

ANNOTATED CHECKLIST OF MILLIPEDE OF THE INFRACLASS Pentazonia (Myriapoda: Diplopoda) OF INDONESIA

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ABSTRACT

A comprehensive checklist of millipedes of the infraclass Pentazonia is compiled for Indonesia. A total of 80 species assigned to 11 genera, three families and three orders has so far been recorded. Two genera are remarkably species-rich: *Castanoherium* (36 species) and *Hyleoglomeris* (15 species). Three genera, *Malayomeris*, *Rajasphaera*, *Leptoprotopus* are monotypic. Most of the species are endemic, recorded only in Indonesia (71 species).

Keywords: Bibliography, biodiversity, checklist, fauna, Indonesia, Southeast Asia.

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INTRODUCTION

Located in Southeast Asia and Oceania between the Indian and Pacific oceans, Indonesia is known as an island country consisting of over 17,000 islands, including the largest ones, such as Sumatra, Java, Sulawesi, and Kalimanta (Indonesian part of Borneo). Its territory covers about 1,904,569 square kilometres (735,358 square miles).

With a huge area, tropical climate, and archipelagic geography, Indonesia is supported to harbour rich biodiversity; it represents one of 17 megadiverse countries in the world, hosting 17% of the world's wildlife, such as mammals (515 species), birds (about 1,519 species), reptiles (more than 600 species), amphibians (about 270 species) and palms (400 species) (Carew-Reid, 2002). Interestingly, Indonesian fauna and flora are a mixture of Asian and Australasian components separated by Wallace's line. To the west of the line, the Sunda Shelf islands (Sumatra, Java, Borneo, and Bali) were once linked to mainland Asia (approximately 12,000–110,000 years ago) and have a wealth of Asian fauna, representing with large mammals, for example the Sumatran tiger, rhinoceros, Asian elephant, while, to the east of the line, New Guinea was part of the Australian landmass and is home to a unique fauna and flora closely related to that of Australia, including over 600 bird species (Carew-Reid, 2002). This country is also second only to Australia in terms of the total number of endemic species, with 36% of its 1,519 species of bird and 39% of its 515 species of mammal being endemic. Though Indonesia is a rich diversity country, many taxa, including terrestrial invertebrates are still unknown or poorly studied.

Of invertebrates, millipede (class Diplopoda) is one of the most diverse groups in nature (Golovatch & Kime, 2009; Minelli, 2015). To date, about 12,000 species have been described, but 80,000 species are estimated to exist (Golovatch & Kime, 2009; Minelli, 2015). Millipedes are detritivores animals that feed on dead leaves and tree

branches, and play important roles as mechanical decomposers in the healthy nutrient cycle of terrestrial ecosystems. Their activities accelerate the decay of organic matter, and return material and nutrients to the ecosystem (Hopkin & Read, 1992; Golovatch & Kime, 2009). Furthermore, millipedes producing a variety of defensive chemical compounds may provide a cure for acquired immune-deficiency syndrome and other serious diseases (Jiang et al., 1981). Therefore, a greater understanding of millipedes will enable more-effective discovery, sustainable use and/or protection of bio-resources.

The millipedes of Indonesia and Borneo Island were studied beginning in the late 19th century, and investigations continued during the 20th century, for example, Attems (1898, 1907, 1930a,b), Silvestri (1895, 1917), Golovatch (1996). However, there is no comprehensive list of all millipede species recorded from Indonesia. The present checklist is, therefore, compiled and updated with the latest classification and literature to accelerate the study on the millipede fauna of Indonesia. Due to the page limitation of the journal, the checklist has to be separated into several parts. Herein, we firstly present the catalogue of the infraclass Pentazonia.

MATERIALS AND METHODS

At the beginning, species and distribution data were extracted from the global diplopod species database in the Field Museum of Natural History, Chicago, USA. Then, all relevant taxa and associated literature were checked and added into the checklist.

The classification follows Hoffman (1980), Wesener in Minelli (2015) and Wesener (1916a). Species are listed in alphabetical order within their current genus, and include the synonyms of each species with each author(s), year, published journal or book, volume (issue), page(s) and figure(s) (if applicable). Deposition of type specimens were checked from original references or online database of relevant museums or referred to available references; the question

***Hyleoglomeris fusca* Golovatch & Geoffroy, 2012**

Hyleoglomeris fusca Golovatch & Geoffroy, 2012: Arthropoda Selecta, 21(3): 220, figs 1D-F & 3. Type specimens: MZB, MNHN, ZMUM (Golovatch & Geoffroy, 2012).

Type locality: Indonesia (Java: Jawa Tengah).

Record from Indonesia: Java (Jawa Tengah, Nusakambangan Isle, Ujung Galang, Klaces, near Goa Maria).

Distribution: Only known from Indonesia.

***Hyleoglomeris jacobsoni* (Silvestri, 1917)**

Apiomeris (Hyleoglomeris) jacobsoni Silvestri, 1917: Records of the Indian Museum, 13(3): 122, fig. 16.

Hyleoglomeris jacobsoni:-- Attems, 1930b: Mitteilungen aus dem Zoologischen Museum in Berlin, 16: 121.

Sundameris jacobsoni:-- Verhoeff, 1935: Transactions of the Sapporo Natural History Society, 14(3): 163.

Hyleoglomeris jacobsoni:-- Golovatch et al., 2006: Zoosystema, 28(4): 890.

Type specimens: Indian Museum (Silvestri, 1917).

Type locality: Indonesia (Java: Nongkodjadjar).

Record from Indonesia: Java (Nongkodjadjar) (Silvestri, 1917); Bali (Gitgit); Sumbawa (Batoe Doelang); Flores (Geli Moetoe) (Attems, 1930b).

Distribution: Only known from Indonesia.

Remarks: Verhoff (1936) created a new genus *Sundameris* to only incorporate *H. jacobsoni* based solely on the 3-segmented male telopodites as illustrated by Attems (1930). Golovatch et al. (2006) stated that the conspecificity of Attems' samples with type material should be verified.

***Hyleoglomeris kirropeza* (Attems, 1897)**

Glomeris kirropeza Attems, 1897: In: Kükenthal W: Ergebnisse einer zoologischen

Forschungsreise in den Molukken und Borneo, im Auftrage der Senckenbergischen naturforschenden Gesellschaft ausgeführt. 2. Teil, 2: 480.

Nesoglomeris kirropeza:-- Carl, 1912: Revue Suisse de Zoologie, 20: 102.

Hyloglomeris kirropeza:-- Attems, 1914: Archiv für Naturgeschichte, 80A: 139.

Apiomeris (Hyleoglomeris) kirropeza:-- Silvestri, 1917: Records of the Indian Museum, 13(3): 148.

Nesoglomeris kirropeza:-- Chamberlin, 1920: Bulletin of the Museum of Comparative Zoology, 64: 92.

Hyleoglomeris kirropeza:-- Golovatch et al., 2006: Zoosystema, 28(4): 891. Type specimens: unknown.

Type locality: Indonesia (Sulawesi: Minahassa).

Record from Indonesia: Sulawesi (Minahassa; (Attems, 1897) Lokon; Soputan (Carl, 1912)).

Distribution: Only known from Indonesia.

***Hyleoglomeris multilineata* Verhoeff, 1910**

Hyleoglomeris multilineata Verhoeff, 1910: Sitzungsberichte der Gesellschaft Naturforschender Freunde zu Berlin, 1910(5): 248, plate 9-figs 1–2.

Hyleoglomeris multilineata:-- Attems, 1914: Archiv für Naturgeschichte, 80A: 139.

Apiomeris (Hyleoglomeris) multilineata:-- Silvestri, 1917: Records of the Indian Museum, 13(3): 107, figs 1–3, 6, figs 4.1–4.2, figs 5.1–5.2.

Hyleoglomeris multilineata:-- Golovatch et al., 2006: Zoosystema, 28(4): 891. Type specimens: ZMB (Silvestri, 1917).

Type locality: Indonesia (Kalimanta: Bengkajong).

Record from Indonesia: Kalimanta (Bengkajong).

Distribution: Only known from Indonesia.

Remarks: No other records available since its original description.

- Castanotherium amythrum*:-- Chamberlin, 1920: Annals of the Entomological Society of America, 13: 91.
- Castanotherium amythrum*:-- Jeekel, 2001: Myriapod Memoranda, 3: 26.
- Castanotherium amythrum*:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 43. Type specimens: NHMW? (Wesener, 2016a).
- Type locality: Indonesia (Halmahera).
- Records from Indonesia: Halmahera (Soah Konorah).
- Distribution: Only known from Indonesia.
- Remarks: No other records available since its original description.
- Castanotherium boetonense* Carl, 1912**
- Castanotherium boetonense* Carl, 1912: Revue Suisse de Zoologie, 20: 119, fig. 8.
- Castanotherium boetonense*:-- Attems, 1914: Archiv für Naturgeschichte, 80A: 149.
- Castanotherium boetonense*:-- Chamberlin, 1920: Bulletin of the Museum of Comparative Zoology, 64: 91.
- Castanotherium boetonense*:-- Jeekel, 2001: Myriapod Memoranda, 3: 26.
- Castanotherium boetonense*:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 43.
- Castanotherium boetonense*:-- Hollier et al., 2020: Revue Suisse de Zoologie, 127(1): 190. Type specimens: unknown.
- Type locality: Indonesia (Sulawesi: Butung Isl.).
- Records from Indonesia: Sulawesi (Butung Isl.).
- Distribution: Only known from Indonesia.
- Remarks: There are no type specimens in MNHG and SMF though they are expected to be there (Hollier et al., 2020).
- Castanotherium celebense* Silvestri, 1897**
- Castanotherium celebense* Silvestri, 1897a: Abhandlungen und Berichte des K. Zoologischen und Anthropologisch-
- Ethnographischen Museums zu Dresden, 6, No.9: 15, figs 20–22.
- Castanotherium celebense*:-- Carl, 1912: Revue Suisse de Zoologie, 20: 86.
- Castanotherium celebense*:-- Attems, 1914: Archiv für Naturgeschichte, 80A: 149.
- Castanotherium celebense*:-- Chamberlin, 1920: Bulletin of the Museum of Comparative Zoology, 64: 90.
- Castanotherium celebense*:-- Jeekel, 2001: Myriapod Memoranda, 3: 26.
- Castanotherium celebense*:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 44.
- Type specimens: MTD (282) (Wesener, 2016a).
- Type locality: Indonesia (Sulawesi: Minahassa).
- Records from Indonesia: Sulawesi (Minahassa).
- Distribution: Only known from Indonesia.
- Remarks: No other records available since its original description.
- Castanotherium cinctum* (Carl, 1906)**
- Sphaeropoeus cinctus* Carl, 1906: Zoologische Jahrbücher, Abteilung für Systematik, Ökologie und Geographie der Tiere, 24(3): 235, plate 17-figs 23–26.
- Castanotherium cinctum*:-- Attems, 1914: Archiv für Naturgeschichte, 80A: 149.
- Castanotherium cinctum*:-- Jeekel, 2001: Myriapod Memoranda, 3: 26.
- Castanotherium cinctum*:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 44.
- Castanotherium cinctum*:-- Hollier et al., 2020: Revue Suisse de Zoologie, 127(1): 193.
- Type specimens: MHNG (ARTO-18447) (Hollier et al., 2020).
- Type locality: Indonesia (Sumatra).
- Records from Indonesia: Sumatra.
- Distribution: Only known from Indonesia.

***Castanotherium ferum* (Attems, 1935)**

Pulusphaera fera Attems, 1935: Archiv für Hydrobiologie, Supplement, 14: 136, figs 28-31.

Pulusphaera fera:-- Attems, 1943: Annalen des Naturhistorischen Museums in Wien, 53: 71.

Castanotherium ferum:-- Jeekel, 2001: Myriapod Memoranda, 3: 27.

Castanotherium ferum:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 45. Type specimens: NHMW (2230) (Wesener, 2016a).

Type locality: Indonesia (Kalimantan: Pulu Miang).

Records from Indonesia: Kalimantan (Pulu Miang).

Distribution: Also known from Malaysia (Sabah: Sandakan).

***Castanotherium glabratum* (Newport, 1844)**

Zephronia glabrata Newport, 1844: The Annals and magazine of natural history, 13: 263-270.

Zephronia glabrata:-- Gervais, 1847: Annales des Sciences Naturelles, (2)7: 84.

Zephronia glabrata:-- Preudhomme de Borre, 1884: Annales de la Société Entomologique de Belgique, 28: 24.

Zephronia glabrata :-- Attems, 1914: Archiv für Naturgeschichte, 80A: 145.

Castanotherium glabratum:-- Jeekel, 2001: Myriapod Memoranda, 3: 27.

Castanotherium glabratum:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 45.

Sphaeropoeus bicollis Karsch, 1881: 33, synonymized with *C. glabrata* by Pocock (1894: 331)

Sphaeropoeus bicollis:-- Preudhomme de Borre, 1884: Annales de la Société Entomologique de Belgique, 28: 23.

Sphaeropoeus bicollis:-- Pocock, 1894: Zoologische Ergebnisse einer Reise in Niederländisch Ost-Indien, 3: 331.

Sphaeropoeus bicollis:-- Silvestri, 1896a: Annali del Museo civico di storia naturale di Genova, 36: 21.

Sphaeropoeus bicollis:-- Attems, 1914: Archiv für Naturgeschichte, 80A: 142.

Sphaeropoeus bicollis:-- Moritz & Fischer, 1974: Mitteilungen aus dem Museum für Naturkunde in Berlin 49: 368.

Type specimens: ZMB (714) (Wesener, 2016a).

Type locality: Indonesia (Kalimantan: Sampit).

Records from Indonesia: Kalimantan (Sampit)

Distribution: Also known from the Philippines.

Remarks: Jeekel (2001) suggested that type specimens of two nominal species, *Zephronia glabrata* and *Sphaeropoeus bicollis*, need to be re-examined to confirm the synonymization made by Pocock (1894).

***Castanotherium granulatum* (Tömösváry, 1885)**

Sphaeropoeus granulatus Tömösváry, 1885: Természentrajzi Füzetek, 9: 68, plate 4-figs 16-17.

Sphaeropoeus granulatus:-- Attems, 1914: Archiv für Naturgeschichte, 80A: 144.

Castanotherium granulatum:-- Attems, 1936: Memoirs of the Indian Museum, 11(4): 193

Castanotherium granulatum:-- Jeekel, 2001: Myriapod Memoranda, 3: 27.

Castanotherium granulatum:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 45. Type specimens: HNHM (305.60/6) (Korsós, 1983).

Type locality: Indonesia (Kalimantan: Matang).

Records from Indonesia: Kalimantan (Matang).

Distribution: Only known from Indonesia.

Remarks: No other records available since its original description.

Castanotherium humile (Silvestri, 1895)

Zephronia humilis Silvestri, 1895: Annali del Museo civico di storia naturale di Genova. Vol. 34, ser. 2: 723, figs 3A–B.

Zephronia humilis:-- Attems, 1914: Archiv für Naturgeschichte, 80A: 145.

Castanotherium humile:-- Jeekel, 2001: Myriapod Memoranda, 3: 28.

Castanotherium humile:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 46. Type specimens: IEPN (Silvestri, 1895; Wesener, 2016).

Type locality: Indonesia (Engano: Bua-Bua).

Records from Indonesia: Engano (Bua-Bua).

Distribution: Only known from Indonesia.

Remarks: No other records available since its original description.

Castanotherium ignobile (Butler, 1872)

Zephronia ignobilis Butler, 1872: Annals and Magazine of Natural History, ser. 4, 10(59): 357.

Zephronia ignobilis:-- Butler, 1873: Proceedings of the Zoological Society of London, 1872: 180, plate 19-fig. 6.

Zephronia ignobilis:-- Preudhomme de Borre, 1884: Annales de la Société Entomologique de Belgique, 28: 24.

Zephronia ignobilis:-- Attems, 1914: Archiv für Naturgeschichte, 80A: 146.

Castanotherium ignobile:-- Jeekel, 2001: Myriapod Memoranda, 3: 28.

Castanotherium ignobile:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 46. Type specimens: NHML (Wesener, 2016a).

Type locality: Indonesia (Java).

Records from Indonesia: Java.

Distribution: Only known from Indonesia

Remarks: No other records available since its original description.

Castanotherium insigne (Brandt, 1833)

Sphaeropoeus insignis Brandt, 1833: Bulletin de la Société Impériale des Naturalists de Moscou, 6: 200.

Zephronia insignis:-- Gervais, 1837: Annales des Sciences naturelles, série 2: 43.

Sphaeropoeus insignis:-- Lucas, 1840: P. Duménil: 522.

Sphaeropoeus insignis:-- Brandt, 1841a: Bulletin Scientifique publié par l'Académie Impériale des Sciences de St.-Pétersbourg: 181.

Sphaeropoeus insignis:-- Brandt, 1841b: Bulletin Scientifique publié par L'Académie Impériale des Sciences de Saint-Petersbourg, 8: 364.

Sphaeropoeus insignis:-- Karsch, 1881: Archiv für Naturgeschichte, 47(1): 34, plate 2-fig. 11.

Sphaeropoeus insigni:-- Preudhomme de Borre, 1884: Annales de la Société Entomologique de Belgique, 28: 24.

Sphaeropoeus insignis:-- Golovatch & Hoffman, 2000: Fragmenta faunistica, Supplement, 43: 238.

Castanotherium insigne:-- Jeekel, 2001: Myriapod Memoranda, 3: 28.

Castanotherium insigne:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 46.

Zephronia javanica Gervais, 1837: Annales des Sciences naturelles, série 2: 43. Synonymized by Brandt (1841a).

Zephronia javanicum:-- Lucas, 1840: P. Duménil: 522.

Sphaerotherium javanicum:-- Gervais, 1847: Histoire naturelle Insectes Apterous 4: 82.

Sphaerotherium javanicum:-- Koch, 1847: In: Panzer & Herrich-Schäffer: Kritische Revision der Insectenfaune Deutschlands, III: 99.

Sphaerotherium javanicum:-- Butler, 1873: Proceedings of the Zoological Society of London, 1872: 175.

Sphaerotherium javanicum:-- Preudhomme de Borre, 1884: Annales de la Société Entomologique de Belgique, 28: 27

Sphaerotherium javanicum:-- Jeekel, 2001: Myriapod Memoranda, 3: 28.

Type specimens: ZISP (Wesener, 2016a).

Type locality: Indonesia (Java).

Records from Indonesia: Java.

Distribution: Only known from Indonesia.

Remarks: No other records available since its original description. Although *Zephronia javanica* was synonymized under *Sphaeropoeus insignis* by Brandt (1841a), Jeekel (2001) and Wesener (2016a) still stated that type species of both species is, perhaps, still in existence in which case it may be possible to finally clarify the confusion in the classical literature.

***Castanothorium laeve* Carl, 1912**

Castanothorium laeve Carl, 1912: Revue Suisse de Zoologie, 20: 85, 110.

Castanothorium laeve:-- Attems, 1914: Archiv für Naturgeschichte, 80A: 150.

Castanothorium laeve:-- Chamberlin, 1920: Bulletin of the Museum of Comparative Zoology, 64: 90.

Castanothorium laeve:-- Jeekel, 2001: Myriapod Memoranda, 3: 28.

Castanothorium laeve:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 47.

Castanothorium laeve:-- Hollier et al., 2020: Revue Suisse de Zoologie, 127(1): 210.

Type specimens: NMB (DIPL-00114a) (Hollier et al., 2020).

Type locality: Indonesia (Sulawesi: Matinang).

Records from Indonesia: Sulawesi (Matinang).

Distribution: Only known from Indonesia.

Remarks: No other records available since its original description.

***Castanothorium lamprongse* (Chamberlin, 1945)**

Sphaeropoeus lamprongsis Chamberlin, 1945: American Museum Novitates, 1282: 1, figs 1–3.

Sphaeropoeus lamprongsis:-- Wang 1967: Quarterly journal of the Taiwan Museum, 20: 384.

Castanothorium lamprongsis:-- Jeekel, 2001: Myriapod Memoranda, 3: 28.

Castanothorium lamprongsis:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 47. Type specimens: AMNH (Chamberlin, 1945).

Type locality: Indonesia (Sumatra: Lamprongs).

Records from Indonesia: Sumatra (Lamprongs, Wai Lima).

Distribution: Only known from Indonesia.

Remarks: No other records available since its original description.

***Castanothorium moderatum* (Chamberlin, 1945)**

Zephronia moderata Chamberlin, 1945: American Museum Novitates, 1282: 1, figs 4–5.

Sphaeropoeus moderata:-- Wang 1967: Quarterly journal of the Taiwan Museum, 20: 384.

Castanothorium moderatum:-- Jeekel, 2001: Myriapod Memoranda, 3: 29.

Castanothorium moderatum:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 47. Type specimens: AMNH (Chamberlin, 1945).

Type locality: Indonesia (Java: Tjibodas).

Records from Indonesia: Java (Tjibodas).

Distribution: Only known from Indonesia.

Remarks: No other records available since its original description.

***Castanothorium nigriceps* (Pocock, 1894)**

Zephronia nigriceps Pocock, 1894: Zoologische Ergebnisse einer Reise in Niederländisch Ost-Indien 3: 329.

Remarks: No other records available since its original description.

***Sphaeropoeus politus* (Attems, 1935)**

Pantitherium politum Attems, 1935: Archiv für Hydrobiologie, 14: 121, figs 10–17.

Sphaeropoeus politus:-- Jeekel, 2001: Myriapod Memoranda, 3: 24.

Sphaeropoeus politus:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 40. *Panitherium* [sic!] *politum*:-- Wang 1967: Quarterly journal of the Taiwan Museum, 20: 384.

Type specimens: NHMW (2217, 2218) (Wesener, 2016a).

Type locality: Indonesia (Sumatra: Singkarak).

Records from Indonesia: Sumatra (Singkarak; Kepajang-Benkulen).

Distribution: Only known from Indonesia.

Remarks: No other records available since its original description.

***Sphaeropoeus punctulatissimus* Silvestri, 1897**

Sphaeropoeus punctulatissimus Silvestri, 1897a: Abhandlungen und Berichte des K. Zoologischen und Anthropologisch-Ethnographischen Museums zu Dresden, 6: 14, plate 2-fig. 74

Sphaeropoeus punctulatissimus:-- Attems, 1914: Archiv für Naturgeschichte, 80A: 143.

Sphaeropoeus punctulatissimus:-- Jeekel, 2001: Myriapod Memoranda, 3: 24.

Sphaeropoeus punctulatissimus:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 40.

Type specimens: MTD (280) (Wesener, 2016a).

Type locality: Indonesia (Sumatra: Deli).

Records from Indonesia: Sumatra (Deli).

Distribution: Only known from Indonesia.

Remarks: No other records available since its original description.

***Sphaeropoeus speciosus* (Attems, 1943)**

Lissosphaera speciosa Attems, 1943: Annalen des Naturhistorischen Museums in Wien, 53: 63, plate 7-figs 1–4.

Lissosphaera speciosa:-- Jeekel, 1971: Monografieen van de Nederlandse Entomologische Vereniging, 5: 26.

Sphaeropoeus speciosus:-- Jeekel, 2001: Myriapod Memoranda, 3: 24.

Sphaeropoeus speciosus:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 41. *Lissosphaera speciosa*:-- Wang 1967: Quarterly journal of the Taiwan Museum, 20: 385.

Type specimens: NHMW (2219) (Wesener, 2016a).

Type locality: Indonesia (Sumatra).

Records from Indonesia: Sumatra.

Distribution: Only known from Indonesia.

Remarks: No other records available since its original description.

***Sphaeropoeus stollii* Pocock, 1895**

Sphaeropoeus stollii Pocock, 1895: Annals and Magazine of Natural History, ser. 6, 16: 412.

Sphaeropoeus stollii:-- Attems, 1914: Archiv für Naturgeschichte, 80A: 143.

Sphaeropoeus stollii:-- Jeekel, 2001: Myriapod Memoranda, 3: 24.

Sphaeropoeus stollii:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 41. Type specimens: NHML (Wesener, 2016a).

Records from Indonesia: Java (Djakarta).

Distribution: Only known from Indonesia.

***Sphaeropoeus sumatrense* (Chamberlin, 1945)**

Tonkinobelum sumatrense Chamberlin, 1945: American Museum Novitates, 1282: 2, figs 8–9.

Sphaeropoeus sumatrensis:-- Jeekel, 2001: Myriapod Memoranda, 3: 24.

***Sphaeropoeus unciger* (Attems, 1943)**

Kophosphaera uncigera Attems, 1943: Annalen des Naturhistorischen Museums in Wien, 53: 66, plate 8-fig. 9.

Sphaeropoeus unciger:-- Jeekel, 2001: Myriapod Memoranda, 3: 24.

Sphaeropoeus unciger:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 41.

Type specimens: NHMW (2195) (Wesener, 2016a).

Type locality: Indonesia (Sumatra).

Records from Indonesia: Sumatra.

Distribution: Only known from Indonesia

Remarks: No other records available since its original description.

***Sphaeropoeus velutinus* Carl, 1906**

Sphaeropoeus velutinus Carl, 1906: Zoologische Jahrbücher, Abteilung für Systematik, Ökologie und Geographie der Tiere, 24(3): 232, plate 17-figs 19–22.

Sphaeropoeus velutinus var. *xanthopleurus*:-- Carl, 1909: Revue Suisse de Zoologie, 17: 249

Sphaeropoeus velutinus var. *xanthopleurus*:-- Attems, 1914: Archiv für Naturgeschichte, 80A: 144.

Sphaeropoeus velutinus var. *xanthopleurus*:-- Jeekel, 2001: Myriapod Memoranda, 3: 24.

Sphaeropoeus velutinus:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 41.

Castanotherium velutinus:-- Hollier et al., 2020: Revue Suisse de Zoologie, 127(1): 235.

Type specimens: MHNG (ARTO-18448) (Hollier et al., 2020).

Type locality: Indonesia (Sumatra: Deli).

Records from Indonesia: Sumatra (Deli; Karoo plain at the foot of Mt. Sinabung).

Distribution: Only known from Indonesia.

Remarks: No other records available since its original description.

***Zephronia* Gray, 1832**

Type species: *Zephronia ovalis* Gray, 1832, by monotypy.

Remarks: See Wesener (2016: 30) and Golovatch et al. (2012: 283) for more citations and updated diagnosis.

***Zephronia ovalis* Gray, 1832**

Zephronia ovalis Gray, 1832: The Class Insecta arranged by the Baron Cuvier, 2: 796.

Zephronia ovalis:-- Gervais, 1837: Annales des Sciences Naturelles, (2)7: 42.

Zephronia ovalis:-- Newport, 1844: The Annals and magazine of natural history, 13: 264.

Sphaerotherium ovale:-- CL Koch, 1847: System der Myriapoden: 99.

Zephronia ovalis:-- Butler, 1873: Proceedings of the zoological Society of London 1873: 180.

Zephronia ovalis:-- Olliff, 1882: Cistula entomologica 3: 30.

Zephronia ovalis:-- Preudhomme de Borre, 1884: Annales de la Société Entomologique de Belgique, 28: 25.

Zephronia ovalis:-- Attems, 1914: Archiv für Naturgeschichte, 80A: 146.

Zephronia ovalis:-- Jeekel, 2001: Myriapod Memoranda, 3: 20.

Zephronia ovalis:-- Golovatch et al., 2012: Arthropoda Selecta, 21(4): 286.

Zephronia ovalis:-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 34.

Type specimens: ZMUM, Neotype (Golovatch et al., 2012).

Type locality: unknown.

Records from Indonesia: Java.

Distribution. Also known from southern Vietnam (Golovatch et al., 2012).

Remarks: The species was recently re-described based on samples collected from Cat Tien National Park, southern Vietnam (Golovatch et al., 2012). These specimens were also designated to be neotypes. The

genus *Zephronia* was formally established with clear diagnosis (Golovatch et al., 2012).

***Zephronia pellita* Attems, 1935**

Zephronia pellita Attems, 1935: Archiv für Hydrobiologie, Supplement, 14: 141, figs 36–37.

Zephronia pellita-- Rack, 1974: Mitteilungen aus dem Hamburgischen zoologischen Museum und Institut, 70: 111.

Zephronia pellita-- Jeekel, 2001: Myriapod Memoranda, 3: 21.

Zephronia pellita-- Wesener, 2016a: Bonn Zoological Bulletin, Supplementum, 63: 34.

Type specimens: NHMW (Wesener, 2016a).

Type locality: Indonesia (Sumatra: Indragiri).

Records from Indonesia: Sumatra (Indragiri, Sungai Lalah).

Distribution: Only known from Indonesia.

Remarks: No other records available since its original description.

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