny, 1841: 70) by IGG (unpublished; cf. Gleadall, 2002: 78). The conclusions of Sasaki (1920: 172, 1929: 49) are the most appropriate (and the most valid, since they pre-date Robson's monograph): he regarded *Octopus areolatus* as a *nomen dubium* and recorded it as a queried junior synonym of *Polypus* [*Octopus*] *fangsiao* (d'Orbigny, 1841). The problems of type designations for *Octopus fangsiao* d'Orbigny and *O. sinensis* d'Orbigny have been addressed elsewhere (Gleadall in prep.; cf. Gleadall & Naggs, 1991).

Amendments to the types list of Sweeney & Roper (1998)

Since the publication of this invaluable list of cephalopod types, and the last update on the worldwide web (at <http://www.mnh.si.edu/cephs/newclass.pdf> in May 2001), a few more problems have been resolved.

The types of *Loligo singhalensis* Ortmann, 1891 [assigned to *Loliolus* (*Uroteuthis*) by Anderson, 2000] are stated to be in the Musée Zoologique, Université Louis Pasteur & de la Ville de Strasbourg, France (Ortmann, 1891: 676).

The holotype of *Loligo eblanae* Ball, 1841 (the type species of *Todaropsis* Girard, 1890) is in the National Museum of Ireland, Dublin (examined by M. Roeleveld, unpublished). According to Wormuth (1998: 376) one paratype was designated. This is apparently an error, perhaps arising from a misreading of Forbes & Hanley (1852: 235-6): "This remarkable species was first found by Mr Warren, in Dublin bay, in 1836 [= the holotype], and afterwards in the same locality by Dr Ball, and in Belfast bay by Mr Thompson" [i.e. more specimens collected subsequently]. Both Ball's original description (1841) and Hoyle's (1903) report on a re-examination of the type suggest a single specimen. No indication of a paratype was found in the National Museum of Ireland.

Guerrero-Kommritz (2001) has published a list of types in the Zoologisches Museum, Universität Hamburg. Types of the following species (with current senior synonyms or generic assignments in square brackets) were found:

Sepia galei Meyer, 1909 [= *S. papuensis* Hoyle, 1885]; *Sepia irvingi* Meyer, 1909 (two syntypes; another is in the Western Australian Museum, Perth; Lu, 1998); *Sepia venusta* Pfeffer, 1884 [?= *S. pharaonis* Ehrenberg, 1831]; *Sepiolo robusta* Naef, 1912; *Sepiolo pusilla* Pfeffer, 1884 [*Euprymna*]; *Sepiolo schneeageni* Pfeffer, 1884 [*Euprymna*]; *Sepiolo tasmani-*

ca Pfeffer, 1884 [*Euprymna*]; *Sepietta minor* Naef, 1912 [*Rondeletiola*]; *Sepioteuthis malayana* Wülker, 1913 [= *Sepioteuthis lessoniana* Férussac in Lesson, 1831]; *Ctenopteryx canariensis* Salcedo-Vargas & Guerrero-Kommritz, 2000; *Graneledone yamana* Guerrero-Kommritz, 2000.

Also provided by Guerrero-Kommritz (2001) is a list of species, the types of which were thought to have been in the Hamburg Museum but which were not found and are now officially noted as lost (current genus assignments in brackets): *Sepia elobyana* Adam, 1941; *Sepia zanzibarica* Pfeffer, 1884; *Sepiella ocellata* Pfeffer, 1884; *Enoploteuthis hoylei* Pfeffer, 1884 [*Abraliopsis*]; *Abralia affinis* Pfeffer, 1912 [*Abraliopsis*]; *Teleoteuthis intermedia* Pfeffer, 1912 [*Onykia*]; *Polypus faeroensis* Russell, 1909 [*Bathypolypus*].

Not yet included in Sweeney and Roper's type list are new species described recently:

Sepia grahami Reid, 2001; *Sepia subplana* Lu & Boucher-Rodoni, 2001; *Abralia* (*Pygmabralia*) *omiae* Hidaka & Kubodera, 2000; *Ctenopteryx canariensis* Salcedo-Vargas & Guerrero-Kommritz, 2000; *Brachioteuthis linkovskyi* Lipinski, 2001; *Slosarczykovia circumantarctica* Lipinski, 2001; *Asperoteuthis lui* Salcedo-Vargas, 1999; *Octopus bulbosus* Norman, 2001; *Octopus harpedon* Norman, 2001; *Octopus micros* Norman, 2001.

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