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An annotated type catalogue of Mantodea present in Naturalis Biodiversity Center (Netherlands) with particular reference to taxa of Stoll and De Haan

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Abstract

The first annotated catalogue of the type material of Mantodea deposited in Naturalis Biodiversity Center in Leiden, The Netherlands is presented. Naturalis holds holotypes for 31 species, lectotypes for 5 species, a neotype for 1 species and syntypes for an additional 9 species. Lectotypes are selected for *Euchomenella apicalis*, *Hierodula timorensis* and *Rhombodera flava*. All primary type specimens and their labels are illustrated. No Mantodea specimens were found that could be traced back to the two illustrated editions of the book by Stoll published in 1787 (first edition) and 1813 (second edition). For all but three taxa (*Haania lobiceps, Euchomenella heteroptera* and *Epsomantis tortricoides*) described by De Haan in 1842, primary types were recovered. On the other hand, altogether at least 14 syntypes studied by De Haan are missing and presumed lost. Angela armata (De Haan, 1842) **reinst. stat.** is reinstated as a valid species.

Key words: Naturalis, nomenclature, taxonomy, primary types

Introduction

Natural history collections serve as invaluable repositories of biological diversity, providing a foundation for taxonomic research, species identification, and conservation efforts. Naturalis Biodiversity Center (Naturalis) located in Leiden is both the national museum of natural history in the Netherlands and a prominent biodiversity research center. Originally established by royal decree in 1820 as Rijksmuseum van Natuurlijke Historie (National Museum of Natural History; RMNH) (Gijzen, 1938), the institute expanded significantly in 2010 through mergers with the Zoologisch Museum Amsterdam (Zoological Museum Amsterdam; ZMA) and the Nationaal Herbarium Nederland (National Herbarium of the Netherlands; L, U, WAG), culminating in the formation of Naturalis Biodiversity Center also known as Naturalis, currently still operating with the acronym RMNH. Today, Naturalis houses an extensive collection of over 43 million specimens, covering a broad range of zoological, botanical, palaeontological, and geological objects, making it one of the largest and most comprehensive natural history collections worldwide.

With some 650 species and 10,000 identified (and an additional 2000 unidentified) specimens, Mantids numerically only form a small part of the 15 million specimens in the insect collection of Naturalis. Despite its rather modest size, the Mantodea collection of Naturalis is still relatively important mainly because it holds the taxa described by Willem de Haan (1801–1855) in 1842 as part of the "*Verhandelingen over de natuurlijke geschiedenis der Nederlandsche overzeesche bezittingen door de leden der Natuurkundige Commissie in Indië en andere schrijvers*" (Commission for Natural Sciences; see also Gasso et al., 2020). In this volume he published a contribution to the Orthopteroid fauna of the former Dutch East Indies, among which were 27 Mantid species. Most of the material De Haan studied was collected by explorers travelling to the region, starting around 1820, to make inventories of anthropology, geology, botany and zoology. The zoological material brought back was deposited in the Rijksmuseum van Natuurlijke Historie in Leiden. Willem de Haan was the first curator of the invertebrate collection of the Rijksmuseum van Natuurlijke Historie between 1823 and 1846. Although his main interest was Crustaceae he did work extensively on the beetle collection which can be deduced from the large number of MS names with his handwriting in this collection and of course the Orthopteroids. De Haan made several trips to other natural history museums across Europe (Hamburg, Berlin, Paris) (Holthuis, 1995) and quite extensively exchanged material for instance with Hope and Eschscholtz, which may explain why his work on Mantids also contained a few taxa from other parts of the world.

Besides type specimens linked to taxa described by De Haan, there are others linked to more or less well known entomologists like Franz Werner who visited the Rijksmuseum van Natuurlijke Historie in 1921 to study the material described by De Haan and included this material as well as material incorporated since 1842 in his 1922 paper in which he described another 4 new species. In 1957, Deeleman-Reinhold, who later became a world renowned Arachnologist, published a paper primarily based on the Mantodea material collected during expeditions to New Guinea between 1939 and 1955 describing five species. Type material in the Naturalis collections also resulted from taxonomic studies notably by Beier (1952b), Kaltenbach (1996) and Roy (1999, 2003, 2004, 2010 & 2013).

Special reference has to be made to the Mantodea taxa mentioned in the monumental work on Orthopteroids by Caspar Stoll (1720–1792) entitled *"Natuurlijke en naar het leven nauwkeurig gekleurde afbeeldingen en beschrijvingen der Spoken, Wandelende Bladen, Zabel-springhanen, Krekels, Treksprinkhanen en Kakkerlakken. In alle vier deelen der wereld, Europa, Asia, Afrika en Amerika, huishoudende."*. Its first edition was published in 1787, its second addition with an additional 17 pages, in 1813. Anderson (2022), in the introduction of his recent

assessment of Stoll's publication, describes the rather complex history behind the two editions of this book, the naming of the taxa included, the material on which it was based, and people linked to it. The taxa described by Stoll, with Houttuyn providing the Latin binomials in the second edition, originated from Mantids kept in private cabinets owned by the Dutch elite at the time. Most of the material mentioned in Stoll's book derived from the cabinets of Van Breukelenwaard and Holthuizen. The former cabinet was eventually sold to the Rijksmuseum van Natuurlijke Historie in 1827 but was subsequently acquired by the Zoologisches Museum der Humboldt Universität zu Berlin, the current Museum für Naturkunde Berlin. The latter cabinet, as was customary at the time, was auctioned off in 1793 in Hamburg (Lichtenstein, 1796). So although the material included in Stoll's book originated in Dutch cabinets, they soon ended up in other cabinets or museums across Europe. Still there has always been the lingering question if any of the specimens used by Stoll stayed in the Netherlands and were deposited in the collection of the Rijksmuseum van Natuurlijke Historie, currently Naturalis. While locating type specimens in the Naturalis collection, special attention has also been given to look for the possible presence of Stoll's specimens among the taxa mentioned in his book. As a hub for biodiversity research, Naturalis plays a crucial role in taxonomy, biodiversity informatics, and ecological studies. With state-of-the-art facilities, including molecular biology laboratories and extensive libraries, the center actively contributes to scientific advancements through collaborative research and international partnerships. One of its key assets are the type specimens, which are essential for taxonomic studies. Type specimens serve as definitive references for species identification and classification, providing critical insights into species diversity, distribution, and evolutionary relationships. Type specimens are particularly valuable for resolving taxonomic ambiguities and facilitating accurate species identification.

Despite advances in digitization and networking, significant portions of natural history collections still remain undigitized, posing challenges for researchers seeking access to crucial taxonomic data. This issue is particularly pressing for type specimens, which are fundamental for scientific research but being undigitized often remain inaccessible to the broader scientific community. This catalogue not only highlights the importance of maintaining and digitizing type collections but also underscores the role of such efforts in ensuring the availability of critical reference material for future studies. As taxonomic research continues to evolve with the integration of molecular techniques, well-documented type specimens remain indispensable for verifying species identities and refining classification systems. This study presents an annotated type catalogue of Mantodea specimens housed at Naturalis. Although, for the sake of completeness, both primary and secondary types are included in the text, only the primary types are illustrated. The catalogue documents the taxonomic status, collection history, and relevant literature associated with these specimens, aiming to enhance accessibility for entomologists and taxonomists worldwide. By compiling and analyzing this material, the study contributes to a more comprehensive understanding of mantids biodiversity and supports ongoing efforts in species classification and conservation. By providing a detailed and systematically organized resource on Mantodea type specimens, this work aims to support and promote rigorous taxonomic research and biodiversity conservation.

Although until now type specimens (primary and secondary types) were kept in the main collection of Naturalis, from now on they'll be kept next to, but separate, from the main collection ordered by author, year and epitheton of the protonym.

Material and methods

In order to prepare this catalogue, type specimens including prepared genitalia were separated from the main collection. Each specimen was assigned a unique registration number, and relevant data was entered in a data entry template which was later added to the data management system of Naturalis. Following the data entry, specimens and their labels were photographed with a NIKON D5600 with a sigma 105 mm macrolens. Although images of all type material and their labels were made, images of paratypes have not been included in this paper but, like the images of the primary type specimens, will eventually become accessible online via the Naturalis portal (bioportal.naturalis.nl) and GBIF (www.gbif.org)

The taxonomic classification follows Schwarz & Roy (2019). Taxonomic ranks are presented in alphabetical order and this also applies to the order of species within a genus. For general references to Mantodea, including type specimens Ehrmann (2002) and Anderson (2025b) have been used.

Species are presented under their currently accepted name. Following this, the protonym is mentioned to which the type specimen is linked. The protonym can be identical to the currently accepted name, the epitheton may be

identical but it may have been shifted to another genus or it may be a taxon that is currently considered a junior synonym. In three taxa (*Deroplatys rhombica*, *Amantis reticulata* and *Rhombodera flava*) De Haan (1842) added the name Hagenbach as an author. If, for these three taxa, De Haan's role was only to publish an existing manuscript name and description prepared by Hagenbach, the correct citation under Art. 50.1.1 would be "Hagenbach in De Haan." Because Hagenbach's manuscript is lost and there is no proof that he authored the description, the Code requires that the authorship default to De Haan, 1842 until such evidence is found.

Information added for each species is summarized in the following headings, not necessarily present for each taxon:

References: This section includes all primary nomenclatural acts and key subsequent works that directly affect the name's status including the original description, any publication in which the species was transferred to the current genus and those containing lectotypification, neotypification, or designation of a holotype (if done after the original description).

Type material: Under this heading the verbatim text of all labels attached to type specimen has been reproduced. Different labels are separated by a double slash (//) whereas a single slash (/) separates single lines within a label. For unreadable data a question mark (?) was added. The labels are ordered as follows: 1. Label with type status. 2. Locality-collecting event label(s). 3. Identification label(s). 4. additional labels.

Type locality: Here the verbatim quote from the original description for the primary type(s) is mentioned, followed, if necessary, between square brackets [] an indication of the current name of the region, area or locality.

Condition: Often specimens are no longer completely preserved. Especially antennae and tarsi are often missing. Under the heading 'Condition' the designation "complete" indicates the main body as well as at least one complete leg of each pair is still present. The designation "incomplete" implies one or more of the legs or part of legs or part of the body are missing. Between brackets the missing part(s) is(are) indicated. The qualification 'good' indicates the specimen is complete and only one or two parts of legs or antennae may be missing. The qualification 'poor' indicates the specimen is very incomplete, missing several legs, the antennae and possibly other parts as well.

Remark(s): Here additional remarks are added for instance regarding type status, name status, repository or specimens that could not be traced in the collection.

For the citation of Willem de Haan, who authored many of the taxa mentioned here, the MLA Handbook (2021) is followed which states that when using only the last name the particle ('de') should be capitalized.

Results

Family Acanthopidae Burmeister, 1838

Subfamily Acanthopinae Burmeister, 1838

Lagrecacanthops Roy, 2004

Lagrecacanthops brasiliensis Roy, 2004

Protonym: *Lagrecacanthops brasiliensis* Roy, 2004
Reference: Roy, 2004: 494.

Type material: Holotype, ♂ (fig. 1): "//Brasil/Rio Jacunda/(Rondônia)/Mei 1964/E.H.Bom//genitalia/R.Roy/3849[ZMA.COL.P43254]//Lagrecacanthops/brasiliensis n.sp./ ♂ holotype/ R.Roy det. 2004//Collectie Zoölogisch Museum/Amsterdam//"; ZMA.INS.5189366.

Type locality: Brasil, Rondônia, Rio Jacunda (fig. 62: no. 1).

Condition: Incomplete (tip of the abdomen missing due to genitalia extraction). Genitalia stored on a separate microscopic slide with 2 labels: "//Lagrecatanthops brasiliensis Roy /holotype/Brasil/ Rio Jacundá / (Rondornia) / V.1964/ E.H. Bom //Amsterdam Entomologie/-/genitalia♂/Nr.3849/R. Roy prep./Euparal/".

Remark: The Mantodea species file online (Otte et al. 2025) states the type is kept at ZMAN, Amsterdam, Netherlands. Since the merger of ZMA with Naturalis in 2010, the type is now being kept in the collection of Naturalis in Leiden.

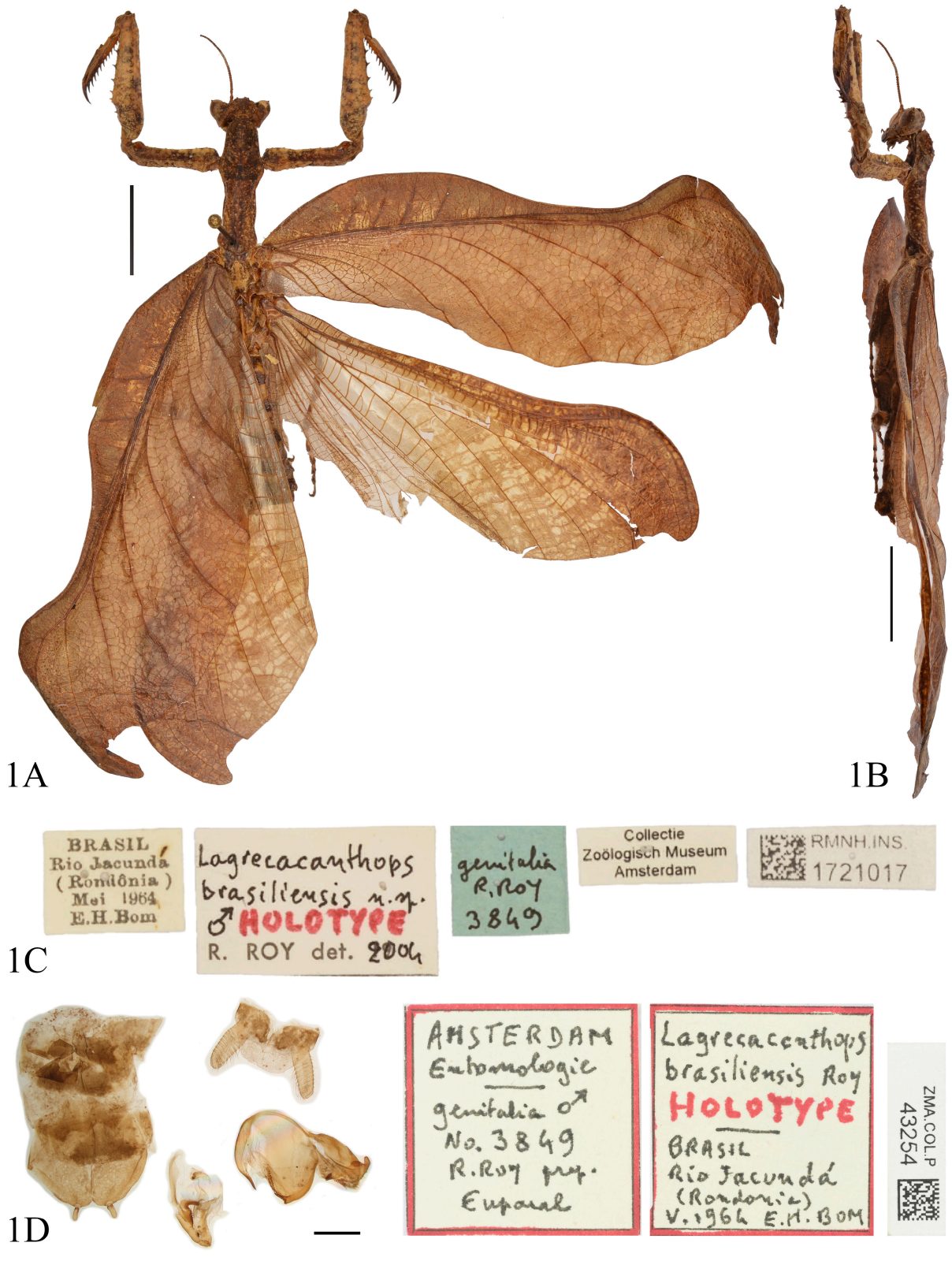


FIGURE 1. *Lagrecatanthops brasiliensis* Roy, 2004. holotype, ♂ (ZMA.INS.5189366). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels. D. Genitalia (ZMA.COL.P.43254) (Bar 2mm).

Family Amorphoscelidae Ståal, 1877

Subfamily Amorphoscelinae Ståal, 1877

***Amorphoscelis* Ståal, 1871**



FIGURE 2. *Amorphoscelis bimaculata* Roy, 2010. holotype, ♂ (ZMA.INS.5189367). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels. D. Genitalia (ZMA.COL.P.43257) (Bar 2mm).

Amorphoscelis bimaculata Roy, 2010

Protonym: *Amorphoscelis bimaculata* Roy, 2010
Reference: Roy, 2010: 85, Figs 15–17.

Type material: Holotype ♂ (fig. 2): "//Borneo, Sabah/Danum Valley/70 km W Lahad Datu/M.J. & J.P. Duffels// sample Sab 44/open area in primary/rainforest; understory/canopy, at light//Nature trail/150 m/28.XI.1989// genitalia/R. Roy/3840 [ZMA.COL.P.43257] //Amorphoscelis/bimaculate n.sp./ ♂ holotype/R.Roy det. 2010// Collectie/Zoologisch Museum/Amsterdam//"; ZMA.INS.5189367.

Type locality: Malaysia, Borneo, Sabah: Danum Valley, 70 km W Lahad Datu (fig. 63: no. 2).

Condition: Incomplete (tip of the abdomen missing for genitalia extraction). Genitalia stored on a separate microscopic slide with 2 labels: "//Amorphoscelis bimaculata Roy /holotype/Borneo, Sabah/ Danum valley/28. XI.1989/ M.J. & J.P. Duffels //Amsterdam Entomologie/-/genitalia ♂/Nr.3840/R. Roy prep./Euparal//"

Remark: The Mantodea species file (Otte et al. 2025) notes the type is kept at ZMAN Amsterdam, Netherlands. Since the merger of the Zoologisch Museum Amsterdam with Naturalis in 2010, the type material of this species is kept in the collection of Naturalis in Leiden.

Amorphoscelis huismani Roy, 2010

Protonym: *Amorphoscelis huismani* Roy, 2010
Reference: Roy, 2010: 77, figs 8–9.

Type material: Holotype, ♂ (fig. 3): "//RMNH; N. Borneo, Dabah/16 km NE Tenom, Agr. Res./Station, resthouse; 270m/115.59E 5.12N; 22 Nov. 1987/a.l.; J. Huisman&R. de Jong//genitalia/R. Roy/3896[RMNH.COL.P.12]// Amorphoscelis/huismani n.sp./♂ holotype/R.Roy det. 2010//"; RMNH.INS.1721019. Paratypes, 2♂: "//RMNH; N. Borneo, Dabah/16 km NE Tenom, Agr. Res./Station, resthouse; 270m/115.59E 5.12N; 22 Nov. 1987/a.l.; J. Huisman&R. de Jong//genitalia/R. Roy/3897[RMNH.COL.P.14] //Amorphoscelis/huismani n.sp./♂ paratype/R.Roy det. 2010//"; RMNH.INS.1721021 • "//RMNH Leiden E Sabah/Lahad Datu. 60 km w of:/Danum Valley Field Centre/at junction Sg Segama and /Sg Palum Tambun. 150 m./4°58'N 117°48'E//At light. Bridge of Segama/19 mar 1987. 18.30–21.30./Clearing. Edge of untouched/evergr. lowl. rainforest/Leg. Van Tol & Huisman// genitalia/R. Roy/ 3894[RMNH.COL.P.13//Amorphoscelis/huismani n.sp./♂ paratype/R.Roy det. 2010//"; RMNH.INS.1721020.

Type locality: Malaysia, Borneo, Sabah, Tenom (fig. 63: no. 3)

Condition: Holotype and both paratypes incomplete (tip of the abdomen missing). Genitalia stored on a separate microscopic slide with 2 labels: "//Amorphoscelis huismani Roy /holotype/Sabah, 270m a.l./ 16 km NE Tenom/22. XI.1987/ Huisman & de Jong //Amsterdam Entomologie/-/genitalia ♂/Nr.3896/R. Roy prep./Euparal//"

Amorphoscelis parva Beier, 1952

Protonym: *Amorphoscelis parva* Beier, 1952
Reference: Beier, 1952a: 297–298.

Type material: Paratype, ♂: "//paratype//Melolo O.Sumba/Laiwuhi 19.6.1949/Dr. Bühler.Dr. Sutter//genitalia/ R.Roy/3376[RMNH.INS.729750]//paratype//Amorphoscelis/parva n. sp. ♂/det. Beier 1952/paratype//"; RMNH. INS1721022.

Type locality: Indonesia, Sumba, Melolo.

Condition: Incomplete (tip of the abdomen missing for genitalia extraction).

Remark: Ehrmann (2002: p. 62) indicates the paratype male is possibly kept at the museum in Vienna (NHMW). This apparently is not the case, as the paratype is part of the collection of Naturalis.

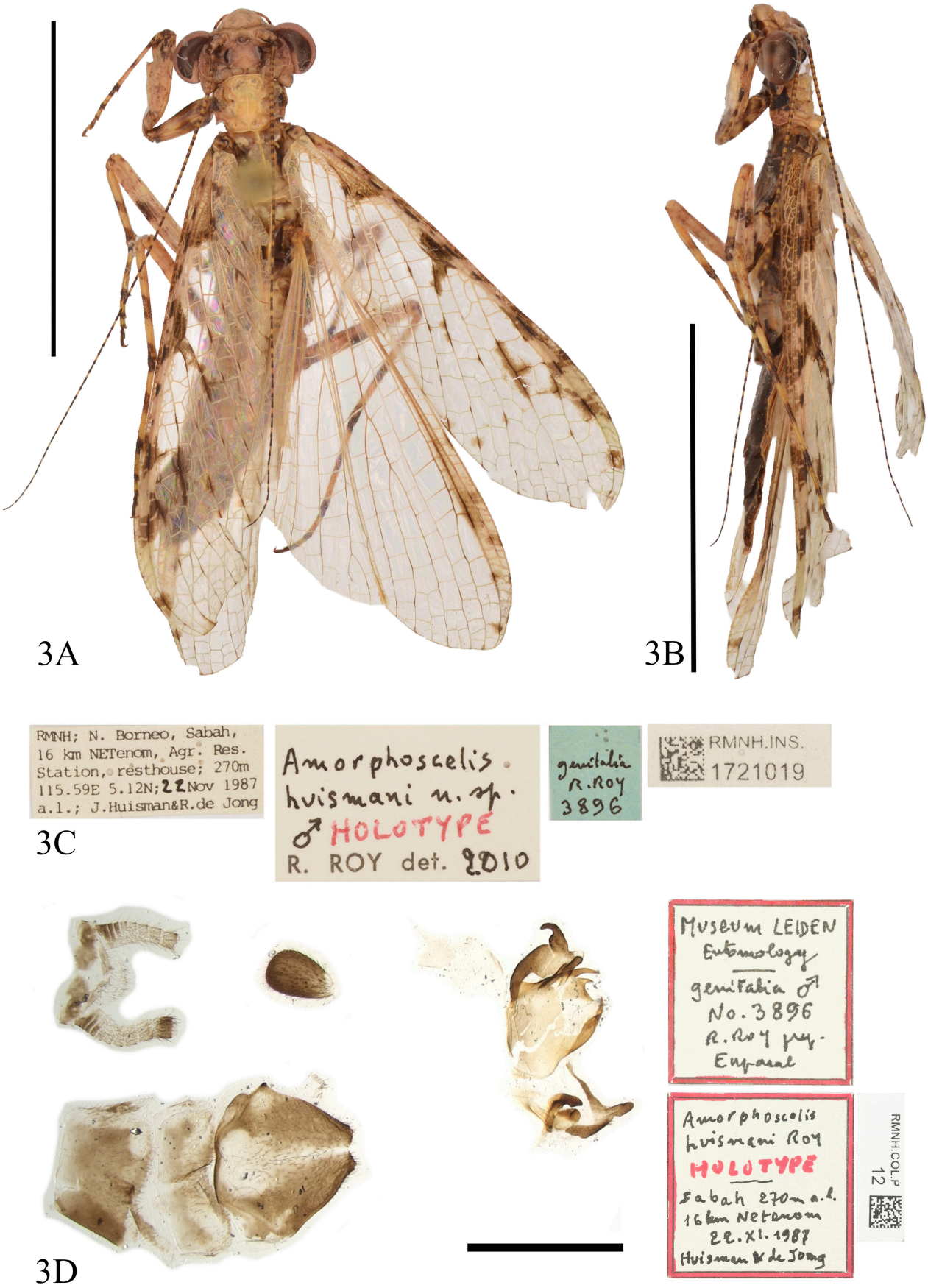


FIGURE 3. *Amorphoscelis huismani* Roy, 2010. holotype, ♂ (RMNH.INS.1721019). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels. D. Genitalia (RMNH.COL.P.12) (Bar: 2 mm).

Amorphoscelis sumatrana Roy, 2010

Protonym: *Amorphoscelis sumatrana* Roy, 2010
Reference: Roy, 2010: 75–77, fig. 7.

Type material: Holotype, ♂ (fig. 4: "//Museum Leiden/N.Sumatra: Allas valley/Kutatjane: Tanah-Merah/3°31' N.–97°47' E./9.VII.1972/J.Krikken no. 41//genitalia/R.Roy/3368 [RMNH.INS.729747]//Amorphoscelis/sumatrana n.sp./ ♂ Holotype/R. Roy 1999//"; RMNH.INS.1721023. Paratype, ♂: "//Museum Leiden/N Sumatra: Bivouac Two/ Mt Bandahara/3°44' N.–97°43' E./5–10.VII.1972/J. Krikken, no 24/ca 1430 m//genitalia/ R. Roy/3367[RMNH. INS.729746]// Amorphoscelis/sumatrana n.sp./ ♂ paratype/R. Roy 1999//"; RMNH.INS.1721024.

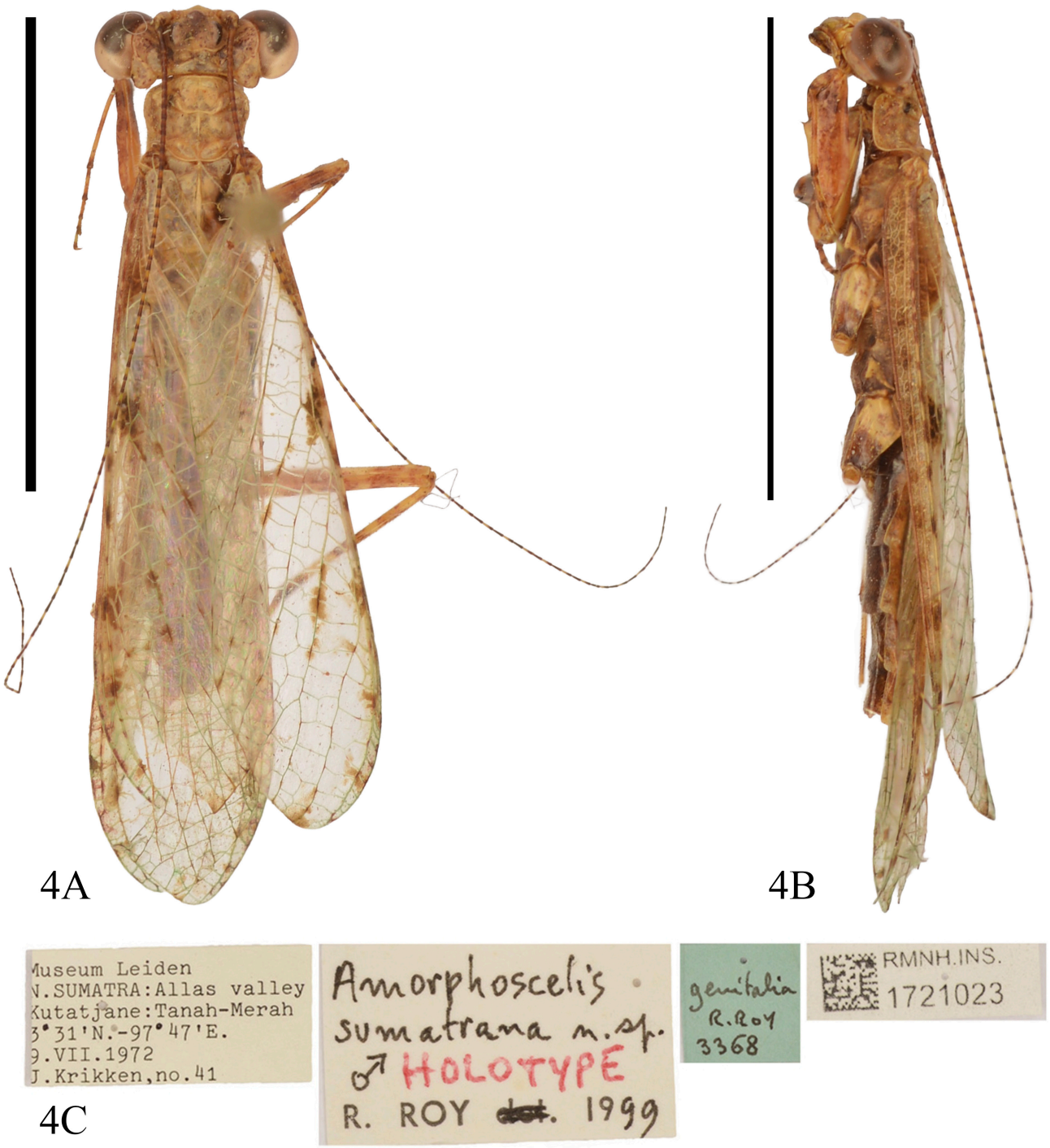


FIGURE 4. *Amorphoscelis sumatrana* Roy, 2010. holotype, ♂ (RMNH.INS.1721023). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Type locality: Indonesia, Sumatera, Ala Valley, Kutacane (fig. 63: no. 4).

Condition: Holotype incomplete (both mid legs, one hind leg and tip of the abdomen missing); paratype incomplete (tip of the abdomen missing). Despite a thorough search we have been unable to find the microscope slides with the genitalia of the holotype and paratype.

Family Angelidae Beier, 1935

Angela Audinet-Serville, 1839

Angela armata (De Haan, 1842) reinst. stat.

Protonym: *Mantis* (*Thespis*) *armata* De Haan, 1842: 95.

References: De Haan, 1842: 95; Uvarov, 1929: 74 [assignment to *Angela*, synonymy *Angela fulgida* Saussure, 1873 with *Angela armata* (De Haan, 1842)].

Type material: Holotype, ♀ (fig. 5): "//Holotype?//[seemingly void round label//Museum Leiden/Angela/armata/ Haan./Det. D.A.Kerpel.//Angela/armata Haan/holotype? ♀/Det. M.C. Polsbroek 1973//armata De Haan/is een Angela,/vermoedelijk/A. Fulgida Sauss.//"; RMNH.INS.1104751.

Type locality: Not indicated (De Haan 1842: p. 95).

Condition: Incomplete (both hind tibiae and tarsi, right fore tibia and tarsi, antennae missing).

Remarks: Type specimen: The original description is based on a single female. The Naturalis (RMNH) collection contains a single female of this species, provided with a holotype label (with a question mark), that fits the very brief original description. The original description does not mention a locality. The female specimen in the Naturalis collection, does carry a round label, similar to those found in other type material of De Haan, with locality information; however, in this specimen the label is entirely blank. This possibly explains the absence of a type location in the original description. As the only female specimen in the collection that fits the original description and shares the same absence of locality data, this specimen (fig. 5) is here regarded as the holotype. Because no locality was cited in the original description, subsequent assignments of St. Jean at the Maroni River, French Guiana, as the type locality (Ehrmann 2002: 66; Mantodea Species File: Otte et al. 2025) have no basis in the original evidence and are therefore erroneous.

Synonymy – Because of the short description, the superficial resemblance, and lack of a type location, Saussure (1873: 59), incorrectly, assigned a specimen from Palestina to *Mantis (Thespis) armata* De Haan, 1842 placing it in the genus *Fischeria*. Uvarov (1924: 4) demonstrated that Saussure's specimen was not conspecific with De Haan's *armata*, thereby establishing that Saussure's usage represented a misidentification rather than the true concept of the species. In subsequent work, Uvarov (1929) and later authors further clarified that Guianan material historically identified as *armata* did not correspond to De Haan's species, but instead represented *Angela fulgida* Saussure, 1872. Moulin (2025: 304) synonymized *Angela armata* (De Haan, 1842) under *Angela fulgida* Saussure, 1872 and reattributed all historical records of "*A. armata*" from French Guiana to *A. fulgida*. However, this treatment is problematic. The Peruvian and Guianan populations are morphologically distinct in male hindwing coloration (entirely infumate versus bicolored), a difference supported by rearing studies (Schwarz *et al.* 2020: 18). Digital analysis of the armata holotype shows that its hindwing maculation aligns with Peruvian material rather than with females from French Guiana. Furthermore, even if the synonymy were accepted, Moulin's action would violate the Principle of Priority, as *A. armata* (1842) is thirty years older than *A. fulgida* (1872). We therefore reinstate *Angela armata* (De Haan, 1842) as a valid species for the Peruvian taxon and exclude it from the fauna of French Guiana, where the species present is *A. fulgida*.

Family Chroicopteridae Giglio-Tos, 1915

Subfamily Chroicopterinae Giglio-Tos, 1915

Tribe Bolbellini Schwarz & Roy, 2019



FIGURE 5. *Angela armata* (De Haan, 1842). holotype, ♀ (RMNH.INS.1104751). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

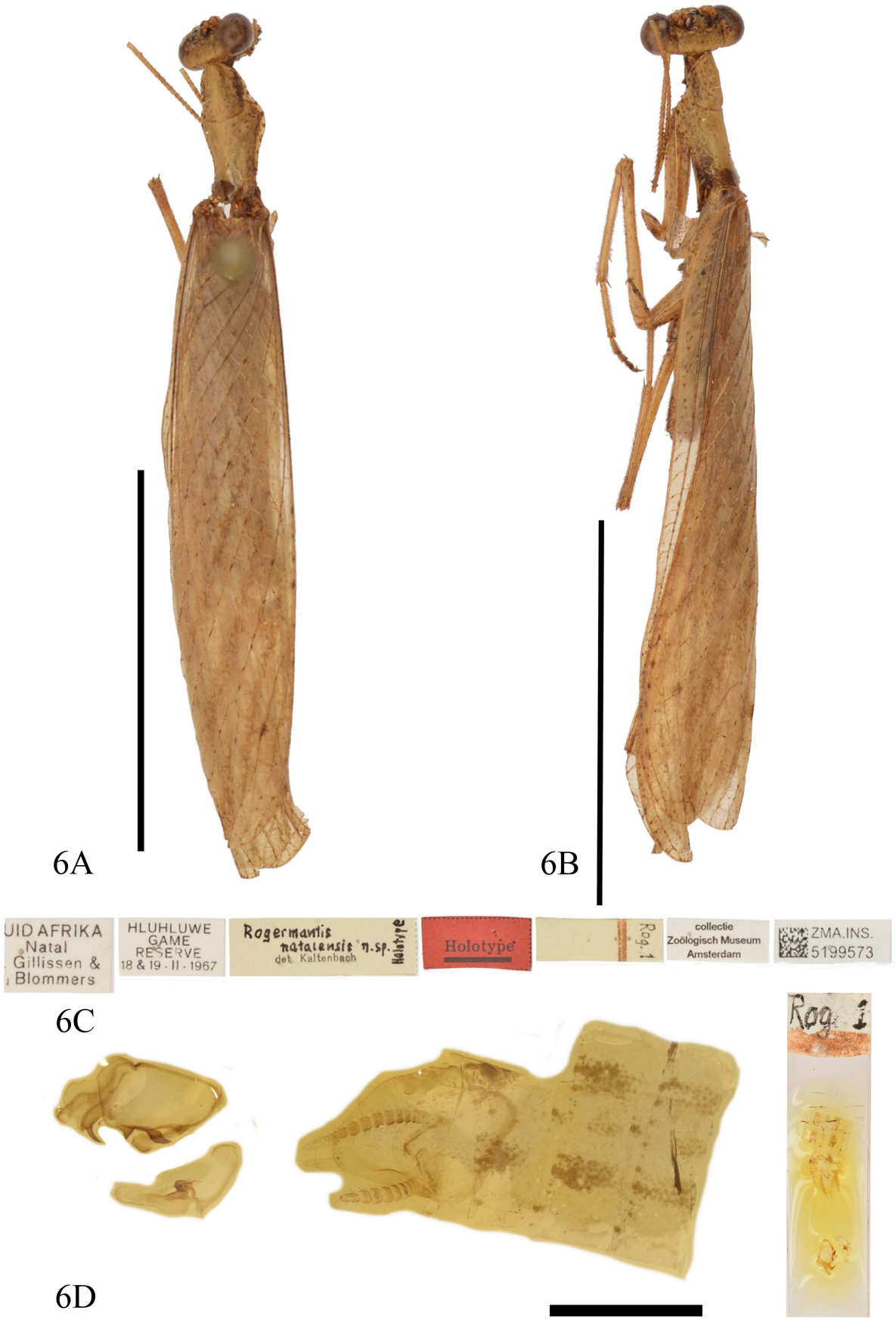


FIGURE 6. *Dystactula natalensis* (Kaltenbach, 1996). holotype, ♂ (ZMA.INS.5199573). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels. D. Genitalia (Bar: 2 mm).

Dystactula Giglio-Tos, 1927

Dystactula natalensis (Kaltenbach, 1996)

Protonym: *Rogermantis natalensis* Kaltenbach, 1996: 281.
References: Kaltenbach, 1996: 281; Roy, 2006: 195 [synonymy *Rogermantis* with *Dystactula*].

Type material: Holotype ♂ (fig. 6): "//Hluhluwe/Game/Reserve/18 & 19.II.1967//Suid Afrika/Natal/D.Gillissen &/L. Blommers//Rogermantis/natalensis n.sp./det. Kaltenbach/holotype//holotype//R093 [genitalia prep.]//collectie/Zoölogisch Museum/ Amsterdam//", ZMA.INS.5199573. Paratypes, 2 ♂♂: "//Lake/St. Lucia/False Bay/13–17.II.1967//Suid Afrika/Natal/D.Gillissen &/L. Blommers//Rogermantis/natalensis n.sp./det. Kaltenbach/paratype //paratype//R094 [genitalia prep.]//collectie/Zoölogisch Museum/Amsterdam//" , ZMA.INS.5199572 • "//Hluhluwe/Game/Reserve/18 & 19.II.1967//Suid Afrika/Natal/D.Gillissen &/L. Blommers//Rogermantis/natalensis n.sp./det. Kaltenbach/holotype [sic!]//paratype//R091 [genitalia prep.]//collectie/Zoölogisch Museum/Amsterdam//", ZMA.INS.5199574.

Type locality: South Africa, Natal (fig. 62: no. 5).

Condition: Holotype incomplete (both hind legs, right fore leg, tibia and tarsus left fore leg and tip of abdomen missing); paratype (ZMA.INS.5199574) incomplete (both mid and hind legs, tip of abdomen en antennae missing), (ZMA.INS.5199572) poor (head, all legs and tip of abdomen missing). In all three specimens, the genitalia have been mounted following Kaltenbach (1994) and attached to the pin with the specimen.

Remark: The Mantodea species file online (Otte et al. 2025) notes the type is kept at ZMA, Amsterdam, Netherlands. However, since the merger of the Zoologisch Museum Amsterdam with Naturalis, the type is now kept in the collection of Naturalis in Leiden.

Tribe Choriocterini Giglio-Tos, 1915

Namamantis Kaltenbach, 1996

Namamantis nigropunctata Kaltenbach, 1996

Protonym: *Namamantis nigropunctata* Kaltenbach, 1996
Reference: Kaltenbach, 1996: 249, fig. 77.

Type material: Holotype ♂ (fig. 7); "//Holotype//Namamantis/ nigropunctata n. sp./det. Kaltenbach XII'89// Collectie /Zoologisch Museum Amsterdam//Steinkopf/Z. Afrika/9.94/M. Weber// Nm 1 [genitalia prep.]//"; ZMA.INS.5199575.

Type locality: Africa: Small Namaqualand, Steinkopf (fig. 62: no. 6).

Condition: Incomplete (tip of abdomen missing). The genitalia have been mounted following Kaltenbach (1994) and attached on the pin with the specimen.

Remark: The Mantodea Species File (Otte et al. 2025) mentions ITHA Amsterdam as the repository of the holotype whereas in Ehrmann (2002, p. 237) ZMA is mentioned. Both acronyms refer to the Zoologisch Museum Amsterdam where the specimen was being kept at the time of the description. In 2010 the complete ZMA collection moved to Leiden and the type specimen is now part of the collection of Naturalis in Leiden. The quotation of "(ZMB Berlin — holotype male, Ehrmann 2002)" for this specimen in the Mantodea Species File (Otte et al. 2025) is erroneous.

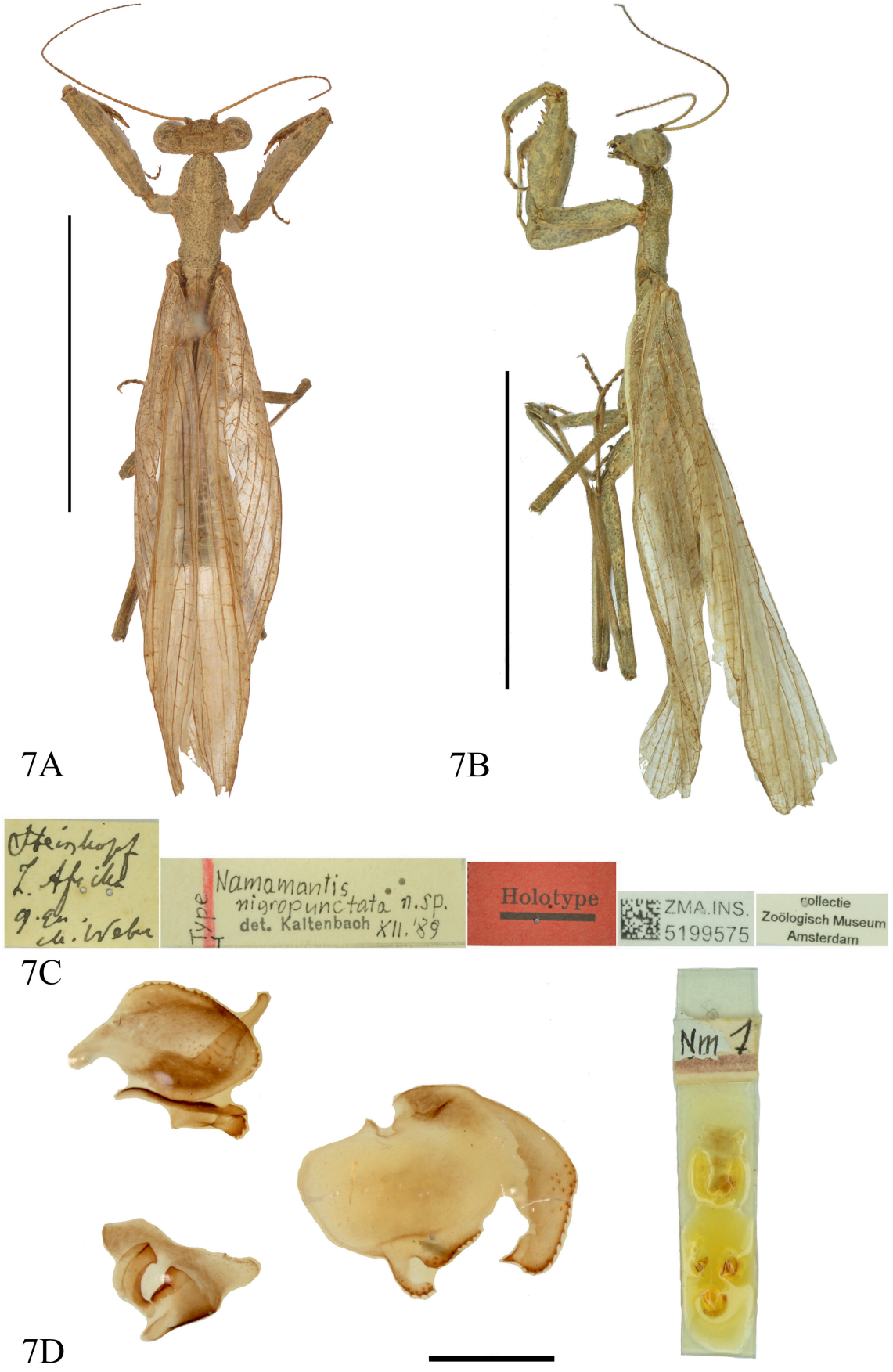


FIGURE 7. *Namamantis nigropunctata* Kaltenbach, 1996. holotype, ♂ (ZMA.INS.5199575). A. Dorsal habitus (Bar: 10 mm). B. Lateral habitus (Bar: 10 mm). C. Labels. D. Genitalia (Bar: 1 mm).

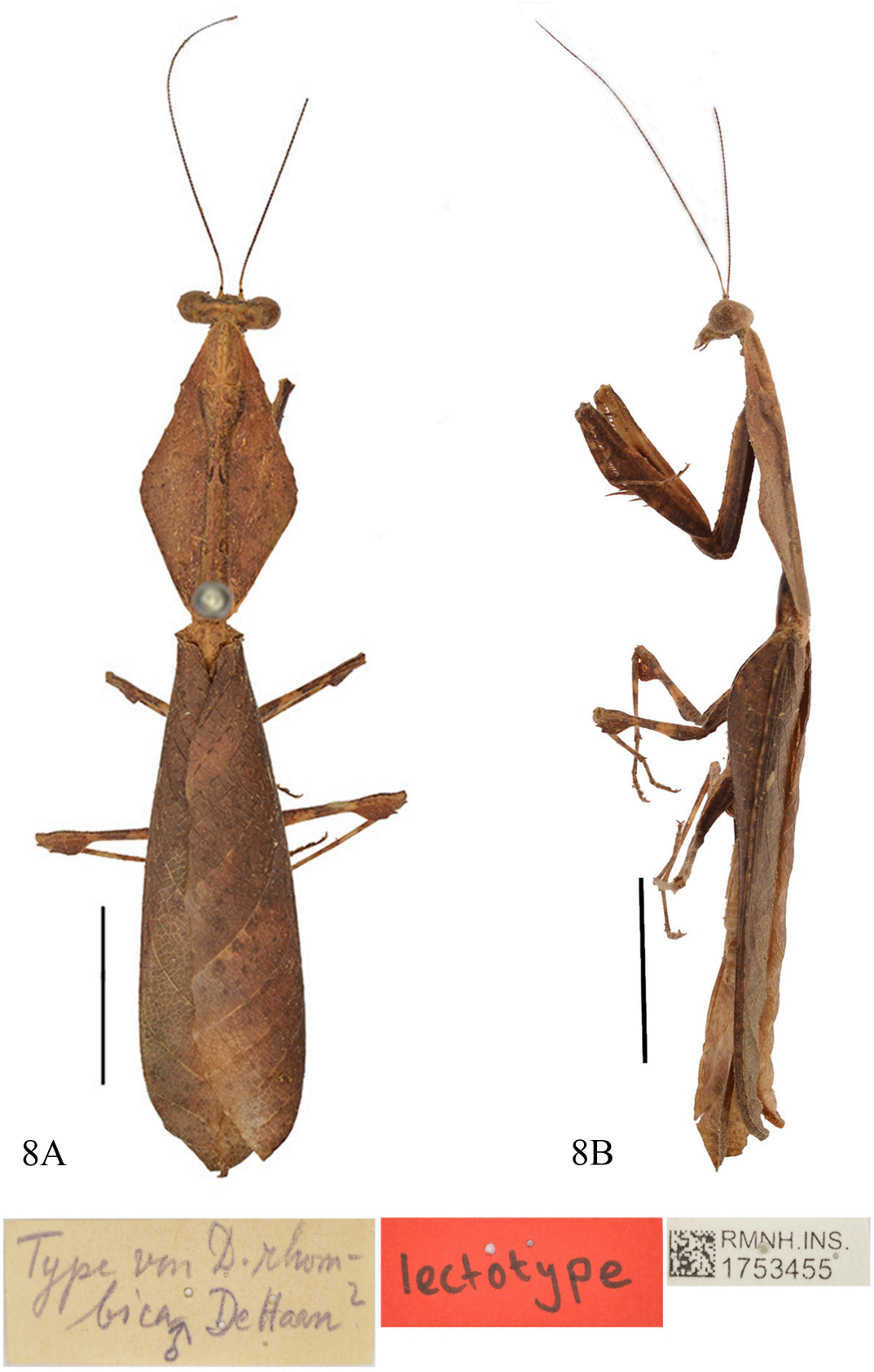


FIGURE 8. *Deroplatys rhombica* (De Haan, 1842). lectotype, ♂ (RMNH.INS.1753455). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Family Deroplatyidae Westwood, 1889

Subfamily Deroplatyinae Westwood, 1889

Tribe Deroplatyini Westwood, 1889

***Deroplatys* Westwood, 1839**

***Deroplatys rhombica* (De Haan, 1842)**

Protonym: *Mantis* (*Deroplatys*) *rhombica* De Haan, 1842.
References: De Haan, 1842: 92–93; Pl. XVII, fig. 1–2; Zhang & Price, 2024: 38 (lectotypification).

Type material: Lectotype ♂ (fig. 8): "//Type van D. rhom-/bica De Haan/♂//lectotype//"; RMNH.INS.1753455.

Type locality: Java, Sumatra, Mandawey (Borneo)

Condition: Good.

Remark: De Haan (1842: 92–93) indicates he has studied material from three islands which implies he studied at least three specimens. Besides the lectotype, no other specimens were found in the Naturalis collection that may have belonged to the type series so these specimens are considered lost.

Tribe Euchomenellini Giglio-Tos, 1916

***Euchomenella* Giglio-Tos, 1916**

***Euchomenella apicalis* Werner, 1922**

Protonym: *Euchomenella apicalis* Werner, 1922
Reference: Werner, 1922: 117

Type material: Lectotype (assigned here, see under Remark) ♂ (fig. 9): "//Dr. B. Hagen./Tandjong Morawa/Serdang/(N.O. Sumatra)//Euchomenella/apicalis Wern./Type ♂//", RMNH.INS.1753440; paralectotypes, 4 ♂♂: "//Banjoewangi/Java, 1910/Mac Gillavry//Museum Leiden/Euchomenella/apicalis.Wern./Det. Werner//", RMNH.INS.1753441; "//Banjoewangi/Java, 1909/Mac Gillavry//Museum Leiden/Euchomenella/apicalis.Wern./Det. Werner//", RMNH.INS.1753442; "//Banjoewangi/Java, 1910/Mac Gillavry//Museum Leiden/Euchomenella/apicalis.Wern./Det. Werner//", RMNH.INS.1753443; "//Banjoewangi/Java, 1911/Mac Gillavry//Museum Leiden/Euchomenella/apicalis.Wern./Det. Werner//", RMNH.INS.1753444.

Type locality: Sumatra, Java (fig. 63: no. 7)

Condition: Lectotype RMNH.INS.1753440 incomplete (right fore leg, both mid legs, right hind leg and part of abdomen missing); paralectotypes RMNH.INS.1753441 incomplete (right fore leg and both hind legs missing), RMNH.INS.1753442 incomplete (left fore leg and both hind legs missing), RMNH.INS.1753443 incomplete (left mid-leg and both hind legs missing), RMNH.INS.1753444 (tibia and tarsi mid legs and hind legs missing)

Remark: To stabilize the taxonomy of *Euchomenella apicalis* Werner, 1922, we hereby designate the male specimen from Tandjong Morawa, Sumatra as the lectotype. Although Werner (1922: 117) did not explicitly select a holotype in his original description, which was based on a series of five males, he later marked the specimen from Tandjong Morawa with a handwritten label reading "Type." This label, though not constituting a formal holotype designation under ICZN (1999) Article 73, reflects Werner's apparent intent and allows for a justified lectotypification in accordance with ICZN (1999) Article 74.1. The designated lectotype matches the diagnostic features outlined in the original description. The four remaining male specimens from the original series are therefore recognized as paralectotypes.

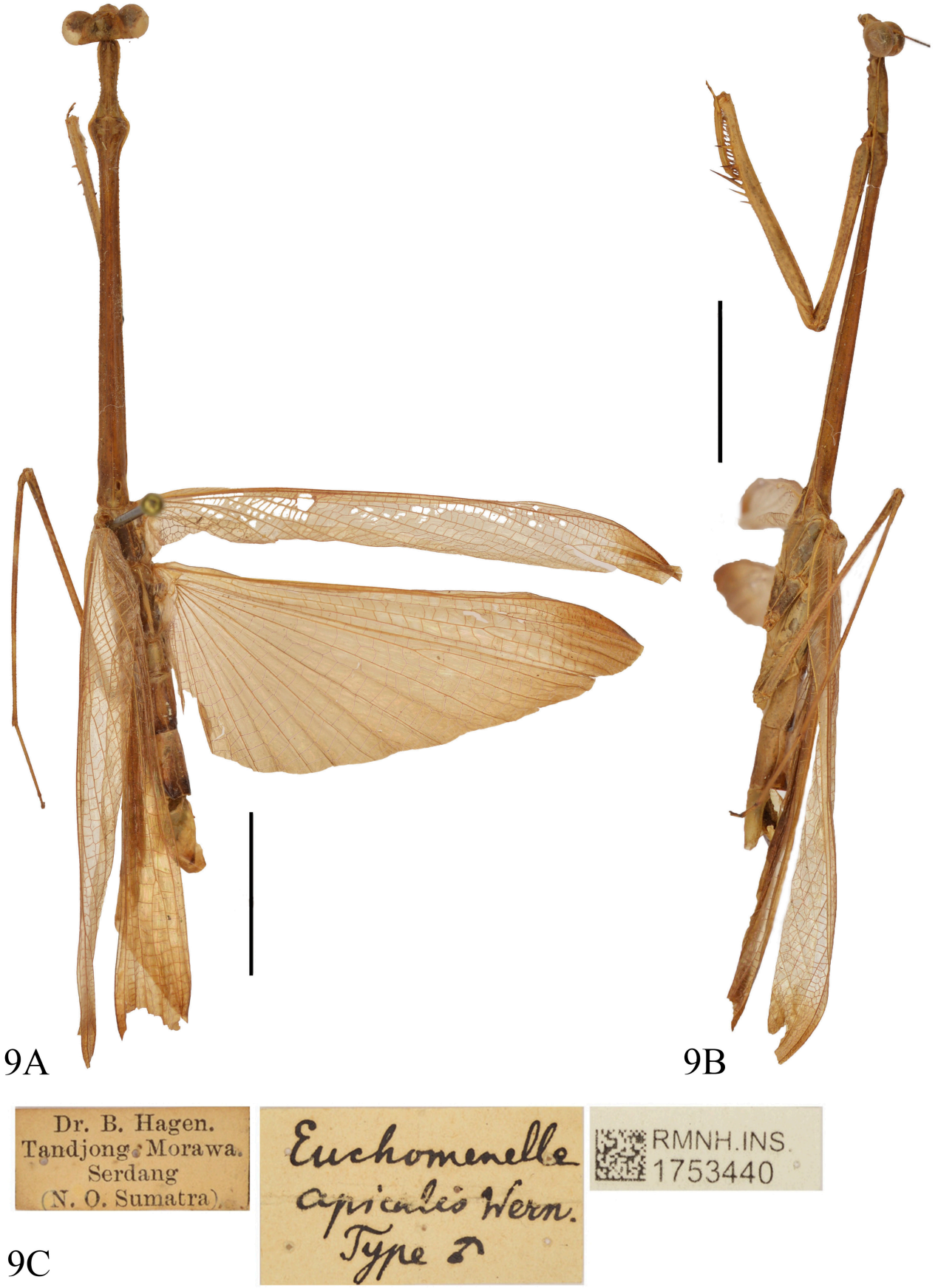


FIGURE 9. *Euchomenella apicalis* Werner, 1922. lectotype, ♂ (RMNH.INS.1753440). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

***Euchomenella* Giglio-Tos, 1916**

***Euchomenella heteroptera* (De Haan, 1842)**

Protonym: *Mantis* (*Mantis*) *heteroptera* De Haan, 1842: 78, Pl. XVIII, fig. 1–2
References: De Haan, 1842: 78, Pl. XVIII, fig. 1–2; Giglio-Tos, 1916: 35 [placement in *Euchomenella*].

Material: (sex unknown) (fig. 10): "//Euchomenella/heteroptera/Haan/Det. C. Willemse//", RMNH.INS.1753445

Type locality: Java, Borneo (Banjarmasin), Sulawesi (Tondano)

Condition: Incomplete (part of the abdomen is missing)

Remark: For the original description De Haan studied both male and female and based on the three locations he had at least 3 specimens at his disposal. Currently the collection of Naturalis only holds one specimen of this species, which only carries a determination label by C. Willemse but no circular location label (fig. 10). As this specimen does not carry a (round) location label and a pin that cannot be traced back to the early 1800s, we decided to refrain from considering this a syntype. All specimens studied by De Haan are therefore considered to be lost.

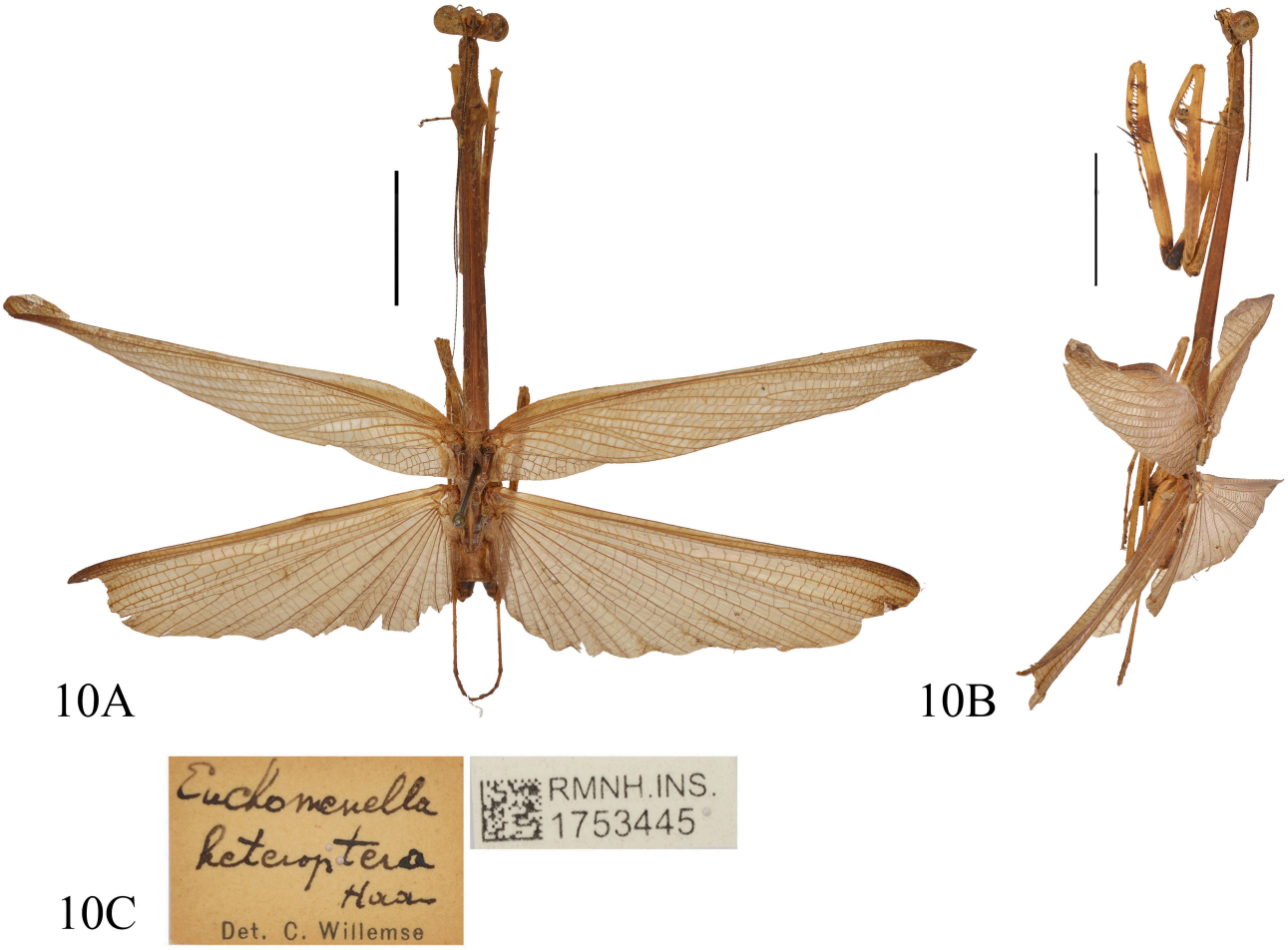


FIGURE 10. *Euchomenella heteroptera* (De Haan, 1842). unknown sex (RMNH.INS.1753445). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

***Euchomenella* Giglio-Tos, 1916**

***Euchomenella thoracica* (De Haan, 1842)**

Protonym: *Mantis (Thespis) thoracica* De Haan, 1842: 94.
References: De Haan, 1842: 94; Giglio-Tos, 1916: 35–36 (placement in *Euchomenella*)



FIGURE 11. *Euchomenella thoracica* (De Haan, 1842). holotype, ♀ (RMNH.INS1721025). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Type material: Holotype, ♀ (fig. 11): "//Holotype?//[void round label]//Museum Leiden/Euchomenella/thoracica (Haan)/Set.://Euchomenella/thoracica (Haan)/holotype ? ♀/Det. M.C.Polsbroek 1973//"; RMNH.INS1721025.

Type locality: Not indicated.

Condition: Incomplete (hind legs missing).

Remark: In De Haan (1842), the description of this species is very concise without an illustration, but it fits this specimen. The location is not provided by De Haan but indicated as a questionmark. This also fits in with this specimen as the circular label which normally provides an indication of the origin of the specimen, although present and thus indicating the specimen originated from the early 1800s, is empty. As there are no other specimens of this species in the Naturalis collection that could have been studied by De Haan, this specimen is considered the holotype.

Family Epaphroditidae Burmeister, 1838

Subfamily Gonatistinae Saussure, 1869

***Gonatista* Saussure, 1869**

***Gonatista bifasciata* (De Haan, 1842)**

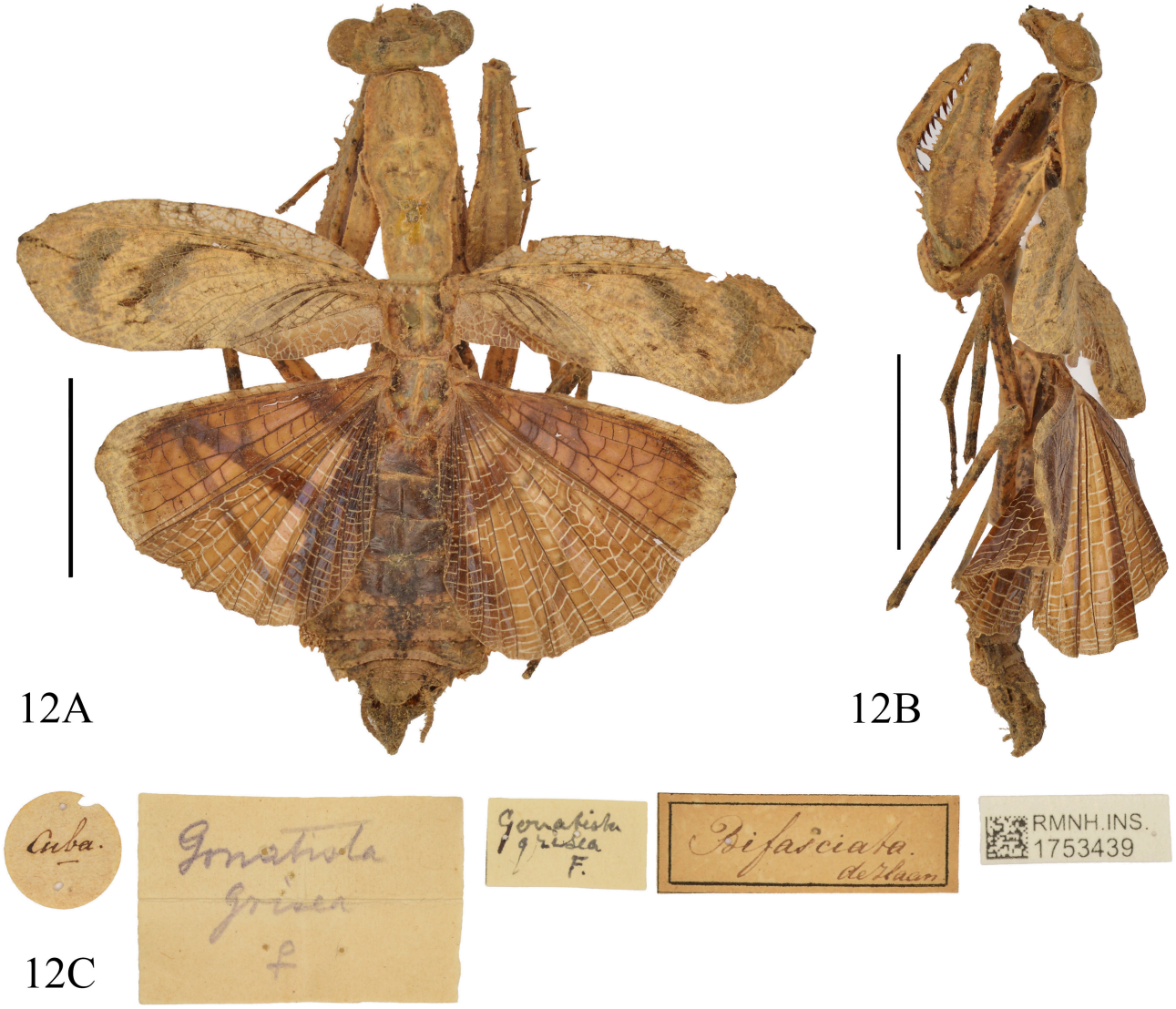


FIGURE 12. *Gonatista bifasciata* (De Haan, 1842). holotype, ♀ (RMNH.INS.1753439). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Protonym: *Mantis* (*Mantis*) *bifasciata* De Haan, 1842: 78.
References: De Haan, 1842: 78; Saussure & Zehntner, 1894 [synonymy *M. bifasciata* with *G. grisea*]; Caudell, 1912: 161 [synonymy *G. bifasciata* with *G. reticulata*]; Anderson, 2021: 97–126 [*G. bifasciata* junior synonym of *G. grisea*]; Anderson, 2025a: 42 [replaced *G. bifasciata* for *G. grisea* nom. dubium].

Type material: Holotype, ♀ (fig. 12): "//Cuba//[in pencil]Gonatista/grisea/♀//[in pen] Gonatista/grisea/F//", RMNH.INS.1753439.

Type locality: Cuba (fig. 62: no. 8).

Current status: Anderson (2021: 100) successfully argued that Caudell's 1912 synonymization of *bifasciata* and *cubensis* with *reticulata* was unfounded, as it lacked justification, ignored earlier taxonomic work, and was based solely on male specimens while disregarding the female type material of both Cuban species. Given the differences in body size, the geographic range, and the absence of *reticulata* in Cuba, Anderson pointed out that both *bifasciata* and *cubensis* are more accurately treated as junior synonyms of *grisea*, in line with the earlier classification by Saussure & Zehntner (1894: 159). In Anderson's (2025a: 47) subsequent revision of *Gonatista* Saussure, 1869, *Mantis grisea* Fabricius, 1793 was determined to be nomen dubium. Consequently, *Mantis bifasciata* De Haan, 1842—the earliest available name considered a junior synonym of *grisea*—was reinstated as a valid species to refer to the species from the Caribbean and North America previously known as *grisea*.

Condition: Complete (only antenna and tarsi of left mid and hind leg missing)

Family Eremiaphilidae Saussure, 1869

Subfamily Tarachodinae Giglio–Tos, 1917

Tribe Tarachodini Giglio-Tos, 1917

***Galepsus* Stål, 1876**

***Galepsus* (*Syngalepsus*) Beier, 1954**

***Galepsus (Syngalepsus) beieri* Kaltenbach, 1996**

Protonym: *Galepsus (Syngalepsus) beieri* Kaltenbach, 1996
Reference: Kaltenbach, 1996: 233, fig. 42.

Type material: Holotype, ♂ (fig. 13): "//Holotype//Suid Afrika/Natal/D. Gillissen &/L.Blommers//Lake/St. Lucia/False Bay/13–17.II.1967//Galepsus (Syngalepsus)/beieri n.sp./det. Kaltenbach I.1990/Type ♂//Ga 1 [label with dry genitalia]//Collectie/Zoologisch Museum/Amsterdam//"; ZMA.INS.5199576.

Type locality: South Africa: Natal, Lake St. Lucia, False Bay (fig. 62: no. 9).

Condition holotype: Incomplete (tip of abdomen missing). The genitalia have been mounted following Kaltenbach (1994) and attached to the pin with the specimen.

Remark: At the time of the description, the holotype was stored in the collection of the Zoölogisch Museum Amsterdam (ZMA). In 2010 the ZMA collection was moved to Naturalis in Leiden where the specimens are currently being kept. Although Kaltenbach (1996: p. 233) mentions a paratype male from the same locations as the holotype to be kept at ZMA, this specimen could not be traced in the Naturalis collection.

***Tarachodes* (*Tarachodina*) Beier, 1957**

***Tarachodes (Tarachodina) natalensis* Kaltenbach, 1996**

Protonym: *Tarachodes* (*Tarachodina*) *natalensis* Kaltenbach, 1996: 219–221.
Reference: Kaltenbach, 1996: 219–221.

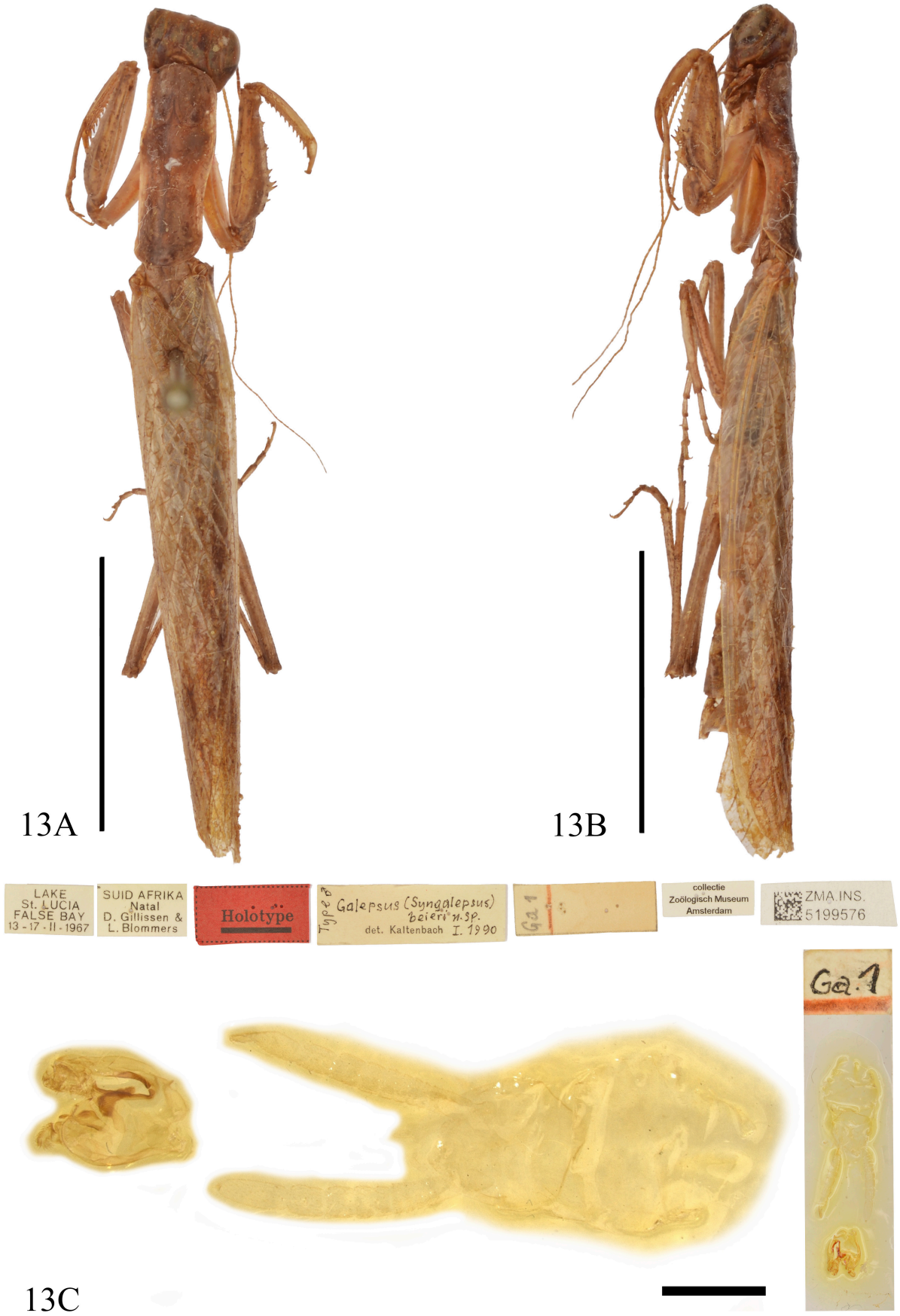


FIGURE 13. *Galepsus* (*Syngalepsus*) *beieri* Kaltenbach, 1996. holotype, ♂ (ZMA.INS.5199576). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm) C. Labels. D. Genitalia (Bar: 1 mm).

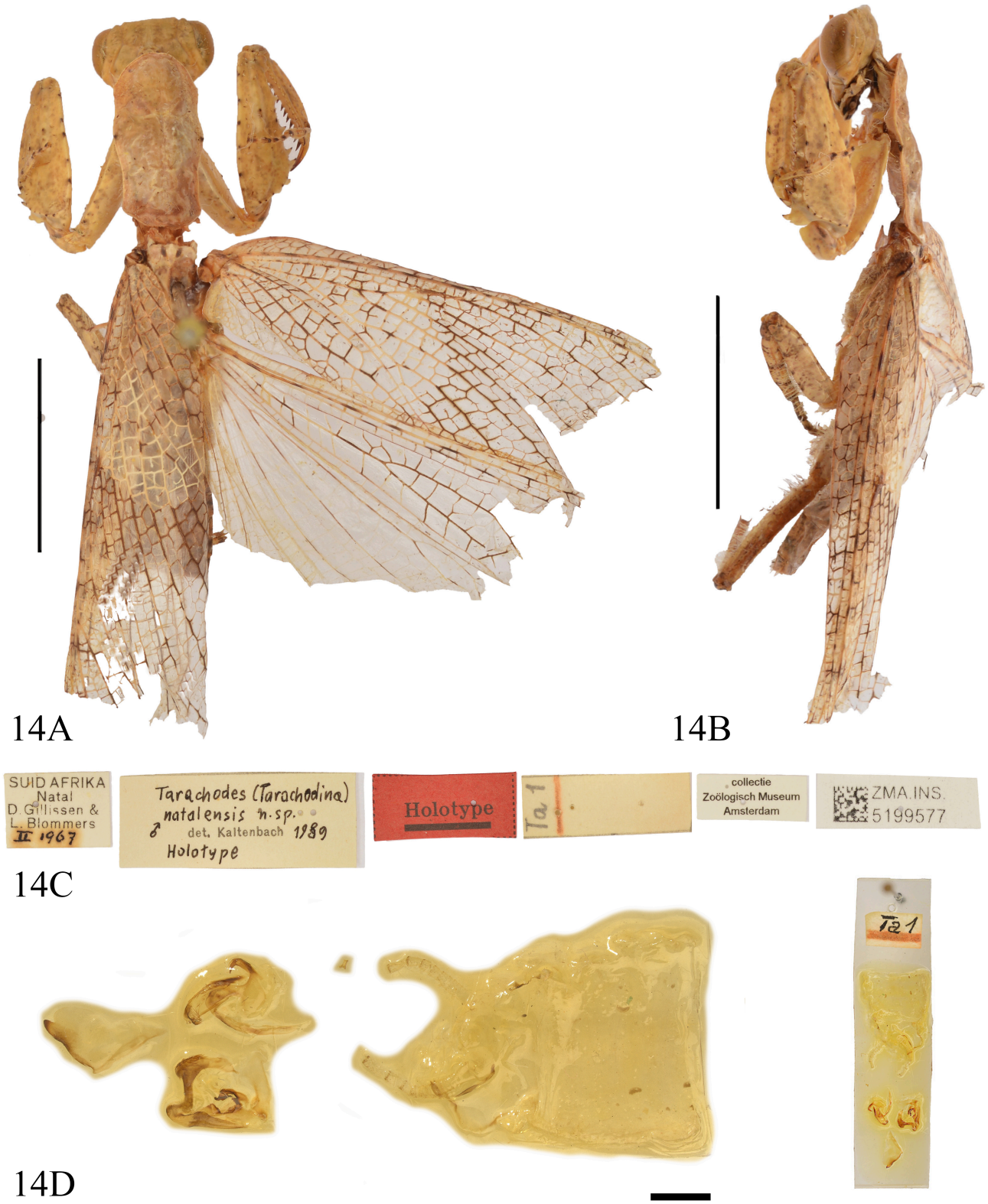


FIGURE 14. *Tarachodes (Tarachodina) natalensis* Kaltenbach, 1996. holotype, ♂ (ZMA.INS.5199577). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels. D. Genitalia (Bar: 2 mm).

Type material: Holotype, ♂ (fig 14): "//Holotype//collectie/Zoologisch Mseum/Amsterdam//Tarachodes (Tarachodina)/natalensis n. sp./ ♂ det. Kaltenbach 1989/holotype//Suid Afrika/Natal/D. Gillissen &/L. Blommers/II 1967//[extracted genitalia]//", ZMA.INS.5199577.

Type locality: Natal (fig. 62: no. 10)

Condition: Incomplete (right mid and hind leg, tarsus left hind leg, tip of forewing and abdomen missing). The genitalia have been mounted following Kaltenbach (1994) and attached to the pin with the specimen.

Remark: The Mantodea species file (Otte et al. 2025) states the type material is deposited in ITHA, whereas Ehrmann (2002) reports it is housed in ZMAN, both in Amsterdam, Netherlands. This information now requires updating, as the types moved with the ZMA collection to Naturalis, Leiden in 2010.

Family Galinthiadidae Giglio-Tos, 1919

Pseudoharpax Saussure, 1870

Pseudoharpax dubius La Greca, 1954

Pseudoharpax congicus unpublished manuscript name

Type locality: Kassaï (Democratic Republic of the Congo) (fig. 62: no. 11)

Current status: Unpublished manuscript name.

Condition: Incomplete (right mid and hind leg and tarsus left mid leg missing) (fig. 15A–B).

Remark: This specimen is accompanied by a suite of historical labels that offer valuable insight into its provenance and taxonomic interpretation (fig. 15C). This female mantis was collected in the region of Kassaï, as indicated by a green locality label. Situated in the central-western portion of the present-day Democratic Republic of the Congo, this locality falls within the ecotonal forest-savanna mosaic of the Congo Basin. Notably, it lies in close biogeographic proximity to Mayidi (Bas Congo), the type locality for the female allotype of *Pseudoharpax dubius* La Greca, 1954. Both localities are situated in central-western DRC and fall within the same transitional forest-savanna mosaic, strongly supporting the inference that they represent the same biogeographic zone and could reasonably yield conspecific specimens. Among the specimen's labels is a particularly notable orange handwritten tag in French: "*Je serais heureux de savoir le nom (Creobotrae?)*," which translates as "I would be happy to know the name (Creobotrae?)."

This statement reflects a tentative and uncertain identification by an earlier worker who speculated that the specimen might belong to the genus *Creobotra* Saussure, 1869, using the Latinized genitive or speculative form Creobotrae with a question mark to express uncertainty. Further down in the labeling sequence, a yellow handwritten label reads: "*Pseudoharpax congicus n. sp. / det. Beier / Type!* ♀," indicating that the Austrian entomologist Max Beier had examined the specimen and regarded it as an undescribed species, assigning it the provisional name *Pseudoharpax congicus*. However, this name was seemingly never published in any formal work. As such, it represents merely an unpublished label name with no standing under the International Code of Zoological Nomenclature (ICZN, 1999). The accompanying printed red "Type" label reflects Beier's internal intent to designate it as a type specimen, but this designation has no crassnomenclatural effect without valid publication. Comparative analysis of the female *congicus* specimen with a photograph of the female allotype of *dubius* confirms that all diagnostic characters—including pronotal morphometrics, head capsule proportions, wing maculation, and abdominal tergite coloration—closely match. Moreover, when placed into the dichotomous key to the species of *Pseudoharpax* Saussure, 1870 in La Greca's (1954: 18), *congicus* unambiguously keys out to *P. dubius*. Taken together, the morphological congruence, matching locality context, and placement within La Greca's key leave no reasonable doubt that *congicus* represents *Pseudoharpax dubius* La Greca, 1954, and it is here referred to that species.

As there is no date on any of the labels it is unsure when Beier made his annotation. It is thus also unsure whether this was done prior to La Greca's revision of the genus in 1954 (in which this specimen is not mentioned at all) or later.

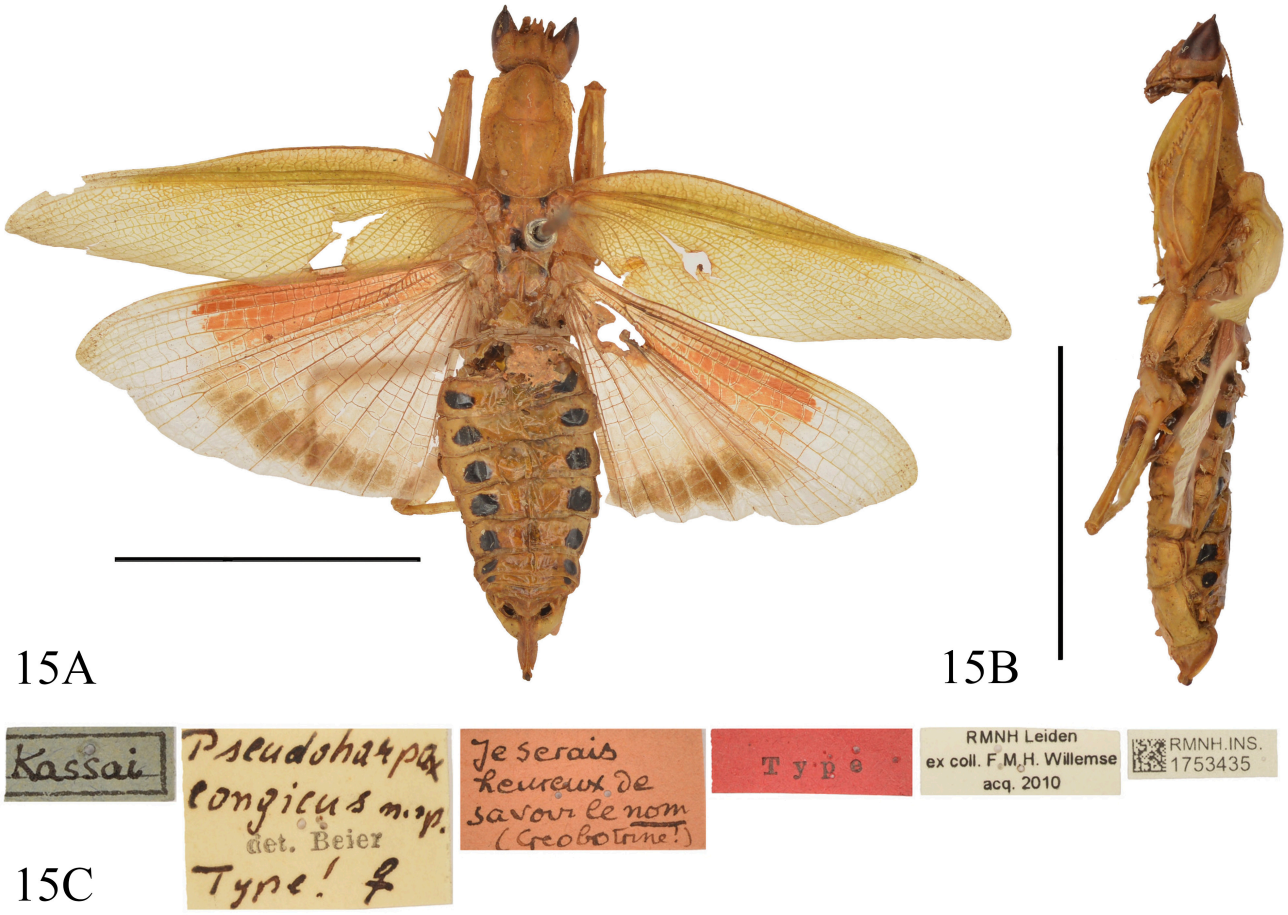


FIGURE 15. *Pseudoharpax 'congicus'* ♀ (RMNH.INS.1753435). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Family Gonypetidae Westwood, 1889

Subfamily Gonypetinae Westwood, 1889

Tribe Gonypetini Westwood, 1889

***Compsomantis* Saussure, 1873**

***Compsomantis crassiceps* (De Haan, 1842)**

Protonym: *Mantis (Oxypilus) crassiceps* De Haan, 1842
References: De Haan, 1842: 87, pl. XVII, fig. 8; Saussure, 1873: 23 [placement in *Compsomantis*]; Anderson, 2024: 45 [revision Compsomantina].

Type material: Holotype, ♀ (fig. 16): "//Java//Compsomantis [in pencil]/Museum Leiden/Compsomantis/crassiceps/Haan/Det./Museum Leiden/Compsomantis tumidiceps/Bol./det. C. Reinhold//"; RMNH.INS.1646909.

Type locality: Java, Krawang (fig. 63: no. 12).

Condition: Complete.

Remark: The specimen does not carry information or a label referring to its type status, which is not surprising as applying type information to specimens was not customary at the time the species was described. Among the material present in the former RMNH collection of Naturalis there is only one specimen carrying a round location label (fig. 16C) implying it is collected in the early 1800s, before the species was described. It is a female and it

matches the original description quite well. Contrary to the description, which mentions 'Krawang' the locality label mentions 'Java'. The identification label attached by C. Reinhold is based on a misidentification. In *C. tumidiceps*, recently placed in a separate genus, *Opsomantis* (Anderson, 2024), the fore tibiae is armed with 7 posteroventral spines, the specimen from Java has 9 posteroventral spines, typical for *Compsomanti*s, the only genus from the subtribe Compsomantina occurring in the Sundaland subregion.

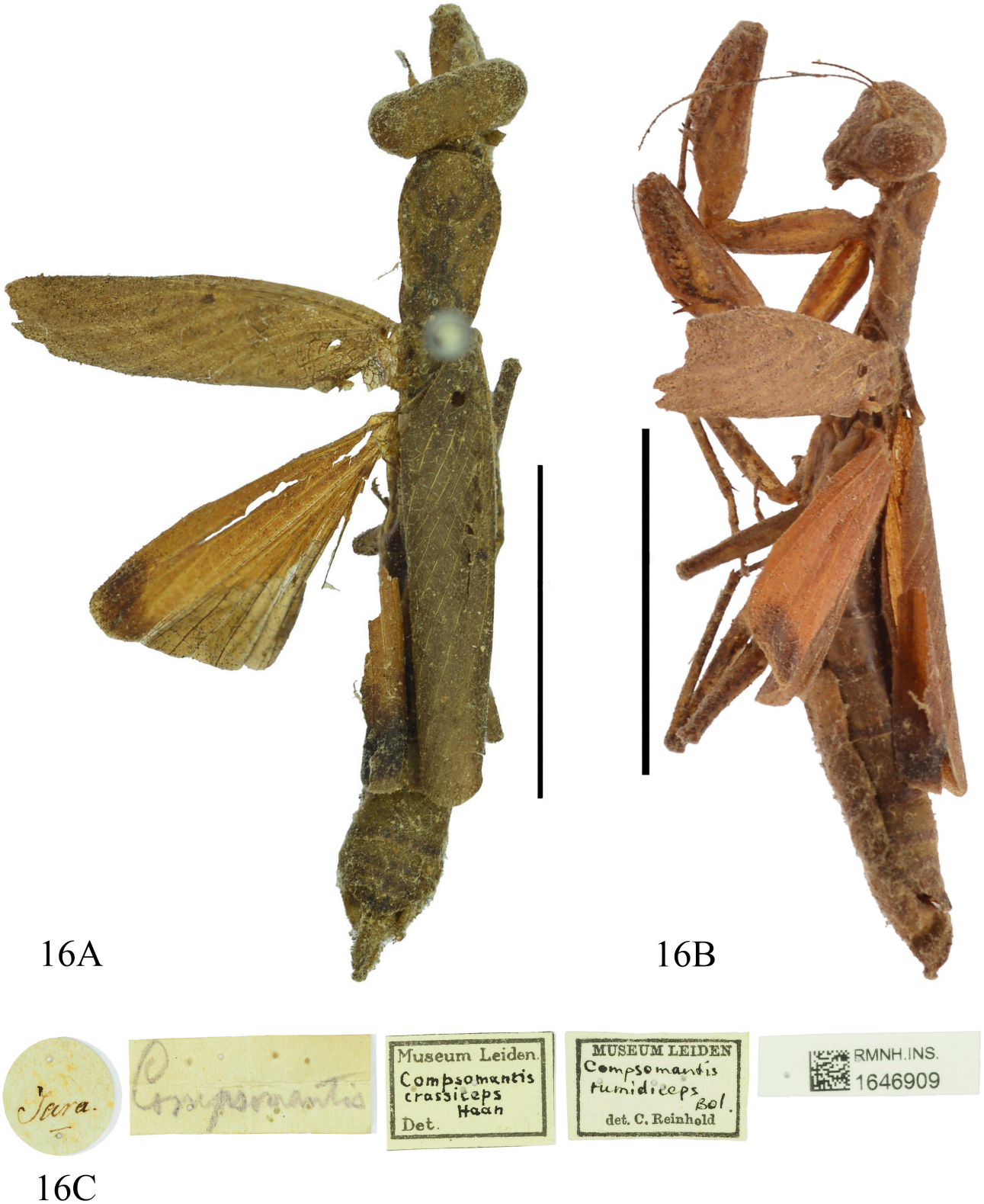


FIGURE 16. *Compsomantis crassiceps* (De Haan, 1842) holotype ♀ (RMNH.INS.1646909). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Family Gonypetidae Westwood, 1889

Subfamily Gonypetinae Westwood, 1889

Tribe Gonypetini Westwood, 1889

***Gonypeta* Saussure, 1869**

***Gonypeta punctata* (De Haan, 1842)**

Protonym: *Mantis (Oxypilus) punctata* De Haan, 1842
References: De Haan, 1842: 85; Pl. XVII, fig. 12–13; Saussure, 1869: 63 [placement in *Gonypeta*]

Type material: Syntype, ♂ (fig. 17): "//Java//Museum Leiden/Gonypeta/punctata/Haan./Det. D.A. Kerpel//Genitalia Prep.Gen.1911/by E.Shcherbakov/09/2019//", RMNH.INS.1256441.

Type locality: Java (fig. 63: no. 13).

Condition: Incomplete (both mid legs, left hind leg, tip of the abdomen missing). Genitalia in a small tube, on a separate pin stored with the specimen.

Remark: In the description of this species (p. 85) De Haan describes both male and female. We have been unable to trace a female of this species collected prior to 1842 in the collection of Naturais and consider this specimen as lost.



FIGURE 17. *Gonypeta punctata* (De Haan, 1842) syntype ♂ (RMNH.INS.1256441). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Family Gonypetidae Westwood, 1889

Subfamily Gonypetinae Westwood, 1889

Tribe Gonypetini Westwood, 1889

***Theopompa* Stål, 1877**

***Theopompa burmeisteri* (De Haan, 1842)**

Protonym: *Mantis (Mantis) burmeisteri* De Haan, 1842
References: De Haan, 1842: 80–81, Pl. XVI, fig. 3–4 [male & female]; Stål, 1877: 22, 47 [placement in *Theompompa*].

Type material: Syntype, ♂ (fig. 18): "//holotypus//Java//[written in pencil/Theopompa/burmeisteri/♀[Sic!] De Haan//", RMNH.INS1277429.

Type locality: Java (fig. 63: no. 14).

Condition: Incomplete (tarsi mid legs and left hind legs and antennae missing)

Remark: For his description, De Haan (1842: p. 80–81) studied both male(s?) and female(s?). Apart from a male from Java, no specimens of this species from Java could be traced in the Naturalis collection. The female therefore is considered lost.



FIGURE 18. *Theopompa burmeisteri* (De Haan, 1842). syntype ♂ (RMNH.INS1277429). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

***Theopompa servillei* (De Haan, 1842)**

Protonym: *Mantis (Mantis) servillei* De Haan, 1842.
References: De Haan, 1842: 81, Pl. XVI,fig. 5–6; Stål, 1877: 48 [placement in *Theopompa*].

Type material: Syntypes, 1 ♂, 2 ♀ (figs.19–21) "//Theopompa !/servillei De Haan/♀//", RMNH.INS.1277451; "//holotypus//Java//Museum Leiden/Theopompa servillei./Haan/Det.//", RMNH.INS.1277452; "//paratypus// Theopompa !/servillei De Haan/♀//", RMNH.INS.1277453

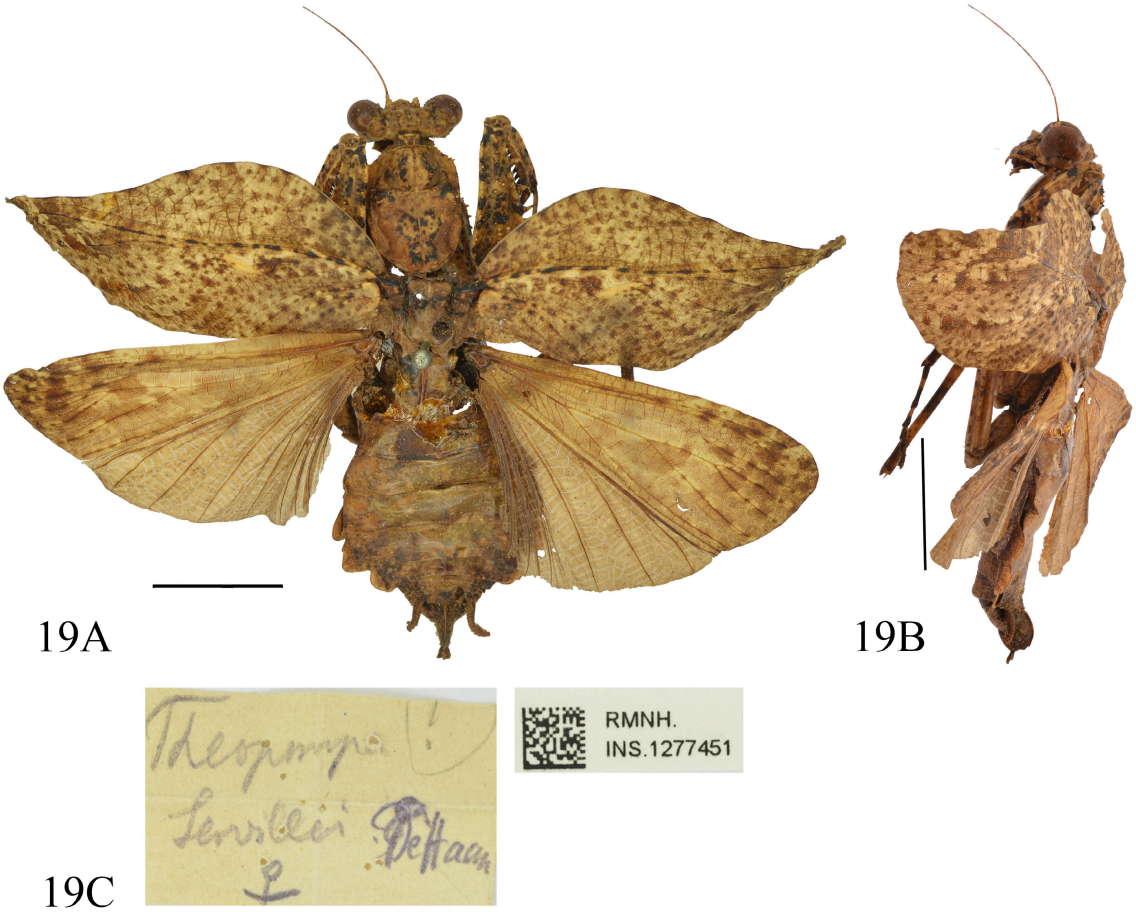


FIGURE 19. *Theopompa servillei* (De Haan, 1842). syntype ♀ (RMNH.INS1277451). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

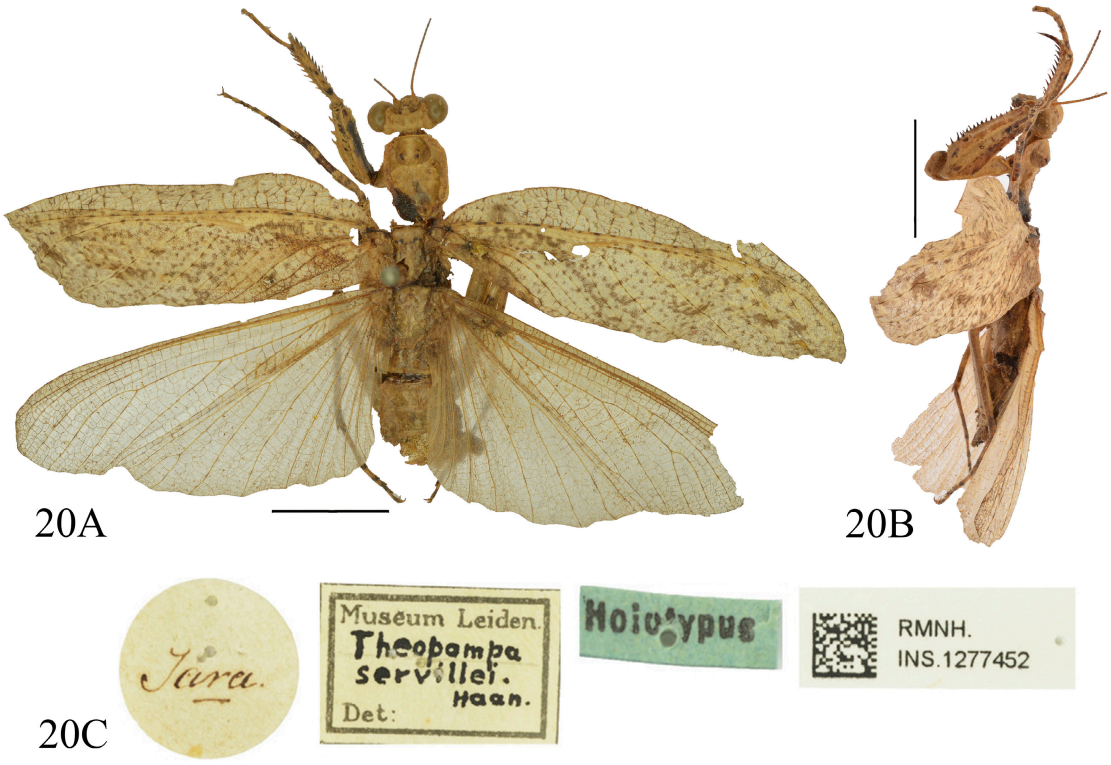


FIGURE 20. *Theopompa servillei* (De Haan, 1842). syntype ♂ (RMNH.INS1277452). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

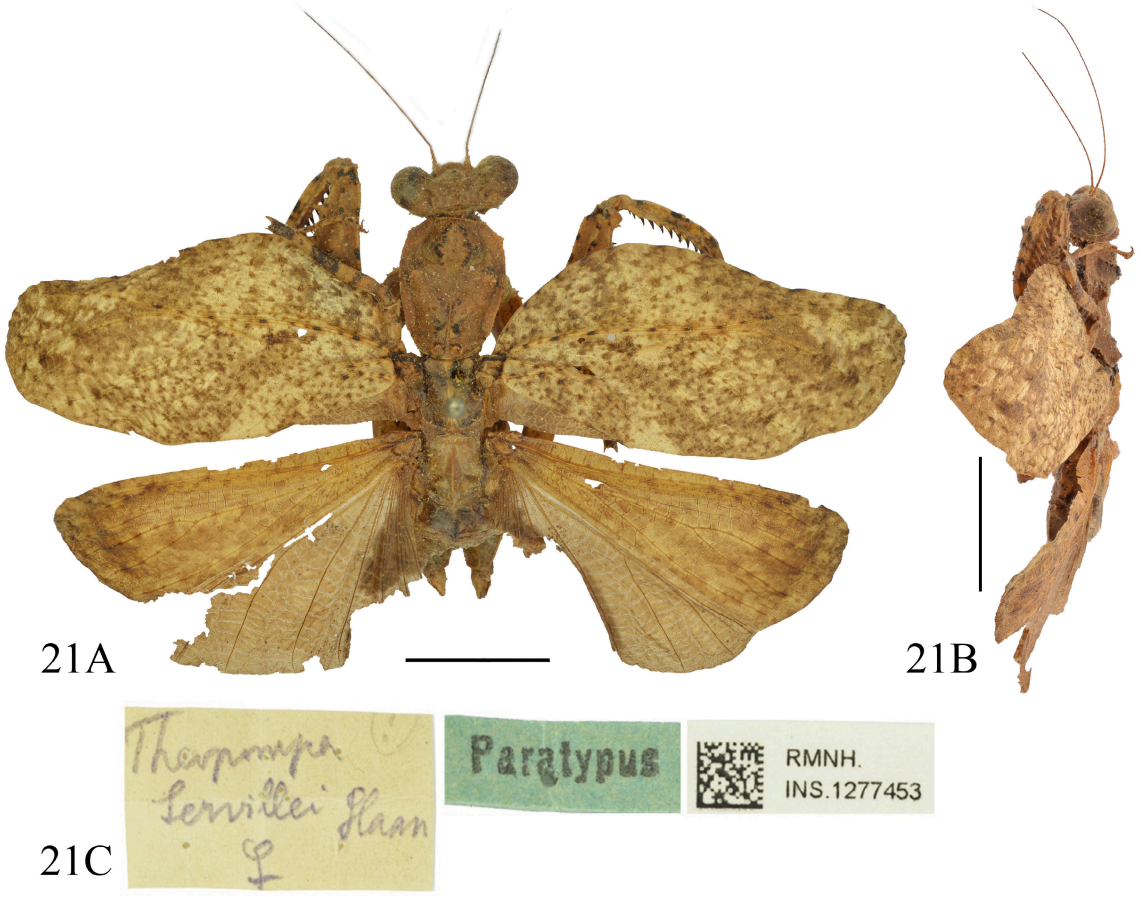


FIGURE 21. *Theopompa servillei* (De Haan, 1842). syntype ♀ (RMNH.INS1277453). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Type locality: Java, Lewibonger (300 ft) (fig. 63: no. 15).

Condition: Female syntype (RMNH.INS.1277451) incomplete (right mid leg missing), female syntype (RMNH.INS.1277453) incomplete (hindlegs, tarsi mid legs, abdomen missing), male syntype (RMNH.INS.1277452) incomplete (tip abdomen missing).

Family Gonypetidae Westwood, 1889

Subfamily Iridopteryginae Saussure, 1869

Tribe Amantini Schwarz & Roy, 2019

***Amantis* Giglio-Tos, 1915**

***Amantis reticulata* (De Haan, 1842)**

Protonym: *Mantis* (*Oxypilus*) *reticulata* De Haan, 1842
References: De Haan, 1842: p. 87, Pl. XVII, fig. 9; Giglio-Tos, 1915b: 151 [placement in *Amantis*].

Type material: Syntype, ♂ (fig. 22): "//Java//Museum Leiden/Amantis/reticulata (Haan)/Det. D.A. Kerpel//", RMNH.INS.1673849.

Type locality: Java, Krawang (fig. 63: no. 16)

Condition: Incomplete (left mid leg, right fore and left hind wing missing).

Remark: Besides a male from Java, no syntype specimens of this species from Java could be traced in the Naturalis collection. The female therefore is considered lost.

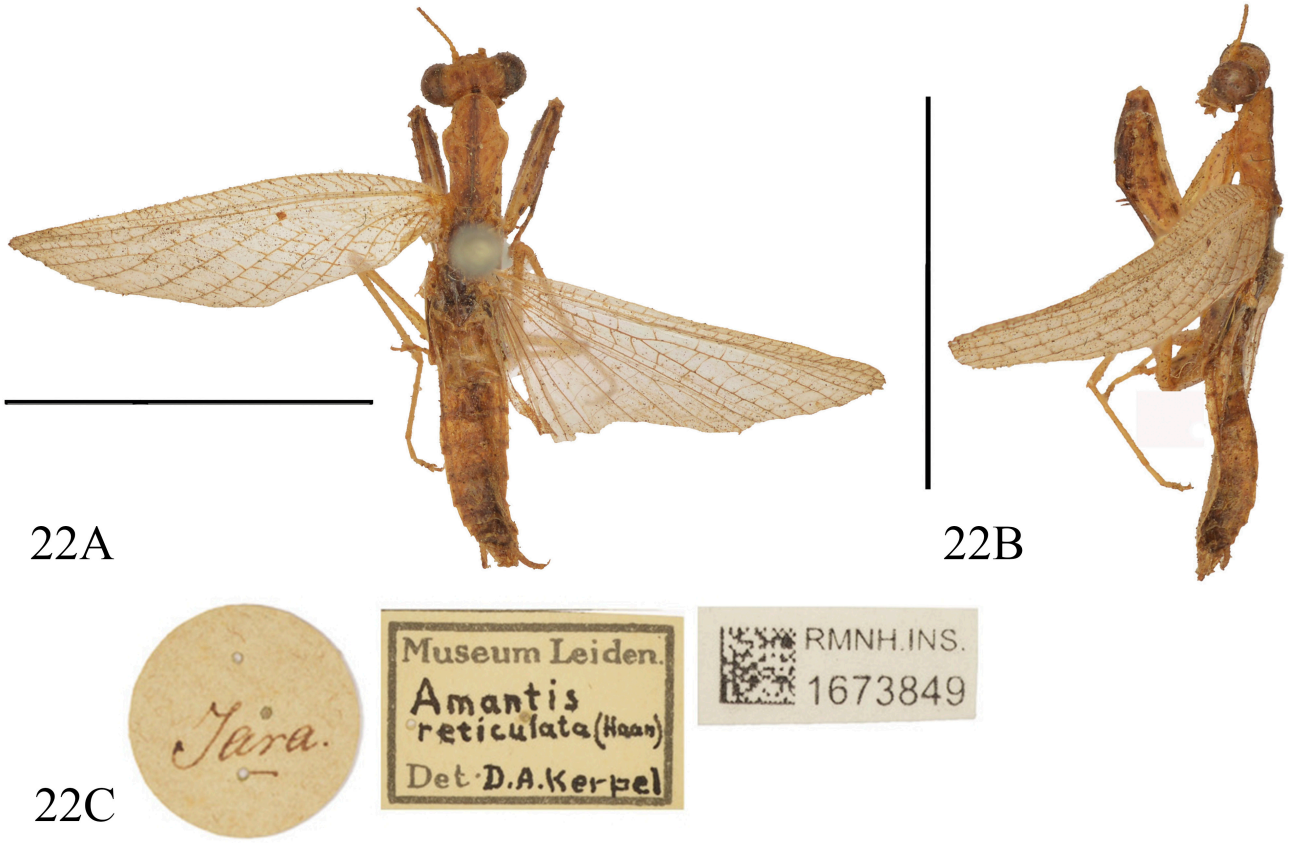


FIGURE 22. *Amantis reticulata* (De Haan, 1842). syntype ♂ (RMNH.INS.1673849). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Family Haaniidae Giglio-Tos, 1915

Subfamily Haaniinae Giglio-Tos, 1915

Tribe Haaniini Giglio-Tos, 1915

Haania Saussure, 1871

***Haania confusa* Saussure, 1871**

Protonym p.p.: *Mantis (Oxypilus) lobiceps* De Haan, 1842

References: De Haan, 1842: p. 85; Pl. XVII, fig. 5 [as *Mantis* (*Oxypilus*) *lobiceps*]; Saussure, 1871a: 307 [syntypes *M. lobiceps* belong to two species] ; Giglio-Tos, 1915b: 198 [synonymized *H. confusa* with *H. lobiceps*]; Chopard, 1920: 58 [reinstated *H. confusa*]; Beier, 1952b: 206–207 [revision *Haania*].

Type material: Holotype, ♀ (fig. 23): "/Muller/Padang//Haania ♀/confusa Sauss./det. Beier 1951/Type !//Museum Leiden/Haania/lobiceps/Haan/Det.//Type//", RMNH.INS.1753425;

Type locality: Padang (fig. 63: no.17).

Condition: Incomplete (antennae and hind legs missing).

Remark: In his seminal work, De Haan (1842: 85) described this specimen from Padang, Sumatra, under the name *Mantis (Oxypilus) lobiceps*, believing it to represent the male of a sexually dimorphic pair. He assigned this supposed male to match a second, short-winged specimen—clearly female—that he had also examined. However,

nearly three decades later, Saussure (1871a: 307) reevaluated De Haan's material and recognized that the so-called male was not a male at all, but in fact a female belonging to an entirely different species. In response, Saussure erected the genus *Haania*, and to account for the taxonomic confusion, he named the misidentified long-winged female *Haania (Pararidopteryx) confusus*. This act separated the short-winged female (*lobiceps*) from the long-winged female (*confusa*), clarifying the erroneous pairing made by De Haan. Despite Saussure's clear distinction between these two species, his insight was subsequently disregarded by Giglio-Tos (1915b: 198), who synonymized *confusus* under *lobiceps*, incorrectly treating them as the same taxon. He retained the older name *Haania lobiceps* for a composite concept that conflated both morphotypes. This error, which directly contradicted Saussure's corrective action, obscured the taxonomic clarity for years to come. It was not until Chopard (1920: 58) that Saussure's original taxonomy was formally reinstated. Chopard restored *confusus*—placing it under the genus *Pararidopteryx*—as a species distinct from *lobiceps*, thereby undoing the synonymy imposed by Giglio-Tos. The matter was ultimately resolved with finality in Beier's (1952b: 206) comprehensive revision of the genus *Haania*. Beier confirmed that Saussure's taxonomic judgment had been correct all along: De Haan's supposed male of *lobiceps* was in reality a female specimen of a completely different species—*confusa*. Thus, over a century after its initial misidentification, the identity of *Haania confusa* was definitively secured in the taxonomic record.

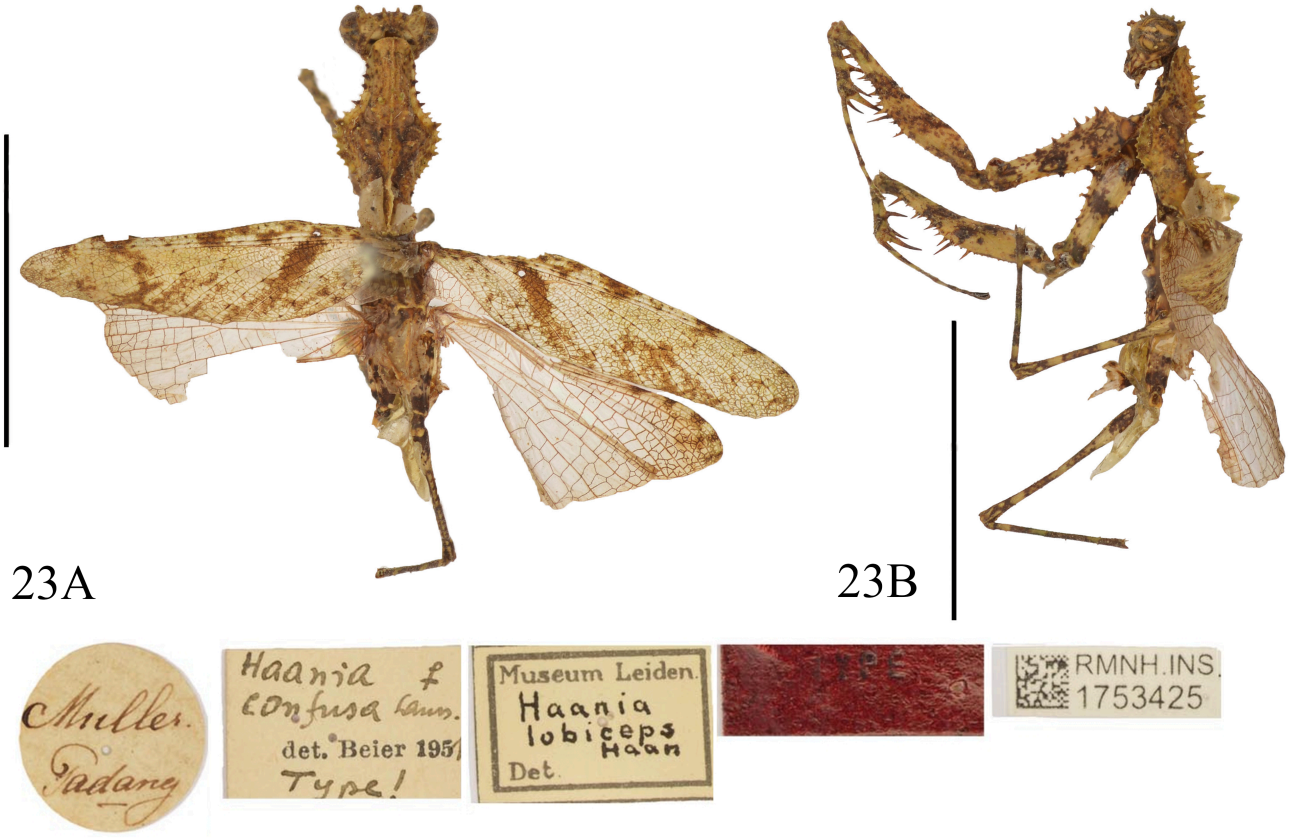


FIGURE 23. *Haania confusa* Saussure, 1871. holotype ♀ (RMNH.INS.1753425). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

***Haania lobiceps* (De Haan, 1842)**

Protonym p.p.: *Mantis* (*Oxypilus*) *lobiceps* De Haan, 1842: p. 85; Pl. XVII, fig. 4
References: De Haan, 1842: p. 85; Pl. XVII, fig. 4; Saussure, 1871a: 307 [syntypes *M. lobiceps* belong to two species]; Beier, 1952b: 206–207 [revision *Haania*].

Type material: See the remark made under *Haania confusa* Saussure, 1871. The current search in the Naturalis collection for material used by De Haan, only revealed the female currently assigned to *Haania confusa* Saussure,

1871. The second female, the holotype of *Haania lobiceps* (De Haan, 1842) from 'Krawang' could not be traced and is assumed lost as was already indicated by Beier (1952b).

Type locality: Krawang.

Haania simplex Beier, 1952

Protonym: *Haania simplex* Beier, 1952.
Reference: Beier, 1952b: p. 206; fig. 3.

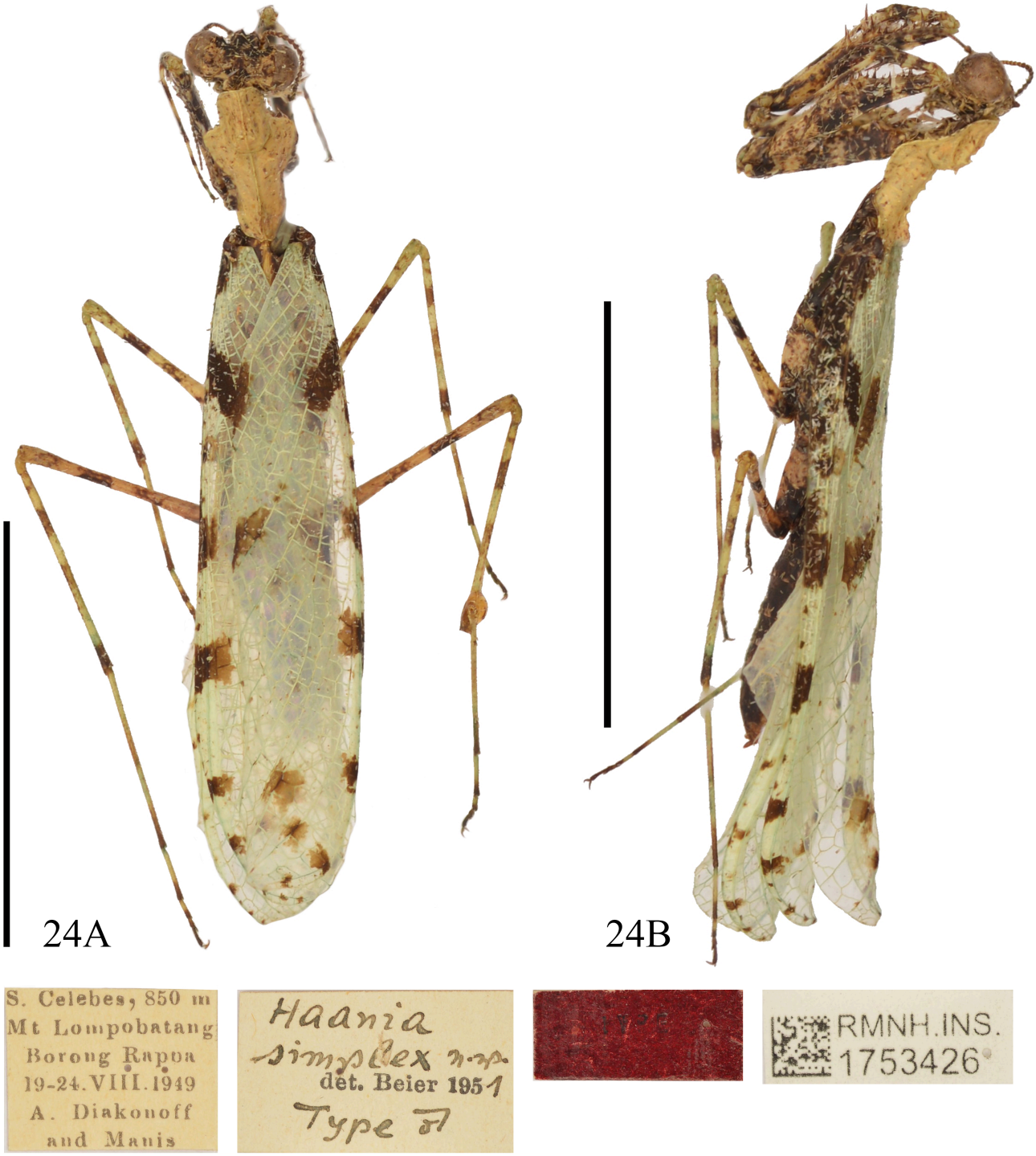


FIGURE 24. *Haania simplex* Beier, 1952. holotype ♂ (RMNH.INS.1753426). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Type material: Holotype, ♂ (fig. 24): "//S. Celebes, 850 m/Mt. Lompobatang/Borong Rapoa/19–24.VIII.1949/A. Diakonoff and Manis//Haania/simplex n.sp./det. Beier 1951/ Type ♂//Type//", RMNH.INS.1753426.

Type locality: South Celebes (fig. 63: no. 18).

Condition: Good.

Family Hoplocoryphidae Giglio–Tos, 1916

Hoplocorypha bicornis Deeleman-Reinhold, 1957

Protonym: *Hoplocorypha bicornis* Deeleman-Reinhold, 1957.
Reference: Deeleman-Reinhold, 1957: 55–57.



FIGURE 25. Hoplocorypha bicornis Deeleman-Reinhold. 1957. holotype ♀ (RMNH.INS.1721070). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Type material: Holotype, ♀ (fig. 25):"//Holotype//Museum Leiden/Prof. H.J. Lam &/A.D.J. Meeuse/Pietersberg/1938// Museum Leiden/Hoplocorypha/bicornis ♀/Det. C.D.R.//"; RMNH.INS.1721070.

Type locality: South Africa: Transvaal, Pietersburg (fig. 62: no. 19)

Condition: Incomplete (left hind leg missing, abdomen broken off).

Remark: Ehrmann (2002: 186) states that the female holotype and a female paratype are kept at RMNH. However in the original description Deeleman-Reinhold (1957: 55) only mentions one specimen, the holotype, the only specimen of this species currently present in the collection of Naturlis. The reference to a paratype in Ehrmann (2002) is a mistake.

Family Hymenopodidae Giglio-Tos, 1915

Subfamily Acromantinae Brunner de Wattenwyl, 1893

Tribe Acromantini Brunner de Wattenwyl, 1893

***Acromantis* Saussure, 1870**

***Acromantis oligoneura* (De Haan, 1842)**

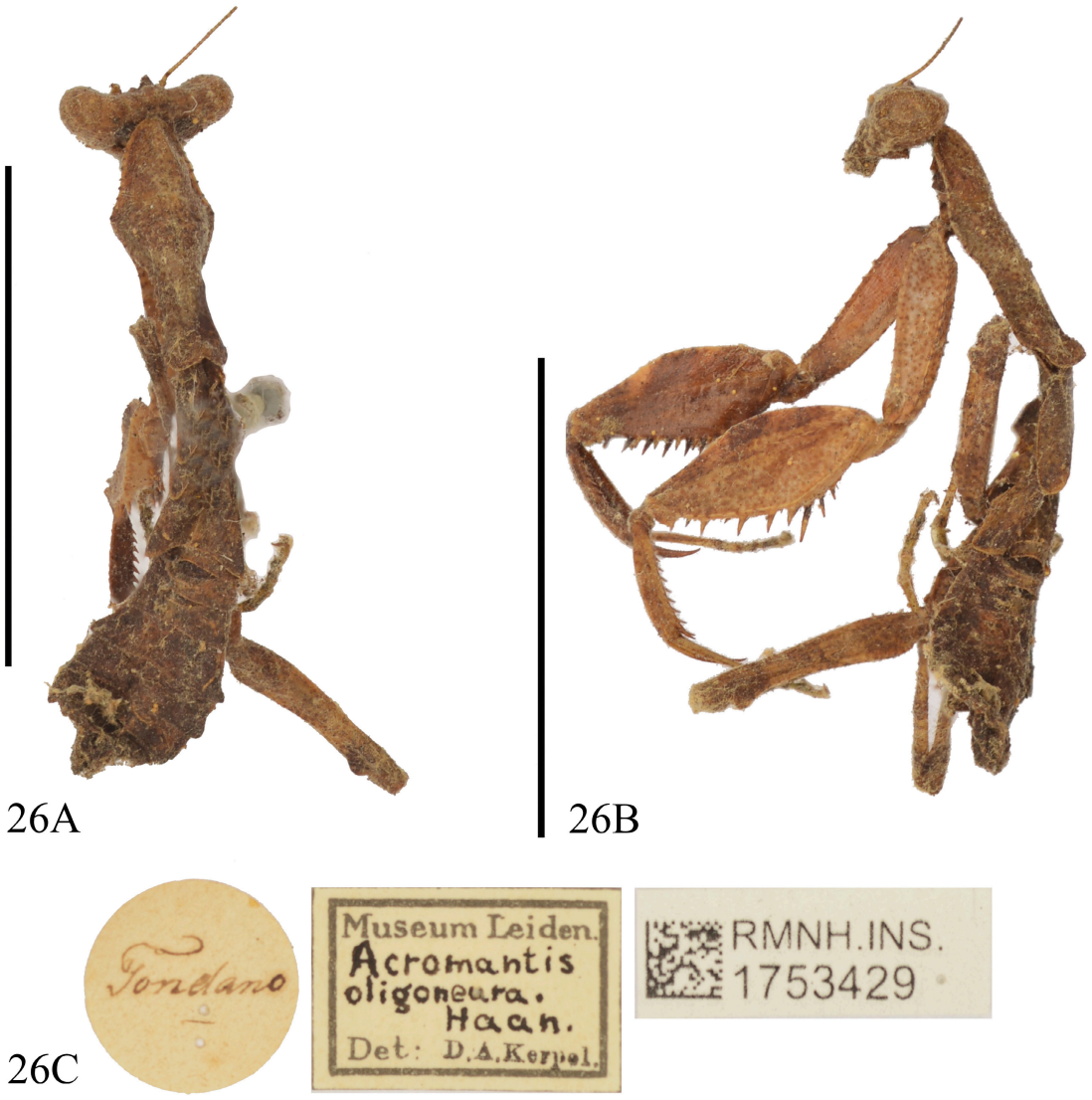


FIGURE 26. *Acromantis oligoneura* (De Haan, 1842). syntype juvenile (RMNH.INS.1753429). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

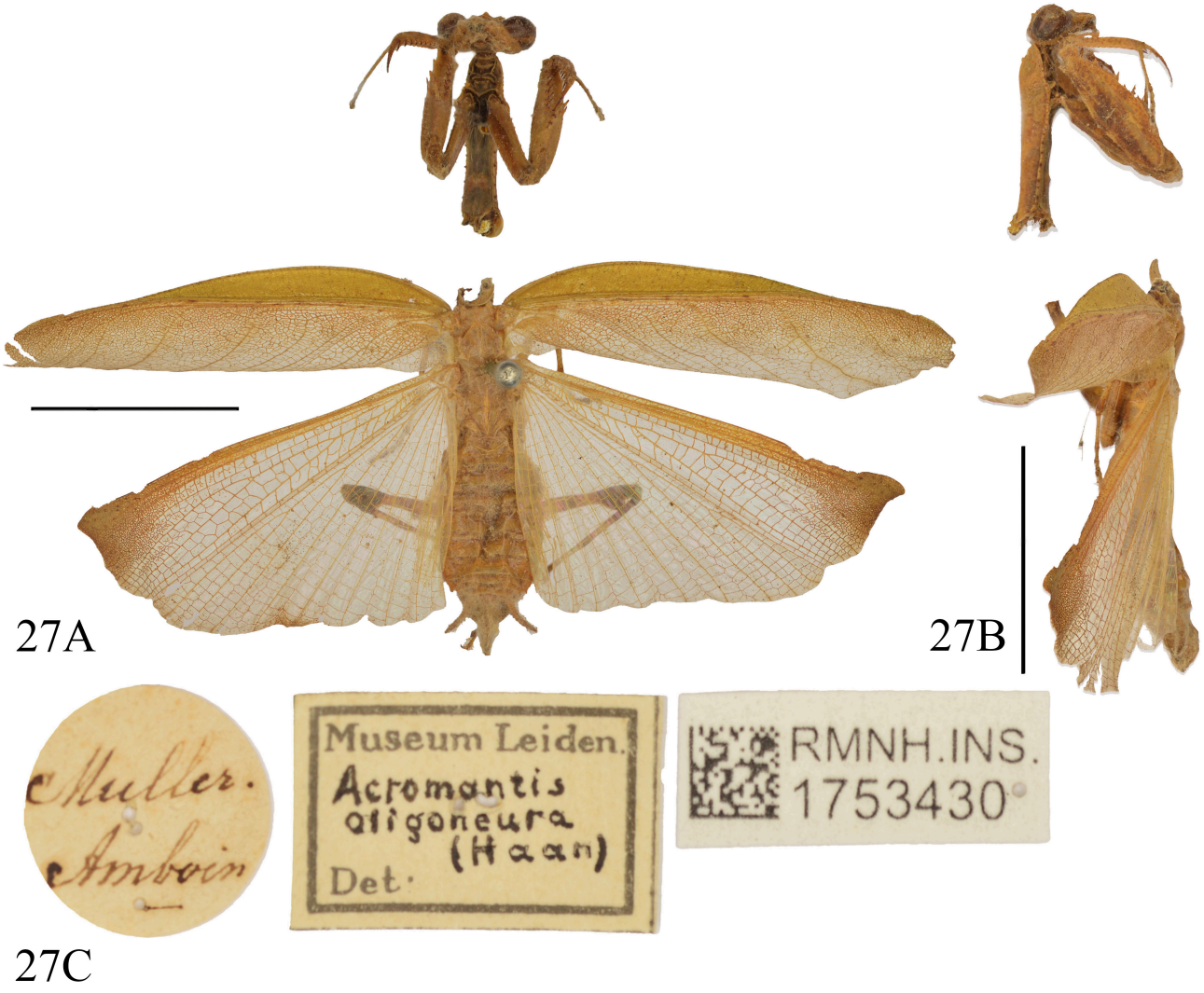


FIGURE 27. *Acromantis oligoneura* (De Haan, 1842). syntype ♀ (RMNH.INS.1753430). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Protonym: *Mantis oligoneura* De Haan, 1842.
References: De Haan, 1842: p. 90–91, Pl. XVIII, fig. 6; Saussure, 1871a: 210, fig. 10, 10a [placement in *Acromantis*]

Type material: Syntypes (figs 26–28): juvenile (fig. 26): "//Tondano//Museum Leiden/Acromantis/oligoneura./Haan/Det. D.A. Kerpel//", RMNH.INS.1753429 • ♀ (fig. 27): "//Muller/Amboin// Museum Leiden/Acromantis/oligoneura./Haan/Det.//", RMNH.INS.1753430 • ♀ (fig. 28): "//Muller/Padang// Museum Leiden/Acromantis/oligoneura./Haan/Det. D.A. Kerpel//", RMNH.INS.1753432.

Type locality: Java, Padang, Amboina, Tondano (Celebes) (fig. 63: no. 20).

Condition: syntype juvenile (RMNH.INS.1753429) complete except for right mid leg, syntype female (RMNH.INS.1753430) complete apart from the missing antenna (head and pronotum detached), syntype female (RMNH.INS.1753432) complete except for right hind leg.

Remark: No specimen from Java could be traced in the Naturalis collection and this specimen (or specimens) is/are assumed lost..

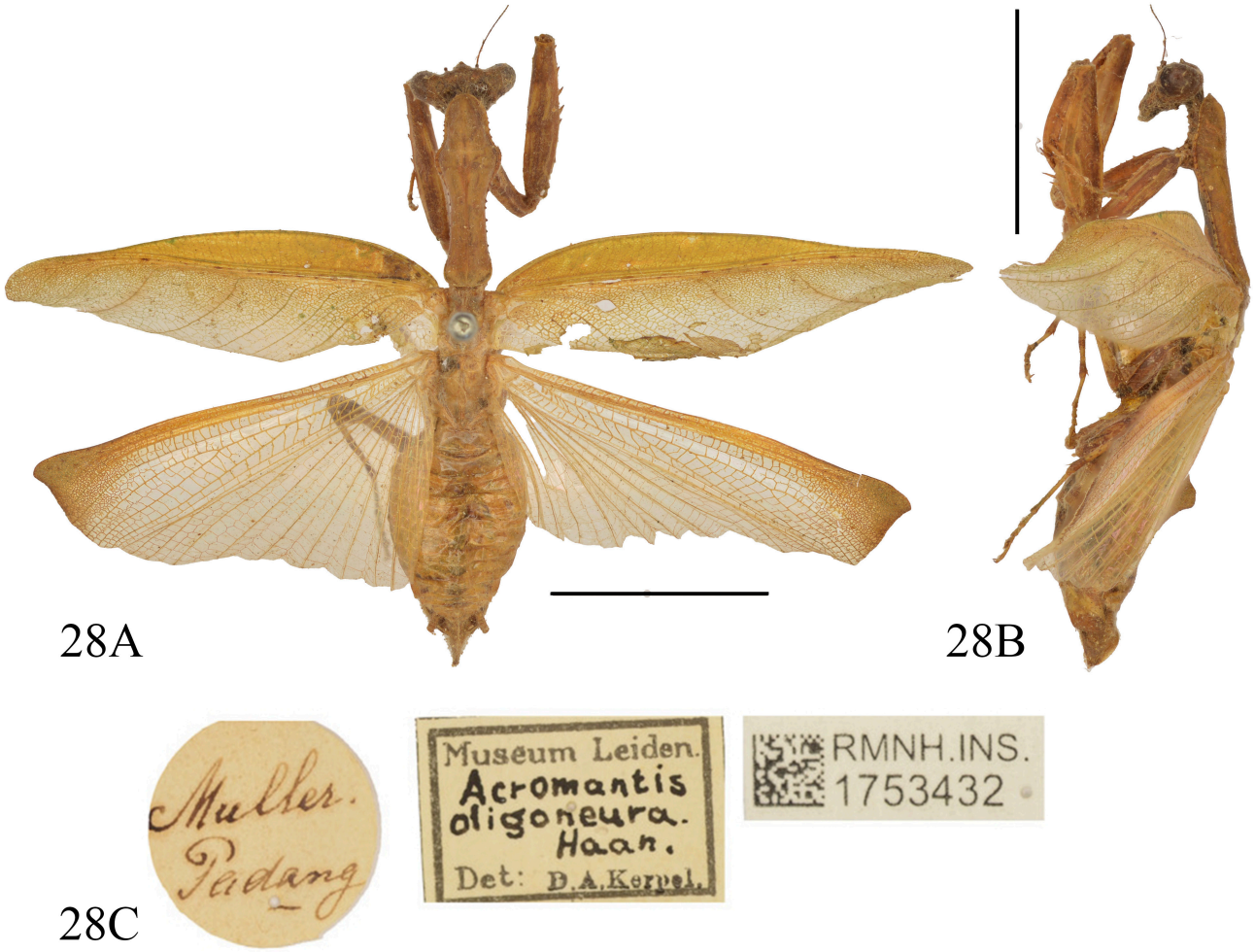


FIGURE 28. *Acromantis oligoneura* (De Haan, 1842). syntype ♀ (RMNH.INS.1753432). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Majangella Giglio-Tos, 1915

Majangella ophirensis (Werner, 1922)

Protonym: *Ephippiomantis ophirensis* Werner, 1922
References: Werner, 1922: 123–125; Svenson & Vollmer, 2014: 104, fig. 1G [synonymy *Ephippiomantis* with *Majangella*].

Type material: Holotype, ♂ (fig. 29): "//holotype//V.1915/E Jacobson/Tanangtalu/Ophir Distrikten/Pad. Bovenl.// Ephippiomantis/ophirensis/n.g. n.sp. Werner/type ♂//"; RMNH.INS.1721026.

Type locality: Sumatra, West Sumatra, Ophir district (fig. 63: no. 21).

Condition: Good.

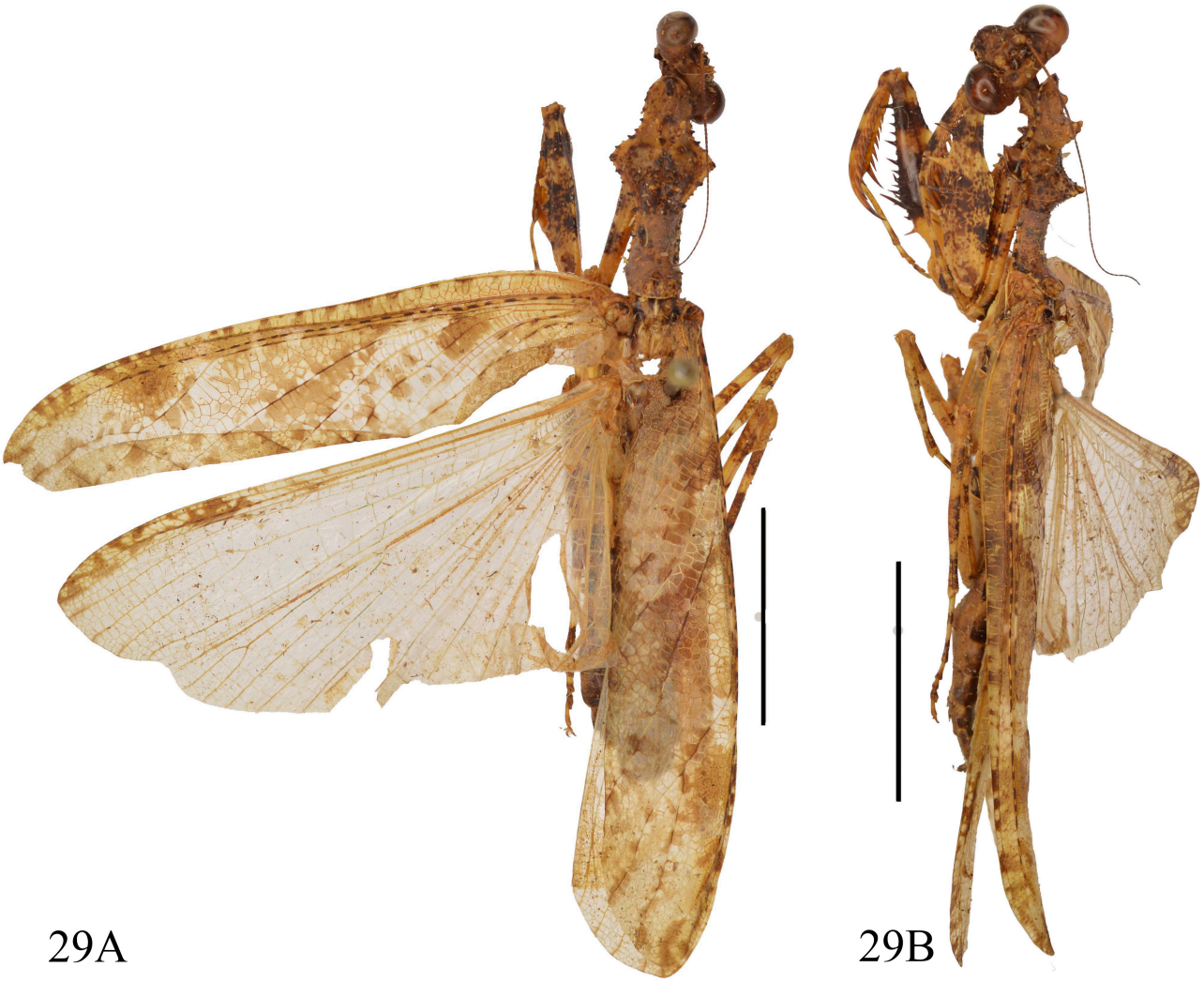


FIGURE 29. *Majangella ophirensis* (Werner, 1922). holotype ♂ (RMNH.INS.1721026). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Psychomantis Giglio-Tos, 1915

Psychomantis borneensis (De Haan, 1842)

Prootonym: *Mantis borneensis* De Haan, 1842
References: De Haan, 1842: 91; Giglio-Tos, 1915c: 2 [placement in *Psychomantis*].

Type material: Holotype, ♂ (fig. 30): "//Banjerm.//Museum Leiden/Psychomantis/ borneensis/(Haan)/Det.//", RMNH.INS.1753433.

Type locality: Borneo (Sakoembang) (fig. 63: no. 22).

Condition: Incomplete (left hind leg missing).

Remark: De Haan (1842: 91) mentions Sakoembang (Borneo) as the location where the type specimen was found. Sakoembang is assumed to be a mountain in South Kalimantan. The label however states "Banjerm." as location, also located in South Banjarmasin. It remains unclear why De Haan mentions Sakoembang instead of Bajarmasin but despite this discrepancy we think it appropriate to consider this the type specimen.

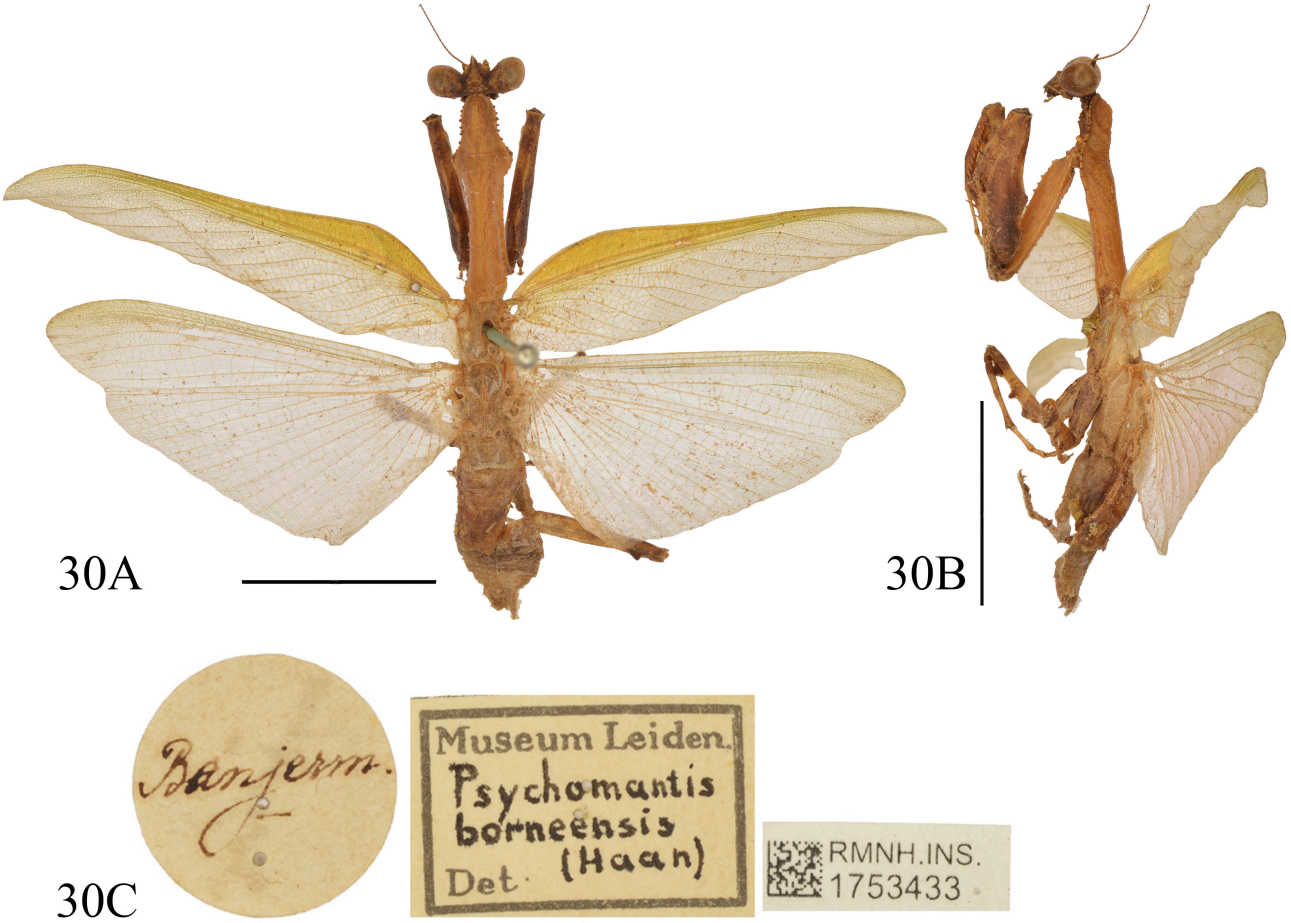


FIGURE 30. *Psychomantis borneensis* (De Haan, 1842). holotype ♂ (RMNH.INS.1753433). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Family Hymenopodidae Giglio-Tos, 1915

Subfamily Hymenopodinae Giglio-Tos, 1915

Tribe Anaxarchini Giglio-Tos, 1919

***Anaxarcha* Stål, 1877**

***Anaxarcha pulchra* (Werner, 1922)**

Protonym: *Parastatilia pulchra* Werner, 1922: 119
References: Werner, 1922: 119; Beier, 1937a: supplement [placement in *Anaxarcha*].

Type material: Holotype, ♀ (fig. 31): "//J Menzel/Loeboe Bangkoe/W Sumatra/Mei 1905//Parastatilia/pulchra Werner/Type!//" RMNH.INS.1753438. .

Type locality: Sumatra (fig. 63: no. 23).

Condition: Incomplete (left fore-, mid and hind legs are missing)

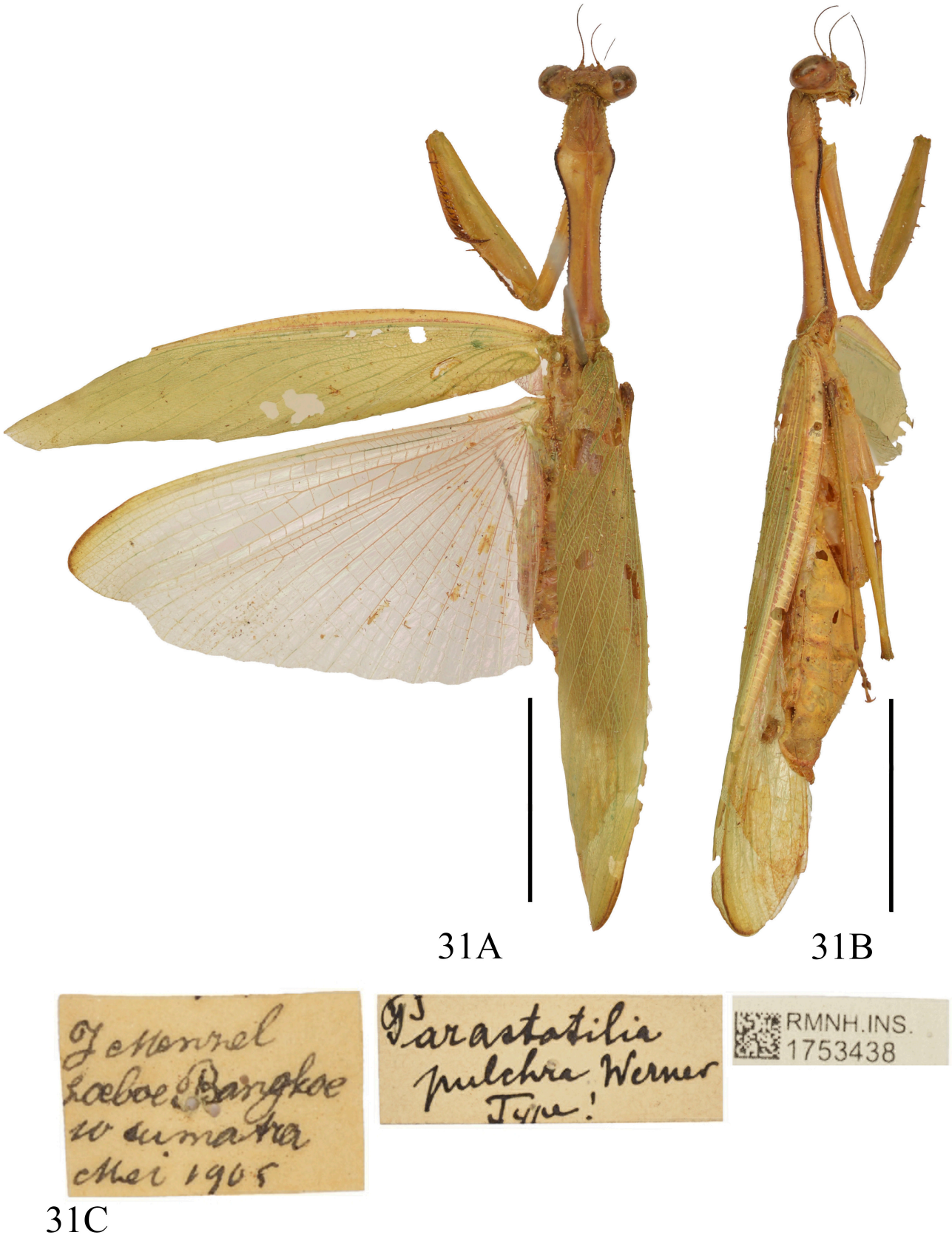


FIGURE 31. *Anaxarcha pulchra* (Werner, 1922). holotype ♀ (RMNH.INS.1753438). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

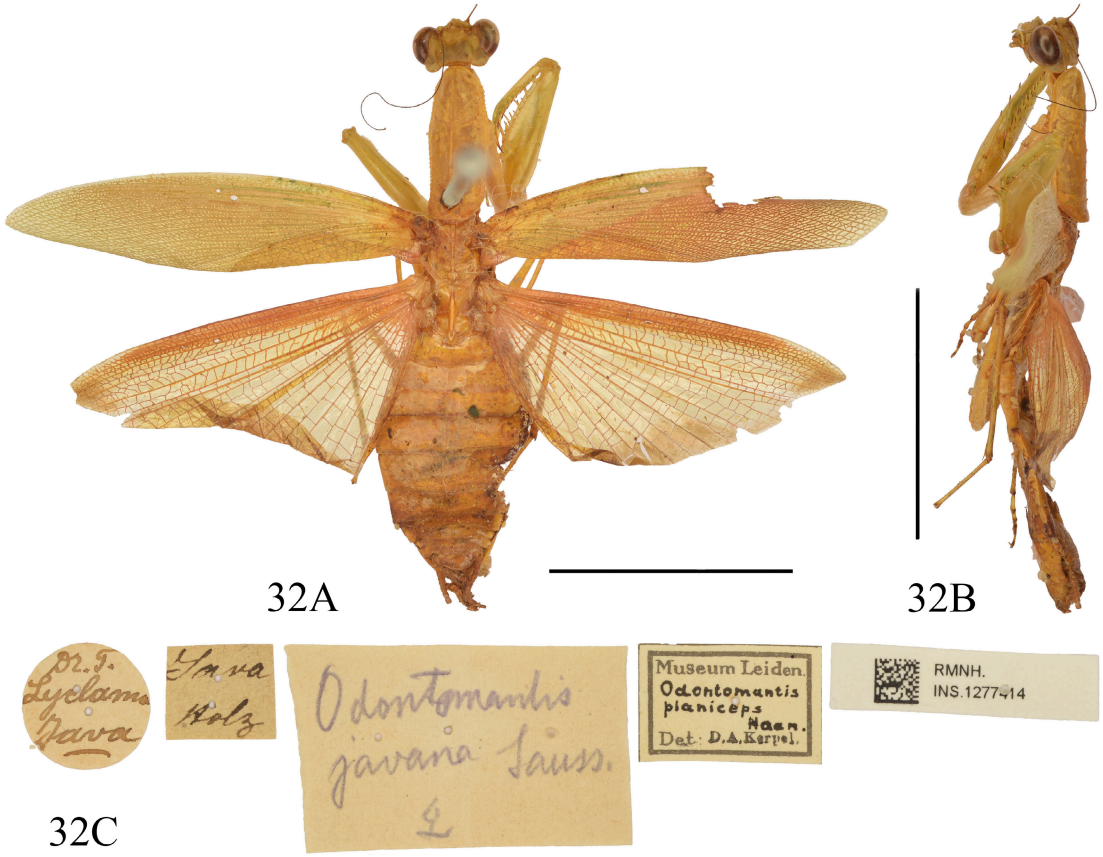


FIGURE 32. *Odontomantis planiceps* (De Haan, 1842). syntype ♀ (RMNH.INS.1277414). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

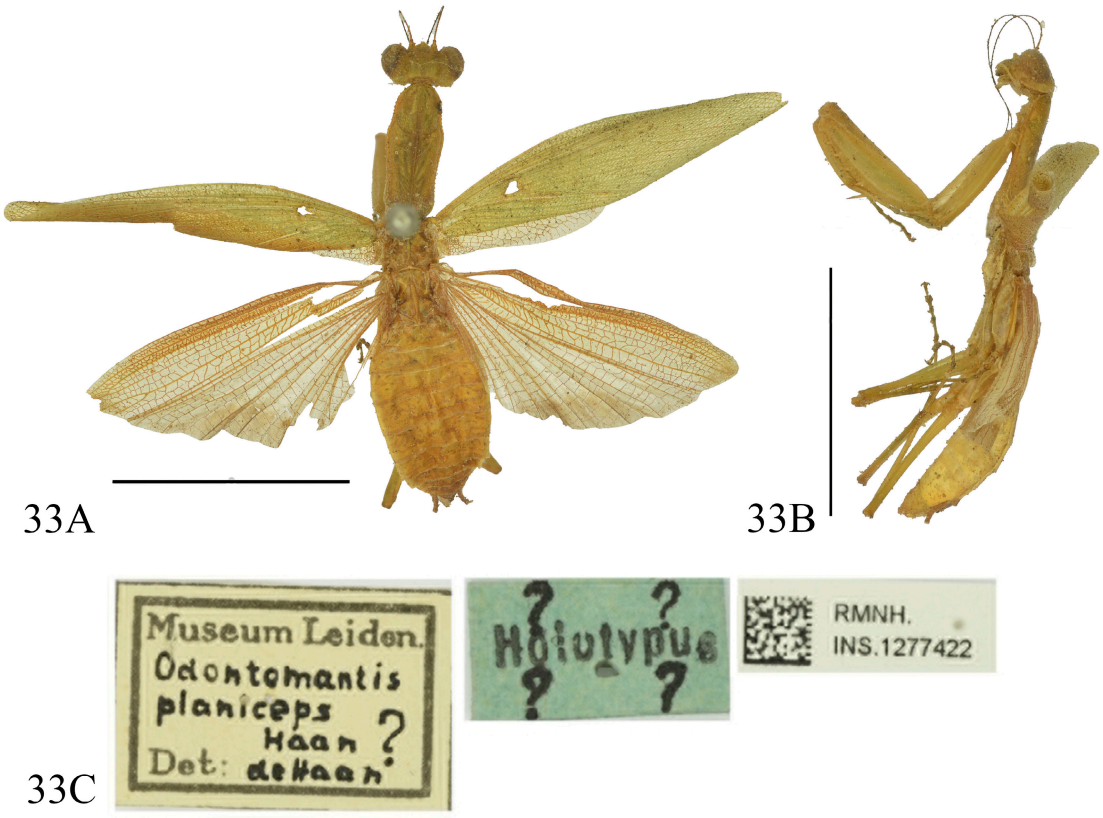


FIGURE 33. *Odontomantis planiceps* (De Haan, 1842). syntype ♂ (RMNH.INS.1277422). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

***Odontomantis* Saussure, 1871**

***Odontomantis planiceps* (De Haan, 1842)**

Protonym: *Mantis (Oxypilus) planiceps* De Haan, 1842
References: De Haan, 1842: p. 88; Pl. XVII, fig. 10–11; Saussure, 1871a: 180 [placement in *Micromantis*]; Kirby, 1904: 223 [listed under *Odontomantis*]; Beier, 1934: 16 [synonymy *Odontomantis javana* with *Micromantis planiceps*]

Type material: Syntype, ♀: "//Dr. T. /Lyclama/Java//Java/Stolz//[pencil written]Odontomantis/javana Sauss/♀// Museum Leiden/ Odontomantis/planiceps/Haan/Det. D.A.Kerpel//", RMNH.INS.1277414 (fig. 32).

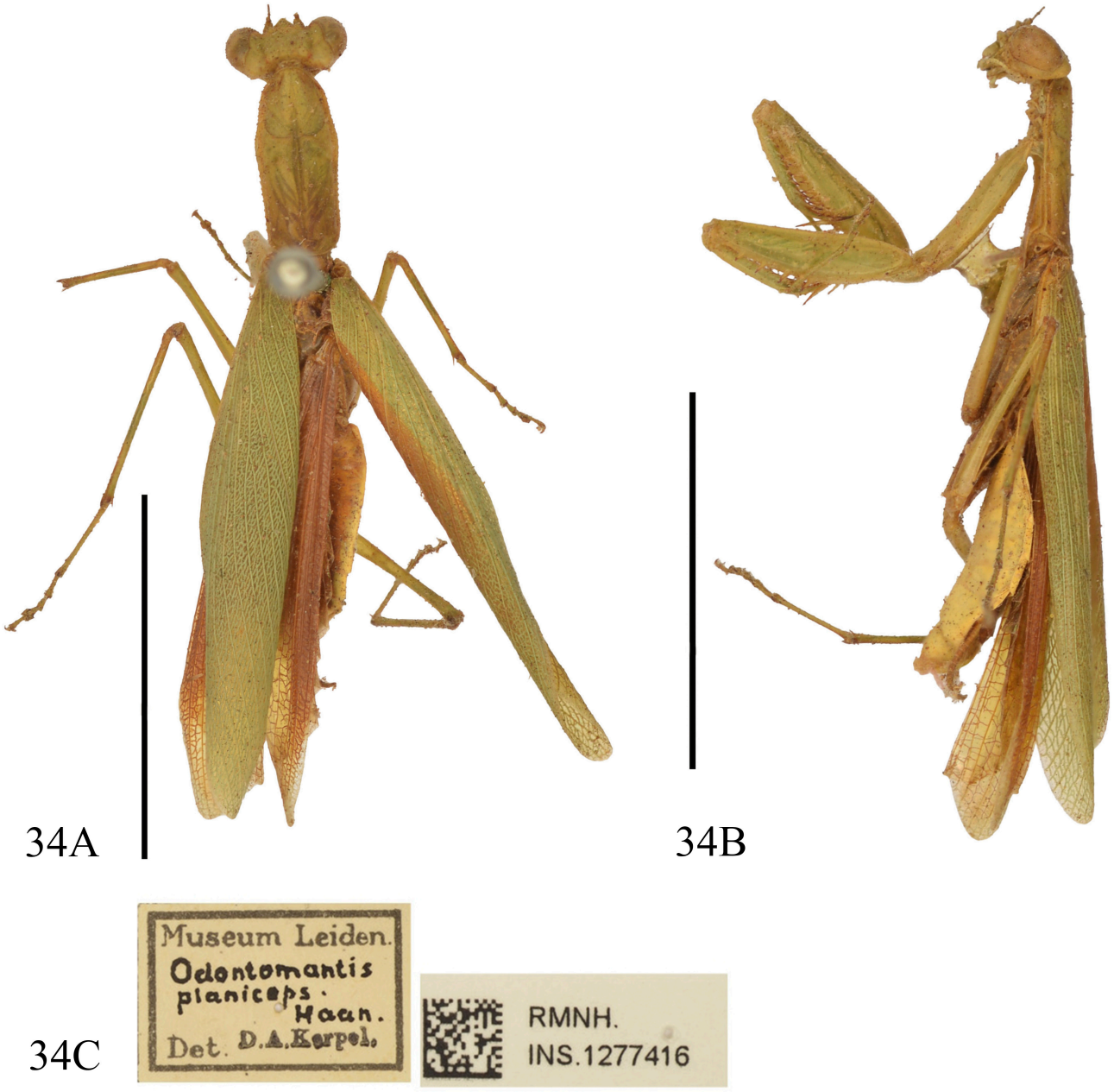


FIGURE 34. *Odontomantis planiceps* (De Haan, 1842). syntype ♀ (RMNH.INS.1277416). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

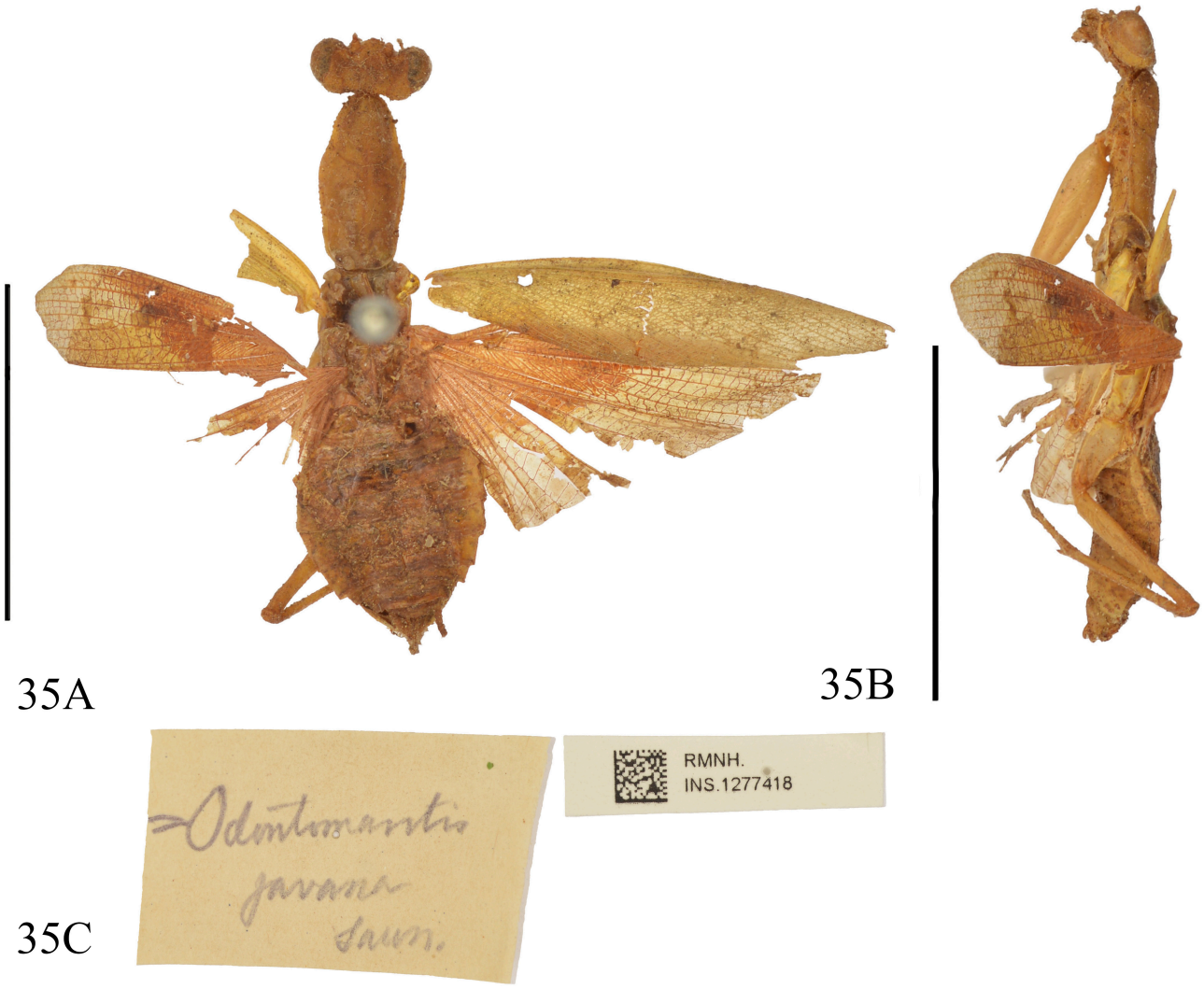


FIGURE 35. *Odontomantis planiceps* (De Haan, 1842). syntype ♀ (RMNH.INS.1277418). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Additional material:

♂ (figs. 33–37): "//Holotypus?//Museum Leiden/Odontomantis/planiceps/Haan ?/Det. De Haan?//", RMNH.INS.1277422 (fig. 33); 4 ♀: "//Museum Leiden/ Odontomantis/planiceps/ Haan/Det. D.A.Kerpel//", RMNH.INS.1277416 (fig. 34)• "//[pencil written] Odontomantis/javana Sauss//, RMNH.INS.1277418 (fig. 35)• "//Museum Leiden/ Odontomantis/ planiceps/Haan/Det. D.A.Kerpel//", RMNH.INS.1277419 (fig. 36)• "[handwritten] Odontomantis/ javana Sauss//", RMNH.INS.1277421 (fig. 37).

Type locality: Java (fig. 63: no. 24), Borneo.

Condition: Good (RMNH.INS.1277422, RMNH.INS.1277414), good except for the antennae and the tarsus of the left mid leg (RMNH.INS.1277416), incomplete (RMNH.INS.1277418: left hindwing, antennae and all legs except for the left hind leg missing),

(RMNH.INS.1277419: antennae, both midlegs and tibia and tarsus left hind leg missing),

(RMNH.INS.1277421: incomplete (antennae, left forewing, right hind leg, tarsus left hind leg and tibia and tarsus right mid leg missing).



FIGURE 36. *Odontomantis planiceps* (De Haan, 1842). syntype ♀ (RMNH.INS.1277419). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

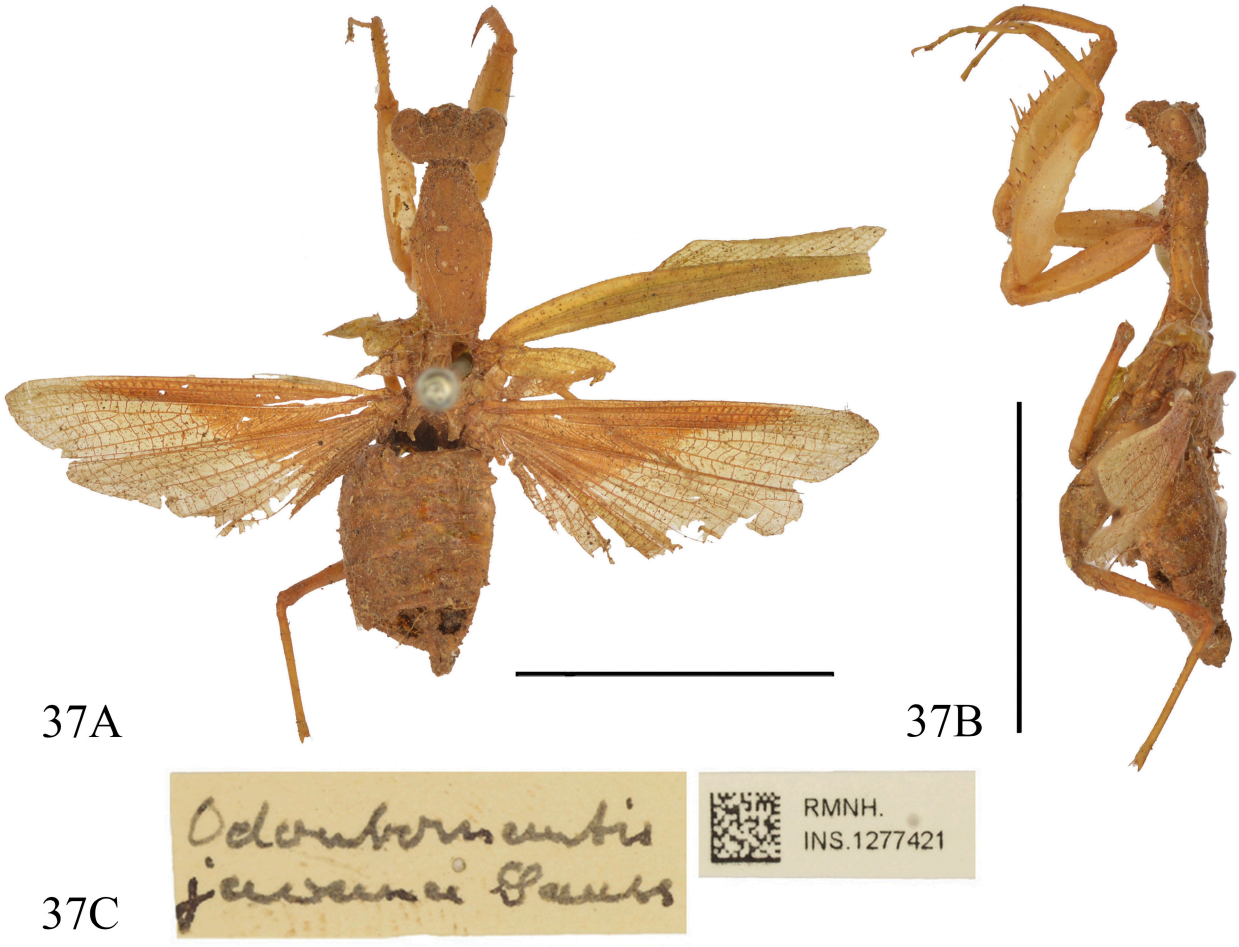


FIGURE 37. *Odontomantis planiceps* (De Haan, 1842). syntype ♀ (RMNH.INS.1277421). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Remark: For the description of this species De Haan used both male and female specimens. In the last sentence in the Dutch text, added after the Latin description, De Haan refers to 'mannetjes' and 'wijfjes' suggesting he studied more specimens of each sex. As no choice was made regarding the type, specimens mentioned in the description should be considered syntypes. Among the 15 specimens of this species present in the Naturalis collection there is one male and five females that most likely have been collected prior to the description of De Haan in 1842, based on the insect pin used. A female carrying a location label (RMNH.INS.1277414) is considered here to be one of the syntypes studied by De Haan. Unfortunately the male (fig. 33) and four of the females (figs. 34–37) do not carry labels pointing to their origin. Because these specimens lack location labels, they are not considered to belong to the syntype series studied by De Haan but are listed and illustrated for the sake of completeness.

Family Hymenopodidae Giglio-Tos, 1915

Subfamily Hymenopodinae Giglio-Tos, 1915

Tribe Hymenopodini Giglio-Tos, 1915

***Creobroter* Audinet-Serville, 1838**

***Creobroter sumatranus* (De Haan, 1842)**

Protonym: *Mantis* (*Harpax*) *sumatrana* De Haan, 1842.
References: De Haan, 1842: p. 89–90, Pl. XVII, figs 14–15; Saussure, 1871a: 293 [placement in *Creobotra*].

Type material: Syntype ♂ (fig. 38): ‘’//Padang//Museum Leiden/Creobroter/sumatranus/(Haan)/Det.//”, RMNH.INS.1753427; “//

Type locality: Padang [Indonesia, Sumatra, Sumatera Barat] (fig. 63: no. 25).

Condition: Incomplete (left fore leg, right mid leg, left hind leg, tarsus of right hind leg and abdomen missing)

Remark: In the description De Haan mentions a male and female from this species. The syntype in the collection, although missing its abdomen, is presumed to be the male as it matches the drawing of the male (Pl. 17, fig. 15) in De Haan (1842). The female could not be traced and seems no longer present in the collection of Naturalis.

Family Hymenopodidae Giglio-Tos, 1915

Subfamily Oxypilinae Saussure, 1871

Tribe Hestiasulini Giglio-Tos, 1915

***Astyliasula* Schwarz & Shcherbakov, 2017**

***Astyliasula phyllopus* (De Haan, 1842)**

Protonym: *Mantis* (*Oxypilus*) *phyllopus* De Haan, 1842
References: De Haan, 1842: p. 84; Pl. XVI, fig. 7; Schwarz & Shcherbakov, 2017: 255 [placement in *Astyliasula*].

Type material: Holotype, ♂ (fig. 39): “//Java//Pachymantis//Hestiasula//”, RMNH.INS.1753452

Type locality: Java (fig. 63: no. 26).

Condition: Incomplete (right fore leg, tarsi of both hind legs, part of the antennae and abdomen missing).

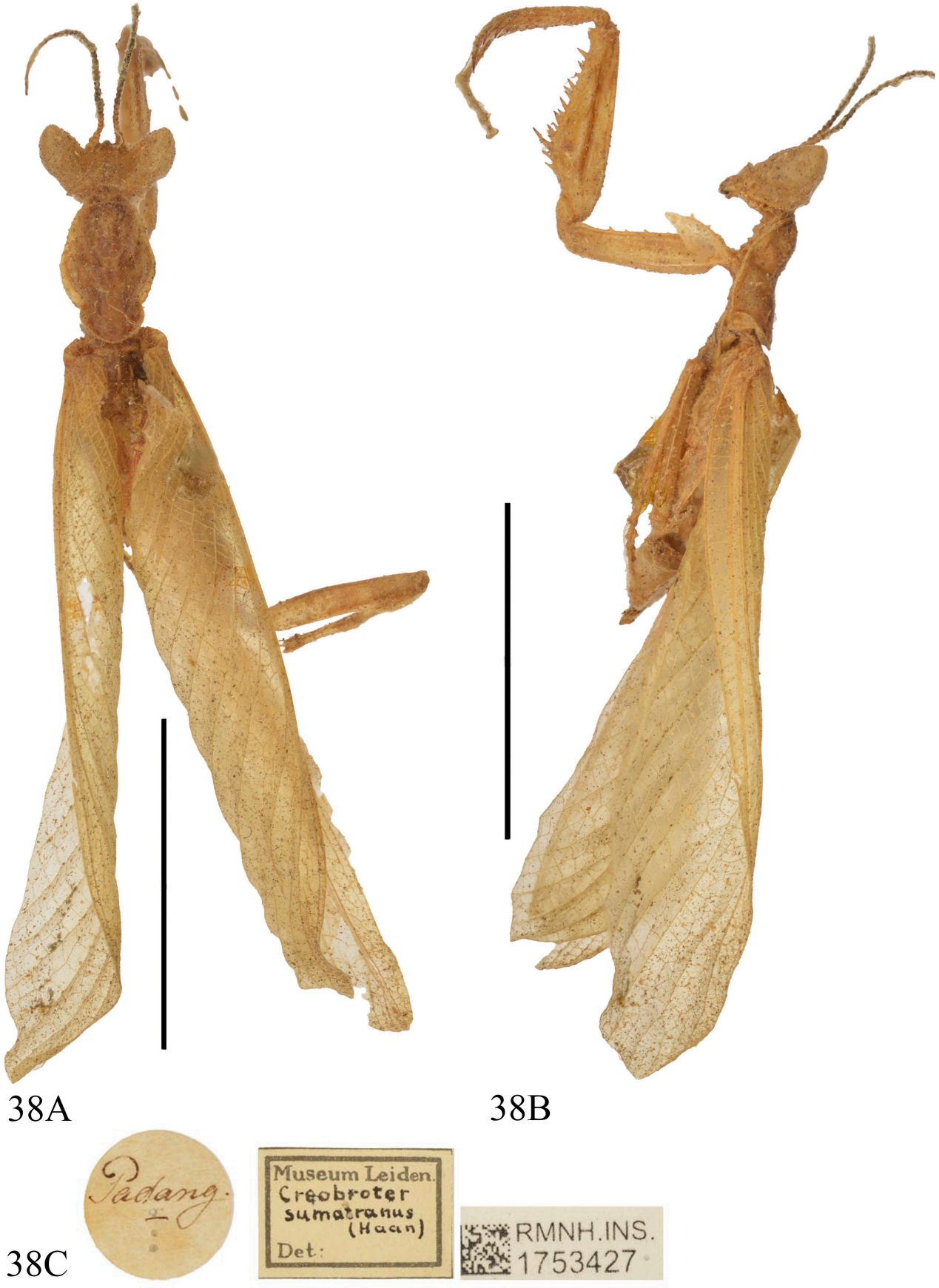


FIGURE 38. Creobroter sumatranus (De Haan, 1842). syntype ♂ (RMNH.INS.1753427). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

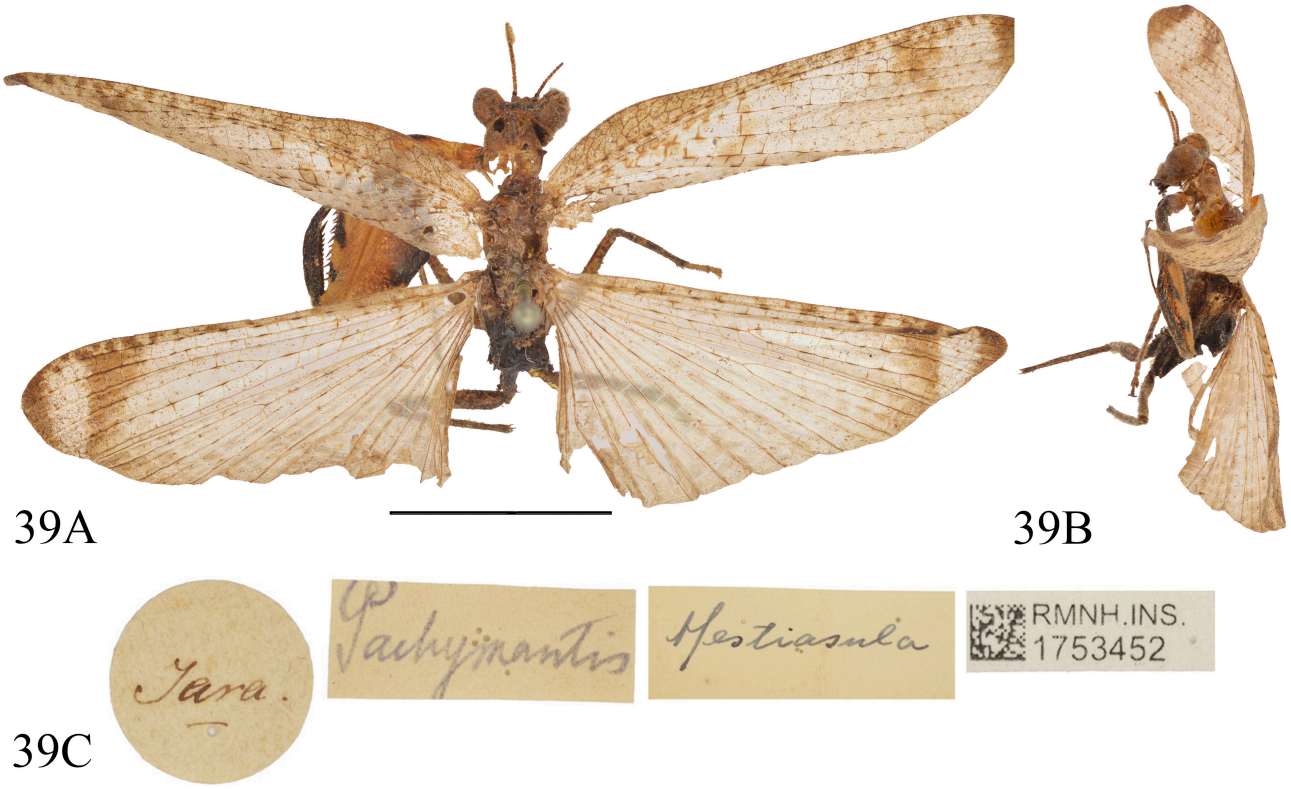


FIGURE 39. *Astyliasula phyllopus* (De Haan, 1842). holotype ♂ (RMNH.INS.1753452). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Family Hymenopodidae Giglio-Tos, 1915

Subfamily Oxypilinae Saussure, 1871

Tribe Oxypilini Saussure, 1871

***Oxypilus* Audinet-Serville, 1831**

***Oxypilus (Oxypilus) montanus* Roy, 1999**

Protonym: *Oxypilus (Oxypilus) montanus* Roy, 1999
Reference: Roy, 1999: 327–329, figs 1–3.

Type material: Paratype, ♂. "//Mus. Leiden/R.A. Maas/Geesteranus/E. Mau III/ 5.IX.1949/Afrika//, R. A. Maas Geesteranus//Oxypilus(s.str.)/montanus n.sp./♂ paratype/R.Roy 1999//genitalia R.Roy/3375 [RMNH.INS.729737]", RMNH.INS.1753453.

Type locality: East Africa.

Condition: Incomplete (front tarsi and part of antennae are missing).

***Pachymantis* Saussure, 1871**

***Pachymantis bicingulata* (De Haan, 1842)**

Protonym: *Mantis (Oxypilus) bicingulata* De Haan, 1842
References: De Haan, 1842: 86–87, Pl . XVII, fig. 6–7; Saussure, 1871a: 306 [placement in *Pachymantis* (as "biangulata")] Roy, 2013: 147–148 [lectotypification].

Type material: Lectotype, ♂ (fig. 40): "//Padang//Cotypus//Museum Leiden/Pachimantis/bicingulata/Haan./Det.// Echinomastoharpax/Wern./Type von ♂/Mantis bicingulata de H//Pachymantis [sic!]/bicingulata (De Haan)/♂ lectotype/R.Roy det. 2012//"; RMNH.INS.1721027. Paralectotype, ♀: "//Cotypus//Museum Leiden/Pachimantis/ bicingulata/Haan./Det.//Echinomastoharpax/ ♀ Wern./Type von/Mantis bicingulata de H//Pachymantis/bicingulata (De Haan)/ ♀ paralectotype/R.Roy det. 2012//", RMNH.INS.1721028.

Type locality: Batang–Singalang [Indonesia, Sumatra, Sumatera Barat, Mt. Singgalang] (fig. 63: no. 27).

Condition: Lectotype (RMNH.INS.1721027) incomplete (left mid leg and tarsus right mid leg missing), paralectotype (RMNH.INS.1721028) good.

Remark: There is a slight mismatch between the type locality mentioned in the description (De Haan, 1842: 86) "Batang-Singalang" and the location mentioned on the label of the male lectotype "Padang". Both refer to the same area in western Sumatra. Roy (2013) in his revision of *Pachymantis* considered both specimens included here as the original syntypes and designated the male as the lectotype.

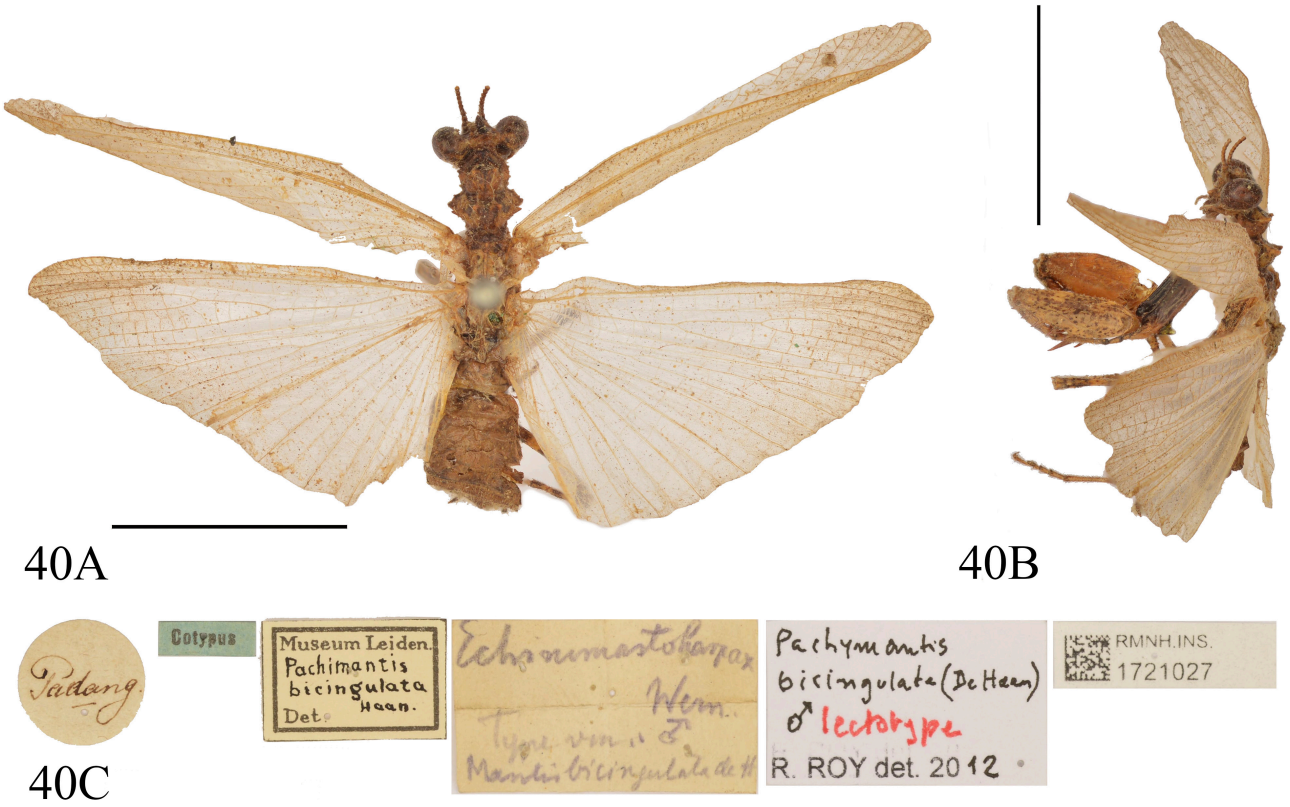


FIGURE 40. *Pachymantis bicingulata* (De Haan, 1842). lectotype ♂ (RMNH.INS.1721027). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Pachymantis maculicoxa Roy, 2013

Protonym: *Pachymantis maculicoxa* Roy, 2013
Reference: Roy, 2013: 151–152, fig. 7a, d, g.

Type Material: Paratype, ♂: "//Dr. Nieuwenhuis/Borneo Exp./Bloe-oe B Mahakk/11 1896//Museum Leiden/ Pachimantis [sic!]/bicingulata/Haan/Det. D.A. Kerpel//Pachymantis/maculicoxa Roy/♂ paratype/R. Roy det. 2013//"; RMNH.INS.1721029.

Type locality: Sabah, Sandakan, Rumidi estate, River Labuk [Malaysia – Borneo, Sabah, Sandakan]

Condition: Incomplete (left mid and hind leg and tarsi of right mid and hind leg missing).

Family Hymenopodidae Giglio-Tos, 1915

Subfamily Phyllothelyinae Brunner de Wattenwyl 1893

Tribe Parablepharini Giglio-Tos, 1915

***Parablepharis* Saussure, 1870**

***Parablepharis kuhlii* (De Haan, 1842)**

Protonym: *Mantis (Blepharis) kuhlii* De Haan, 1842
References: De Haan, 1842: 93–94, P. XVIII, fig. 3; Saussure, 1870: 223 [placement in *Parablepharis*].

Type material: Holotype, ♀ nymph (fig. 41): "//K & vH./Java//syntype// [pencil]Parablepharis/Sauss//"; RMNH.INS.1721030.

Type locality: Java, Goenong Parang (Preanger) [Indonesia, Java, Kota Sukabumi, Gunung Parang] (fig. 63: no. 28).

Condition: Good, only antennae missing.

Remark: Although still a nymph, De Haan (1842) used this female to describe and illustrate the species. In an additional paragraph in the Dutch language, De Haan refers to a drawing made by van Raalten of another specimen, an adult, which, he claimed, must belong to the same species. Some effort has been put into recovering this drawing from the Naturalis archives but so far unsuccessful.

Family Mantidae Latreille, 1802

Subfamily Hierodulinae Brunner de Wattenwyl, 1893

Tribe Archimantini Giglio-Tos, 1917

***Austrovates* Sjöstedt, 1918**

***Austrovates variegata* Sjöstedt, 1918**

Protonym: *Heterarchimantis lobata* Werner, 1922
References: Werner, 1922 :121; Beier, 1935: 118 [synonymized *H. lobata* with *Austrovates variegata*].

Type material: Holotype, ♀ (fig. 42): "//Type – Heterarchimantis/lobata Werner//Museum Leiden/Austrovates/variegata/Sjöst/det. C. Reinhold//v Bemm./Port Darw/N.Holl.//"; RMNH.INS.1721031.

Type locality: Australia, Port Darwin (fig. 62: no. 29)..

Condition: Incomplete (all tarsi, tibiaright hind leg and antennae missing).



FIGURE 41. *Parablepharis kuhlii* (De Haan, 1842). holotype ♀ nymph (RMNH.INS.1721030). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

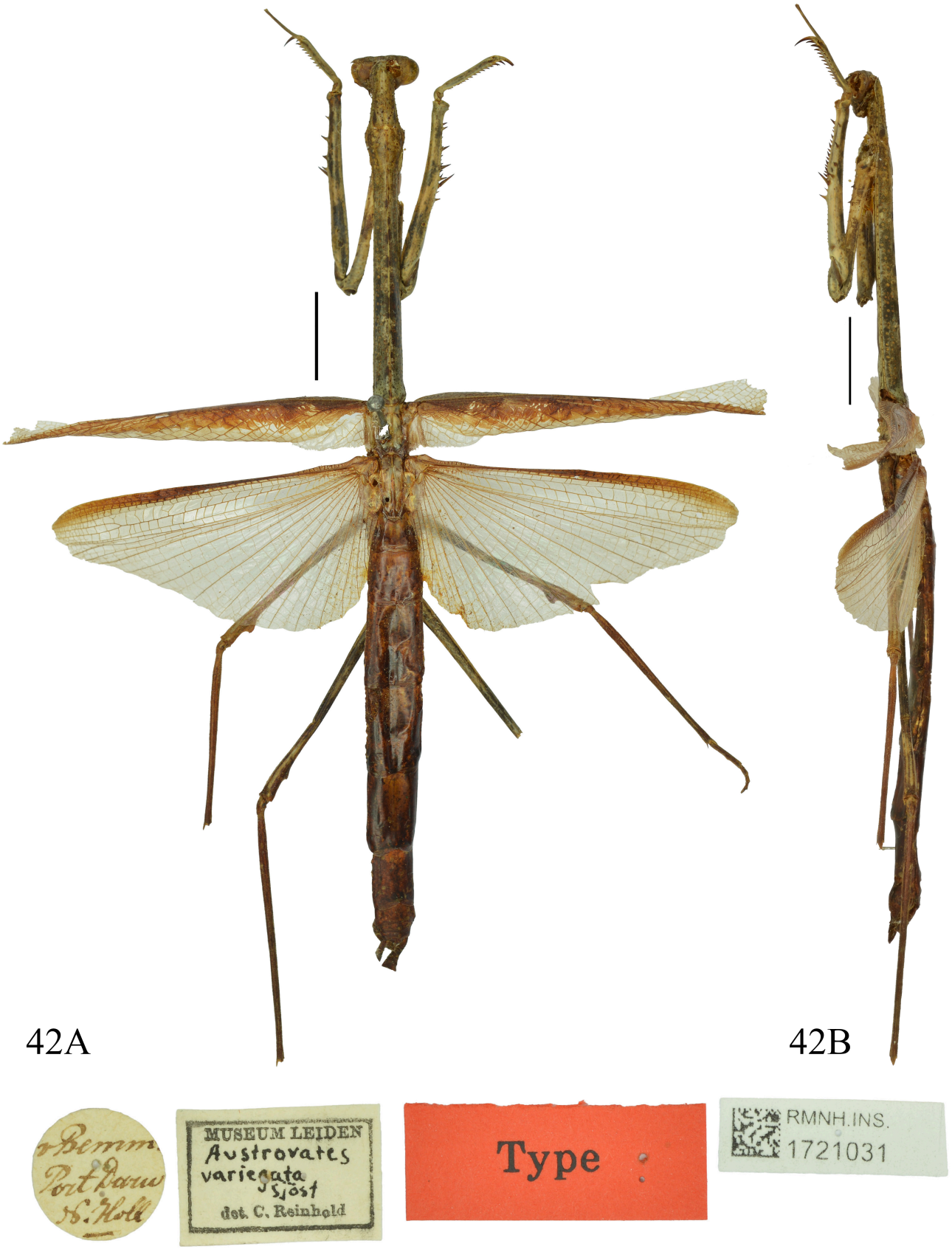


FIGURE 42. *Austrovates variegata* Sjöstedt, 1918. holotype ♀ (RMNH.INS.1721031). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Family Mantidae Latreille, 1802

Subfamily Hierodulinae Brunner de Wattenwyl, 1893

Tribe Hierodulini Brunner de Wattenwyl, 1893

***Hierodula* Burmeister, 1838**

***Hierodula biaka* Deeleman-Reinhold, 1957**

Protonym: *Hierodula biaka* Deeleman-Reinhold, 1957
Reference: Deeleman-Reinhold, 1957: 59–60, fig. 1g.

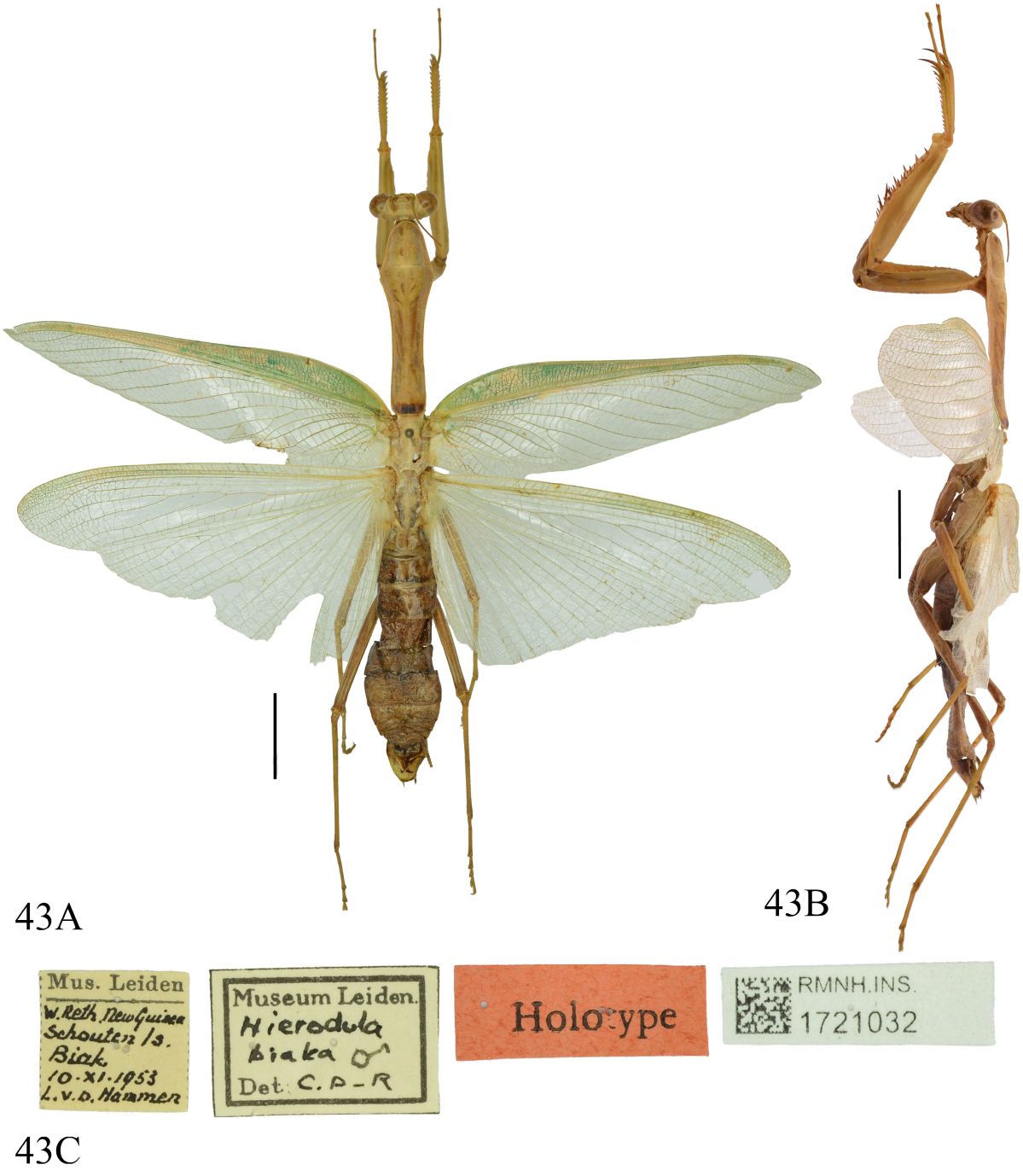


FIGURE 43. *Hierodula biaka* Deeleman-Reinhold, 1957. holotype ♂ (RMNH.INS.1721032). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Type material: Holotype, ♂ (fig. 43): "//Holotype//Mus. Leiden/W. Neth. NewGuinea/Schouten Is. /Biak/10.XI.1953/ L.v.d.Hammen//Museum Leiden/Hierodula/biaka ♂/Det C. D R//"; RMNH.INS.1721032. Paratypes, 5 ♂♂: "//Mus. Leiden/L.D.Brongersma/L.B.Holthuis/Genjem/ N Nieuw Guinea/4–XI–1954//Museum Leiden/Hierodula/biaka ♂/ Det C. D R//"; RMNH.INS.1721033 • "//Paratype//Mus. Leiden/L.D.Brongersma/en W.J. Roosdorp/Base Biak/12–VIII–1952//Museum Leiden/Hierodula/biaka ♂/Det C. D-R//"; RMNH.INS.1721034 • "//Paratype//Mus. Leiden/ J.H. v. Lunteren/Hollandia/22–II–1952//Museum Leiden/Hierodula/biaka ♂/Det C. D-R//"; RMNH.INS.1721035 • "//Paratype//Mus. Leiden/D C d. Hollander/Biak/1-II-1952//Museum Leiden/Hierodula/biaka ♂/Det C. D-R//"; RMNH.INS.1721036 • "//Paratype//Mus. Leiden/A Hollander/Biak/2–III–1952//Museum Leiden/Hierodula/biaka ♂/Det C. D-R//"; RMNH.INS.1721037

Type locality: New Guinea, Schouten Islands: Biak Island (fig. 63: no. 30).

Condition: Holotype (RMNH.INS.1721032) good; paratypes: RMNH.INS.1721033good except for hind tarsi, RMNH.INS.1721034 complete except for tarsi right fore leg and left hind leg, RMNH.INS.1721035 incomplete (right mid leg, tarsus left mid leg, one hind leg and antennae missing), RMNH.INS.1721036 good except for tarsi left fore leg, RMNH.INS.1721037 good except for tarsus right fore leg.

Remark: In the original description, the collectors for the paratype collected on 1st February 1952 (RMNH. INS.1721036) were mentioned to be Lieutenant de Vaisseau D.C. den Hollander. However the label attached to this specimen only mentions D.C. den Hollander.

Hierodula Burmeister, 1838

Hierodula macrostigmata Deeleman-Reinhold, 1957

Protonym: *Hierodula macrostigmata* Deeleman-Reinhold, 1957
Reference: Deeleman-Reinhold, 1957: 57–58, fig. 1c, e.

Type material: Holotype, ♂ (fig. 44): "//Holotype//Mus. Leiden/Mej. Dr.C.R./Bakker/Djask/Aug. 1934//Museum Leiden/Hierodula/macrostigmata/Det.: ♂ C. D.R.//Hierodula/transcaucasica/Brunner v.Wattenwyl/1878/det. Schütte 2009//Museum Leiden/RMNH/genitalia ♂/ Nr.0608191/K.Schütte prep.//"; RMNH.INS.968028.

Type locality: Iran: Jask [currently: Bandar-e-Jask] (fig. 62: no. 31).

Condition: Incomplete (tibiae of mid legs and left hind leg, tarsi and antennae missing). Loose forewing stored with the specimen. Genitalia stored on a separate microscopic slide with 2 labels: "//Hierodula macrostigmata/ Deeleman-Reinhold,/1957/holotype/ Hierodula transcaucasica/Brunner v. Wattenwyl,/1878/det. Schütte 2009// Museum Leiden/RMNH/-/genitalia ♂/Nr.0608191/K. Schütte prep./Euparal//"

Remark: This species has been newly treated as a synonym of *H. coarctata* by the first author (Mirzaee et al. 2026).

Hierodula Burmeister, 1838

Hierodula rufomaculata Werner, 1922

Protonym: *Hierodula rufomaculata* Werner, 1922
Reference: Werner, 1922: 120.

Type material: Holotype, ♀ (fig. 45): "//Edw. Jacobson/Muara Kiawai/Sum. VI 1915//Hierodula/(Parhierodula)/ rufomaculata/ ♀ Wern. n.sp./Type!//"; RMNH.INS.1277411.

Type locality: Sumatra, Muara Kiawai (fig. 63: no. 32).

Condition: Complete (right hind leg and antennae missing; right mid leg detached).

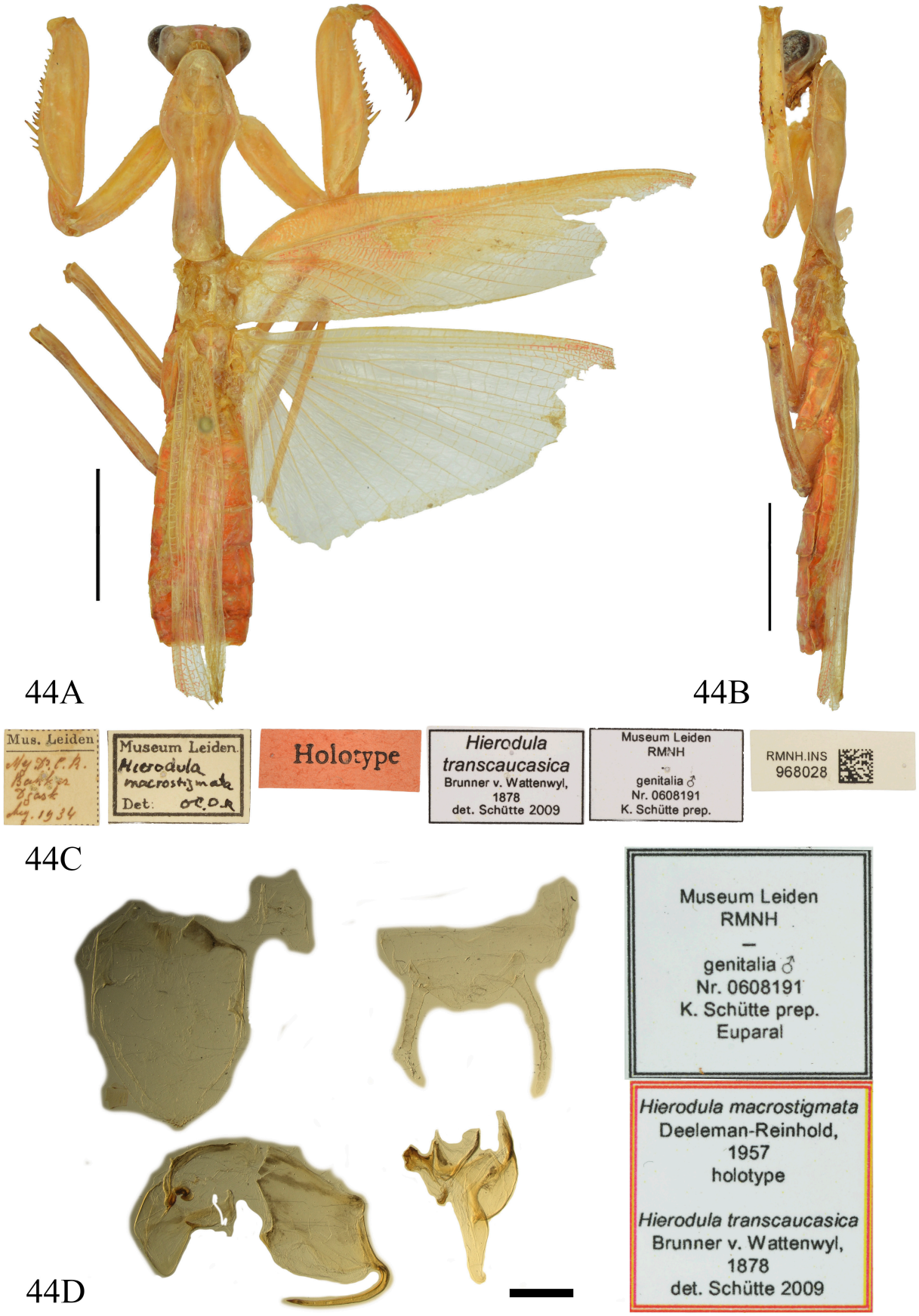


FIGURE 44. *Hierodula macrostigmata* Deeleman-Reinhold, 1957. holotype ♂ (RMNH.INS.968028). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels. D. Genitalia. (Bar: 2mm).

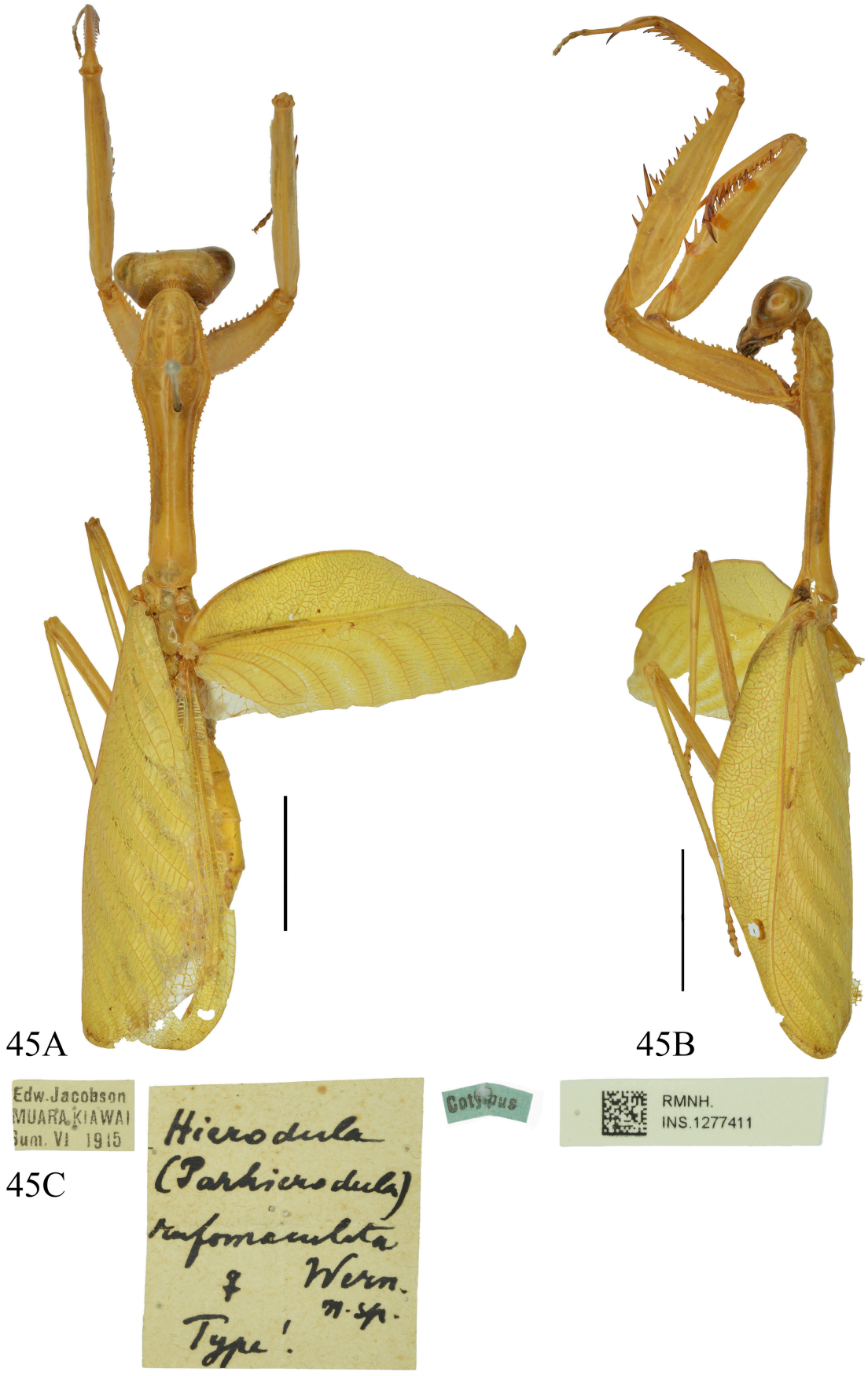


FIGURE 45. *Hierodula rufomaculata* Werner, 1922. holotype ♀ (RMNH.INS.1277411). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.



FIGURE 46. *Hierodula timorensis* (De Haan, 1842). lectotype ♂ (RMNH.INS.1753446). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

***Hierodula* Burmeister, 1838**

***Hierodula timorensis* (De Haan, 1842)**

Protonym: *Mantis* (*Mantis*) *timorensis De Haan*, 1842
References: De Haan, 1842: 69; Saussure, 1873: 38 [placement in *Hierodula*].

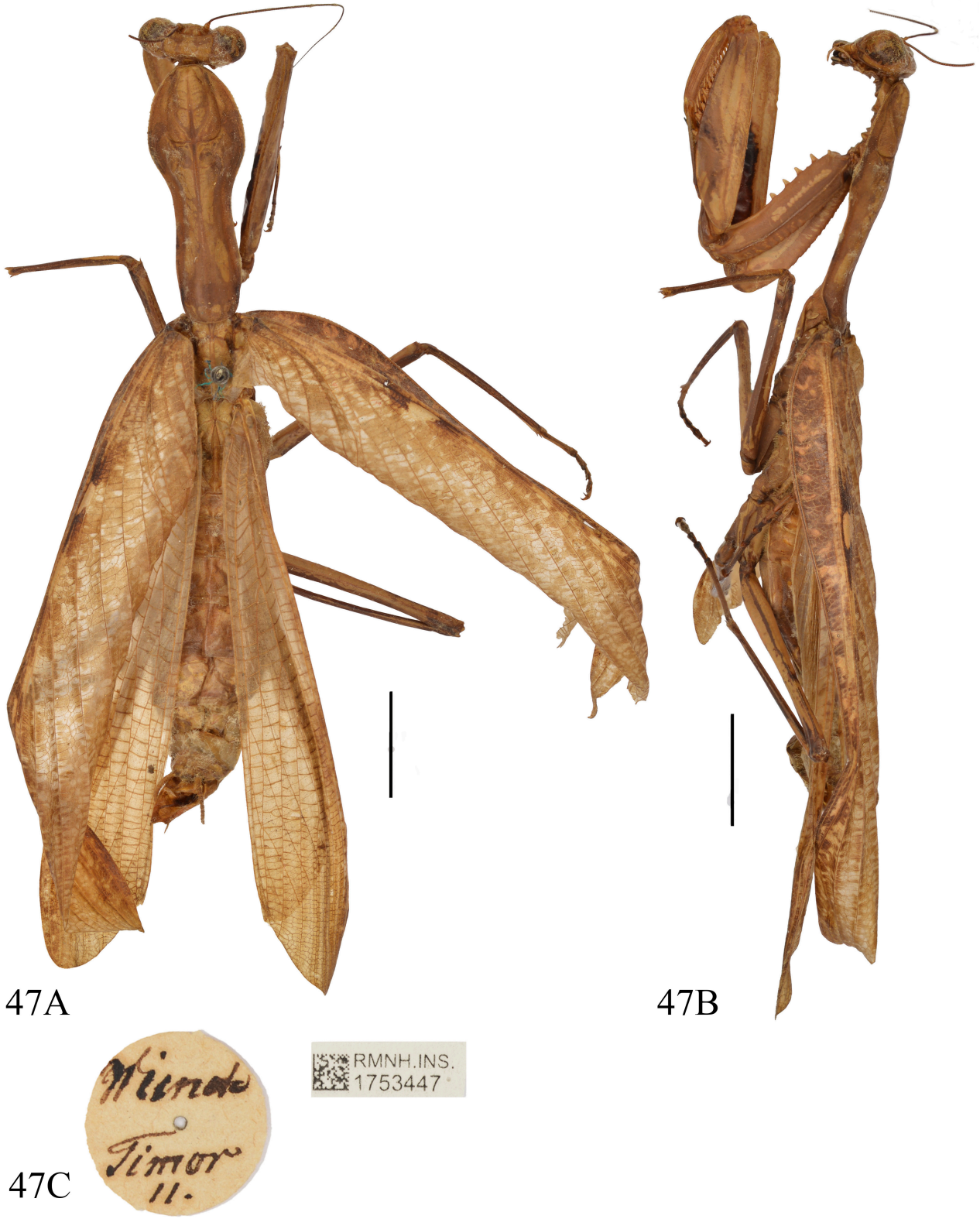


FIGURE 47. *Hierodula timorensis* (De Haan, 1842). paralectotype ♂ (RMNH.INS.1753447). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Type material: Lectotype (here designated), ♂: "//Amboina//"; RMNH.INS.1753446 (fig. 46)• paralectotype ♂: "//[unreadable word]/Timor/II.//"; RMNH.INS.1753447 (fig. 47).

Type locality: Timor, Amboina [currently: Ambon] (fig. 63: no. 33).

Condition: Both specimens are in good condition, in RMNH.INS.1753446 only part of an antenna is missing, in RMNH.INS.1753447 the tarsus of the left mid leg is missing.

Remark: De Haan (1842: 69–70) originally described *timorensis* based on a series of two specimens collected from Timor, which he interpreted to represent one male and one female. However, subsequent examination has revealed that both specimens are in fact males, indicating that De Haan misidentified the sex of one individual—though it remains unclear which. In order to stabilize the nomenclature and facilitate future identification within this taxonomically challenging genus, one specimen from the syntype series is herein designated as the lectotype. Of the two male syntypes, RMNH.INS.1753446 is selected as the lectotype, as its mounting position clearly exposes the maculated anterior surface of the prothoracic femur, allowing critical diagnostic characters to be readily observed.

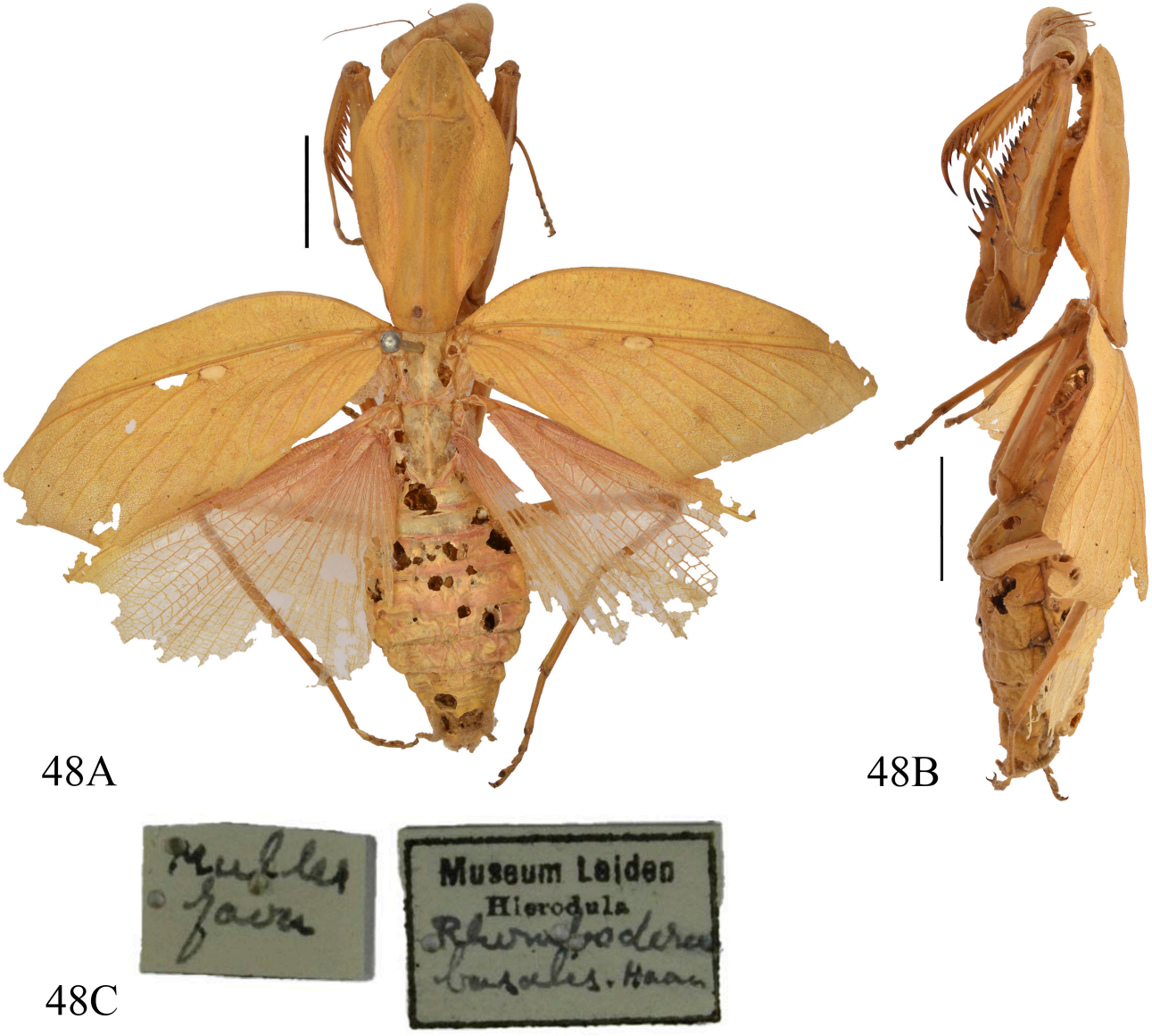


FIGURE 48. *Rhombodera basalis* (De Haan, 1842). syntype ♀ (RMNH.INS.1277484). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Family Mantidae Latreille, 1802

Subfamily Hierodulinae Brunner de Wattenwyl, 1893

Tribe Hierodulini Brunner de Wattenwyl, 1893

***Rhombodera* Burmeister, 1838**

***Rhombodera basalis* (De Haan, 1842)**

Protonym: *Mantis (Mantis) basalis De Haan*, 1842
References: De Haan, 1842: 67; Sausure, 1871a: 217 [placement in *Rhombodera*].

Type material: Syntypes, 2 ♀ (figs 48–49):"//Muller,/Java.//Museum Leiden/Hierodula/(Rhombodera)/basalis (Haan)/Det.//", RMNH.INS.1277485 (fig. 49) • "//Muller/Java// Museum Leiden/Hierodula/Rhombodera/basalis. Haan//, RMNH.INS.1277484 (fig. 48).

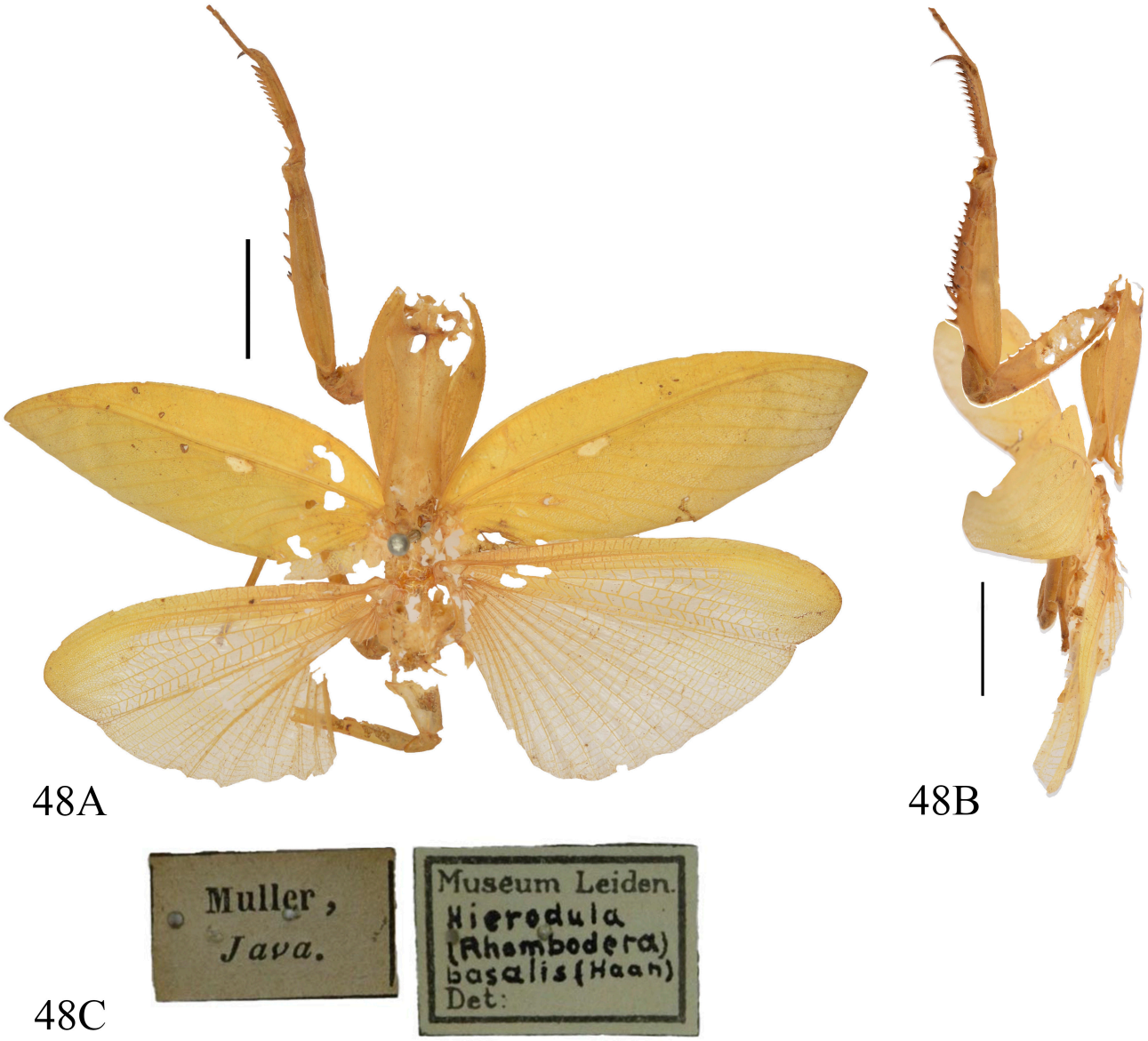


FIGURE 49. *Rhombodera basalis* (De Haan, 1842). syntype ♀ (RMNH.INS.1277485). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Type locality: Java: Krawang (fig. 63: no. 34).

Condition: One syntype (RMNH.INS.1277484), although the abdomen is damaged by the museum beetle, is complete except for part of the mid leg tarsi, the second syntype (RMNH.INS.1277485) is in poor condition (head, abdomen, right fore leg and parts of mid and hind legs missing).

Remark: In the collection of Naturalis are two females labelled 'Muller Java'. Muller, no doubt refers to Salomon Müller (1804–1864) who, as an assistant/member of the *Natuurkundige Commissie*, collected specimens in the East Indies between 1826 and 1835 during which period he also was stationed some time at Java. In 1842 De Haan (p. 67) described *Mantis (Mantis) basalis* based on specimens collected at Krawang (Java). As there is currently no instability or ambiguity regarding the identity of Rhombodera basalis, a lectotype has not been designated here. If such a need would arise in the future, the obvious choice would be the more complete syntype specimen (RMNH. INS.1277484).

Rhombodera Burmeister, 1838

Rhombodera boschmai (Deeleman-Reinhold, 1957)

Protonym: *Hierodula (Rhombodera) boschmai* Deeleman-Reinhold, 1957: 61–62.
Reference: Deeleman-Reinhold, 1957: 61–62.

Type material: Holotype, ♂ (fig. 50): "//holotype//Rhombodera boschmai/Deelem.-Reinhold, 1957//Rhombodera boschmai ♂/Deelem.-Reinhold, 1957/det. R. Ehrmann, VI.2012//Museum Leiden/Rhombodera/boschmai ♂/Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/29.IX.1939//", RMNH.INS.973015; Allotype, ♀ (fig. 51): "//allotype//Museum Leiden/Rhombodera/boschmai ♀/Det. C. D.-R.//Museum Leiden/Nieuw Guinea Exp/ K.N.A.G. 1939/Paniai/28–IX–1939//", RMNH.INS.1721047; Paratypes, 4 ♂♂, 16 ♀, 10 juveniles: arabo"// paratype ♂/Rhombodera boschmai/Deelem-Reinhold, 1957//Museum Leiden/Nieuw Guinea Exp/K.N.A.G. 1939/ Araboebivak/4–X–1939//Museum Leiden/Rhombodera/boschmai ♂/Det. C. D.-R.//", RMNH.INS.1721043 • "// paratype//Museum Leiden/Rhombodera /boschmai ♀/Det. C. D.-R. //Museum Leiden/Nieuw Guinea Exp/ K.N.A.G. 1939/Araboebivak/16–X–1939//A 16 oct uit abdomen een gordiide, deze op alcohol//", RMNH.INS.1721038 • "// paratype//Museum Leiden/Rhombodera /boschmai ♀/Det. C. D.-R. //Museum Leiden/W.J.Roosdorp/Enarotali/13–VII–1952// ", RMNH.INS.1721039 • "//paratype// Museum Leiden/Rhombodera/boschmai ♀/Det. C D.-R.// Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/17.IX.1939//", RMNH.INS.1721040 • "//paratype// Museum Leiden/Rhombodera/boschmai ♀/Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/ Paniai/13.IX.1939//", RMNH.INS.1721041 • "//paratype// Museum Leiden/Rhombodera/boschmai ♀/Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Araboebivak/5.XI.1939//", RMNH.INS.1721042 • "// paratype// Museum Leiden/Rhombodera/boschmai ♀/Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/29.IX.1939//paratype ♀ /Rhombodera boschmai/Deelem.-Reinhold, 1957//Rhombodera boschmai ♀/Deelem.-Reinhold, 1957/det. R. Ehrmann, VI.2012//", RMNH.INS.1721044 • "//[void red label]// Museum Leiden/Rhombodera/boschmai ♀/Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/3. XI.1939//", RMNH.INS.1721045 • "//[void red label]// Museum Leiden/Rhombodera/boschmai ♀/Det. C D.-R.// Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Araboebivak/3.X.1939/van Ravens-/waay Claasen//", RMNH. INS.1721046 • "//[void red label]// Museum Leiden/Rhombodera/boschmai ♂/Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/29.X.1939//", RMNH.INS.1721048 • "//paratype//Museum Leiden/ Rhombodera /boschmai ♀/Det. C. D.-R. //Museum Leiden/Nieuw Guinea Exp/ K.N.A.G. 1939/Araboebivak/4–X–1939//uit het abdomen een groote Gordiide/gehaald,/op alcohol bewaard//", RMNH.INS.1721049 • "//paratype// Museum Leiden/Rhombodera/boschmai ♀/Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/ Paniai/14.IX.1939//", RMNH.INS.1721050 • "//paratype//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/ Araboebivak/28.X.1939//", RMNH.INS.1721051 • "//paratype// Museum Leiden/Rhombodera/boschmai ♀/Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/6.IX.1939//", RMNH.INS.1721052 • "// paratype// Museum Leiden/Rhombodera/boschmai ♀/Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/25.IX.1939//25 sep/mantis ♀,achterlijf/leeggehaald.//", RMNH.INS.1721053 • "//[void red label]// Museum Leiden/Rhombodera/boschmai juv./Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/ Paniai/25.IX.1939//", RMNH.INS.1721054 • "//[void red label]// Museum Leiden/Rhombodera/boschmai juv./Det.

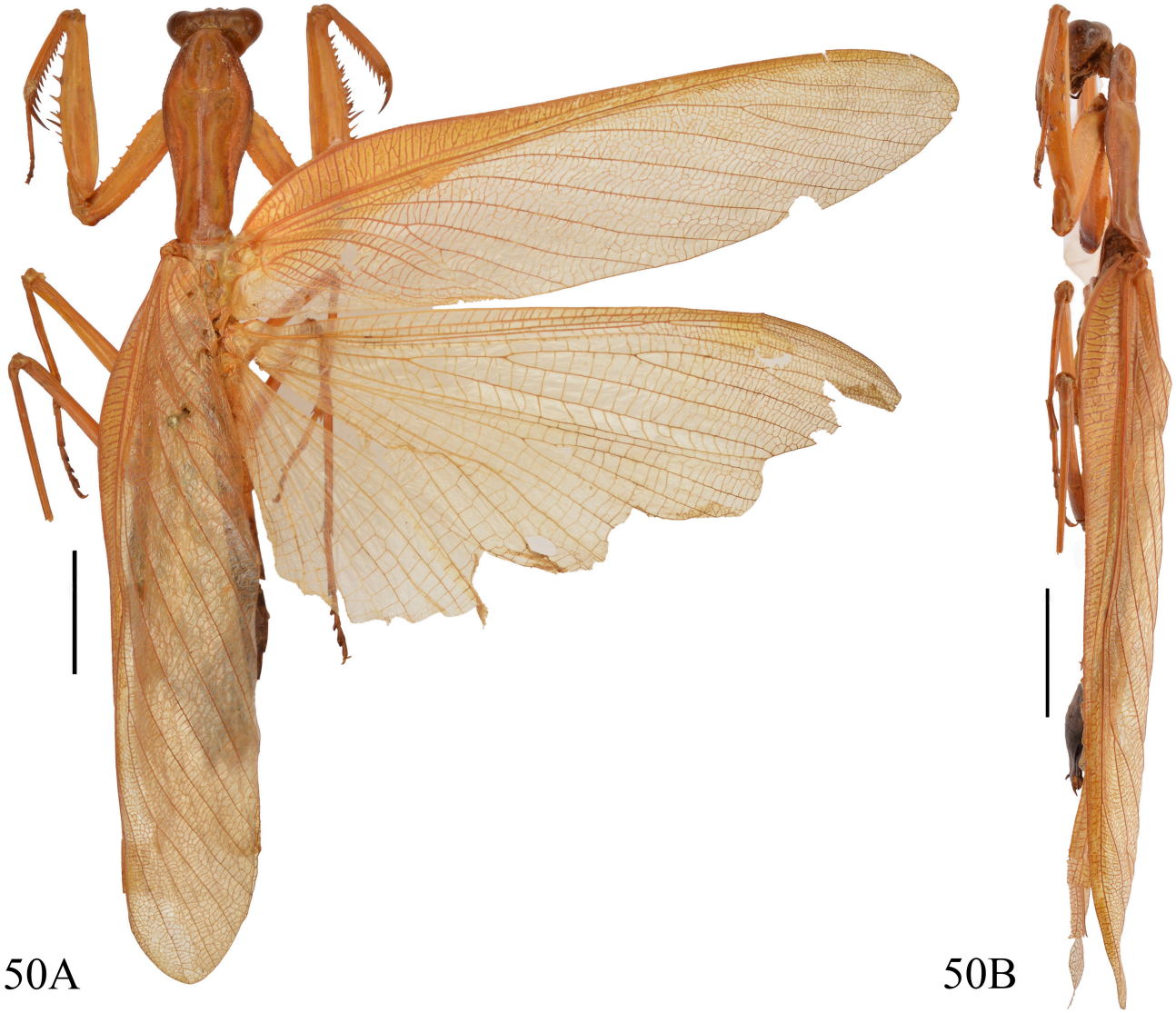


FIGURE 50. *Rhombodera boschmai* (Deeleman-Reinhold, 1957). holotype ♂ (RMNH.INS.973015). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/26.IX.1939//", RMNH.INS.1721055 • "//[void red label]// Museum Leiden/Rhombodera/boschmai juv./Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/9.XI.1939//", RMNH.INS.1721056 • "//[void red label]// Museum Leiden/Rhombodera/boschmai juv./ Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/18.IX.1939//", RMNH.INS.1721057 • "//[void red label]// Museum Leiden/Rhombodera/boschmai juv./Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/15.IX.1939//", RMNH.INS.1721058 • "//[void red label]// Museum Leiden/Rhombodera/ boschmai ♂/Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Digitara/midden Oct 1939/leg. Mantri Hoeka//", RMNH.INS.1721059 • "//[void red label]// Museum Leiden/Rhombodera/boschmai ♂/Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/19-20.IX.1939//", RMNH.INS.1721060 • "// paratype// Museum Leiden/Rhombodera/boschmai ♀/Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G.



FIGURE 51. *Rhombodera boschmai* (Deeleman-Reinhold, 1957). allotype ♀ (RMNH.INS.1721047). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

1939/Paniai/3.XI.1939//", RMNH.INS.1721061 • "//paratype// Museum Leiden/Rhombodera/boschmai ♀/Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/1.X.1939//", RMNH.INS.1721062 • "// paratype// Museum Leiden/Rhombodera/boschmai ♀/Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/29.VIII.1939//", RMNH.INS.1721063 • "//[void red label]// Museum Leiden/Rhombodera/boschmai juv./Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Dr. P.J. Eyma/Egemendora/midden Oct.1939//", RMNH.INS.1721064 • "//[void red label]// Museum Leiden/Rhombodera/boschmai juv./Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/KG Masiga/13-22.IX.1939//", RMNH.INS.1721065 • "//[void red label]// Museum Leiden/Rhombodera/boschmai juv./Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/30.VIII.1939/bruin van kleur//", RMNH.INS.1721066 • "//[void red label]// Museum Leiden/Rhombodera/boschmai juv./Det. C D.-R.//Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/15. IX.1939//", RMNH.INS.1721067 • "//[void red label]// Museum Leiden/Rhombodera/boschmai juv./Det. C D.-R.// Museum Leiden/ NieuwGuinea Exp/ K.N.A.G. 1939/Paniai/28.IX.1939//", RMNH.INS.1721068.

Type locality: New Guinea, Wisselmeren [Indonesia, Central Papua, Paniai Lakes] (fig. 63: no. 35).

Condition: Holotype (fig. 50) complete, only missing antennae and tarsi of right fore and left hind leg, allotype (fig. 51) complete except for the antennae and hind tarsi, paratypes good or complete, generally only missing tarsi and/or the antennae.

Remark: The type series used by Deeleman-Reinhold (1957: p. 61) to describe this species consisted of the holotype, allotype and 30 additional paratypes (4 males, 16 females and 10 juveniles). All the type material is currently still in the Naturalis collection.

Rhombodera **Burmeister, 1838**

Rhombodera flava **(De Haan, 1842)**

Protonym: *Mantis* (*Mantis*) *flava De Haan*, 1842: 68
References: De Haan, 1842: 68; Saussure, 187a1: 219 [placement in *Rhombodera*].



FIGURE 52. *Rhombodera flava* (De Haan, 1842). lectotype ♀ (RMNH.INS.1277431). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Type material: Syntype, ♂ (fig. 52): "//Holotype/K & v H./Java//Museum Leiden/Hierodula/(Rhombodera)/flava (Haan)/Det.//Museum Leiden/Rhombodera/flava Haan/Det. C. Reinhold//", RMNH.INS.1277431.

Type locality: Java (fig. 63: no. 36).

Condition: Incomplete (head, tarsi of right mid and left hind leg missing).

Remark: For the original description, De Haan studied both male and female specimens. Besides the male specimen collected by Kuhl and van Hasselt in Java, no other specimen, collected prior to 1842 was found in the collection of Naturalis. De Haan did not designate a holotype. Later workers have misapplied the name, or even treated it inconsistently. Selecting the surviving syntype male as lectotype would stabilize the name and permanently fix the application of *R. flava*. Lectotype (here designated): ♂, Java, K & v H, kept at Naturalis, Leiden (RMNH.INS.1277431). This specimen is selected from the syntype series of *Rhombodera flava* (De Haan, 1842) to fix the taxonomic identity of the species. The second syntype female mentioned by De Haan is no longer extant.

Family Mantidae Latreille, 1802

Subfamily Stagmomantinae

***Isomantis* Giglio-Tos, 1917**

***Isomantis domingensis* (Palisot de Beauvois, 1805)**

Protonym: *Mantis cubaensis* De Haan, 1842

References: De Haan, 1842: 74,75; Beier, 1935: 97 [synonymy *Mantis cubaensis* with *I. domingensis*]; Anderson, 2020: 3–7 [re-instatement of *Isomantis*].

Type material: Holotype, ♀ (fig. 53): "//Cuba//Isomantis/domingensis/Palis//", RMNH.INS.1753448.

Type locality: Cuba (fig. 62: no. 37).

Condition: Complete except for the left mid leg and the tarsus of the right mid leg; the right hind leg is detached.

Remark: The species described by De Haan in 1842 as *Mantis cubaensis* had already been described by Palisot in 1805 as *Mantis domingensis* . In 1917 Giglio-Tos placed *M. domingenensis* in *Isomantis*. The genus remained valid until 1995 when Terra considered *Isomantis* a synonym of *Stagmomantis*. Anderson (2020), following the views of many predecessors, reinstated *Isomantis* again as a valid genus stating:

"As previously pointed out by Giglio-Tos, Hebard, Beier, and Rehn, the demarcation between *Stagmomantis* and is not restricted only to the shape of the lower frons, which Terra seems to suggest. There are, as noted, other salient differences with the morphology of Isomantis pertaining to the compound eyes, vertex, basitarsi, supraanal plate, wing maculation, and male genitalia, in addition to the geographic isolation of Isomantis where Stagmomantis does not occur."

Family Mantidae Latreille, 1802

Subfamily Vatinae Stål, 1877

***Callivates* Roy, 2003**

***Callivates stephanei* Roy, 2003**

Protonym: *Callivates stephanei* Roy, 2003

Reference: Roy, 2003: 233–234, figs 1–5.

Type material: Paratype, ♂: "//Brokopondo/3–VI–1965/Mees[with pencil] //Brokopondo/ 3–VI–1965/Mees/ Surinam//genitalia/R.Roy/3377[RMNH.INS.729745]//Callivates/stephanei n.sp./R. Roy det. 2003//Heterovates spec. nov.//; RMNH.INS.1721701.

Type locality: Guyanas
Condition: Good, antennae and right mid leg detached.



FIGURE 53. *Mantis cubaensis* De Haan, 1842 (=*Isomantis domingensis* (Palisot de Beauvois, 1805)) holotype ♀ (RMNH. INS.1753448). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Family Mantidae Latreille, 1802

Subfamily Vatinae Stål, 1877

***Pseudovates* Saussure, 1869**

***Pseudovates parallela* (De Haan, 1842)**

Protonym: *Mantis (Mantis) paralella* De Haan, 1842
Reference: De Haan, 1842: 79; Svenson et al. 2015: 237 [placement in *Pseudovates*] .

Type material: Syntypes: ♂ (fig. 54): "//[in pencil] oude determinatie/paralella Haan/=/cingulata Burm [sic!]// Museum Leiden/Phyllovates/paralella/Haan./Det.//Brasilia//"; RMNH.INS.1664959 • ♀ (fig. 55): "//Phyllovates/parallela[sic!]/Haan//Brazilia//"; RMNH.INS.1664960.



FIGURE 54. *Pseudovates parallela* (De Haan, 1842). syntype ♂ (RMNH.INS.1664959). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Type locality: Brasilia [Brazil] (fig. 62: no. 38).

Condition: male syntype, incomplete (part abdomen and one mid leg missing; one mid leg detached); female syntype, complete except for antennae

Remark: De Haan originally received the two specimens through Prof. Klug from the Berlin museum where they were kept under *Mantis cingulata*. Anderson (2021) provides an elaborate summary on the taxonomic status of *Pseudovates cingulata*. De Haan recognized that the specimens from Brazil differed from the Caribbean *M. cingulata* and described them as a separate species *Mantis (Mantis) paralella*.

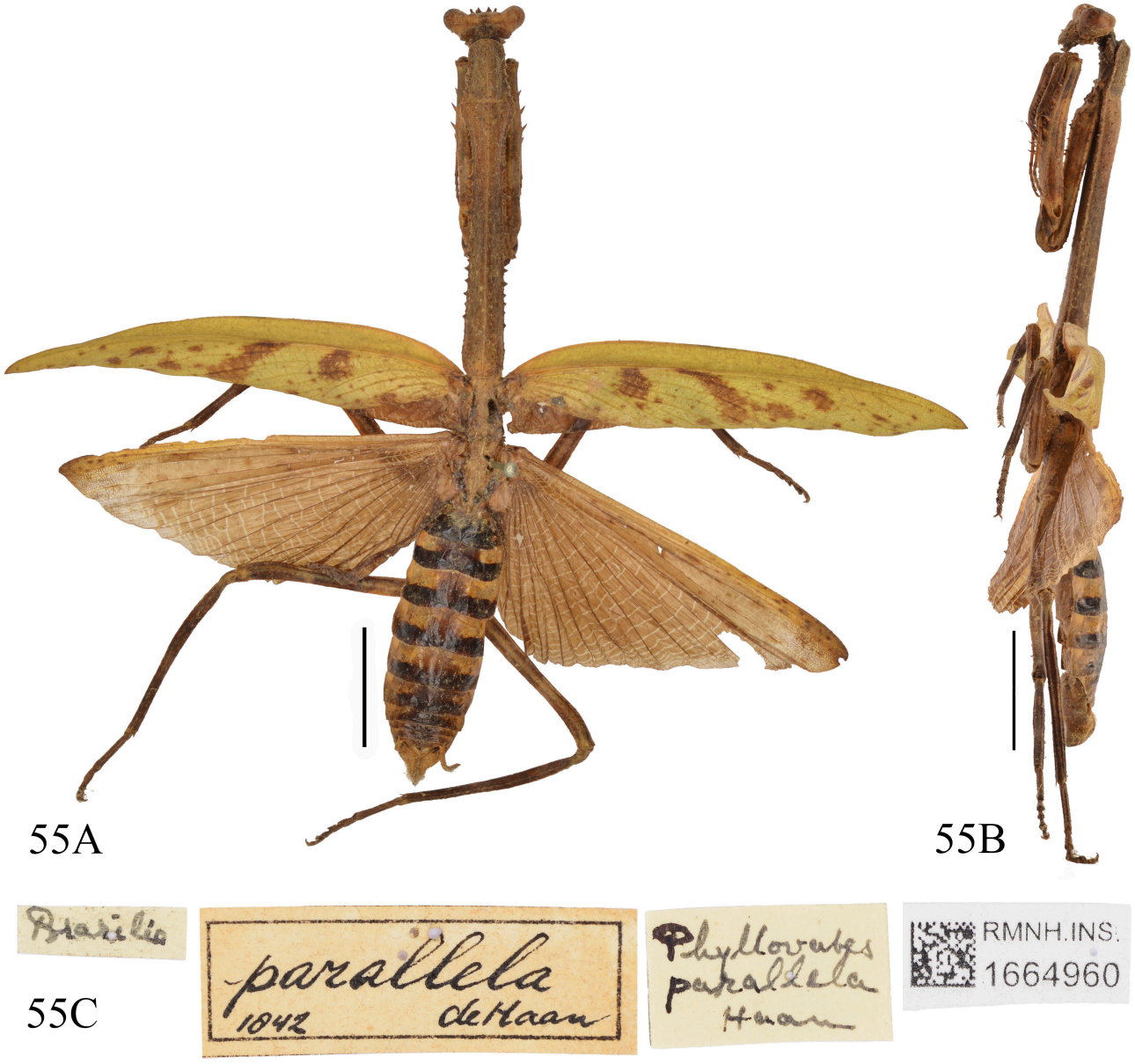


FIGURE 55. *Pseudovates parallela* (De Haan, 1842). syntype ♀ (RMNH.INS.1664960). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Vates Burmeister, 1838

Vates chopardi (Deeleman-Reinhold, 1957)

Protonym: *Lobovates chopardi* Deeleman-Reinhold, 1957
References: Deeleman-Reinhold, 1957: 66–67, Pl. II, figs. 1–4; Svenson et al. 2015: 237 [synonymy *Lobovates* with *Vates*].

Type material: Holotype, ♂ (fig. 56): "//Holotype//Museum Leiden/M. Boeseman/ San Salvador/ – V – 1953// Museum Leiden/Lobovates/chopardi/Det.C. D.-R.//". RMNH.INS1721069.

Type locality: Central America / El Salvador (fig. 62: no. 39)

Condition: Incomplete (antennae and tarsi of hind legs missing; both front legs detached).

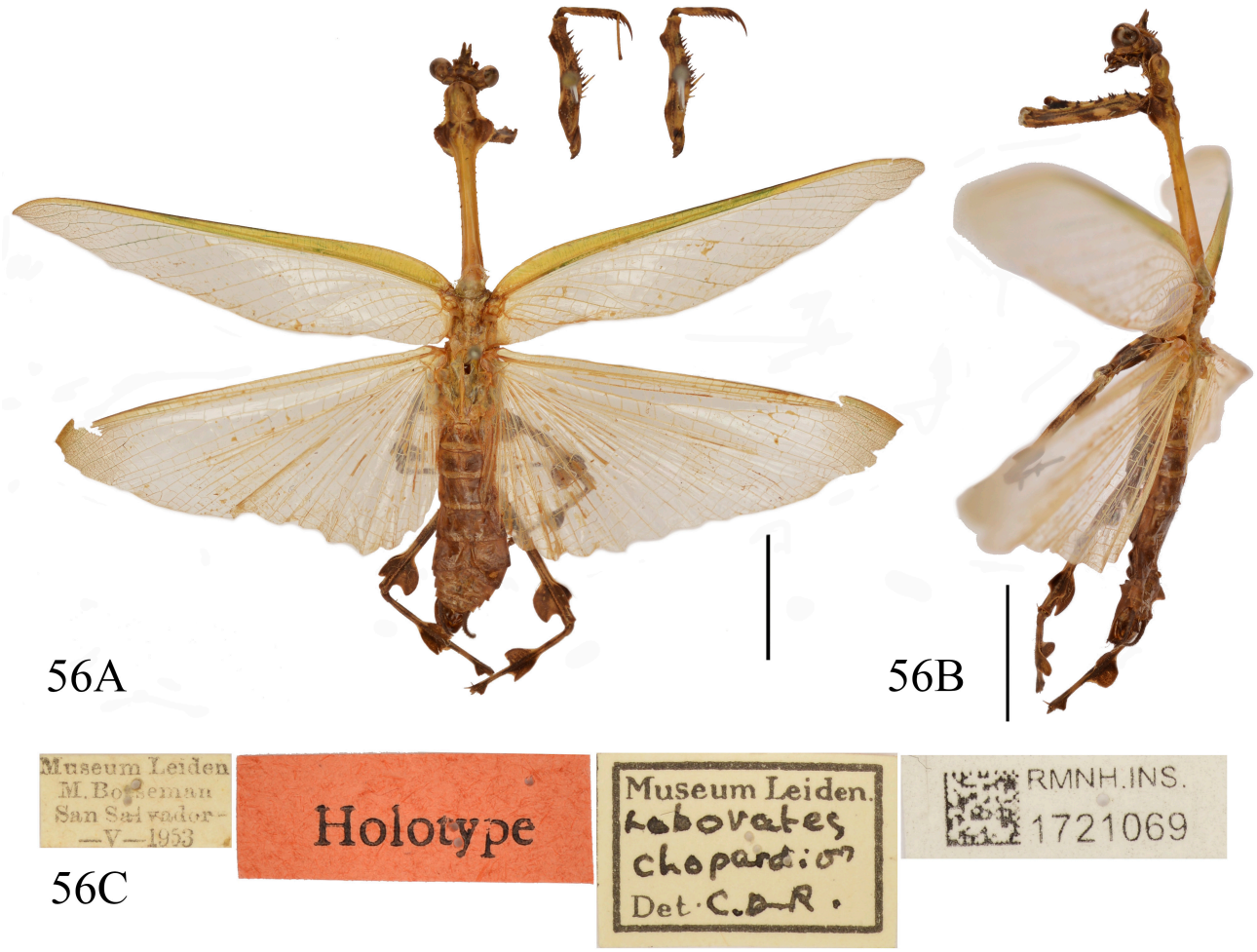


FIGURE 56. *Vates chopardi* (Deeleman-Reinhold, 1957). holotype ♂ (RMNH.INS1721069). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Family Miomantidae Westwood, 1889

Subfamily Miomantinae Westwood, 1889

***Parasphendale* Schulthess-Schindler, 1898**

***Parasphendale arabukosokokei* Borer & Ehrmann, 2022**

Protonym: *Parasphendale arabukosokokei* Borer & Ehrmann, 2022
Reference: Borer & Ehrmann, 2022: 4–6, figs 1–21.

Type material: Paratypes: ♂ "// *Parasphendale arabukosokokei*/ Schwarz, Ehrmann & Borer/paratype ♂/ Leiden (RMNH)//Kenya/RMNH-Mantodea/18a. ♂/ Parasphendale arabukosokokei/paratype// Parasphendale arabukosokokei/ Schwarz, Ehrmann & Borer/ 2019 - ♂ - PT/det. R. Ehrmann, XI. 2018//Kenya-SE: part of Arabuko Sokoke Forest./vic. Malindi, (03.42125°S – 039.89815°E),/05.-17.VIII.2012 (captive bred)/ Parasphendale arabukosokokei Schwarz,/ Ehrmann & Borer, 2019 - ♀[sic!] - (PT)//"; RMNH.INS.1256439 • ♀ "// *Parasphendale arabukosokokei*/ Schwarz, Ehrmann & Borer/paratype ♀/Leiden (RMNH)//Kenya/RMNH-Mantodea/19a. ♀/

Parasphendale arabukosokokei/paratype// Parasphendale arabukosokokei/ Schwarz, Ehrmann & Borer/ 2019 - ♀ - PT/ det. R. Ehrmann, XI. 2018//Kenya-SE: part of Arabuko Sokoke Forest./vic. Malindi, (03.42125°S – 039.89815°E),/ (site 06), leg. S. Materna & T. Schulze/05.–17.VIII.2012 (captive bred)/ Parasphendale arabukosokokei Schwarz,/ Ehrmann & Borer, 2019 - ♀[sic!] - (PT)//"; RMNH.INS.1256440.

Type locality: Kenya, Kilifi County, Arabuko Sokoke Forest.

Condition: Both paratypes: good.

Family Nanomantidae

Subfamily Fulciniinae

Tribe Stenomantini Giglio-Tos, 1915

***Fulciniola* Giglio-Tos, 1915**

***Fulciniola snelleni* (Saussure, 1871)**

Protonym: *Nanomantis snelleni* Saussure, 1871
References: Saussure, 1871b: 437–438, Pl. 7, fig. 65; Giglio-Tos, 1915a: 63 [placement in *Fulciniola*].

Type material: Holotype, ♀ (fig. 57): "//Bernstein/Gebeh// Nanomantis/snelleni ♀ Sauss.//Fulciniola//"; RMNH.INS.1277413

Type locality: Moluccas, Gebeh (fig. 63: no. 40).

Condition: Incomplete (right hind leg and tarsus left hind leg missing).

Remark: Saussure based the description of this species on a single female which is therefore designated as holotype.

***Stenomantis* Saussure, 1871**

***Stenomantis novaeguineae* (De Haan, 1842)**

Protonym: *Mantis* (*Mantis*) *novae guineae* De Haan, 1842: 76, Pl. XVII, fig. 3.
References: De Haan, 1842: 76, Pl. XVII, fig. 3; Saussure, 1871b: 435 [placement in *Stenomantis*].

Type material: Holotype, ♀ (fig. 58): "//Muller/N. Guinea//Stenomantis//", RMNH.INS.1753449.

Type locality: New Guinea (fig. 63: no. 41).

Condition: Incomplete (left mid leg and antennae missing).

Family Nanomantidae Brunner von Wattenwyl. 1893

Subfamily Tropidomantinae Brannoch & Svenson. 2016

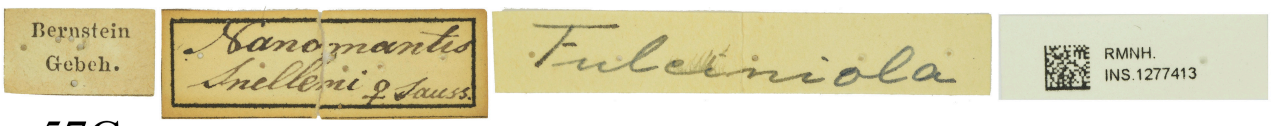
Tribe Epsomantini Schwarz & Roy. 2019

***Epsomantis* Giglio-Tos, 1915**

***Epsomantis tortricoides* (De Haan, 1842)**

Protonym: *Mantis* (*Mantis*) *tortricoides* De Haan, 1842: p. 82, Pl. XVIII, fig. 4
References: De Haan, 1842: p. 82, Pl. XVIII, fig. 4; Giglio-Tos, 1915a: 47 [placement in *Epsomantis*].





57C

FIGURE 57. *Fulciniola snelleni* (Saussure, 1871). holotype ♀ (RMNH.INS.1277413). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

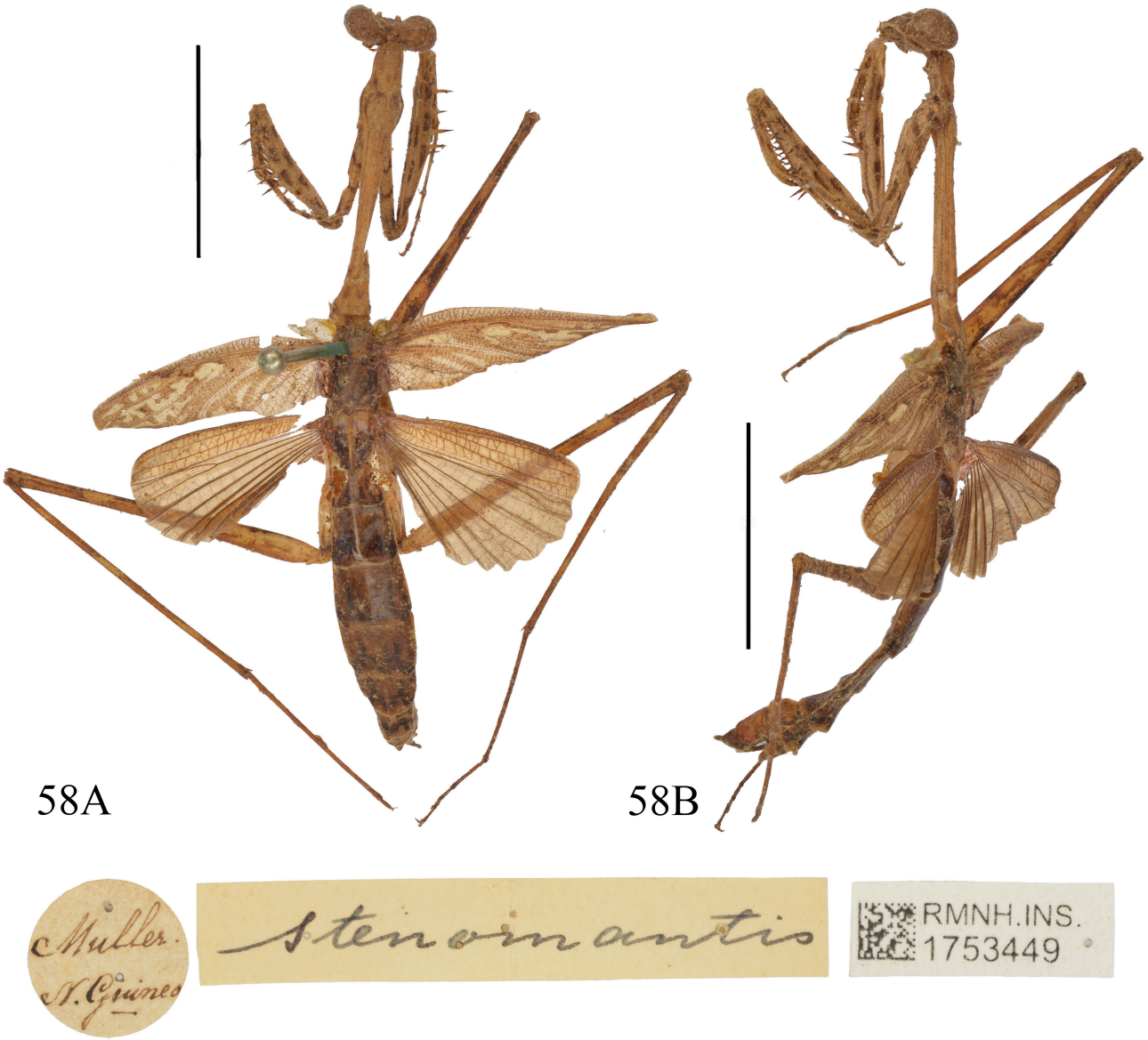


FIGURE 58. *Stenomantis novaeguineae* (De Haan, 1842). holotype ♀ (RMNH.INS.1753449). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Type material: [missing, see under Remark]

Type locality: Java

Condition: n.a.

Remark: Despite a thorough search we have been unable to find the specimen from Java used by De Haan for the description of this species. It must be considered lost.

Family Photinaidae Giglio-Tos, 1915

Subfamily Macromantinae

***Macromantis* Saussure, 1871**

Macromantis saussurei Roy, 2002

Protonym: *Macromantis saussurei* Roy, 2002
Reference: Roy, 2002: 415, table IV, figs 14, 18, 20.

Type material: Paratypes 2 ♀: "//Paloemeu/Kodebakoe/29.3.1952/bos/D.C. Geijskes/902[original label]//Paloemeu/Kodebakoe/29–III–1952//Macromantis/hyalina (DeGeer)/♀/Det. M.C.Polsbroek 1973//Macromantis/costalis n. sp.[sic!]/♀ paratype/R.Roy det. 1999//"; RMNH.INS1758195 • "//Nassaugebergte/lijn km 3.2 berghelling/3 Mrt 1949/8138//Nassaugebergte/lijn Zuid van km 7/3 Mrt 1949//Nassaugeb./lijn km 3,2/berghelling/3–III–1949/D.C. Geijskes//Macromantis/hyalina (DeGeer)/ ♀/ Det. M.C. Polsbroek 1973//Macromantis/costalis n.sp. [sic!]/♀ paratype/R.Roy det. 1999//"; RMNH.INS.1758204.

Type locality: French Guyana and Venezuela, Surinam, Bolivia

Condition: Good, one female (RMNH.INS1758195) missing its right mid leg.

Remark: Both specimens in the Naturalis collection were labeled by Roy in 1999 as paratypes of "*Macromantis costalis* n.sp.". Clearly, after having put these labels, Roy decided to rename the new species to *Macromantis saussurei*. The location data of the two specimens match exactly those mentioned in the description of *M. saussurei* with Naturalis as the repository.

Family Rivetinidae Ehrmann & Roy, 2002

Subfamily Rivetininae Ehrmann & Roy, 2002

Tribe Rivetinini Ehrmann & Roy, 2002

Rivetina Berland & Chopard, 1922

Rivetina baetica (Rambur, 1838)

Protonym: *Mantis* (*Mantis*) trifasciata De Haan, 1842: 77.
References: De Haan, 1842: 77; see below for an elaborate account of reassignments and taxonomic ambiguity of this species.

Type material: Holotype, ♀ (fig. 59): "//Brasilia//Fischeria/baetica.Fundort falsch ♀//Museum Leiden/Eufischeriella/trifasciata/Haan/Det.//", RMNH.INS.1753451.

Type locality: Brasilia (fig. 62: no. 42).

Condition: Complete except for the antennae and the tarsus of the right hind leg..

Remark: De Haan's original description of *trifasciata* was based upon a female specimen reportedly originating from Brazil. Three labels are affixed to the holotype, each offering insight into its evolving identification. The first is a circular locality label bearing only the word "Brasilia," which appears to be the origin for the long-standing confusion regarding its provenance. The second label is a square, handwritten note identifying the specimen as *Fischeria baetica* with an added annotation in German reading "Fundort falsch!" (meaning "locality incorrect!"). Although its author remains unknown, the aged yellowed paper suggests an older, historically informed intervention— correctly identifying the specimen as a misattributed *Rivetina baetica* (Rambur, 1838) female and rejecting Brazil as its locality. The third label, printed and institutional, attributes the name *Eufischeriella trifasciata* Haan, reflecting a later generic placement that, though outdated, corroborates the specimen with *Rivetina* Berland & Chopard, 1922.

Despite this historically accurate but anonymous identification, *trifasciata* has undergone a tangled web of reassignments and taxonomic ambiguity across nearly two centuries. Saussure (1871c: 27) speculated that the species might belong to *Gonatista* Saussure, 1869, and listed it fundamentally correct, as was his suspicion that "Brasilia" was an erroneous locality. Notably, Westwood likened De Haan's female type to the female of *baetica*. Nonetheless, he mistakenly synonymized *Fischeria fraterna* Saussure, 1871 with *trifasciata*, a position that would complicate the species' trajectory in future works.

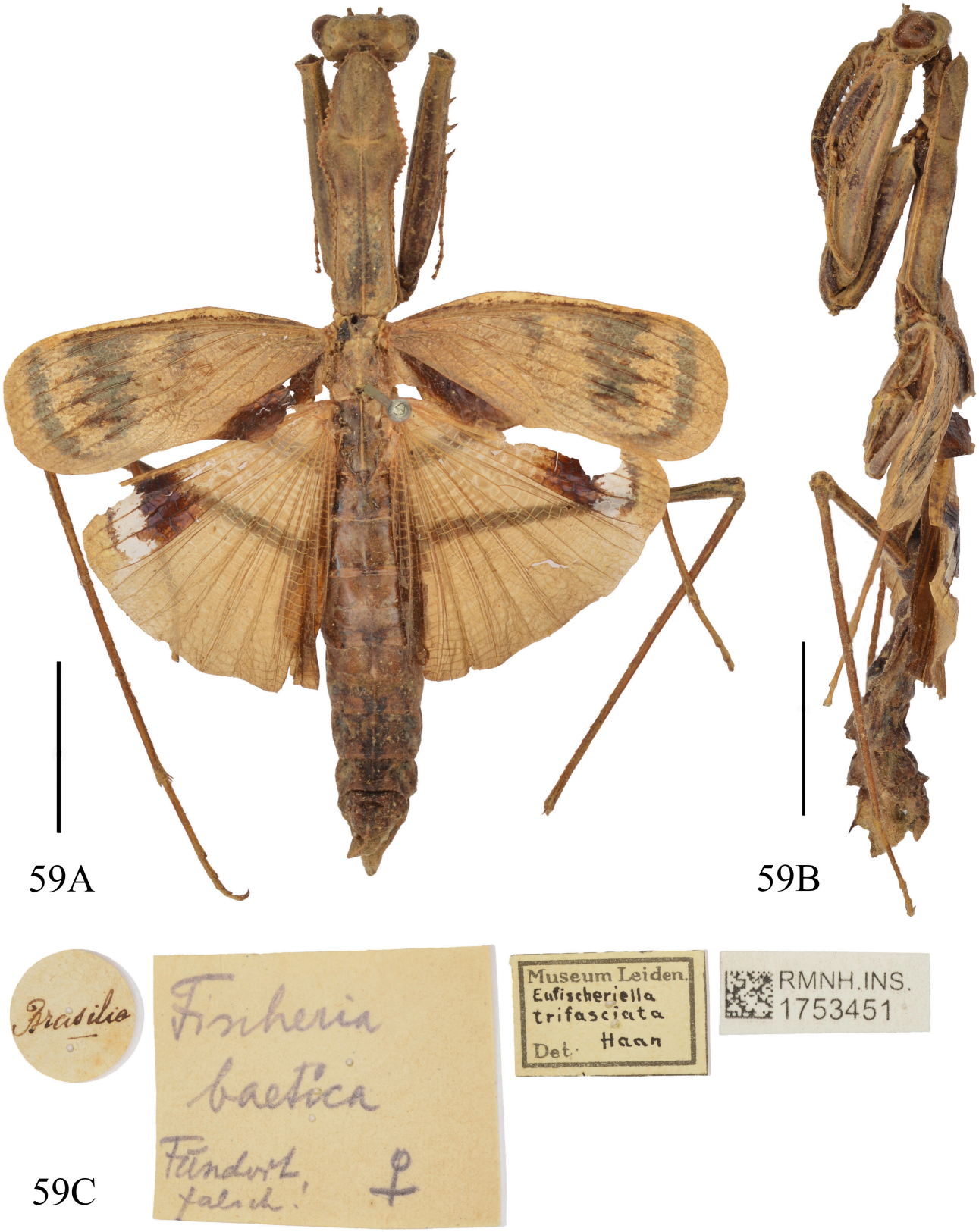


FIGURE 59. *Mantis* (*Mantis*) trifasciata De Haan, 1842, (= *Rivetina baetica* (Rambur, 1838)) holotype ♀ (RMNH.INS.1753451). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Kirby (1904: 270), despite Westwood's correct genus placement, compounded the confusion by omitting Saussure's genus query and formally listing *trifasciata* within *Gonatista*. Yet a cursory examination of the female holotype reveals no morphological affinity with that Caribbean genus. The general habitus, head capsule, leg and pronotal morphology of the holotype all diverge sharply from the characters defining *Gonatista*, rendering Kirby's placement unfounded. Giglio-Tos (1927: 486) later corrected this misstep by moving the species to *Eufischeriella* Giglio-Tos, 1927 (another junior synonym of *Rivetina*) and qualifying it with *incertae sedis*. Though he refrained from a definitive placement, his action was significant in reversing the erroneous connection to *Gonatista* and restoring the association with *Rivetina* as originally recognized by Westwood.

La Greca (1977: 23) erected the genus *Rivetinula* to accommodate *fraterna*, noting clear differences that distinguished this species from members of *Rivetina*. A direct comparison between the female allotype of *fraterna* and the female holotype of *trifasciata* confirms that *trifasciata* does not possess the defining characters of *Rivetinula*, such as subconical eyes, a parallel-sided prozona, modest supracoxal dilation, or the densely reticulated anal area of the hindwing. Rather, the *trifasciata* holotype closely aligns with females of *baetica*, just as Westwood originally noted— further validating his long-overlooked judgment. Despite La Greca's careful distinction between *Rivetina* and *Rivetinula*, Ehrmann (2002: 313) incorrectly listed *trifasciata* as a synonym of *fraterna* without any justification, undermining the morphological clarity established decades prior. The situation only worsened when Otte & Spearman (2005: 135) egregiously transferred *trifasciata* to *Mellierella* Giglio-Tos, 1915, a genus restricted to New Guinea and entirely unrelated to *Rivetina*.

While the original specimen of *Mantis (Mantis) trifasciata* De Haan was misattributed geographically, its identity has never truly been lost. The correct identification, *baetica,* was recognized long ago by Westwood and reaffirmed informally by a now-anonymous German taxonomist, whose handwritten label quietly preserved the truth. Given that *trifasciata* was published four years after Rambur's original description of *baetica* in 1838, it is nomenclaturally junior. As the two specimens are conspecific, *trifasciata* must therefore be regarded as a junior synonym of *Rivetina baetica* (Rambur, 1838).

Family Toxoderidae Saussure, 1869

Subfamily Toxoderinae Saussure, 1869

Tribe Aethalochroini Giglio-Tos, 1914

***Oestomantis* Giglio-Tos, 1914**

***Oestomantis anoplonotus* (Werner, 1933)**

Protonym: *Mesomicropus anoplonotus* Werner, 1933
References: Werner, 1933: 269; Beier, 1937b: addendum [placement in *Oestomantis*].

Type material: Holotype, ♂ (fig. 60): "//Holotype//W. Java. Kedoe/Tjipiring Kendal/5–VI–1932/Van der Meyden leg.// det. Werner/Mesomicropus/n.g./anoplonotus/det. Werner/n.sp./ ♂/det. Werner/Type!//"; RMNH.INS.1721071.

Type locality: Java (fig. 63: no. 43).

Condition: Complete (left mid leg, antennae and tarsus of right fore leg missing).

Remark: In the Mantodea species file online (Otte et al. 2025), it is stated that the holotype male is deposited in the Bogor Zoology Museum, Indonesia (MBBJ Bogor Mus). However, the type material was found in the RMNH Mantodea collection during the current inventory. The species was described by Frans Werner in his fifth contribution to the Mantodea of Indonesia (Werner, 1933). Based on the introductory notes in this paper (Werner, 1933), the species and material treated in this publication were sent to him by the museum in Bogor (MBBJ) and one would expect the material to be deposited there. In the Mantodea Species File (Otte et al., 2025) the whereabouts of the type of this species are indicated with a question mark whereas for the specimen information about the other taxa described by Werner in the same paper MBBJ Bogor is indicated as the repository. In Ehrmann (2002, p. 244–245) the species is not included although the genus name under which it was described by Werner, *Mesomicropus*, is correctly mentioned under *Oestomantis*.

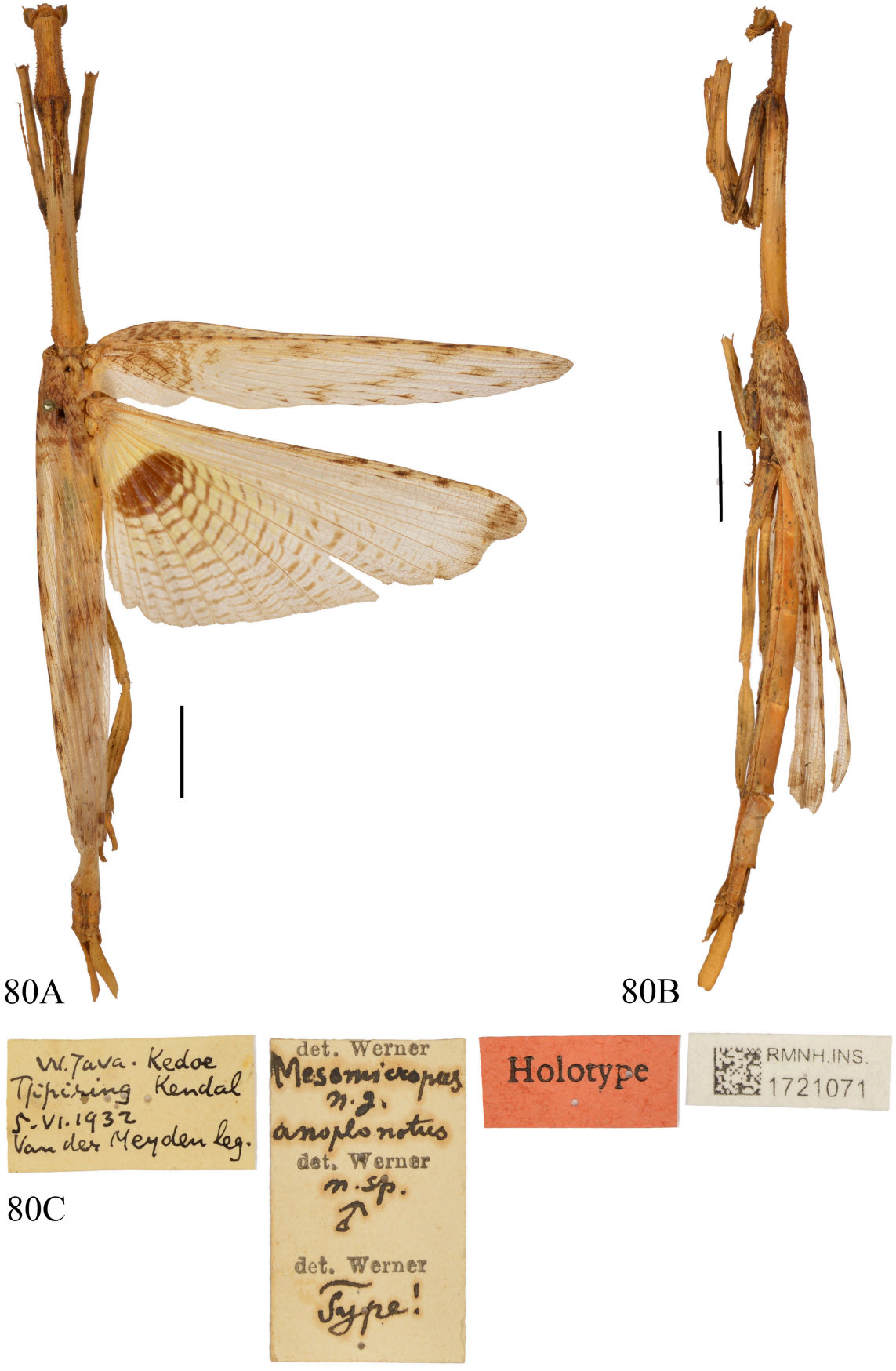


FIGURE 60. *Oestomantis anoplonotus* (Werner, 1933). holotype ♂ (RMNH.INS.1721071). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.



FIGURE 61. *Toxodera maculata* Ouwens, 1913. neotype ♂ (RMNH.INS.1721072). A. Dorsal habitus. B. Lateral habitus. (Bar: 10 mm). C. Labels.

Tribe Toxoderini Saussure, 1869

***Toxodera* Audinet-Serville, 1837**

***Toxodera maculata* Ouwens, 1913**

Protonym: *Toxodera maculata* Ouwens, 1913
References: Ouwens, 1913: 122–123; Lieftinck, 1935: 171 [assignment ‘plesiotype’]; Roy, 1999: 117.

Type material: Neotype, ♂ (fig. 61): "//Type/Neotype//Toxodera maculata/Ouwens (Lieftinck)/det. M.A. Lieftinck 1935//W. Java/Tjibadak 800 m/Ond. Sinagar/17.III.1931 (levend)/Mevr. Ermeling/Expl. dood Buitenzorg/29. III.1931//1♂ prelevé/6–V–1999/R. Roy//", RMNH.INS.1721072.

Type locality: Java (fig. 63: no. 44).

Condition: Good.

Remark: *Toxodera maculata* was described by P.A. Ouwens in 1913 in 'De Tropische Natuur". At the time Ouwens was curator at the Museum in Buitenzorg, nowadays the Museum Zoologi Bogor (MBBJ). Although the author did not indicate the repository where the specimen was kept, one assumes this must have been the museum in Bogor. After it was supposedly deposited at Bogor the type specimen got subsequently lost. In 1935, Lieftinck, at the time curator at the Bogor Museum, selected another specimen from the Bogor collection , which also originated from Java (fig. 61C), and declared it to be the "plesiotype" (Lieftinck, 1935: p.171). The specimen was mentioned again in publication by Roy (2009) on the Toxoderini where he wrote about *Toxodera maculata* (p. 117): "Aside from the plesiotype, which serves as a neotype, I was able to examine 14 additional males and only 2 females of this species (CTP, MHNG, MNHN, NHML, NHMW, NNML, SMNK) originating from Thailand, Laos, West Malaysia, Java, Sumatra, and Borneo." Unfortunately, from this remark by Roy it was not clear where he did examine the plesiotype. Ehrmann (2002) mentions MBBJ as the repository of the type of this species. When checking the Naturalis collection for type material we came across a specimen of *Toxodera maculata* depicted here and labeled as 'neotype' by Roy in 1999 and, more importantly, also carrying a determination label of Lieftinck dated 1935. There is no doubt this is the specimen that was picked by Lieftinck to replace the original type specimen studied by Ouwens which got lost. Apparently at some point in time after 1935 this specimen was transferred to the collection of the Rijksmuseum van Natuurlijke Historie in Leiden, the precursor of Naturalis, where Lieftinck took up a curator position in 1954 after leaving Indonesia.



FIGURE 62. Locations across the globe of primary types present in the Naturalis collection: 1. *Lagrecacanthops brasiliensis* Roy, 2004; 5. *Dystactula natalensis* (Kaltenbach, 1996); 6. *Namamantis nigropunctata* Kaltenbach, 1996; 8. *Gonatista bifasciata* (De Haan, 1842); 9. *Galepsus* (*Syngalepsus*) *beieri* Kaltenbach, 1996; 10. *Tarachodes* (*Tarachodina*) *natalensis* Kaltenbach, 1996; 11. *Pseudoharpax congicus* unpublished manuscript name; 19. *Hoplocorypha bicornis* Deeleman-Reinhold, 1957; 29. *Austrovates variegata* Sjöstedt, 1918; 31. *Hierodula macrostigmata* Deeleman-Reinhold, 1957; 37. *Isomantis domingensis* (Palisot de Beauvois, 1805); 38. *Pseudovates parallela* (De Haan, 1842); 39. *Vates chopardi* (Deeleman-Reinhold, 1957); 42. *Rivetina baetica* (Rambur, 1838). Blue mark: indication location precise, yellow mark: indication location only regional or national.

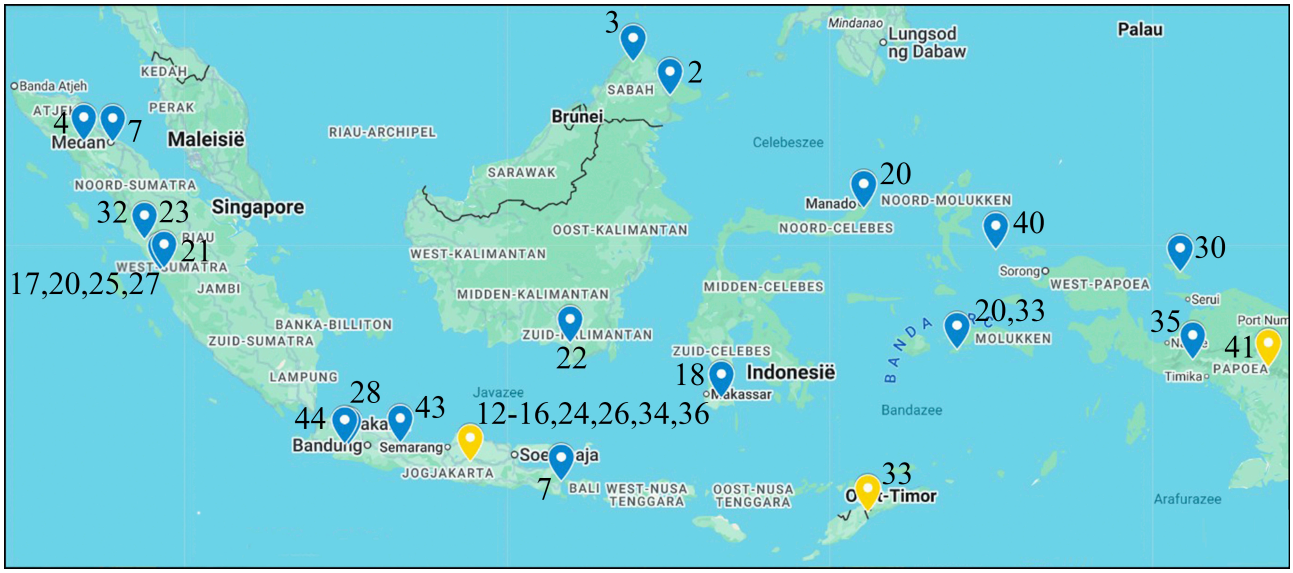


FIGURE 63. Locations of primary types across Indonesia and Malaysia, present in the Naturalis collection: 2. *Amorphoscelis bimaculata* Roy, 2010; 3. *Amorphoscelis huismani* Roy, 2010; 4. *Amorphoscelis sumatrana* Roy, 2010; 7. *Euchomenella apicalis* Werner, 1922; 12. *Compsomantis crassiceps* (De Haan, 1842); 13. *Gonypeta punctata* (De Haan, 1842) ; 14. *Theopompa burmeisteri* (De Haan, 1842); 15. *Theopompa servillei* (De Haan, 1842); 16. *Amantis reticulata* (De Haan, 1842); 17. *Haania confusa* Saussure, 1871; 18. *Haania simplex* Beier, 1952; 20. *Acromantis oligoneura* (De Haan, 1842); 21. *Majangella ophirensis* (Werner, 1922); 22. *Psychomantis borneensis* (De Haan, 1842); 23. *Anaxarcha pulchra* (Werner, 1922); 24. *Odontomantis planiceps* (De Haan, 1842); 25. *Creobroter sumatranus* (De Haan, 1842); 26. *Astyliasula phyllopus* (De Haan, 1842); 27. *Pachymantis bicingulata* (De Haan, 1842); 28. *Parablepharis kuhlii* (De Haan, 1842); 30. *Hierodula biaka* Deeleman-Reinhold, 1957; 32. *Hierodula rufomaculata* Werner, 1922; 33. *Hierodula timorensis* (De Haan, 1842); 34. *Rhombodera basalis* (De Haan, 1842); 35. *Rhombodera boschmai* Deeleman-Reinhold, 1957; 36. *Rhombodera flava* (De Haan, 1842); 40. *Fulciniola snelleni* (Saussure, 1871); 41.*Stenomantis novaeguineae* (De Haan, 1842); 43. *Oestomantis anoplonotus* (Werner, 1933); 44. *Toxodera maculata* Ouwens, 1913. Blue mark: indication location precise, yellow mark: indication location only regional or national.

Discussion

The present study provides an updated catalogue of the Mantodea type material housed in Naturalis (RMNH), aiming to enhance accessibility and facilitate future taxonomic research. The meticulous documentation of type specimens is crucial for maintaining taxonomic accuracy, resolving ambiguities, and ensuring proper species identification. Our findings underscore the significance of preserving and digitizing type specimens, as they serve as definitive references for taxonomic studies and biodiversity assessments.

Below in tables 1–3 the overall result of this study regarding type specimens linked to taxa described by Stoll (Table 1) and de Haan (Table 2) and type specimens present in the Naturalis collection (Table 3) is summarized.

Table 1 presents an overview of all Mantid species mentioned in Stoll's first (1787) and second (1813) edition, including the binomens applied by Houttuyn in the second edition, the taxa included in De Haan's 1842 publication and the current valid name. A check among the species currently present in the Naturalis collection revealed that some of them include specimens collected prior to the publication of De Haan (1842). However none of these could conclusively be matched with the specimens depicted in Stoll predominantly because their posture did not match the illustrations, color patterns deviated slightly and there were discrepancies with the location. Summarising, based on the current search, it can be confirmed that there are no Mantid specimens depicted in Stoll (1787, 1813) present in the Naturalis collection.

Table 2 presents an overview of Mantodea taxa described by De Haan in 1842, the sex he studied, page, plate and figure numbers, the current name, their provenance, the registration numbers of specimens linked to those taxa as types, the type category and sex. There are several factors which make linking specimens in the current Naturalis collection to specimens actually studied by the Haan not always straightforward. Descriptions provided by De Haan

were brief, not all taxa were depicted and figures are generalized symmetrical images of mantids with their wings spread. On top of that specimens were not labeled as 'type' although some of them, on a later date, received type labels, sometimes provided with question marks. Specimens linked to taxa described by De Haan as a rule carry small circular labels, usually only provided with a single word for the location, sometimes including the collector name as well.

TABLE 1. Cross reference for Mantids described by Stoll, their occurrence in De Haan, 1842 and their currently accepted name.

name in Stoll, 1787	page no.	plate no.	name in Stoll, 1813	page no.	plate no.	name De Haan, 1842	page ([]: only listed)	currently accepted name
The Withered Leaf Mantis	12	IV-14	*Mantis sinuata* Houttuyn in Stoll, 1813	77		not included		*Acanthops fuscifolia* (Manuel, 1797)
The Five-Spots Mantis	8–9	III-9	*Mantis quinquemaculata* Manuel 1797	79		*Mantis* (*Thespis*) *5-maculata,* Stoll	94	*Angela quinquemaculata* (Manuel, 1797)
The Shining Purple	25	VIII-28	*Mantis versicolor* Houttuyn in Stoll, 1813	79		*Mantis (Thespis) purpurascens*, Oliv.	94	*Angela purpurascens* (Manuel, 1797)
The Slim Body with Small Wings			*Mantis brachyptera* Houttuyn in Stoll, 1813	79	XIX-71	*Mantis (Thespis) purpurascens*, Oliv.	94	*Angela purpurascens* (Manuel, 1797)
The Green Dwarf	5–6	I-4	*Mantis abbreviata* Houttuyn in Stoll, 1813	77		not included		*Astollia chloris* (Manuel, 1797)
The Mantis with Inlaid Wings	41	XII-47	*Mantis mendica* Fabricius, 1775	78		not included		*Blepharopsis mendica* (Fabricius, 1775)
The Diana			*Mantis diana* Houttuyn in Stoll, 1813	74	XXV -100	*Mantis* (*Harpax*) *diana* Stoll	90	*Callibia diana* (Houttuyn in Stoll, 1813)
The Shield-Bearing Mantis	35–37	XI-42	*Mantis cancellata* Fabricius, 1775	78		not included		*Choeradodis strumaria* (Linnaeus, 1758)
The Choking Mantis	39–40	XII-45	*Mantis rhomboidea* Houttuyn in Stoll, 1813	78		not included		*Choeradodis rhomboidea* (Houttuyn in Stoll, 1813)
The Yellow-Eyed Dwarf			*Mantis gemmata* Houttuyn in Stoll, 1813	71	XXIV-93	*Mantis* (*Harpax*) *urbana*, Fabr.	89	Creobroter gemmata (Houttuyn in Stoll, 1813)
The Gray Mantis, Spitted with Black	10–11	IV-12	"Nympha"	78		not included		*Deiphobe mesomelas* (Manuel, 1797)
The Yellow-Winged Mantis	19	VI-22	"Nympha"	77		not included		*Deiphobe xanthoptera* (Manuel, 1797)
The Russian Comb-Antennes Mantis (male)	30–31	IX-34	*Mantis pectinicornis* Linnaeus, 1767	78		not included		*Empusa pennicornis* (Pallas, 1773)
The Russian Comb-Antennes Mantis (female)	31	IX-35	*Mantis pectinicornis* Linnaeus, 1768	78		not included		*Empusa spinosa* Krauss, 1902
The Impoverished	33–34	X-40	*Mantis pauperata* Fabricius, 1781	78		not included		*Empusa pauperata* (Fabricius, 1781)

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TABLE 1. (Continued)

name in Stoll, 1787	page no.	plate no.	name in Stoll, 1813	page no.	plate no.	name De Haan, 1842	page ([]: only listed)	currently accepted name
The Orange Flat-Horned Mantis			*Mantis fronticornis* Houttuyn in Stoll, 1813	63	XXI-79	not included		*Empusa fronticornis* (Houttuyn in Stoll, 1813)
The Up-Tailed mantis			"Nympha"	72	XXIV-94	not included		*Empusa fronticornis* (Houttuyn in Stoll, 1813)
The Little Yellow-Edged Dwarf	37	XI-43	*Mantis marginalis* Houttuyn in Stoll, 1813	78		*Mantis* (*Oxypilus*) *marginalis,* Stoll	87	*Euantissa pulchra* (Fabricius, 1787)
The Green Gouty Mantis	46–48	XVI-58-59	*Mantis gongylodes* Linnaeus, 1758	78		not included		*Gongylus gongylodes* (Linnaeus, 1758)
The Brown Gouty Mantis	49–50	XVII-61	*Mantis flabellicornis* Fabricius, 1793	79		not included		*Gongylus gongylodes* (Linnaeus, 1758)
The Yellow-Banded Purple			*Mantis ornata* Houttuyn in Stoll, 1813	57	XIX-69	[*Mantis* (*Mantis*) *ornata*, Stoll]	[76]	*Hagiomantis ornata* (Houttuyn in Stoll, 1813)
The Little Horned Mantis	29–30	IX-33	*Mantis lobata* Fabricius, 1781	78		*Mantis* (*Harpax*) *tricolo*r Linn.	89	*Harpagomantis tricolor* (Linnaeus, 1758)
The Little Crowned Mantis	41	XII-48	*Mantis lobata* Fabricius, 1781	78		*Mantis* (*Harpax*) *tricolo*r Linn.	89	*Harpagomantis tricolor* (Linnaeus, 1758)
The Variegated Crowned Mantis	42	XII-50	Mantis quadricornis Houttuyn in Stoll, 1813	78		*Mantis* (*Harpax*) *tricolo*r Linn.	89	*Harpagomantis tricolor* (Linnaeus, 1758)
The Banded Mantis	56	XVIII-68	*Mantis stigosa* Houttuyn in Stoll, 1813	78		not included		*Heterochaetula* sp.
The Green-Edged Mantis	15	V-19	*Mantis vitrea* Houttuyn in Stoll, 1813	77		not included		*Hierodula vitrea* (Houttuyn in Stoll, 1813)
The One-Spot Mantis	42	XII-49	*Mantis notata* Houttuyn in Stoll, 1813	78		[*Mantis (Mantis) unimaculata* St.]	[66]	*Hierodula unimaculata* (Manuel, 1797)
The Dotted Glass-Winged Mantis	49	XVI-60	*Mantis punctata* Houttuyn in Stoll, 1813	78		not included		*Hierodula venosa* (Manuel, 1797)
The Crowned Mantis	38	XI-44, 44A	*Mantis bicornis* Houttuyn in Stoll, 1813	78		not included		*Hymenopus coronatus* (Manuel, 1797)
The Olive Leaf Mantis	58–59	XIX-72	*Mantis ovalifolia* Houttuyn in Stoll, 1813	78		[Mantis (Mantis) unimaculata St.]	[66]	*Macromantis ovalifolia* (Houttuyn in Stoll, 1813)
The Glass-Winged Mantis			*Mantis hyalina* De Geer, 1773	78	XX-75	[*Mantis* (*Mantis*) *vitrea, Burm.*]	[82]	*Macromantis hyalina* (De Geer, 1773)
The Green Glass-Winged Mantis	53	XVII-64	*Mantis oratoria* Linnaeus, 1758	79		*Mantis (Mantis) religiosa Linn.*	71	*Mantis religiosa* Linnaeus, 1758
The Glazed-Winged NMantis	4–5	1-2	*Mantis forsicata* Houttuyn in Stoll, 1813	77		not included		*Miomantis monacha* (Fabricius, 1787)

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TABLE 1. (Continued)

name in Stoll, 1787	page no.	plate no.	name in Stoll, 1813	page no.	plate no.	name De Haan, 1842	page ([]: only listed)	currently accepted name
The Greenish Dwarf			*Mantis nana* Houttuyn in Stoll, 1813	78	XXII-84	*Mantis* (*Mantis*) *nana*	70	*Miomantis fenestrata* (Fabricius, 1781)
The Little Green Mantis			Mantis rubicunda Houttuyn in Stoll, 1813	79	XXV-96	[*Mantis* (*Mantis*) *rubicunda*, Stoll]	[74]	*Oxyopsis rubicunda* (Houttuyn in Stoll, 1813)
The Variegated Mantis	34–35	XI-4	Mantis (Mantis) religiosa Linn.	78		*Mantis (Mantis) striata Stoll*	73	*Polyspilota aeruginosa* (Goeze, 1778)
The Dotted Mantis			*Mantis pustulata* Houttuyn in Stoll, 1813	78	XX-73	[*Mantis* (*Mantis*) *pustulata*, Stoll]	[71]	*Polyspilota aeruginosa* (Goeze, 1778)
The Belted Mantis	29	IX-32	*Mantis cingulata* Drury, 1773	77		*Mantis* (*Mantis*) *bidens*, F.	79	*Pseudovates stolli* (Saussure & Zehntner, 1894)
The Yellow Corpulent Mantis			*Mantis diluta* Houttuyn in Stoll, 1813	78	XXII-83	[*Mantis* (*Mantis*) *diluta*, Stoll]	[74]	*Pseudoxyops diluta* (Houttuyn in Stoll, 1813)
The Lacewing Mantis	40	XII-46	*Mantis fenestrata* Houttuyn in Stoll, 1813	78		not included		*Pseudoxypilus hemerobius* (Manuel, 1797)
The Little Brown Mantis	9	III-10	*Mantis truncata* Fabricius, 1793	77		[*Mantis* (*Mantis*) *truncata*, Stoll [sic!]]	[75]	*Raptrix perspicua* (Fabricius, 1787)
The Little Dark Mantis			*Mantis fuscata* Houttuyn in Stoll, 1813	78	XIX-70	[*Mantis* (*Mantis*) *fuscata,* Stoll]	[76]	*Raptrix perspicua* (Fabricius, 1787)
The Narrow Horned Mantis	32–33	X-38	Mantis oculata Fabricius, 1781	79		not included		*Schizocephala bicornis* (Linnaeus, 1758)
The Narrow Horned Chinese Mantis	43	XIII-53	Mantis oculata Fabricius, 1781	79		not included		*Schizocephala bicornis* (Linnaeus, 1758)
Nymph of Cape Mantis	11	IV-13	"Nympha"	78		not included		*Sphodromantis gastrica* (Stål, 1858)
The Fat Belly	28	IX-31	*Mantis birivia* Houttuyn in Stoll, 1813	77		[*Mantis* (*Mantis*) *birivia*, Stoll]	[76]	*Stagmatoptera abdominalis* (Manuel, 1797)
The Devot Mantis	51–52	XVII-62	*Mantis precaria* Linnaeus, 1758	78		[*Mantis* (*Mantis*) *precria*, Fabr. [sic!]]	[74]	*Stagmatopotera supplicaria* (Burmeister, 1838)
The Way-Showing Mantis	52	XVII-63	*Mantis sancta* Fabricius, 1787	79		[*Mantis* (*Mantis*) *sancta*, Stoll [sic!]]	[74]	*Stagmatoptera indicator* (Manuel, 1797)
The Red and White-Eyed Mantis	55	XVIII-66	*Mantis annulata* Houttuyn in Stoll, 1813	78		not included		*Stagmatoptera precaria* (Linnaeus, 1758)
The Great Green Mantis			*Mantis rogatoria* Houttuyn in Stoll, 1813	79	XXV-95	not included		*Stagmatoptera precaria* (Linnaeus, 1758)
The Devot Lace Mantis			*Mantis carolina* Linnaeus, 1763	70	XXIV-91	[*Mantis* (*Mantis*) *carolina*, St. [sic!]]	[75]	*Stagmomantis carolina* (Linnaeus, 1763)

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TABLE 1. (Continued)

name in Stoll, 1787	page no.	plate no.	name in Stoll, 1813	page no.	plate no.	name De Haan, 1842	page ([]: only listed)	currently accepted name
The Narrow-Winged Striped Mantis	13	V-16	*Mantis attenuata* Houttuyn in Stoll, 1813	79		[*Mantis* (*Mantis*) *superstitiosa*, F.]	71, 72	*Tenodera fasciata* (Manuel, 1797)
The Praying Mantis			*Mantis religiosa* Linnaeus, 1758	78	XXI-80	not included		*Tenodera* sp.
The Brown Mantis			*Mantis aridifolia* Houttuyn in Stoll, 1813	78	XXII-82	not included		*Tenodera aridifolia* (Houttuyn in Stoll, 1813)
The Brown-Big-Eyed Mantis	19–20	VI-23	*Mantis oratoria* Linnaeus, 1758	77		[*Mantis* (*Mantis*) *oratoria Linn*.]	[76]	*Theopompa ophthalmica* (Manuel, 1797)
The Leafed Mantis	55–56	XVII-67	*Mantis subfoliata* Houttuyn in Stoll, 1813	78		not included		*Vates lobata* (Fabricius, 1798)
The Little Black Buttock			*Mantis sphingicornis* Houttuyn in Stoll, 1813	78	XX-74	not included		*Vates sphingicornis* (Houttuyn in Stoll, 1813)
The Lobe Leg	26–27	VIII-30	Mantis macroptera Houttuyn in Stoll, 1813	77		not included		*Zoolea lobipes* (Manuel, 1797)
The Dwarf			*Phasma acicularis* Houttuyn in Stoll, 1813	77	XXV-97	not included		*Phasma acicularis* Houttuyn in Stoll, 1813

TABLE 2. Summary of Mantodea type specimens of taxa described by De Haan and their presence/absence in the collection of Naturalis (RMNH).

current name	De Haan, 1842				Naturalis collection 2025	remarks
	protonym	sex(es) studied	page(s), plate and figure(s)	type location description:		
Acromantis oligoneura (De Haan, 1842)	Mantis oligoneura	male; female	p. 90–91; Pl. XVIII, fig. 6	Java, Padang, Amboina, Tondano	syntype 1 juv. 2 ♀	syntype from Java not found
Amantis reticulata (Hagenbach in De Haan, 1842)	Mantis (Oxypilus) reticulata	male; female	p. 87; Pl. XVII, fig. 9	Krawang	syntype ♂	female syntype not found
Angela armata (De Haan, 1842)	Mantis (Thespis) armata	female	p. 95	[no location]	holotype ♀	
Astyliasula phyllopus (De Haan, 1842)	Mantis (Oxypilus) phyllopus	male	p. 84; Pl. XVI, fig. 7	Java	holotype ♂	
Compsomantis crassiceps (De Haan, 1842)	Mantis (Oxypilus) crassiceps	female	p. 87; Pl. XVII, fig. 8	Krawang	holotype ♀	
Creobroter sumatranus (De Haan, 1842)	Mantis (Harpax) sumatrana	male; female	p. 89–90; Pl. XVII, fig. 14–15	Padang	syntype ♂	female syntype not found
Deroplatys rhombica (Hagenbach in De Haan, 1842)	Mantis (Deroplatys) rhombica	male; female	p. 92–93; Pl. XVII, fig. 1–2	Java, Sumatra, Mandawey (Borneo)	lectotype ♂	paralectotypes not found
Epsomantis tortricoides (De Haan, 1842)	Mantis (Mantis) tortricoides	male	p. 82; PL XVIII, fig. 4	Java		holotype not found
Euchomenella heteroptera (De Haan, 1842)	Mantis (Mantis) heteroptera	male; female	p. 78; Pl XVIII, fig. 1–2	Java, Banjermassing, Tondano (Celebes)		syntypes not found

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TABLE 2. (Continued)

current name	De Haan, 1842				Naturalis collection 2025	remarks
	protonym	sex(es) studied	page(s), plate and figure(s)	type location description:		
Euchomenella thoracica (De Haan, 1842)	Mantis (Thespis) thoracica	female	p. 94	[no location]	holotype ♀	
Gonatista bifasciata (De Haan, 1842)	Mantis (Mantis) bifasciata	female	p. 78	Cuba	holotype ♀	
Gonypeta punctata (De Haan, 1842)	Mantis (Oxypilus) punctata	male; female	p. 85; P. XVII, fig. 12–13	Java	syntype ♂	female syntype not found
Haania confusa Saussure, 1871	Mantis (Oxypilus) lobiceps	male; female	p. 85; Pl. XVII, fig. 4–5	Padang	holotype ♀	
Haania lobiceps (De Haan, 1842)	Mantis (Oxypilus) lobiceps	male; female	p. 85; Pl. XVII, fig. 4–5	Krawang		female holotype not found
Hierodula timorensis (De Haan, 1842)	Mantis (Mantis) timorensis	male; female	p. 69	Timor, Amboina	lectotype ♂; paralectotype ♂	
Odontomantis planiceps (De Haan, 1842)	Mantis (Oxypilus) planiceps	male; female	p. 88; Pl. XVII, fig. 10–11	Java, Borneo	syntype ♀	
Pachymantis bicingulata (De Haan, 1842)	Mantis (Oxypilus) bicingulata	male; female	p. 86; Pl. XVII, fig. 6–7	Batang-Singalang	lectotype ♂; paralectotype ♀	
Parablepharis kuhlii (De Haan, 1842)	Mantis (Blepharis) kuhlii	female nymph	p. 93; Pl. XVIII, fig. 3	Java	holotype (♀ nymph)	
Pseudovates parallela (De Haan, 1842)	Mantis (Mantis) parallela	male; female	p. 79	Brasilia	syntype ♂, ♀	
Psychomantis borneensis (De Haan, 1842)	Mantis borneensis	male	p. 91	Sakoembang (Borneo)	holotype ♂	
Rhombodera basalis (De Haan, 1842)	Mantis (Mantis) basalis	female	p. 67	Krawang (Java)	syntype 2 ♀	
Rhombodera flava (De Haan, 1842)	Mantis (Mantis) flava	male; female	p.68	Java	syntype ♂	female syntype not found
Rivetina baetica (Rambur, 1838)	Mantis (Mantis) trifasciata	female	p. 77	Brasilia [erroneous!]	holotype ♀	
Stagmomantis domingensis, Palisot de Beauvois, 1805	Mantis cubaensis	[not indicated]	p. 74, 75	Cuba	holotype ♀	
Stenomantis novaeguineae (De Haan, 1842)	Mantis (Mantis) novae guineae	female	p. 76; Pl XVII, fig. 3	Nova Guinea	holotype ♀	
Theopompa burmeisteri (De Haan, 1842)	Mantis (Mantis) burmeisteri	male; female	p. 80; Pl XVI, fig. 3–4	Java	syntype ♂	female syntype not found
Theopompa servillei (De Haan, 1842)	Mantis (Mantis) servillei	male; female	p. 81; PL XVI,fig. 5–6	Java	syntype ♂, 2♀	both females without location label

We have been able to locate specimens belonging to the original series described by De Haan (1842) for all but three of the 27 species. For 3 species (*Haania lobiceps, Euchomenella heteroptera* and *Epsomantis tortricoides*) we were unable to trace specimens that could have belonged to the original series studied by De Haan. The typeseries of these three species must therefore be considered lost. In 18 out of 27 species described by De Haan, specimens were found in the Naturalis collection carrying round labels and a location that exactly matches the location provided in the descriptions. In 4 species described by De Haan, the specimens assumed to belong to the original series carried round labels with locations that slightly deviated from the text in De Haan's book. Both in *Compsomantis crassiceps* (De Haan, 1842) and *Amantis reticulata* (De Haan, 1842) the book mentions "Krawang" whereas the round label on the specimens mention "Java". For *Pachymantis bicingulata* (De Haan, 1842) the book states "Batang-Singalang" as locality, the label citing 'Padang' and in *Psychomantis borneensis* (De Haan, 1842) the localities provided are "Sakoembang-Borneo"in the book and "Bajerm" on the label. The exact reason behind the differences remains unknown but in all these 4 cases names used in the book and mentioned on the label refer to the same area. For

instance “Batang-Singalang” is the name of a river whose estuary is situated in Padang, Besides slight differences between label text and the information provided in the book, in two species (*Angela armata* and *Euchomenella thoracica*) specimens carried a void round label which is also reflected in the book of of De Haan where the location is not provided. The specimens assigned as type to *Rhombodera basalis*, based on their appearance and the pin, clearly date back to the early 1800s, do not carry round labels but do carry labels applied more recently stating ‘Muller Java’. We assume that these labels were used to replace the original round labels. Finally the lectotype of *Deroplatys rhombica* (De Haan, 1842), designated by Zhang & Price (2024: 38) does not carry a location label.

Table 3 provides a list of all the primary and secondary type specimens of Mantodea present in the Naturalis collection. With this table and the current catalogue of the Mantodea type material housed in the Naturalis collection (RMNH), we aim to enhance accessibility and facilitate future taxonomic research. The detailed documentation of type specimens is crucial for maintaining taxonomic accuracy, resolving ambiguities, and ensuring proper species identification. Our findings underscore the significance of preserving and digitizing type specimens, as they serve as definitive references for taxonomic studies and biodiversity assessments.

TABLE 3. Mantodea type specimens present in the collection of Naturalis.

taxon no.	current valid taxon name	type of taxon name	family	subfamily	tribe	type category	sex	registration number
1	Lagrecacanthops brasiliensis Roy, 2004	Lagrecacanthops brasiliensis Roy, 2004	Acanthopidae	Acanthopinae		holotype	male	RMNH. INS.1721017
2	Amorphoscelis bimaculata Roy, 2010	Amorphoscelis bimaculata Roy, 2010	Amorphoscelidae	Amorphoscelinae		holotype	male	RMNH. INS.1721018
3	Amorphoscelis huismani Roy, 2010	Amorphoscelis huismani Roy, 2010	Amorphoscelidae	Amorphoscelinae		holotype	male	RMNH. INS.1721019
3	Amorphoscelis huismani Roy, 2010	Amorphoscelis huismani Roy, 2010	Amorphoscelidae	Amorphoscelinae		paratype	male	RMNH. INS.1721020
3	Amorphoscelis huismani Roy, 2010	Amorphoscelis huismani Roy, 2010	Amorphoscelidae	Amorphoscelinae		paratype	male	RMNH. INS.1721021
4	Amorphoscelis parva Beier, 1952	Amorphoscelis parva Beier, 1952	Amorphoscelidae	Amorphoscelinae		paratype	male	RMNH. INS.1721022
5	Amorphoscelis sumatrana Roy, 2010	Amorphoscelis sumatrana Roy, 2010	Amorphoscelidae	Amorphoscelinae		holotype	male	RMNH. INS.1721023
5	Amorphoscelis sumatrana Roy, 2010	Amorphoscelis sumatrana Roy, 2010	Amorphoscelidae	Amorphoscelinae		paratype	male	RMNH. INS.1721024
6	Angela armata (De Haan, 1842)	Mantis (Thespis) armata De Haan, 1842	Angelidae			holotype	female	RMNH. INS.1104751
7	Dystactula natalensis (Kaltenbach, 1996)	Rogermantis natalensis Kaltenbach, 1996	Chroicopteridaea	Chroicopterinae	Bolbellini	paratype	male	ZMA. INS.5199572
7	Dystactula natalensis (Kaltenbach, 1996)	Rogermantis natalensis Kaltenbach, 1996	Chroicopteridaea	Chroicopterinae	Bolbellini	paratype	male	ZMA. INS.5199573
7	Dystactula natalensis (Kaltenbach, 1996)	Rogermantis natalensis Kaltenbach, 1996	Chroicopteridaea	Chroicopterinae	Bolbellini	holotype	male	ZMA. INS.5199574

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TABLE 3. (Continued)

taxon no.	current valid taxon name	type of taxon name	family	subfamily	tribe	type category	sex	registration number
8	Namamantis nigropunctata Kaltenbach, 1996	Namamantis nigropunctata Kaltenbach, 1996	Chroicopteridaea	Chroicopterinae	Chroicopterini	holotype	male	ZMA. INS.5199575
9	Deroplatys rhombica (Hagenbach in De Haan, 1842)	Mantis (Deroplatys) rhombica De Haan, 1842	Deroplatyidae	Deroplatyinae	Deroplatyini	lectotype	male	RMNH. INS.1753455
10	Euchomenella apicalis Werner, 1922	Euchomenella apicalis Werner, 1922	Deroplatyidae	Deroplatyinae	Euchomenellini	lectotype	male	RMNH. INS.1753440
10	Euchomenella apicalis Werner, 1922	Euchomenella apicalis Werner, 1922	Deroplatyidae	Deroplatyinae	Euchomenellini	paralectotype	male	RMNH. INS.1753441
10	Euchomenella apicalis Werner, 1922	Euchomenella apicalis Werner, 1922	Deroplatyidae	Deroplatyinae	Euchomenellini	paralectotype	male	RMNH. INS.1753442
10	Euchomenella apicalis Werner, 1922	Euchomenella apicalis Werner, 1922	Deroplatyidae	Deroplatyinae	Euchomenellini	paralectotype	male	RMNH. INS.1753443
10	Euchomenella apicalis Werner, 1922	Euchomenella apicalis Werner, 1922	Deroplatyidae	Deroplatyinae	Euchomenellini	paralectotype	male	RMNH. INS.1753444
11	Euchomenella heteroptera (De Haan, 1842)	Mantis (Mantis) heteroptera De Haan, 1842	Deroplatyidae	Deroplatyinae	Euchomenellini	syntype [?]		RMNH. INS.1753445
12	Euchomenella thoracica (De Haan, 1842)	Mantis (Thespis) thoracica De Haan, 1842	Deroplatyidae	Deroplatyinae	Euchomenellini	holotype	female	RMNH. INS.1721025
13	Gonatista bifasciata (De Haan, 1842)	Mantis (Mantis) bifasciata De Haan, 1842	Epaphroditidae	Gonatistinae		holotype	female	RMNH. INS.1753439
14	Galepsus (Syngalepsus) beieri Kaltenbach, 1996	Galepsus (Syngalepsus) beieri Kaltenbach, 1996	Eremiaphilidae	Tarachodinae	Tarachodini	holotype	male	ZMA. INS.5199576
15	Tarachodes (Tarachodina) natalensis Kaltenbach, 1996	Tarachodes (Tarachodina) natalensis Kaltenbach, 1996	Eremiaphilidae	Tarachodinae	Tarachodini	holotype	male	ZMA. INS.5199577
16	Pseudo harpax dubius, La Grec, 1954	Pseudoharpax congicus Beier in litteris	Galinthiadidae				female	RMNH. INS.1753435
17	Compsomantis crassiceps (De Haan, 1842)	Mantis (Oxypilus) crassiceps De Haan, 1842	Gonypetidae	Gonypetinae	Gonypetini	holotype	female	RMNH. INS.1646909
18	Gonypeta punctata (De Haan, 1842)	Mantis (Oxypilus) punctata De Haan, 1842	Gonypetidae	Gonypetinae	Gonypetini	syntype	male	RMNH. INS.1256441
19	Theopompa burmeisteri (De Haan, 1842)	Mantis (Mantis) burmeisteri De Haan, 1842	Gonypetidae	Gonypetinae	Gonypetini	syntype	male	RMNH. INS.1277429
20	Theopompa servillei (De Haan, 1842)	Mantis (Mantis) servillei De Haan, 1842	Gonypetidae	Gonypetinae	Gonypetini	syntype	female	RMNH. INS.1277451

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TABLE 3. (Continued)

taxon no.	current valid taxon name	type of taxon name	family	subfamily	tribe	type category	sex	registration number
20	Theopompa servillei (De Haan, 1842)	Mantis (Mantis) servillei De Haan, 1842	Gonypetidae	Gonypetinae	Gonypetini	syntype	male	RMNH. INS.1277452
20	Theopompa servillei (De Haan, 1842)	Mantis (Mantis) servillei De Haan, 1842	Gonypetidae	Gonypetinae	Gonypetini	syntype	female	RMNH. INS.1277453
21	Amantis reticulata (Hagenbach in De Haan, 1842)	Mantis (Oxypilus) reticulata Thunberg, 1815	Gonypetidae	Iridopteryginae	Amantini	syntype	male	RMNH. INS.1673849
23	Haania confusa Saussure, 1871	Mantis (Oxypilus) lobiceps De Haan, 1842	Haaniidae	Haaniinae	Haaniini	holotype	female	RMNH. INS.1753425
25	Haania simplex Beier, 1952	Haania simplex Beier, 1952	Haaniidae	Haaniinae	Haaniini	holotype	male	RMNH. INS.1753426
26	Hoplocorypha bicornis Deeleman-Reinhold, 1957	Hoplocorypha bicornis Deeleman-Reinhold, 1957	Hoplocoryphidae			holotype	female	RMNH. INS.1721070
27	Acromantis oligoneura (De Haan, 1842)	Mantis oligoneura De Haan, 1842	Hymenopodidae	Acromantinae	Acromantini	syntype	female	RMNH. INS.1753432
27	Acromantis oligoneura (De Haan, 1842)	Mantis oligoneura De Haan, 1842	Hymenopodidae	Acromantinae	Acromantini	syntype	female	RMNH. INS.1753430
27	Acromantis oligoneura (De Haan, 1842)	Mantis oligoneura De Haan, 1842	Hymenopodidae	Acromantinae	Acromantini	syntype	female nymph	RMNH. INS.1753429
28	Majangella ophirensis (Werner, 1922)	Ephippiomantis ophirensis Werner, 1922	Hymenopodidae	Acromantinae	Acromantini	holotype	male	RMNH. INS.1721026
29	Psychomantis borneensis (De Haan, 1842)	Mantis borneensis De Haan, 1842	Hymenopodidae	Acromantinae	Acromantini	holotype	male	RMNH. INS.1753433
30	Anaxarcha pulchra (Werner, 1922)	Parastatilia pulchra Werner, 1922	Hymenopodidae	Hymenopidinae	Anaxarchini	holotype	female	RMNH. INS.1753438
31	Odontomantis planiceps (De Haan, 1842)	Mantis (Oxypilus) planiceps De Haan, 1842	Hymenopodidae	Hymenopodinae	Anaxarchini	syntype	male	RMNH. INS.1277422
31	Odontomantis planiceps (De Haan, 1842)	Mantis (Oxypilus) planiceps De Haan, 1842	Hymenopodidae	Hymenopodinae	Anaxarchini	syntype	female	RMNH. INS.1277414
31	Odontomantis planiceps (De Haan, 1842)	Mantis (Oxypilus) planiceps De Haan, 1843	Hymenopodidae	Hymenopodinae	Anaxarchini	syntype	female	RMNH. INS.1277416
31	Odontomantis planiceps (De Haan, 1842)	Mantis (Oxypilus) planiceps De Haan, 1844	Hymenopodidae	Hymenopodinae	Anaxarchini	syntype	female	RMNH. INS.1277418
31	Odontomantis planiceps (De Haan, 1842)	Mantis (Oxypilus) planiceps De Haan, 1845	Hymenopodidae	Hymenopodinae	Anaxarchini	syntype	female	RMNH. INS.1277419

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TABLE 3. (Continued)

taxon no.	current valid taxon name	type of taxon name	family	subfamily	tribe	type category	sex	registration number
31	Odontomantis planiceps (De Haan, 1842)	Mantis (Oxypilus) planiceps De Haan, 1846	Hymenopodidae	Hymenopodinae	Anaxarchini	syntype	female	RMNH. INS.1277421
32	Creobroter sumatranus (De Haan, 1842)	Mantis (Harpax) sumatrana De Haan, 1842	Hymenopodidae	Hymenopodinae	Hymenopodini	syntype	male	RMNH. INS.1753427
33	Astyliasula phyllopus (De Haan, 1842)	Mantis (Oxypilus) phyllopus De Haan, 1842	Hymenopodidae	Oxypilinae	Hestiasulini	holotype	male	RMNH. INS.1753452
34	Oxypilus montanus Roy, 1999	Oxypilus montanus Roy, 1999	Hymenopodidae	Oxypilinae	Oxypilini	paratype	male	RMNH. INS.1753453
35	Pachymantis bicingulata (De Haan, 1842)	Mantis (Oxypilus) bicingulata De Haan, 1842	Hymenopodidae	Oxypilinae	Oxypilini	lectotype	male	RMNH. INS.1721027
35	Pachymantis bicingulata (De Haan, 1842)	Mantis (Oxypilus) bicingulata De Haan, 1842	Hymenopodidae	Oxypilinae	Oxypilini	paralectotype	female	RMNH. INS.1721028
36	Pachymantis maculicoxa Roy, 2013	Pachymantis maculicoxa Roy, 2013	Hymenopodidae	Oxypilinae	Oxypilini	paratype	male	RMNH. INS.1721029
37	Parablepharis kuhlii (De Haan, 1842)	Mantis (Blepharis) kuhlii De Haan, 1842	Hymenopodidae	Phyllothelyinae	Parablepharini	holotype	f subadult	RMNH. INS.1721030
38	Austrovates variegata Sjöstedt, 1918	Heterarchimantis lobata Werner, 1922	Mantidae	Hierodulinae	Archimantini	holotype	female	RMNH. INS.1721031
39	Hierodula biaka Deeleman-Reinhold, 1957	Hierodula biaka Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	holotype	male	RMNH. INS.1721032
39	Hierodula biaka Deeleman-Reinhold, 1957	Hierodula biaka Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	male	RMNH. INS.1721033
39	Hierodula biaka Deeleman-Reinhold, 1957	Hierodula biaka Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	male	RMNH. INS.1721034
39	Hierodula biaka Deeleman-Reinhold, 1957	Hierodula biaka Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	male	RMNH. INS.1721035
39	Hierodula biaka Deeleman-Reinhold, 1957	Hierodula biaka Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	male	RMNH. INS.1721036
39	Hierodula biaka Deeleman-Reinhold, 1957	Hierodula biaka Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	male	RMNH. INS.1721037
40	Hierodula macrostigmata Deeleman-Reinhold, 1957	Hierodula macrostigmata Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	holotype	male	RMNH. INS.968028
41	Hierodula rufomaculata Werner, 1922	Hierodula rufomaculata Werner, 1922	Mantidae	Hierodulinae	Hierodulini	holotype	female	RMNH. INS.1277411

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TABLE 3. (Continued)

taxon no.	current valid taxon name	type of taxon name	family	subfamily	tribe	type category	sex	registration number
42	Hierodula timorensis (De Haan, 1842)	Mantis (Mantis) timorensis De Haan, 1842	Mantidae	Hierodulinae	Hierodulini	syntype	male	RMNH. INS.1753446
42	Hierodula timorensis (De Haan, 1842)	Mantis (Mantis) timorensis De Haan, 1842	Mantidae	Hierodulinae	Hierodulini	syntype	male	RMNH. INS.1753447
44	Rhombodera basalis (De Haan, 1842)	Mantis (Mantis) basalis De Haan, 1842	Mantidae	Hierodulinae	Hierodulini	syntype	female	RMNH. INS.1277484
44	Rhombodera basalis (De Haan, 1842)	Mantis (Mantis) basalis De Haan, 1842	Mantidae	Hierodulinae	Hierodulini	syntype	female	RMNH. INS.1277485
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	holotype	male	RMNH. INS.973015
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721038
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721039
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721040
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721041
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721042
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	male	RMNH. INS.1721043
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721044
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721045
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721046

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TABLE 3. (Continued)

taxon no.	current valid taxon name	type of taxon name	family	subfamily	tribe	type category	sex	registration number
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	allotype	female	RMNH. INS.1721047
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	male	RMNH. INS.1721048
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721049
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721050
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721051
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721052
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721053
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	juv.	RMNH. INS.1721054
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	juv.	RMNH. INS.1721055
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	juv.	RMNH. INS.1721056
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	juv.	RMNH. INS.1721057
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	juv.	RMNH. INS.1721058
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	male	RMNH. INS.1721059

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TABLE 3. (Continued)

taxon no.	current valid taxon name	type of taxon name	family	subfamily	tribe	type category	sex	registration number
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	male	RMNH. INS.1721060
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721061
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721062
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	female	RMNH. INS.1721063
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	juv.	RMNH. INS.1721064
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	juv.	RMNH. INS.1721065
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	juv.	RMNH. INS.1721066
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	juv.	RMNH. INS.1721067
45	Rhombodera boschmai Deeleman-Reinhold, 1957	Rhombodera boschmai Deeleman-Reinhold, 1957	Mantidae	Hierodulinae	Hierodulini	paratype	juv.	RMNH. INS.1721068
46	Rhombodera flava (Hagenbach in De Haan, 1842)	Mantis (Mantis) flava Hagenbach in De Haan, 1842	Mantidae	Hierodulinae	Hierodulini	syntype	male	RMNH. INS.1277431
47	Isomantis domingensis (Palisot de Beauvois, 1805)	Mantis cubaensis De Haan, 1842	Mantidae	Stagmomantinae	Stagmomantini	holotype	female	RMNH. INS.1753448
49	Pseudovates parallela (De Haan, 1842)	Mantis (Mantis) parallela De Haan, 1842	Mantidae	Vatinae	Vatini	syntype	male	RMNH. INS.1664959
49	Pseudovates parallela (De Haan, 1842)	Mantis (Mantis) parallela De Haan, 1842	Mantidae	Vatinae	Vatini	syntype	female	RMNH. INS.1664960
50	Vates chopardi (Deeleman-Reinhold, 1957)	Lobovates chopardi Deeleman-Reinhold, 1957	Mantidae	Vatinae	Vatini	holotype	male	RMNH. INS.1721069

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TABLE 3. (Continued)

taxon no.	current valid taxon name	type of taxon name	family	subfamily	tribe	type category	sex	registration number
51	Parasphendale arabukosokokei Borer & Ehrmann, 2022	Parasphendale arabukosokokei Borer & Ehrmann, 2022	Miomantidaae	Miomantinae		paratype	male	RMNH. INS.1256439
51	Parasphendale arabukosokokei Borer & Ehrmann, 2022	Parasphendale arabukosokokei Borer & Ehrmann, 2022	Miomantidaae	Miomantinae		paratype	female	RMNH. INS,1256440
52	Fulciniola snelleni (Saussure, 1871)	Nanomantis snelleni Saussure, 1871	Nanomantidae	Fulciniinae	Stenomantini	holotype	female	RMNH. INS.1277413
53	Stenomantis novaeguineae (De Haan, 1842)	Mantis (Mantis) novae guineae De Haan, 1842	Nanomantidae	Fulciniinae	Stenomantini	holotype	female	RMNH. INS.1753449
56	Rivetina baetica (Rambur, 1838)	Mantis (Mantis) trifasciata De Haan, 1842	Rivetinidae	Rivetininae	Rivetinini	holotype	female	RMNH. INs.1753451
57	Oestomantis anoplonotus (Werner, 1933)	Mesomicropus anoplonotus Werner, 1933	Toxoderidae	Toxoderinae	Aethalochroini	holotype	male	RMNH. INS.1721071
58	Toxodera maculata Ouwens, 1913	Toxodera maculata Ouwens, 1913	Toxoderidae	Toxoderinae	Toxoderini	neotype	male	RMNH. INS.1721072

During our review of the Mantodea type material at Naturalis, several discrepancies between published records and the specimens currently housed in the collection were discovered. Examples include missing type specimens (for a number of the taxa of De Haan), type specimens carrying a name that was changed by the author before the paper was published but not adjusted in the collection, types that are believed to be held at different repositories (*Toxodera maculata* Ouwens) or types with location labels slightly different from locations mentioned in the description.. Such discrepancies highlight the challenges associated with maintaining historical collections, including mislabeling, misplaced specimens, and undocumented transfers between institutions. The integration of digital databases and collaborative efforts among taxonomists and curators are essential to address these issues and improve the accuracy of specimen records. Future studies should prioritize the systematic verification of type specimen locations and enhance efforts to recover or confirm missing specimens.

Additionally, our study reinforces the importance of continuous updates to online databases such as the Mantodea Species File to reflect the most current information on type material locations. The discovery of inconsistencies emphasizes the need for regular cross-referencing between historical literature, digital repositories, and physical collections to prevent the perpetuation of inaccurate records.

In conclusion, our findings contribute to a more comprehensive understanding of the mantodean type specimens housed at Naturalis (RMNH) and underscore the necessity of continued efforts in specimen verification and data accuracy. Addressing these challenges through improved documentation, digitization, and inter-institutional collaboration will significantly enhance the reliability of taxonomic research and biodiversity conservation.

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