

# Catalogue of the type specimens of the family Gerridae (Insecta: Hemiptera: Heteroptera) in the Natural History Museum Vienna

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## Abstract

The type specimens of the water strider family Gerridae housed in the Natural History Museum Vienna are catalogued. Information on type status, label data, and current taxonomic status is provided. The treated material consists of 1242 specimens of 153 nominal taxa of species and subspecies, including 47 holotypes, 4 lectotypes, 50 syntypes (including 2 questionable), 14 paralectotypes, and 1127 paratypes (including 11 allotypes). Photographs of 88 type specimens are provided.

**Key words:** Gerridae, types, catalogue, collection.

## Zusammenfassung

Die Typenexemplare der Wasserläuferfamilie Gerridae, die im Naturhistorischen Museum in Wien verwahrt werden, wurden katalogisiert. Informationen zum Typenstatus, zu den Etikettendaten und zum aktuellen taxonomischen Status werden geliefert. Das behandelte Material umfasst 1242 Exemplare von 153 nominellen Taxa von Arten und Unterarten, einschließlich 47 Holotypen, 4 Lectotypen, 50 Syntypen (einschließlich zweier fraglicher), 14 Paralectotypen und 1127 Paratypen (einschließlich 11 Allotypen). 88 Typusexemplare werden illustriert.

## Introduction

The documentation of type specimens is possibly the most important tool for taxonomy. The compilation of type catalogues of public collections serves as the foundation for this documentation. The Natural History Museum Vienna, one of the museums with long history, holds a good number of the primary types of species that were described since the 19<sup>th</sup> century, or even before. However, some types are still not labelled as such and need to be “rediscovered” by taxonomists. The many recent requests for photos of historical specimens to the curators impressively show the demand for this information; the examination of primary types is often conducted in cooperation between the experts on the respective taxonomic groups and the curators.

This catalogue of gerrid type specimens deals only in a minor part with primary types, but many species are represented “only” by paratypes. They were often acquired by exchange with other institutions or private collectors or derive from new expedition material. We are especially grateful to those who donated voucher specimens of their taxonomic work

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or provided reference specimens by exchange (see acknowledgements). Modern taxonomic work often requires that primary types are returned to the country of origin. Consequently, holotypes are deposited in many parts of the world, often in countries where they are hardly accessible to researchers, e.g., by loans of specimens or preparation of high-quality photographs. To facilitate scientific collaboration, we also included many photographs of paratypes in this catalogue, as a primary information for taxonomic work.

### **The historical Hemiptera collection at the Natural History Museum Vienna** (translated and excerpted from SEHNAL 2000)

**History of the Heteroptera collection:** After the new “k. k. Naturhistorisches Hofmuseum” was founded in 1889, Anton Handlirsch was put in charge of the “Rhynchota (= Hemiptera), Thysanura, Thysanoptera, Siphonaptera and Corrodentia (= Psocoptera) collections”. At the time, the Rhynchota collection comprised around 20,000 specimens of 6,000 species (HANDLIRSCH 1890), while the number of globally described species was estimated at 20,000. After the death of Dr. Franz Löw (1829–1889), who worked chiefly on gall-forming insects and Sternorrhyncha, his brother Paul Löw donated their joint private collection to NHMW in 1890. It contained around 16,530 specimens of 1,200 species. In the same year, upon the advice of Anton Handlirsch, the Signoret collection was acquired from his widow (HAUER 1891). Thus, the museum’s Rhynchota collection became one of the most notable worldwide (KOHL 1908). The collection was made up of four separate parts: the “European collection”, the “Exotic collection”, the Signoret collection, and the Löw collection. Starting in 1891, these parts were united to form a systematic collection. Each specimen was given a label designating locality, species name, and name of the determinator (HAUER 1892). Unfortunately, the original labels were not kept in most cases. For specimens of unknown origin, localities were often added later, leading to instances of confusion in cases of erroneous determination.

**Signoret (1816–1889):** The Hemiptera collection of Victor Antoine Signoret was considered the most significant one of his time (PETITS NOUVELLES ENTOMOLOGIQUES 1875). It comprised 30,150 specimens of 9,014 hemipteran species; beside numerous specimens of Homoptera, it contained more than 13,200 individuals of 5,270 heteropteran species (HAUER 1891). Its particular value was due to the large number of type specimens. They were not only of species that were described by Signoret himself, but also ones described by other taxonomists such as Carl Stål, Odo M. Reuter, and Gustav Mayr, to whom Signoret had left his material for study (PETITS NOUVELLES ENTOMOLOGIQUES 1875, HANDLIRSCH 1890).

As Signoret acquired the Serville collection, his own collection also contained types from Jean Guillaume Audinet Serville, Ambroise Marie François Joseph Palisot de Beauvois, and Amédée Louis Michel Lepeletier (PETITS NOUVELLES ENTOMOLOGIQUES 1875). When integrating them into his collection, he did not label the new specimens as such, thereby losing valuable information about their origins. Several Signoret types also came to NHMW via the acquisition of the Mayr collection (STEINDACHNER 1897).

**Mayr (1830–1908):** Gustav Mayr’s Hemiptera collection comprised 5,500 specimens of 1,350 species (STEINDACHNER 1897, KOHL 1908). It was especially valuable due to the type specimens of 49 genera and 110 species described by Mayr, as well as types from

other authors, such as Carl Stål, Franz X. Fieber and Victor A. Signoret (STEINDACHNER 1897). To make his collection more accessible for scientific work, Mayr donated it to the “k. k. Naturhistorisches Hofmuseum” in 1896 (STEINDACHNER 1897, KOHL 1908). He himself devoted the last 30 years of his life to studying the Formicidae.

**Champion** (1851–1927): On behalf of Frederick Du Cane Godman and Osbert Salvin, George Charles Champion conducted collections in Guatemala and Panama in the years 1879–1883. In 1883, he became curator of their collection, which was later housed at the British Museum (The Natural History Museum, London). Types of the species described in “Biologia Centrali-Americana” (edited by F.D. Godman & O. Salvin in 1897–1901) were distributed to museums around the world. Through the agency of Champion, NHMW thereby received 850 specimens, 370 of them syntypes of various heteropteran species (STEINDACHNER 1909). Several type specimens of the species described by Champion originated from the NHMW collection, as he loaned and assessed material in 1899 (STEINDACHNER 1900).

## Material and methods

The source of this inventory is the database of the Natural History Museum Vienna, which includes all types of Gerridae in the systematic main collection of dry mounted specimens registered until 2021. The catalogue does not treat a small number of paratype specimens of long series, which were put aside for future exchange with other museums (pinned or in alcohol) and therefore not included in the database. Taxa described between 1833 and 2021 were considered.

The species are listed alphabetically, following their original description, but without their original subgeneric assignment.

The paragraph with the original citation includes the type locality and the depository of primary types (holo-, lecto- and syntypes). If the type depository is not mentioned in the original description, it has been taken from ANDERSEN (1995a; Palaearctic Region), an unpublished catalogue by Nils Møller Andersen, or it was investigated by the authors. If type specimens (paratypes) originate from more than one locality, a “type region” is noted that summarizes the distribution of all type specimens.

## Acronyms of depositories (of primary types)

AMNH	American Museum of Natural History, New York, U.S.A.
ANIC	Australian National Insect Collection, Australia
BMNH	The Natural History Museum (formerly British Museum of Natural History), London, U.K.
BPBM	Bernice Pauahi Bishop Museum, Honolulu, Hawaii, U.S.A.
BUMS	BORNEENSIS, Universiti Malaysia Sabah, Malaysia
HNHM	Hungarian Natural History Museum, Budapest, Hungary
INPA	Forest Management Station, Amazonas, Brazil
IRSN	Institut royal des Sciences naturelles de Belgique, Brussels, Belgium

MZLU	Zoological Collections, University of Lund, Sweden
NBCN	Naturalis Biodiversity Center, Leiden, The Netherlands
NHMW	Natural History Museum, Vienna, Austria
NHRS	Swedish Museum of Natural History, Stockholm, Sweden
NKUM	Institute of Entomology, College of Life Sciences, Nankai University, Tianjin, China
NMPC	National Museum, Prague, Czech Republic
OXUM	Oxford University Museum of Natural History, Oxford, U.K.
PNM	Philippine National Museum, Manila, Philippines
PPCC	Ping-ping Chen Private Collection, Tiel, The Netherlands
RMNH	Rijksmuseum van Natuurlijke Historie (collection now included in NBCN), Leiden, The Netherlands
SEMC	Biodiversity and Natural History Museum (formerly Snow Entomological Museum Collection), Lawrence, Kansas, U.S.A.
UPLB	Museum of Natural History, University of the Philippines, Los Baños, Laguna, Philippines
USNM	National Museum of Natural History, Washington D.C., U.S.A.
ZMAN	Zoological Museum Amsterdam (collection now included in NBCN), The Netherlands
ZMUC	Zoological Museum, University of Copenhagen, Denmark
ZRC	Zoological Reference Collection, Lee Kong Chian Natural History Museum, National University of Singapore, Singapore
ZSMC	Zoological State Collection, Munich, Germany
ZVNU	Zoological Collection of Biological Museum, VNU University of Science, Hanoi, Vietnam

The types are listed by providing specific collection numbers (# followed by number). Locality labels are cited in quotation marks. The sign \ indicates a line break. Identification and type labels are only cited for historical specimens.

A paragraph “Current status” is only added if it deviates from the original taxon.

A large number of gerrid specimens have been illustrated by stacked photos; only a selection is printed in this catalogue. Many photos were taken with a Leica DFC450 camera attached to a Leica Z16APO optics carrier, using Leica Application Suite V3.8; then they were stacked with ZereneStacker 64-bit, and the stacked digital image was processed with Adobe Photoshop 7.0. However, some older photographs and some photos of large specimens were prepared with different camera equipments. Labels were photographed only for a few historical specimens (not on scale with specimens). The photos were mostly prepared by the second and third authors, Alice Laciny and Harald Bruckner. Few photos were already used in publications which are cited. Scale bars in black or white represent 1 mm. If no scale bar is provided, body length (BL; measured from tip of head to tip of abdomen) is mentioned in the caption.

## Catalogue

### *Amemboa aquafrigida* ZETTEL & CHEN, 1997 (Fig. 1)

*Amemboa* (s. str.) *aquafrigida* ZETTEL & CHEN, 1997: 94. – Type locality: Thailand, Phetchabun Province, Nam Nao National Park, Huai Phrom Laeng; holotype in NHMW. – Type region: Northeast Thailand: Phetchabun and Chaiyaphum Provinces.

**Type material.** Holotype (apterous male, #6347) and paratypes (24 apterous males, #6348–6371; 17 apterous females, #6372, 6374–6389): “Thailand: Phetchabun Prov.\ Nam Nao NP, Huai Phrom\ Laeng, 24.11.1995\ leg. H. Zettel (22)”; paratypes (2 apterous males, #6390, 6391; 1 apterous female #6373): “Thailand: P[h]etchabun\ Nam Nao NP, Huai Ya\ Krua, 14.III.1994\ leg.W.D.Shepard (1039)”; paratype (1 apterous male, #6392): “Thailand: P[h]etchabun\ Nam Nao NP, Prom Laeng\ 22.III.1994\ leg. W.D.Shepard (1040)”; paratypes (1 apterous male, #6393; 1 apterous female, #6394): “Thailand: Chaiyaphum\ Phu Khieo NP, trib. to\ Huai Prom Mai, 5.IV.1994\ leg.W.D.Shepard (1054)”.

### *Amemboa incurvata* POLHEMUS & ANDERSEN, 1984

*Amemboa* (*Amemboa*) *incurvata* J. POLHEMUS & ANDERSEN, 1984: 97. – Type locality: Malaysia (West), Penang, Batu Ferringhi; holotype in ZMUC. – Type region: Malaysia (Penang) and Indonesia (Sumatra).

**Type material.** Paratypes (1 apterous male, #6550; 2 apterous females, #6551, 6552): “Malaysia,\ Penang Island\ Bayan Lepas\ 24.xi. 1979\ Peter Nielsen leg.”; paratype (1 apterous male, #6549): “MALAYSIA: Penang\ Batu Ferringhi\ 26.xii.1981\ N. Møller Andersen”.

### *Amemboa intermedia* ZETTEL & CHEN, 1996 (Fig. 2)

*Amemboa* (s. str.) *intermedia* ZETTEL & CHEN, 1996: 157. – Type locality: Vietnam, Quang Ninh Province, Halong near “Honggai”; holotype in ZSMC.

**Type material.** Paratype (apterous male, #6548): “N.Vietnam,Halong\ bei Honggai\ 19.–21.3.78 Josifov”.

### *Amemboa laotica* ZETTEL, 1998 (Fig. 3)

*Amemboa* (s. str.) *laotica* ZETTEL, 1998: 170. – Type locality: Laos, Saravan Province, Tat Lo Waterfall and Resort 370 m a.s.l.; holotype in NHMW.

**Type material.** Holotype (apterous male, #7001) and paratypes (1 apterous male, #7002; 4 apterous females, #7003–7006): “LAOS: Saravan Prov.\ Tat Lo Waterfall & Resort\ 370 m, 29.12.1996\ leg. Schwendinger”.

### *Amemboa mathildae* ZETTEL, 1995 (Fig. 4)

*Amemboa* (s. str.) *mathildae* ZETTEL, 1995: 63. – Type locality: Malaysia (East), Sarawak, Mount Penrisen, 80 km S Kuching; holotype in NHMW. – Type region: Borneo, Sarawak, Mount Penrisen and Mount Serapi.

**Type material.** Holotype (apterous male, #6498) and paratypes (3 apterous males, #6499–6501; 3 apterous females, #6502–6504): “MALAYSIA: Sarawak\ Mt.Penris[s]en, 80 km\ S Kuching, 18.2.\1993, leg.H.Zettel (4)”; paratype (apterous male, #6505): “MALAYSIA: Sarawak 1993\ Kubah NP, 20 km W\ Kuching, Gunung Serapi\ 6.3., leg.H.Zettel (15)”.

### *Amemboa nodosa* POLHEMUS & ANDERSEN, 1984

*Amemboa* (*Amemboides*) *nodosa* J. POLHEMUS & ANDERSEN, 1984: 103. – Type locality: Malaysia (West), Pahang, Cameron Highlands, 2000 m a.s.l.; holotype in ZMUC. – Type region: Malaysia (Pahang and Perak) and Thailand (Phuket).

**Type material. Paratypes** (2 apterous males, #8779, 8780; 2 apterous females, #8781, 8782): “Malaysia, Pahang\ Cameron Highlands\ 2000 m\ 17. xi. 1979\ Peter Nielsen leg.”.

**Current status.** *Amemboides nodosus* (TRAN & D. POLHEMUS (2009: 50) raised *Amemboides* to genus level.)

### *Amemboa pilifera* ZETTEL, YANG & TRAN, 2007 (Fig. 5)

*Amemboa* (*Amemboides*) *pilifera* ZETTEL, YANG & TRAN 2007: 226. – Type locality: China, Yunnan Province, Mengyang, Km 13, Menglun to Mengyang; holotype in ZRC. – Type region: South China: Yunnan Province; North Laos: Champasak Province.

**Type material. Paratype** (1 apterous male, #8778): “Laos: Champasak Province\ Bolavens Plateau, nr. Tat Phan\ Wf. Ban Itou, 800 m, 26.12.1996\ leg. P. Schwendinger”.

**Current status.** *Amemboides pilifer* (TRAN & D. POLHEMUS (2009: 50) raised *Amemboides* to genus level.)

### *Amemboa schwendingeri* ZETTEL & CHEN, 1997 (Fig. 6)

*Amemboa* (s. str.) *schwendingeri* ZETTEL & CHEN, 1997: 96. – Type locality: Thailand, Chiang Mai Province, Chiang Dao, Ban Yang Thung Pong; holotype in NHMW. – Type region: North Thailand: Chiang Mai and Mae Hong Son Provinces.

**Type material. Holotype** (apterous male, #6340) and **paratypes** (2 apterous males, #6341, 6342; 2 apterous females, #6343, 6344): “Thailand: Chiang Mai Prov.\ Chiang Dao, Ban Yang Thung\ Pong, 500 m, 8.11.1995\ leg. H. Zettel (10)”; paratype (apterous male, #6345): “Thailand: Mae Hong Son Prov.\ 3 km SE Mae Hong Son\ 13.11.1995\ leg. H. Zettel (14b)”.

### *Amemboa vasarhelyii* ZETTEL, 1995 (Fig. 7)

*Amemboa* (*Amemboides*) *vasarhelyii* ZETTEL, 1995: 64. – Type locality: Vietnam, Ninh Binh Province, Cuc Phuong; holotype in HNHM. – Type region: Vietnam (North), Ninh Binh and Vinh Phuc Provinces.

**Type material. Paratypes** (1 apterous male, #8823; 1 apterous female, #8824): “VIETNAM\ Cuc Phuong, 400 m”, “No.68.\ 17.X.1986.\ leg. Vásárhelyi”; paratype (apterous male, #8822): “VIETNAM\ Tam Dao, 1200 m”, “No.50.\ 14.X.1986.\ leg. Vásárhelyi”.

**Current status.** *Amemboides vasarhelyii* (TRAN & D. POLHEMUS (2009: 50) raised *Amemboides* to genus level.)

### *Amemboa velaris orientalis* ZETTEL & CHEN, 1997 (Fig. 10)

*Amemboa* (*Amemboides*) *velaris orientalis* ZETTEL & CHEN, 1997: 99. – Type locality: Vietnam (South), Lam Dong Province, 12 km N Dalat-Lang Bian; holotype in NHMW. – Type region: South Vietnam, Lam Dong Province.

**Type material. Holotype** (apterous male, #8844) and **paratypes** (2 apterous males, #8845; 8846; 6 apterous females, #8847–8852): “S-VIETNAM: 28.–30.4.1994\ 12 km N Dalat-LangBian\ P. Pacholátko &\ L. Dembicky leg”; paratypes (2 apterous males, #8853, 8854; 1 apterous female, #8855): “S VIETNAM, 16 km N Dalat- Ankreot, 12°05'N, 108°24'E\ 1400 m, 15.4.1995\ leg. Pacholátko & Dembicky”; paratypes (2 apterous males, #8856, 8857; 1 apterous female, #8858): “VIETNAM\ Suoi Vang, 15 km\ NW of Da Lat,”, “No.308.\ 17.X.1986. leg.\ Vásárhelyi”.

**Current status.** *Amemboides velaris orientalis* (TRAN & D. POLHEMUS (2009: 50) raised *Amemboides* to genus level.)

### *Amemboa yunnana* ZETTEL, YANG & TRAN, 2007 (Fig. 11)

*Amemboa* (*Amemboides*) *yunnana* ZETTEL, YANG & TRAN 2007: 224. – Type locality: China, Yunnan Province, Mengla; holotype in ZRC. – Type region: China, Yunnan Province.

**Type material. Paratypes** (1 apterous male, #8516; 1 apterous female, #8517): “CHINA – Yunnan, Xishuangbanna, Mengka, 55th stream\ CM Yang & P. Chew\ 30-MAY-2002 YCM0303”; paratypes (1 apterous male, #8518; 1 apterous female, #8519): “CHINA – Yunnan, Xishuangbanna\ Jinghong, Banna Nat Park\ rocky stream; CM Yang & P. Chew\ 07-JUN-2002 YCM0327”; paratype (1 macropterous male, #8520): “CHINA, Yunnan, Mengla\ small waterfall, 28 km\ from Mengla, 24.V.2000\ leg. L. Cheng (LC 031)”; paratype (1 macropterous female, #8521): “CHINA, Yunnan, Mengla\ mountain stream by\ waterfall, 18.V.2000\ leg. L. Cheng (LC 001)”; paratypes (1 macropterous male, #8522; 1 apterous female, #8523): “CHINA: Yunnan, Mengyang\ km 20 on road Menglun –\ Mengyang, 22.V.2000\ Leg. L. Cheng, LC 019”.

**Current status.** *Amemboides yunnanus* (TRAN & D. POLHEMUS (2009: 50) raised *Amemboides* to genus level.)

### *Amemboides falcatus* TRAN & POLHEMUS, 2009 (Fig. 8)

*Amemboides falcatus* TRAN & D. POLHEMUS, 2009: 52. – Type locality: Vietnam, Da Nang Province, Ba Na-Nui Chua, Suoi Vong Nguyet; holotype in ZVNU. – Type region: Vietnam, Da Nang Province.

**Type material. Paratype** (apterous male, #8515): “VIETNAM: Da Nang Prov.\ Ba Na – Nui Chua, Suoi Nai Thac\ Cau Vong, 1370 m, 15°59.615 N\ 107°59.466 E, 26.V.2003\ leg. Tran A.D. (TAD0334)”.

### *Amemboides gladiolus* TRAN & POLHEMUS, 2009 (Fig. 9)

*Amemboides gladiolus* TRAN & D. POLHEMUS, 2009: 53. – Type locality: Vietnam, Dien Bien Province, upstream and waterfall of Muong Phang stream; holotype in ZVNU. – Type region: Vietnam, Dien Bien Province.

**Type material. Paratypes** (1 apterous male, #8513, 1 apterous female, #8514): “VIETNAM: Dien Bien Prov.\ Muong Phang, upstream &\ waterfall, 29.VII.2004\ leg. Tran A.D. (DY 0419)”.

### *Andersenella nilsi* CHEN & NIESER, 2000 (Fig. 12)

*Andersenella nilsi* CHEN & NIESER, 2000: 70. – Type locality: Indonesia, Sulawesi Utara Province, Talaud Archipelago, Pulau Karakelong, Desa Ambela; holotype in RMNH.

**Type material. Paratypes** (7 apterous males, #31296–31302; 7 apterous females, #31289–31295) “Indonesia, Talaud Archipel-\ ago, Pulau Karakelong,\ Desa Ambela, 30.XI.1994\ leg. N. Nieser (N9493)”.

**Current status.** *Talaudia nilsi* (J. POLHEMUS & D. POLHEMUS (2002: 290) designated *A. nilsi* as the type species of their new genus *Talaudia*.)

### *Andersenius dentifer* ZETTEL & CHEN, 1996 (Fig. 13)

*Andersenius dentifer* ZETTEL & CHEN, 1996: 168. – Type locality: Vietnam (South), Gia Lai-Kontum Province, 40 km NW An Khe; holotype in NHMW. – Type region: Vietnam, Gia Lai-Kontum and Lam Dong.

**Type material. Holotype** (apterous male, #11163) and **paratypes** (17 apterous males, #11164–11179, #11181, 1 macropterous male, #11180; 14 apterous females, #11182–11195): “S VIETNAM, 40 km NW An Khe\ Buon Luoi, 14°10'N, 108°30'E\ 620–750 m, 28.3.–12.4.1995\ leg. Pacholátko & Dembicky”.

### *Aquarius philippensis* ZETTEL & RUIZ, 2003 (Fig. 14)

*Aquarius philippensis* ZETTEL & RUIZ, 2003: 196. – Type locality: Philippines, Camarines Sur Province, Buhi, Santa Cruz, Lake Buhi; holotype in UPLB. – Type region: Philippines, Camarines Sur Province, Lake Buhi and Lake Baaoo.

**Type material. Paratypes** (1 apterous male, #6639; 1 apterous female, #6641): “Philippines, Camarines Sur\ Buhi, Santa Cruz,\ Lake Buhi, 21.12.2001, leg. Ryan B. Ruiz”; paratype (1 apterous male, #6440): “Philippines, Camarines Sur\ Baaoo, San Francisco\ Lake Baaoo, 21.12.2002\ leg. Ryan B. Ruiz”.

### *Archaeoptilomera kodadai* ZETTEL, 2009 (Fig. 15)

*Archaeoptilomera kodadai* ZETTEL, 2009: 40. – Type locality: Malaysia (East), Sarawak, ca. 40 km SE Kapit; holotype in NHMW.

**Type material. Holotype** (apterous female, #19379): “SARAWAK (Borneo),\ ca. 40 km SE Kapit,\ 3. 1994, leg. J. Kodada”, “Rumah Ugap Ng\ marating bena Kapit\ Sut”.

### *Cryptobatoides brunneus* POLHEMUS, 1991

*Cryptobatoides brunneus* J. POLHEMUS, 1991: 84. – Type locality: Brazil, Amazonas, INPA Forest Management Station, 98 km NW Manaus; holotype in INPA. – Brazil: Amazonas State, surroundings of Manaus.

**Type material. Paratypes** (4 apterous males, #5270–5273; 4 apterous females, #5274–5277): “BRAZIL, Amazonas\ Igarape da Anta, Reserva\ Ducke, 25 km. NE of Manaus, 60 m., 24.5°C\ 25 August 1989 CL 2472\ D. A. & J. T. Polhemus”.

**Current status.** *Lathriobatoides brunneus* (transferred to *Lathriobatoides* by J. POLHEMUS 2004).

### *Cylindrostethus brachyakanthinos* CHEN & NIESER, 1992 (Fig. 16)

*Cylindrostethus brachyakanthinos* CHEN & NIESER, 1992: 151. – Type locality: Indonesia, Sulawesi Tengah Province, Luwuk area, Sungai Batui; holotype in RMNH. – Type region: Indonesia, Sulawesi Tengah Province, Luwuk area.

**Type material. Paratypes** (2 apterous males, #31304, 31305; 2 apterous females, #31306, 31307): “INDONESIA: Sulawesi\ Tengah, Sg. Batui nr.\ “Singsing”, 17.10.\ leg. J. v. Tol 1989”.

**Current status.** *Cylindrostethus persephone* KIRKALDY, 1899 (syn. D. POLHEMUS 1994: 13).

**Notes.** The taxonomy of the *C. scrutator* group appears not finally solved. Therefore, the synonymy of *C. persephone* and *C. brachyakanthinos* has not been implemented in the collection of NHMW.

### *Cylindrostethus fieberi* MAYR, 1865 (Fig. 17)

*Cylindrostethus fieberi* MAYR, 1865: 444. – Type locality: Sri Lanka (“Ceylon”); holotype in NMHW.

**Type material. Holotype** (macropterous female, #31303) “Felder\ Ceylon\ 1861”, “HOLOTYPE\ Cylindrostethus\ fieberi MAYR 1865\ Verh.Zool.-Bot.Ges. 15: 444”.

**Current status.** *Cylindrostethus productus* (SPINOLA, 1840) (syn. DISTANT 1903: 184).

**Notes.** The single female specimen is lacking an identification label by Gustav Mayr, but it agrees with the original description. This fact and also the early collecting date let us believe that this is the holotype, and we labelled it as such.

### *Eotrechus luuae* TRAN & ZETTEL, 2006 (Fig. 19)

*Eotrechus luuae* TRAN & ZETTEL, 2006: 43. – Type locality: China, Hainan Province, Ledong, Jianfenglin Forest Reserve; holotype in ZRC. – Type region: China, Hainan Island.

**Type material. Paratypes** (3 apterous males, #6449, #6451, #6452; 1 apterous female, #6450): “CHINA: Hainan Prov. Qiong-\ zhong, Balhua waterfall nr.\ Qiongzhong, 11.IX.2005\ leg. I.-S. Chen & al THH05-73”.

### *Eotrechus pilicaudatus* TRAN & ZETTEL, 2006 (Fig. 20)

*Eotrechus pilicaudatus* TRAN & ZETTEL, 2006: 40. – Type locality: India (Northeast), Meghalaya, 3 km E of Tura, 1150 m a.s.l., 25°30' N, 94°14' E; holotype in NHMW.

**Type material. Holotype** (apterous male, #6444): “NE-INDIA: Meghalaya\ 3 km E Tura, 1150 m\ 25°30'N 90°14'E, 18.IV.1999\ leg. Dembicky & Pacholatko”.

### *Eotrechus vietnamensis* TRAN & YANG, 2006 (Fig. 18)

*Eotrechus vietnamensis* TRAN & YANG, 2006: 12. – Type locality: Vietnam, Vinh Phuc Province, Tam Dao National Park, Suoi Thac Bac (near Doi Che), 21°27.005' N, 105°38.771' E, 749 m a.s.l.; holotype in ZVNU. – Type region: Northern Vietnam: Vinh Phuc, Ba Vi, Lai Chau, Dien Bien, and Lao Cai Provinces.

**Type material. Paratypes** (1 apterous male, #6446; 1 apterous female, #6645): “VIETNAM: Dien Bien Prov.\ Muong Phang, upstream &\ waterfall, 28.VII.2004\ leg. Tran A.D. (DY 0419)”; paratypes (1 apterous male, #6448; 1 apterous female, #6447): “VIETNAM: Vinh Phuc Prov.\ Tam Dao NP, Suoi Bua Lon\ 600 m, 19.VI.2003\ leg. Tran A.D. (TAD0356)”.

### *Esakia borneensis* TRAN & ZETTEL, 2019 (Fig. 21)

*Esakia borneensis* TRAN & ZETTEL, 2019: 306. – Type locality: Malaysia (East), Sarawak, Gunung Mulu National Park, Sungai Long Langsat (tributary of Sungai Tutoh); holotype in ZRC. – Type region: Borneo: Brunei, Sarawak, Kalimantan.

**Type material. Paratypes** (2 apterous females, #26076, 26082; 5 apterous males, #26077–26081): “MALAYSIA: Sarawak\ Mulu NP, 3.–5.3.\ 1993, leg.H.Zettel (14)”, “(e) rechter Zufluß des Tutoh River bei\ Long Iman,\ ca. 8 m breit, 4.3.”; paratypes (1 dealate male, #26083; 4 dealate females, #26084–26087): “SARAWAK (Borneo)\ ca. 40 km SE Kapit,\ 3.1994, leg. J. Kodada”, “Rumah Ugap Ng\ marating bena Kapit\ Sut”; paratypes (6 apterous males, #26088–26093; 2 apterous females, #26094, 26095; 1 dealate female, #26096): “SARAWAK (Borneo) 3.1994\ PADAWAN (ca. 80 km W\ from Kuching, SARAWAK\ river, J. Kodada leg.”; paratypes (17 apterous males, #26097, 26099, 26104, 26105, 26107, 26110–26112, 26119, 26120, 26150, 26151, 26157–26161; 22 apterous females, #26098, 26100–26103, 26106, 26108, 26109, 26113–26118, 26121, 26152–26156, 26162, 26163): “MALAYSIA: Sabah\ Danum Valley, Palum\ Tambun, 2.–13.2.1997\ leg. H. Zettel (2)”; paratypes (1 apterous male, #26122; 5 apterous females, #26123–26127): “MALAYSIA: Sabah\ Danum Valley, Palum\ Tambun, 2.–13.2.1997\ leg. H. Zettel (P16)”; paratypes (1 apterous male, #26128; 1 dealate male, #26129): “MALAYSIA: Sabah\ Danum Valley, Sapat\ Kalisan, 12.2.1997\ leg. H. Zettel (15)”; paratypes (4 apterous females, #26130–26133; 1 apterous male, #26134; 1 macropterous male, #26135); 1 dealate male, #26136): “BRUNEI: Belait District: Sungai\ Ingei, upstream of Base Camp\ Site 6, 13.VI.2010\ leg. Mayyer Ling (#5)”; paratypes (2 apterous females, #26137, 26139; 3 apterous males, #26138, 26140, 26141): “BRUNEI: Belait District: Sungai\ Ingei, upstream of Base Camp\ Site 4, 13.VI.2010\ leg. Mayyer Ling (#9)”; paratypes (3 apterous males, #26147–26149; 5 apterous females, #26142–26146): “BRUNEI: Belait District: Sungai\ Ingei, upstream of Base Camp\ Site 2, 13.VI.2010\ leg. Mayyer Ling (#8)”; paratypes (2 apterous males, #26164, 26167; 2 apterous females, #26165, 26166): “MALAYSIA: Sarawak\ Mulu NP, 3.–5.3.\ 1993,leg.H.Zettel (14)”, “(e) rechter Zufluß des Tutoh River bei\ Long Iman,\ ca. 8 m breit, 4.3.”.

### *Esakia cenizae* ZETTEL, 2004 (Fig. 22)

*Esakia cenizae* ZETTEL, 2004: 382. – Type locality: Philippines, Bohol Island, Northeast of Tagbilaran, South of Sikatuna, near Dangay; holotype in UPLB. – Type region: Philippines: Bohol and Samar Islands.

**Type material. Paratypes** (19 apterous males, #4621–4639; 14 apterous females, #4640–4653): “PHILIPPINEN: Bohol\ NE Tagbilaran, S Sikatuna\ nr. Dangay, 26.–27.11.\ 1996, leg. H. Zettel (111)”; paratype (1 apterous female, #4654): “PHILIPPINEN: Bohol\ Antequera, Mag-Aso\ Falls, 22.11.1996, leg. H. Zettel (104)”; paratypes (1 apterous male, #4655; 1 dealate male, #4656; 1 apterous female, #4657; 1 dealate female, #4658): “Philippinen: N. Samar\ San Joaquin, Lologayan\ Falls, 27.1.2000\ leg. H. Zettel (219a)”; paratypes (8 apterous males, #4659–4666; 8 apterous females, #4667–4674): “Philippinen: N. Samar\ San Joaquin, Lologayan\ Falls, 27.1.2000\ leg. H. Zettel (219b)”; paratype (1 apterous male, #4675): “Philippinen: W. Samar\ E Basey, Sohoton NP,\ Sohoton River, 29.1.2000\ leg. H. Zettel (221a)”.

### *Esakia kuiterti* HUNGERFORD & MATSUDA, 1958

*Esakia kuiterti* HUNGERFORD & MATSUDA, 1958a: 193. – Type locality: Myanmar (“Burma”), Ting-kawk; holotype in SEMC.

**Type material.** Paratype (1 apterous male, #31512): “Tingkawk\ Burma\ V-1994\ L.C. Kuitert”.

**Note.** When this catalogue was compiled, this specimen was on loan.

### *Esakia latonota* TRAN & ZETTEL, 2013 (Fig. 23)

*Esakia latonota* TRAN & ZETTEL, 2013: 22. – Type locality: Vietnam, Nam Cat Tien National Park; holotype in NHMW.

**Type material.** Holotype (apterous male, #9684), allotype (apterous female, #9686) and paratypes (1 apterous male, #9685; 10 apterous females, #9687–9696): “S VIETNAM, 1.–15.5.1994\ Nam Cat Tien N.P.\ P. Pacholátko & L. Dembicky leg.”.

### *Esakia mazzoldii* TRAN & ZETTEL, 2019

*Esakia mazzoldii* TRAN & ZETTEL, 2019: 310. – Type locality: Indonesia, Kalimantan Tengah Province, Sungai Pané, left tributary of Katingan River; holotype in ZRC.

**Type material.** Paratypes (2 apterous males, #31309, 31310): “Indonesia: Kalimantan\ Sungai Pané, left trib.\ of Katingan, 11.VII.2005\ leg. Paolo Mazzoldi\ Acqu. 2019-04”.

### *Esakia palawanensis* ZETTEL, 2004 (Fig. 24)

*Esakia palawanensis* ZETTEL, 2004: 379. – Type locality: Philippines, Palawan Island, 20 km West of Puerto Princesa, Tacduan Area, Tacduan River; holotype in NHMW. – Type region: Philippines, Palawan Island and Busuanga Island.

**Type material.** Holotype (apterous male, #4546) and paratypes (5 apterous males, #4547–4551; 1 macropterous male, #4552; 3 apterous females, #4553–4555; 2 macropterous females, #4556, 4557): “PHILIPPINEN: Palawan\ 20 km W P. Princesa\ Tacduan Area, Tacduan riv.\ Ig. Zettel, 5.3.1994 (49b)”; paratypes (7 apterous males, #4558–4564; 3 apterous females, #4565–4567): “PHILIPPINEN: Palawan\ 9 km W P. Princesa\ Iwahig, Balsahan riv.\ Ig. Zettel, 24.3.1994 (48)”; paratypes (16 apterous males, #4568–4583; 14 apterous females, #4584–4597): “PHILIPPINEN: Palawan\ 20 km WSW P. Princesa\ Montible River, 26.3.\ leg. H. Zettel 1994 (50a)”; paratypes (10 apterous males, #4598–4607, 1 macropterous male, #4608; 9 apterous females, #4609–4618): “PHILIPPINEN: Palawan\ 10 km NE Quezon\ Tumarbon Falls, 3.–4.4.\ leg. Zettel 1994 (58)”; paratype (1 apterous male, #4618): “PHILIPPINEN: Palawan\ Sabang, 0–30 m\ 27.3.1994\ leg. H. Zettel (52b)”; paratype (1 macropterous female, #4619): “PHILIPPINEN: Palawan\ 7 km N Narra, Estrella\ Falls, 2.4.1994\ leg. H. Zettel (57)”.

### *Eurymetra papaceki* ZETTEL, 2020 (Fig. 25)

*Eurymetra papaceki* ZETTEL, 2020: 21. – Type locality: Madagascar, Fianarantsoa Province, Ranomafana; holotype in NHMW.

**Type material.** Holotype (apterous male, #5303), allotype (apterous female, #5306), and paratypes (7 apterous males, #5298–5302, 5304, 5305; 6 apterous females, #5307–5312): “MADAGASCAR C.\ 6.–10.I.1998,\ Ranomafana\ (pr. Fianarantsoa)\ P. Pacholátko leg.”.

### *Eurymetra santamariae* ZETTEL, 2020 (Fig. 26)

*Eurymetra santamariae* ZETTEL, 2020: 19. – Type locality: Madagascar, Toamasina Province, Nosy Boraha, Forêt de Kalalao; holotype in NHMW.

**Type material.** Holotype (apterous male, #5292), allotype (apterous female, #5291), and paratypes (5 apterous females, #5293–5297): “MADAGASKAR: Ste.Marie\ Foret de Kalalao\ 18.11.1993, I.M. Madl”.

### ***Gerris beieri* DRAKE & HARRIS, 1934**

*Gerris beieri* DRAKE & HARRIS, 1934: 200. – Type locality: Colombia; holotype in NHMW.

**Type material.** Holotype (apterous male) and allotype (apterous female; both on one pin, #13891), paratypes (2 apterous males and 2 apterous female, #13892, 13893; one male and one female each on one pin): “Thorei\ Columbian”.

**Current status.** *Eurygerris beieri* (transferred to *Eurygerris* by HUNGERFORD & MATSUDA 1958b: 168).

### ***Gerris canarium* DUFOUR, 1833 (Fig. 27)**

*Gerris canarium* DUFOUR, 1833: 197. – Type locality: not mentioned (probably France); depository of syntypes not mentioned).

**Type material.** Syntype (?) (apterous male, #22245): “Süd Frankr.\ Coll. Signoret.”, “canarium\ det. Signoret.”, “? Syntypus ? Gerris canarium Dufour, 1833 Rech. anat. &\ physiol. Hémipt. 4: 197”.

**Current status.** *Aquarius najas* (DE GEER, 1773) (syn. AMYOT & SERVILLE 1843: 418).

**Notes.** DUFOUR (1833) described the apterous morph of “*Gerris najas*” as a separate species. The possible syntype bears the characteristic labels of a specimen purchased by the NHMW from Signoret’s widow: printed with handwriting by Anton Handlirsch (Fig. 27). It seems possible that specimens from Dufour’s studies were integrated in the collection of Signoret. Therefore, we labelled the specimen as a possible syntype.

### ***Gerris cariniventris* CHAMPION, 1898**

*Gerris cariniventris* CHAMPION, 1898: 148. – Type locality: Mexico, Amula in Guerrero; Cuernavaca in Morelos; Guatemala; Costa Rica, Volcan de Irazu, Rio Sucio; Panama, Volcan de Chiriqui; syntypes in NHMW and BMNH.

**Type material.** Syntype (apterous female, #13894): “Bilimek\ Mexico\ 1883 II.\ Cuernova.”.

**Current status.** *Eurygerris cariniventris* (transferred to *Eurygerris* by HUNGERFORD & MATSUDA 1958b: 168).

**Notes.** CHAMPION (1898) listed the exact localities and type depositories. Accordingly, the specimen above was labelled as a syntype.

### ***Gerris cereiventris* SIGNORET, 1862**

*Gerris cereiventris* SIGNORET, 1862b: 30. – Type locality: Madagascar; lectotype (ANDERSEN 1975: 67) in NHMW.

**Type material.** Lectotype (macropterous female, #31311): “Madagascar\ Coll. Signoret.”, “LECTOTYPE\ Gerris (Limnogonus)\ cereiventris Signoret\ N Möller Andersen 1972”, “Limnogonus\ cereiventris\ ♀ (Sign.)\ Det: H.B. Hungerford”, “LECTOTYPUS\ Gerris\ cereiventris SIGNORET 1862 in: MAILLARD Notes Reunion Ann. J: 30”. Paralectotypes (1 apterous female [head missing], #31312; 2 apterous males, #31313, 31314): “Bourbon\ Coll. Signoret.”, “cereiventris\ det. Signoret.”, the female with the label “PARALECTOTYPE\ Gerris (Limnogonus)\ cereiventris Signoret\ N Möller Andersen 1972”, all three paralectotypes with the label “PARALECTOTYPUS\ Gerris\ cereiventris SIGNORET 1862 in: MAILLARD Notes Reunion Ann. J: 30”.

**Current status.** *Limnogonus cereiventris* (transferred to *Limnogonus* by BERGROTH 1893: 203).

**Notes.** In his revision, ANDERSEN (1975) studied only the female specimens and selected the lectotype, whereas the males were recognized as paralectotypes later by the first author. Only the males are in a reasonably good condition.

### ***Gerris comatus* DRAKE & HOTTES, 1925**

*Gerris (Gerris) comatus* DRAKE & HOTTES, 1925a: 48. – Type locality: U.S.A., Colorado, Estes Park, YMCA Conference grounds; holotype in USNM. – Type region: U.S.A., Colorado, Ohio, Iowa, Wisconsin, Maine.

**Type material. Paratype** (1 apterous female, #31505): “Ames, Iowa\ X-18 1924\ C. J. Drake”.

### ***Gerris curvus* TRAN & POLHEMUS, 2012**

*Gerris curvus* TRAN & J. POLHEMUS, 2012: 21. – Type locality: Vietnam, Dong Nai Province, Cat Tien National Park, Bau Sau; holotype in ZVNU.

**Type material. Paratypes** (2 apterous males, #9679, 9680; 1 macropterous male, #9681; 2 apterous females, #9682, 9683): “VIETNAM: Dong Nai Prov.\ Cat Tien Nat. Park, Bau Sau\ (Crocodile Lake), 12.IV.2009\ leg. Tran A.D. TAD0909”.

### ***Gerris discolor* STÅL, 1860**

*Gerris discolor* STÅL, 1860: 265. – Type locality: “Manilla [Manila, Philippines], China et insula Taiti [Tahiti]”; syntypes in NHRS and NHMW(?).

**Type material. Syntype (?)** (1 macropterous male, #7290): “Manila\ Coll. Signoret.”, “discolor\ det. Signoret”, “Syntypus ?\ *Gerris discolor* Stål, 1860: 265 Hemiptera\ Species nova descriptis”.

**Current status.** *Limnogonus fossarum fossarum* (syn. LUNDBLAD 1933: 377).

**Notes.** The specimen was part of Signoret’s collection which was sold to NHMW. In his collection, both species names *discolor* and *fossarum* were represented. Signoret and Stål maintained a lively exchange of (type) specimens as can be observed in many taxa, so that it is not unlikely that this specimen is a syntype. The identification label was added by Anton Handlirsch in the NHMW, and “det. Signoret” might be erroneous. The unusually small specimen (length 7.8 mm) agrees otherwise well with STÅL’s (1860) description and falls in the current interpretation of *Limnogonus fossarum fossarum* (cf. ANDERSEN 1975).

### ***Gerris flavolineatus* CHAMPION, 1898**

*Gerris flavolineatus* CHAMPION, 1898: 149. – Type locality: Mexico, Puebla, Cuernavaca, Tacubaya; Mexico “ex coll. Signoret”; Guatemala, San Gerónimo; syntypes in BMNH, ISNB, NHMW, NHRS.

**Type material. Syntypes** (1 macropterous male, #13911; 1 apterous female, #13912): “Mexico\ Coll. Signoret.”; syntypes (2 apterous males, #13913, 13914; 1 apterous female, #13915): “Bilimek\ Mexico\ 1883 II\ Cornuva.”; syntype (1 apterous male, #13916): “Bilimek\ Cornu\ vacca\ Jaenner”; syntype (1 apterous male, #13917): “Bilimek\ Mexico\ 1883 II\ Takubay.”; syntype (1 apterous female, #13918): “Bilimek\ Mexico\ 1871”; syntype (1 apterous female, #13919): “Bilimek\ Mexico\ 1883 II\ Puebla”; syntype (1 macropterous female, #13920): “Bilimek\ Mexico\ 1883 II\ Puebla”.

**Current status.** *Eurygerris flavolineatus* (transferred to *Eurygerris* by HUNGERFORD & MATSUDA 1958b: 168).

**Notes.** CHAMPION (1898) listed the exact localities and type depositories. Accordingly, we labelled the specimens above as syntypes. MORALES-CASTAÑO & MOLANO-RENDÓN (2009) erroneously used the term “paratype” for a syntype in BMNH.

### ***Gerris incurvatus* DRAKE & HOTTES, 1925**

*Gerris incurvatus* DRAKE & HOTTES, 1925b: 72. – Type locality: U.S.A., Montana, Bozeman; holotype in USNM. – Type region: U.S.A., Montana, Washington and California; Canada, British Columbia and Ontario.

**Type material. Paratype** (1 apterous male, #31504): “Saanich Distr., B.C. [Canada, British Columbia] \ 15.IX. 1924\ W. Downes”.

### *Gerris kiritshenkoi* KANYUKOVA, 1979

*Gerris kiritshenkoi* KANYUKOVA, 1979: 51. – Type locality: Azerbaijan, Astara Rayon, Archevan; holotype in ZMSP. – Type region: Azerbaijan.

**Type material. Paratype** (1 apterous male, #10967): “Azerbaijan: Lenkoran Distr.\ Gelyakeran, Talysh\ 7.V.1909\ leg. Kirichenko”; paratype (1 apterous female, #10968): “Azerbaijan: Bilyasar\ in river Vasharu-chay\ 800 m, 15.VII.1932\ leg. Znoyko”.

**Current status.** *Gerris (Gerriselloides) kiritshenkoi* (see KANYUKOVA 1982).

### *Gerris mexicanus* CHAMPION, 1898 (Fig. 28)

*Gerris mexicanus* CHAMPION, 1898: 147. – Type locality: Mexico, Orizaba and Cuernavaca; syntypes in BMNH and NHMW.

**Type material. Syntype** (1 macropterous female, #13895): “Mexico\ Coll. Signoret.”; syntypes (2 apterous females, #13896, 13897): “Bilimek Mexico\ 1871”; syntype (1 apterous male, #13898): “Bilimek\ Mexico\ 1883 II\ Orizaba”; syntype (1 apterous male, #13899): “Bilimek\ Orizaba\ Juni”; syntypes (1 apterous male and 1 apterous female on one pin, #13900): “Bilimek\ Mexico\ 1883 II\ Cornuva. [Cuernavaca]”; syntypes (2 apterous males, #13901, 13902): “Bilimek\ Mexico 83.”.

**Current status.** *Eurygerris mexicanus* (transferred to *Eurygerris* by HUNGERFORD & MATSUDA 1958b: 168).

**Notes.** CHAMPION (1898) listed the exact localities and type depositories, and noted having seen 14 specimens. Nine specimens in NHMW bear a label referring to Biologia Centrali-Americana (see Fig. 28), probably with Champion’s handwriting. Accordingly, we labelled these specimens as syntypes. There is at least one syntype in BMNH; MORALES-CASTAÑO & MOLANO-RENDÓN (2009) erroneously used the term “holotype” for it; this act was not a lectotype designation according to ICZN, Art. 74. In NHMW, there are six additional specimens from the localities Orizaba, Cuernavaca, and “Bilimek Mexico 1871” without the B.C.A. label; they may not have been studied by Champion and we do not regard them as syntypes.

### *Halobates dianae* ZETTEL, 2001 (Fig. 29)

*Halobates dianae* ZETTEL, 2001a: 1079. – Type locality: Philippines, Luzon, Camarines Sur, Lagonoy, San Sebastian; holotype in UPLB. – Type region: Philippines, Luzon, Leyte, and Ponson Islands.

**Type material. Paratypes** (4 apterous males, #5634–5637; 4 apterous females, #5638–5641): “Philippines: Luzon,\ Camarines Sur, Lagonoy,\ San Sebastian, 10.2.2001\ leg. H. Zettel (268b)”; paratypes (1 apterous male, #5642; 1 apterous female, #5643): “Philippines: Leyte,\ Inopacan, mangrove and intertidal zone, 10.3.\ 2001, leg. Zettel (297)” ; paratypes (3 apterous males, #5644–5646; 1 apterous female, #5647): “Philippines: Camotes Isl.,\ Ponson Isl., s. coast,\ SW San Juan, mangroves,\ 28.2.2001, leg. Zettel (286)” ; paratype (1 apterous male, #5648): “Philippines: Luzon,\ Zambales, Subic Bay\ Triboa Mangrove, 7.12.\ 2000, leg.H.Zettel (260)” ; paratype (1 apterous female, #5649): “– PHILIPPINE IS.\ Dagupan Pangasinan\ May 10. 1936\ Roman Abalos”.

### *Halobates liaoi* ZETTEL, 2005 (Fig. 30)

*Halobates liaoi* ZETTEL, 2005: 410. – Type locality: Philippines, Surigao del Norte, Dinagat Island, 6.8 road-km north of Dinagat, Busay; holotype in UPLB. – Type region: Southeastern Philippines: Dinagat and Hikdop Island.

**Type material. Paratypes** (6 apterous males, #5529–5534; 5 apterous females, #5535–5539): “Philippines: Surigao d.N.\ Dinagat Isl., 6.8 rd.km N\ Dinagat, Busay, 3.2.2000\ leg. H. Zettel (224c)”; paratypes (2 apterous males, #5540, 5541; 1 apterous female, #5542): “Philippines: Surigao d.N.\ Hiktop [sic!] Isl., S + SW coast \5.2.2000\ leg. H. Zettel (227)”.

### *Halobates pangantihoni* ZETTEL & LACINY, 2021 (Fig. 31)

*Halobates pangantihoni* ZETTEL & LACINY, 2021a: 438. – Type locality: Philippines, Oriental Mindoro, Calapan City, Silonay, N 13°24', E 121°14'; holotype in PNM.

**Type material. Paratypes** (6 apterous males, #31445–31450; 4 apterous females; #31451–31454): “Philippines: Oriental Mindoro\ Calapan City, Silonay\ N 13°24', E 121°14'\ leg. C. V. Pangantihon”.

### *Halobates peronis* HERRING, 1961

*Halobates peronis* HERRING, 1961: 278. – Type locality: Solomon Islands, San Cristobal Island, Star Harbor; holotype in BMNH. – Type region: Solomon Islands and Philippines.

**Type material. Paratype** (apterous male, #31455): “SOLOMON IS.\ Kolombangara\ Jack Harbour\ I : X : 1954\ E.S.Brown\1141”; paratype (apterous female, #31456): “SOLOMON IS.\ San Cristobal\ Star Harbour\ 24.IV.1955\ E.S.Brown\ 2900”.

**Notes.** Philippine specimens assigned to *H. peronis* by HERRING (1961) belong to *H. dianae* (see ZETTEL 2001).

### *Halobates wuellerstorffi* FRAUENFELD, 1867 (Figs 32, 33)

*Halobates Wüllerstorffi* FRAUENFELD, 1867: 458. – Type locality: Brazil, off Cape Frio near Rio de Janeiro; syntypes in NHMW.

**Type material. Syntype** (apterous female, #31529): “Cap Frio”, “Wüllersdorff\ det. Frauenf.”, “*H. micans*\ det. Schmidt”, “Syntypus\ Halobates wuellersdorffi\ Frauenfeld, 1867: 458”, “Halobates\ micans\ Eschscholz, 1822\ det. H. Zettel 1993”; syntype (apterous female, #31530): “Novara 1857–59 Reise”, “Halobates\ wüllersdorffi frf.\ Cotype\ Handlirsch don.”, “*H. micans*\ det. Schmidt”, “Syntypus\ Halobates wuellersdorffi\ Frauenfeld, 1867: 458”, “Halobates\ micans\ Eschscholz, 1822\ det. H. Zettel 1993”; syntypes (1 apterous male, #31531; 2 apterous females, #21444, 31532): “Novara\ Brasil.”, “Syntypus\ Halobates wuellersdorffi\ Frauenfeld, 1867: 458”, “Halobates\ micans\ Eschscholz, 1822\ det. H. Zettel 1993”.

**Current status.** *Halobates micans* ESCHSCHOLTZ, 1822 (syn. DAHL 1893: 6).

**Notes.** The historical material of *Halobates wuellerstorffi* collected during the Novara Expedition by Georg Ritter von Frauenfeld is deposited in the Natural History Museum Vienna. The labelling varies, as the labels were obviously provided by different persons. All specimens are in a poor condition as most appendages are broken. We selected five specimens that most likely belong to the original material of *Halobates wuellerstorffi* and labelled them as syntypes. FRAUENFELD (1867) described male and female from “Cap frio nächst [= near] Rio Janeiro”, but the number of specimens is uncertain. Therefore, the female specimen labelled “Cap Frio” is undoubtedly a syntype; it is the only specimen from Brasil that bears an identification label assigned to Frauenfeld. Another female from “Novara 1857–59 Reise” has been labelled as “Cotype” and is accepted as a syntype, too (fide Anton Handlirsch). Three further specimens labelled only “Novara Brasil” (without historical identification label) are also accepted as syntypes, as this series includes the described male.

The synonymy is undoubted as *H. micans* is the only species of *Halobates* occurring in the Atlantic Ocean.

### ***Hydrometra diversa* MAYR, 1866**

*Hydrometra diversa* MAYR, 1866: 365. – Type locality: South Africa, Cape of Good Hope; syntypes in NHMW.

**Type material. Syntypes** (4 macropterous females, #31473–31476; 6 macropterous males, #31477–31482): “Novara Exp.\ Cap.d.g.H.”, “diversa\ det. Mayr”, “Syntypus\ Hydrometra diversa\ Mayr, 1866 Verh. k.-k. Zool.-\ Bot. Ges. Wien 16 : 365”.

**Current status.** *Gerris swakopensis* (STÅL, 1858) (syn. POISSON 1940: 101).

**Notes.** MAYR (1866, 1868) described *Hydrometra diversa* twice, the monograph from 1868 includes an illustration. Both descriptions give size ranges for males and females, but no specimen numbers are mentioned. NHMW houses ten syntypes with Mayr’s identification labels, three specimens bear identification labels by Kirkaldy, who already recognized the synonymy with *Gerris swakopensis* in 1901, as can be seen by his identification labels. We labelled the syntypes accordingly.

### ***Hydrometra fasciata* SIGNORET, 1862 (Fig. 34)**

*Hydrometra fasciata* SIGNORET, 1862a: 376. – Type locality: France, Corsica; syntypes in NHMW.

**Type material. Syntypes** (2 apterous males, #22244, 22246; 1 macropterous male, #22242; 1 macropterous female, #22243): “Corsica\ Coll. Signoret.”, “fasciatus\ det. Signoret”, “Syntypus\ Hydrometra fasciata\ Signoret, 1862 Ann. Soc.\ Ent. France, IV, 2: 376”.

**Current status.** *Aquarius najas* (DE GEER, 1773) (syn. PUTON 1874: 229).

**Notes.** Four specimens of *H. fasciata* from Signoret’s collection were recognized as syntypes and labelled accordingly.

### ***Hydrometra nitida* MAYR, 1865**

*Hydrometra nitida* MAYR, 1865: 443. – Type locality: Sri Lanka (“Ceylon”); lectotype (ANDERSEN 1975: 62) in NHMW.

**Type material. Lectotype** (1 macropterous male, #12212): “Novara Exp.\ Ceylon”, “nitida\ det. Mayr”, “LECTOTYPUS\ Limnogonus\ nitidus (Mayr)\ N Möller Andersen 1972”, “LECTOTYPUS\ Hydrometra\ nitida MAYR 1865\ Verh.Zool.-Bot.Ges.15: 443”. **Paralectotypes** (1 macropterous male, #12213 [head and legs missing]; 1 macropterous female, #12215): “Novara Exp.\ Ceylon”, “nitida\ det. Mayr”, “Paralectotypus\ Limnogonus\ nitidus (Mayr)\ N Möller Andersen 1972”, “PARALECTOTYPUS\ Hydrometra\ nitida MAYR 1865\ Verh.Zool.-Bot.Ges.15: 443”; paralectotype (1 macropterous male, #12214 [genitalia missing]): “Novara Exp.\ Ceylon”, “nitida\ det. Mayr”, “PARALECTOTYPUS\ Hydrometra\ nitida MAYR 1865\ Verh.Zool.-Bot.Ges.15: 443\ des. H. ZETTEL 1993”.

**Current status.** *Limnogonus nitidus* (transferred to *Limnogonus* by KIRKALDY 1908: 21).

**Notes.** In his revision, ANDERSEN (1975) has studied two males, of which he selected one as the lectotype, and one female. Later, the third male was recognized as a paralectotype by the first author. All four specimens are in bad condition; nearly all legs and antennae are missing, and one specimen is even missing its head.

### ***Hydrometra pectoralis* MAYR, 1865**

*Hydrometra pectoralis* MAYR, 1865: 443. – Type locality: Sri Lanka (“Ceylon”); lectotype in NHMW.

**Type material. Lectotype** (macropterous female, #4471) and **paralectotype** (macropterous female, #4472): “Novara Exp.\ Ceylon”.

**Current status.** *Limnogonus pectoralis* (transferred to *Limnogonus* by ANDERSEN 1975: 69).

**Notes.** It is evident from the original description (MAYR 1865: 443: “Long. 7–7,3 mm”) that the author had at least two specimens at hand. Indeed, NHMW keeps two females identified by Gustav Mayr. The publication of a “holotype” in the revision by ANDERSEN (1975) is an unintended lectotype designation. Accordingly, we labelled the specimens as lectotype and paralectotype.

### *Limnogonus anderseni* ZETTEL, 2004 (Fig. 35)

*Limnogonus* (s. str.) *anderseni* ZETTEL, 2004: 371. – Type locality: Philippines, Mindanao, Bukidnon Province, Malaybalay, Spring Site; holotype in UPLB. – Type region: Philippines, Mindanao, Bukidnon Province.

**Type material. Paratypes** (2 macropterous males, #6795, 6796; 1 macropterous female, #6797): “PHILIPPINEN: Mindanao\ Bukidnon Pr., Malaybalay\ Spring Site, 650 m,\ 7.11.1996\ leg. H. Zettel (91)”, paratype (macropterous male, #6798): “PHILIPPINEN: Mindanao\ Bukidnon Pr., Malaybalay\ Woodstock, 650 m, 5.11.\ 1996, leg.H.Zettel (89)”.

### *Limnogonus visendus* DRAKE & HARRIS, 1934

*Limnogonus visendus* DRAKE & HARRIS, 1934: 215. – Type locality: Brazil, Rio Branco; holotype in NHMW.

**Type material. Holotype** (apterous male, #10204) and **allotype** (apterous female, #10205): “Rio Branco\ Haseman”.

**Current status.** *Neogerris visendus* (transferred to *Neogerris* by NIESER 1994: 27).

### *Limnometra arachnis* NIESER & CHEN, 1992 (Fig. 36)

*Limnometra arachnis* NIESER & CHEN, 1992: 17. – Type locality: Indonesia, Sulawesi Tenggara, road Kolaka – Kendari km 20; holotype in RMNH. – Type region: Indonesia: Sulawesi Tenggara (incl. Pulau Buton) and Sulawesi Tengah.

**Type material. Paratypes** (macropterous male, #31470; macropterous female, #31471): “INDONESIA, Sulawesi\ Tanggara: Kolaka Kendari\ km 20, stream, 3.3.\ N8934, leg. NIESER 1989”.

### *Limnometra ciliata* MAYR, 1865

*Limnometra ciliata* MAYR, 1865: 444. – Type locality: Indonesia, “Java” (probably erroneous); holotype in NHMW.

**Type material. Holotype** (macropterous male, #31464): “ciliata\ det. Mayr”, “D\ Doleschal\ 1859.\ Amboina.”, “HOLOTYPUS\ Limnometra\ ciliata MAYR 1965\ Verh.Zool.-Bot.Ges.15: 444\ des. H. ZETTEL 1993”.

**Notes.** The specimen was not included in the revision by HUNGERFORD & MATSUDA (1958c). The problem for recognizing the specimen as the holotype was the fact that the locality given in the original publication (MAYR 1865: “Java”) does not agree with the label “Amboina” (= Amboin, Moluccas). This problem was already solved by ZETTEL & CHEN (2000) and their words are repeated here: “The provenances of some *Limnometra* specimens collected by Dr. Carl Ludwig Doleschall and deposited in the collection of NHMW and those mentioned by MAYR (1865) are contradictory. This is true for the holotype of *L. ciliata* and also for the syntype series of *Limnometra pulchra*, which are all labeled “Amboina”, but have been recorded from “Java” by MAYR (1865). Doleschall has studied in Vienna, lived

as a medical doctor first at Java, and later at Ambon, where he has died in 1859 at the age of 32. His entomological work and interest has been concentrated on Diptera (HORN & KAHLE, 1935; HORN & SCHENKLING, 1928–1929; STAGL, 1999). Doleschall's insect collections originate from Central Java and Ambon (STAGL, 1999), but insects of the main shipment, which has reached the NHMW in December 1859 (STAGL, 1999), are either from Ambon or of unstated provenance (a[c] quisition book of NHMW: unstated for Hemiptera). At that time the insects have been probably unlabeled, eventually even a few years later, when Mayr has studied the Gerridae, so that the collecting locality may have been unclear for him. The position of the locality label below the identification label of one *L. pulchra* syntype would indicate this. *Limnometra pulchra* is regarded as an endemic species of the Moluccas and Palau Island and does not occur in Java (ANDERSEN, 1995[b]; NIESER & CHEN, 1992). The origin of the holotype of *L. ciliata* is probably Ambon, too.”

### *Limnometra faracii* ZETTEL, 2007

*Limnometra faracii* ZETTEL, 2007: 42. – Type locality: Fiji, Viti Levu, Navala; holotype in NHMW.

**Type material.** Holotype (apterous male, #31403) and paratype (apterous female, #31404): “FIJI: Viti Levu\ Navala\ 22.XI.1998\ leg. F. Faraci (FJ3)”.

### *Limnometra femorata* MAYR, 1865 (Fig. 37)

*Limnometra femorata* MAYR, 1865: 443. – Type locality: Philippines; holotype in NHMW.

**Type material.** Holotype (macropterous male, #31466): “femorata\ det. Mayr”, “HOLOTYPE\ Limnometra\ femorata MAYR 1965\ Verh.Zool.-Bot.Ges.15: 443”.

**Notes.** HUNGERFORD & MATSUDA (1958c) mentioned the holotype in the Natural History Museum Vienna but did not redescribe it. The holotype was already discussed by ZETTEL & CHEN (2000); since then, the holotype label (previously fixed by the first author) was slightly altered after the change to a new system of inventory numbers (Fig. 37).

### *Limnometra freitagi* ZETTEL, YANG & TRAN, 2009

*Limnometra freitagi* ZETTEL, YANG & TRAN, 2009: 22. – Type locality: Philippines, Mindanao Island, Cotabato Province, Mt. Apo area, municipality of Kidapawan, Barangay Balabag, 1.1 km E of Maw-reg, N 07°02', E 125°13' ca. 950 m a.s.l.; holotype in NHMW.

**Type material.** Holotype (macropterous male, #18367): “Philippines: Mindanao, Kidapa-\ wan, Balabag, 1.1 km E Maw-\reg, calm trib. of Paniqui Riv.\ prim. forest, 950 m, 07°02'N\ 125°13'E 14.4.1995\ leg. Hendrik Freitag(36b)M”.

### *Limnometra genitalis* NIESER & CHEN, 1992 (Fig. 38)

*Limnometra genitalis* NIESER & CHEN, 1992a: 18. – Type locality: Indonesia, Sulawesi Tenggara, Buton Island; holotype in RMNH.

**Type material.** Paratypes (1 macropterous male, #31458; 1 macropterous female, #31459): “INDONESIA: Pulau Buton\ small cascading stream\ nr. sea, 9.3.\ N8941, leg.NIESER 1989”; paratypes (2 macropterous males, #31460, 31461; 2 macropterous females, #31462, 31463): “INDONESIA: Pulau Buton\ road to Parjewiro outside\ Ban-ban, small cascading\ stream on quiet stretches\ N8941, leg. NIESER 10.3.1989”.

### *Limnometra inermis* MAYR, 1865 (Fig. 39)

*Limnometra inermis* MAYR, 1865: 444. – Type locality: Philippines, Luzon, Manila (“Manilla”); holotype in NHMW.

**Type material. Holotype** (macropterous female, #31465): “Novara Exp.\ Manilla.”, “*inermis*\ det. Mayr”, “HOLOTYPE\ *Limnometra*\ *inermis* MAYR 1965\ Verh.Zool.-Bot.Ges.15: 444\ des. H. ZETTEL 1993”.

**Current status.** *Limnometra ciliata* (syn. HUNGERFORD & MATSUDA 1958c: 409).

**Notes.** HUNGERFORD & MATSUDA (1958c) redescribed the holotype and correctly placed *L. inermis* in synonymy with *L. ciliata*. The synonymy was confirmed by ZETTEL & CHEN (2000). The holotype is a female, not a male, as erroneously stated by MAYR (1865); the strong sexual dimorphism of *L. ciliata* was probably the reason why *L. inermis* was described as a different species. The holotype is strongly damaged; all antennae and legs are broken.

### *Limnometra minuta* MAYR, 1865 (Fig. 40)

*Limnometra minuta* MAYR, 1865: 444. – Type locality: India, Nicobar Islands, Sambelong; holotype in NHMW.

**Type material. Holotype** (macropterous male, #18379): “Novara Exp.\ Sambelong”, “*minuta*\ det. Mayr”, “♂”, “Type”, “PLESIOTYPE\ H.B. Hungerford”, “HOLOTYPE\ *Limnometra*\ *minuta* MAYR 1965\ Verh.Zool.-Bot.Ges.15: 444”.

**Notes.** HUNGERFORD & MATSUDA (1958c) revised this species exclusively based on the holotype. The left antenna and some of the legs are broken.

### *Limnometra nigripennis* MAYR, 1865

*Limnometra nigripennis* MAYR, 1865: 443. – Type locality: Philippines; holotype in NHMW.

**Type material. Holotype** (macropterous male, #31472): “*nigripennis*\ det. Mayr”, “Dohrn\ Philipp.”, “♂”, “HOLOTYPE\ *Limnometra*\ *nigripennis* MAYR 1965\ Verh.Zool.-Bot.Ges.15: 443”.

**Current status.** *Limnometra nigripennis nigripennis* (see ZETTEL 2004).

**Notes.** The holotype was redescribed in detail by HUNGERFORD & MATSUDA (1958c). Antennae and legs are partly broken and the abdomen is damaged by *Anthrenus* feeding. There is no information about the island of origin; the colour pattern agrees with the most widely distributed form (see ZETTEL 2004).

### *Limnometra nigripennis amabilis* ZETTEL, 2004

*Limnometra nigripennis amabilis* ZETTEL, 2004: 376. – Type locality: Philippines, Surigao del Norte Province, Dinagat Island, 6.8 road-km North of Dinagat, Busay; holotype in UPLB. – Type region: Philippines, Dinagat and Bayagnan Islands.

**Type material. Paratypes** (micropterous female, #31400; macropterous male, #31402): “Philippines: Surigao d.N.\ Dinagat Isl., 6.8 rd.km N\ Dinagat, Busay, 3.2.2000\ leg. H. Zettel (224a)”, paratype (micropterous female, #31401): “Philippines: Surigao d.N.\ Bayagnan Isl., San José\ Buyho Waterf., 7.2.2000\ leg. H. Zettel (229)”.

### *Limnometra nigripennis bicolana* ZETTEL, 2004

*Limnometra nigripennis bicolana* ZETTEL, 2004: 375. – Type locality: Philippines, Luzon, border between Camarines Sur and Camarines Norte Provinces, Lupi, Alanao, Bahi River; holotype in UPLB. – Type region: Philippines, South Luzon: Camarines Norte and Camarines Sur Provinces; Catanduanes; Marinduque; Northern Samar.

**Type material. Paratypes** (3 micropterous males, #31364, 31365, #31398; 1 macropterous male, #31366; 1 micropterous female, #31367; 1 apterous female, 31366): “Philippines: Marinduque\ NE Boac, 7 km SE Mogpog\ Bocboc, Paadyan Falls\ 17.2.1998, leg. Zettel (140)”; paratypes (2 micropterous males, #31373, 31378; 1 micropterous female, #31375): “Philippines: Camarines Sur\ 20 km E Naga, 5 km E Carolina\ Mt. Isarog, nr. Malabsay Falls\ 4.3.1999, leg. Zettel (192)”; paratype (1 micropterous female, #31387): “Philippines: Luzon, Cam.\ Sur, Lupi, small\ creek, 20.3.2003 leg. C. Panganithon”; paratypes (2 macropterous males, #31376, 31397; 2 micropterous females, #31377, 31395): “Philippines: Luzon, Albay\ 40 km N Legaspi, 1 km W\ Malilipot, Busai Falls\ 23.2.1998, leg. Zettel (143)”; paratype (1 micropterous male, #31394): “Philippines: Luzon, Albay\ 15 km SW Manito, S Cawayan\ small canal, 24.2.1998\ leg. H. Zettel (144a)”; paratypes (1 micropterous male, #31389; 4 micropterous females, #31382–31384, 31399; 1 macropterous male, #31381; 2 macropterous females, #31385, 31386): “Philippines: Catanduanes\ W Bato, Maribini Falls\ 6.3.1999\ leg. H. Zettel (194)”; paratypes (2 micropterous males, #31372, 31374): “Philippines: Catanduanes\ N Bato, S San Miguel\ Balongbong Falls, 7.3.\ 1999, leg. H. Zettel (195)”; paratypes (1 micropterous male, #31369; 2 micropterous females, #31370, 31371): “Philippines: Catanduanes\ E San Andres\ 11.–12.3.1999\ leg. H. Zettel (200)”; paratypes (1 apterous male, #31391; 1 apterous female, #31392; 2 micropterous males #31390, 31396; 2 micropterous females, #31388, 31393): “Philippines: N. Samar\ Veriato, El Amigo\ Veriato Falls, 25.1.2000\ leg. H. Zettel (217)”; paratypes (1 micropterous male, #31379; 1 micropterous female, #31380): “Philippines: N. Samar\ San Joaquin, Lologayan\ Falls, 27.1.2000\ leg. H. Zettel (219b)”.

### *Limnometra nigripennis cebuana* ZETTEL, 2004

*Limnometra nigripennis cebuana* ZETTEL, 2004: 373. – Type locality: Philippines, Cebu, south of Badian, Matutinao, Kawasan Falls; holotype in UPLB. – Type region: Philippines, Cebu Island.

**Type material. Paratypes** (8 micropterous males, #31331–31335, 31343, 31344, 31351; 17 micropterous females, #31327–31330, 31336–31342, 31345–31350): “PHILIPPINEN: Cebu, S Badian\ Matutinao, Kawasan Falls\ 2–50 m, 29.–30.11.1996\ leg. H. Zettel (112)”; paratypes (3 micropterous males, #31352–31354; 2 micropterous females, 31355, 31356): “Philippines: Cebu, S Badian\ Matutinao, Kawasan Falls\ 1–30 m, 11.11.2003\ leg. H. Zettel (352a)”; paratypes (4 micropterous males, #31357–31360): “Philippines: Cebu, S Badian\ Matutinao, Kawasan Falls\ 20–50 m, 12.11.2003\ leg. H. Zettel (352d)”; paratype (1 micropterous male, #31361): “Philippines: Cebu, NW\ Cebu City, Lusaran, Lu-\ saran River, 9.11.2003\ leg. H. Zettel (350)”; paratypes (2 micropterous males, #31362, 31363): “Philippines: Cebu\ Malapuyug, Monteneza\ 0–10 m, 13.11.2003\ leg. H. Zettel (353)”.

### *Limnometra palawanensis* ZETTEL & CHEN, 2000

*Limnometra palawanensis* ZETTEL & CHEN, 2000: 81. – Type locality: Philippines, Palawan Island, Brooke’s [“Brook’s”] Point, Mate; holotype in NHMW. – Type region: Palawan and Busuanga Islands.

**Type material. Holotype** (micropterous male, #31405) and **paratypes** (3 apterous males, #31406, 31410, 31415; 1 macropterous male, #31407; 8 apterous females, #31409, 31411–31414, 31416–31418; 2 macropterous females, #31408, 31419): “PHILIPPINEN: Palawan\ Brooke’s Point\ Mate, 31.3.1994\ leg. H. Zettel (54)”; paratypes (2 macropterous males, #31420, 31421): “PHILIPPINEN: Palawan\ 7 km N Narra, Estrella\ Falls, 2.4.1994\ leg. H. Zettel (57)”; paratype (1 macropterous male, #31422): “PHILIPPINEN: Palawan\ 7 km N Narra, Estrella\ Falls, 5.4.1994\ leg. H. Zettel (59)”; paratypes (2 apterous males, #31423, 31424; 1 apterous female, #31425): “PHILIPPINEN: Palawan\ 20 km W P. Princesa\ Tacduan Area, Tacduan riv.\ lg. Zettel, 25.3.1994 (49d)”; paratypes (3 apterous males, #31426, 31428, 31429; 4 apterous females, #31430–31433; 1 brachypterous female, #31427; 1 macropterous female, #31434): “PHILIPPINEN: Palawan\ 9 km W P. Princesa\ Iwahig, Balsahan riv.\ lg. Zettel, 24.3.1994 (48)”; paratypes (2 micropterous females, #31435, 31436): “PHILIPPINEN: Palawan\ Sabang, 0–30 m\ 29.3.1994\ leg. H. Zettel (52e)”; paratype (1 apterous female, #31437): “PHILIPPINEN: Palawan\ 9 km W P. Princesa\ Iwahig, Balsahan riv.\ lg. Zettel, 7.4.1994(60)”; paratypes (1 macropterous male, #31438; 1 apterous male, #31439; 1 macropterous female, #31440; 2 apterous females, #31441, 31442): “Philippines, Palawan centr.\ Sabang env. 30. XI. 1995,\ 100 m, stream in degraded\ forest, J. Kodada lgt.”.

### ***Limnometra pulchra* MAYR, 1865 (Fig. 41)**

*Limnometra pulchra* MAYR, 1865: 443. – Type locality: Indonesia, “Java” (erroneous); lectotype (designated by ZETTEL 2011: 117) in NHMW.

**Type material. Lectotype** (macropterous male, #31467): “pulchra det. Mayr.”, “D\ Doleschal\ 1859\ Amboina.”, “♂”, “LECTOTYPUS\ Limnometra pulchra MAYR, 1865\ Verh.Zool.-Bot.Ges.15: 443\ des. H. ZETTEL 2011”. Paralectotypes (2 macropterous males; #31468, 31469) “D\ Doleschal\ 1859\ Amboina.”, “♂”, “PARALECTOTYPUS\ Limnometra pulchra MAYR, 1865\ Verh.Zool.-Bot. Ges.15: 443\ des. H. ZETTEL 2011”.

**Notes.** ZETTEL (2011) discussed the erroneous type locality in MAYR (1865) and designated the lectotype. *Limnometra pulchra* is distributed on the Moluccas and on Palau (ANDERSEN 1995b). See also notes under *Limnometra ciliata*.

### ***Limnometra skalei* ZETTEL, 2011**

*Limnometra skalei* ZETTEL, 2011c: 116. – Type locality: Indonesia, Kai Islands, Kei Besar, 10 km W of Tual City, near Ohoidertawun, ca. 10 m a.s.l., S 5°37'13", E 132°39'20"; holotype in NHMW.

**Type material. Holotype** (apterous male, #18366): “INDONESIA or. KEI-ISLANDS\ 10 km W Tual City, vic.\ Ohoidertawun vill., 10 m\ S5°37'13"\E132°39'20"\ 17.–20.II.2011, l. A. Skale (013)”.

### ***Limnometra spinosa* ZETTEL, 2002 (Fig. 42)**

*Limnometra spinosa* ZETTEL, 2002: 137. – Type locality: Indonesia, Java; holotype in NHMW. – Type region: Malay Peninsula, Sumatra, Java, and Borneo.

**Type material. Holotype** (macropterous male, #18370) and **paratype** (1 macropterous female, #18371): “Java Coll. Signoret”, “spinosa” det. Signoret.; paratype (1 macropterous male, #18372): “Barabe\ Z.O.Afd.\ BORNEO\ Geschenk\ A. POOL\ 1883.”, “Museum Natura Artis Magistra”; paratype (1 macropterous male, #18373): “Coll. McGillavry\ Batang, Serangan\ SUMATRA, 1911\ leg. de Bussy”; paratype (1 macropterous female, #18374): “Coll. McGillavry\ Minahol, O.S. oerbosch\ SUMATRA, 28 V 1917\ leg.J.E A.den Doop”; paratypes (1 macropterous female, #18375; 1 macropterous male, #18376): “Lawas\ Sept. 9\ 1909\ Ex F.M.S.\ Museum.\ B.M.1955-354”.

### ***Limnometra thirumalaii* ZETTEL, 2001**

*Limnometra thirumalaii* ZETTEL, 2001b: 402. – Type locality: India (South), Kerala, 30 km NNE Trivandrum, Kallar Bridge; holotype in NHMW.

**Type material. Holotype** (macropterous male, #18380) and **allotype** (micropterous female, #18381): “INDIA: Kerala, 31.12.1998\ 30 km NNE Trivandrum, 400 m\ Kallar Bridge, 08°45'N 77°05'E\ leg. D. Boukal (31)”.

### ***Limnometra tiomanensis* ZETTEL, YANG & TRAN, 2009**

*Limnometra tiomanensis* ZETTEL, YANG & TRAN, 2009: 25. – Type locality: West Malaysia, Pahang, Tioman Island, Kampong Tekek; holotype in ZRC.

**Type material. Paratype** (macropterous male, #18368): “MALAYSIA- Pahang, Pulau\ Tioman, Kg Tekek, saline pool\ CM Yang & HK Lua\ YCM0148 29-JUN-1996”; paratype (macropterous female, #18369): “MALAYSIA: Tioman 0–100 m\ rd. Kampong Tekek – K.Juara\ 4.–16.3.1998, 2.48°N 104.11°E\ Dembicky & Pacholatko leg.”.

### ***Metrobates amblydonti* NIESER, 1993**

*Metrobates amblydonti* NIESER, 1993: 22. – Type locality: Trinidad, St. David, Grande Rivière River; holotype in BMNH. – Type region: Trinidad, surroundings of St. David.

**Type material. Paratypes** (apterous male, # 5250; apterous female, # 5249): “TRINIDAD\ Rio Grande\ 18.II.1988\ leg: Nieser”, “at bridge\ N8821”.

### *Metrocoris atlas* ZETTEL, 2011 (Fig. 43)

*Metrocoris atlas* ZETTEL, 2011a: 105. – Type locality: Myanmar, Sagaing Division, Alaungdaw Kathapa National Park, Khaung Din Stream, 450 m a.s.l., 22°18.360' N, 94° 25.937' E; holotype in NHMW.

**Type material.** Holotype (apterous male, #10238) and paratype (macropterous male, #10239): “MYANMAR: Sagaing Div\ Alaungdaw Kathapa NP\ Khaung Din Stream, 450 m\ 22° 18.360' N 94° 25.937' E\ 11.5.2003, l. Boukal & al. (119)”.

### *Metrocoris brevis* MAYR, 1865 (Fig. 44)

*Metrocoris brevis* MAYR, 1865: 445. – Type locality: Sri Lanka (“Ceylon”); syntypes in NHMW.

**Type material.** Syntypes (2 macropterous males, #10500, 10501): “Felder\ Ceylon\ 1861”, “brevis\ det. Mayr” [“*Metrocoris\ brevis\* det. Mayr” on #10501], “*Metrocoris\ stali* (Dohrn)\ f. macroptera\ det. T. Esaki”, “Syntypus\ *Metrocoris\ brevis* MAYR, 1865 Verh. k.-k.\ Zool.-Bot. Ges. Wien 15: 445”.

**Current status.** *Metrocoris stali* (DOHRN, 1860) (syn. MEINERT 1888: 143).

**Notes.** NHMW holds two syntypes that were accordingly labelled by us. The types were not studied in the course of the revision by CHEN & NIESER (1993), but Ping-ping Chen dissected and examined the genitalia during a visit to NHMW in 1996 and confirmed the synonymy of *M. brevis* and *M. stali*.

### *Metrocoris dembickyi* CHEN & ZETTEL, 1999 (Fig. 45)

*Metrocoris dembickyi* CHEN & ZETTEL, 1999b: 27. – Type locality: India (South), Kerala, 12 km SW Munnar; holotype in NHMW.

**Type material.** Holotype (apterous male, #4514), allotype (apterous female, #4515), and paratypes (15 apterous males, #4516–4530; 2 macropterous males, #4531, 4532; 7 apterous females, #4533–4539; 5 macropterous females, #4540–4544; 1 dealate female, #4545): “S.INDIA, KERALA, 1250 m\ 15 km SW Munnar, 1.–9.V.1997\ 10°02'N 76°58'E, Kallar Valley\ Dembicky & Pacholátko leg.”.

### *Metrocoris heineri* CHEN & ZETTEL, 1999

*Metrocoris heineri* CHEN & ZETTEL, 1999b: 21. – Type locality: China, Hunan Province (Northwest), Dayong District, Wulingyuan, Zhangjiajie Forest National Park; holotype in NHMW.

**Type material.** Holotype (apterous male, #10421) and paratypes (1 apterous male, #10422; 2 apterous females, #10423, 10424): “CHINA: NW-Hunan, Bez. Dayong\ Wulingyuan, Zhangjiajie\ Forest NP, Shuiraoismen\ 30.10.1993, 500 m\ leg. H. Schönmann (3)”; allotype (apterous female, #10427): “CHINA: NW-Hunan, Bez. Dayong\ Wulingyuan, Zhangjiajie\ Forest NP, Shuiraoismen\ 30.10.1993, 450 m\ leg. H. Schillhammer (4)”; paratypes (2 apterous females, #10428, 10429): “CHINA: NW-Hunan, Bez. Dayong\ Zhangjiajie Forest NP, Pipaxi, 29.10.1993, 650 m\ leg. H. Schillhammer (1)”.

### *Metrocoris johnpolhemi* TRAN & POLHEMUS, 2017

*Metrocoris johnpolhemi* TRAN & D. POLHEMUS, 2017: 119. – Type locality: Vietnam, Hanoi, Ba Vi National Park, stream near Coste 400, ca. 550 m a.s.l.; holotype in ZVNU. – Type region: Vietnam: Hanoi, Lai Chau, and Phu Tho Provinces.

**Type material.** Paratypes (2 apterous males, #31121, 31123; 2 apterous females, #31120, 31122): “VIETNAM: Hanoi, Ba Vi N.Park\ stream nr Coste 400, 550 m\ 27.IV.2012, leg. Ngo Q.H. &\ Tran A.D. TAD1210\ Acquis.-Nr. 2017-05”.

### *Metrocoris medioides* CHEN & NIESER, 1996

*Metrocoris medioides* CHEN & NIESER, 1996: 72. – Type locality: Indonesia, Sulawesi Utara, Pulau Sangihe, Sungai Limu “near Gunung”, holotype in ZMAN. – Type region: Indonesia, Pulau Sangihe.

**Type material.** Paratypes (1 macropterous male, #10510; 2 apterous females, #10511, 10512): “INDONESIA: P. Sangihe\ Sungai Limu, nr. Gunung\ 19.XI.1994\ leg. N. Nieser (9479)”.

### *Metrocoris monticola* TRAN & POLHEMUS, 2017 (Fig. 46)

*Metrocoris monticola* TRAN & D. POLHEMUS, 2017: 135. – Type locality: Vietnam, Lao Cai Province, Sa Pa, Sin Chai, Sin Chai stream; holotype in ZVNU.

**Type material. Paratypes** (1 apterous male, #31119; 1 apterous female, #31118): “VIETNAM: Lao Cai Prov., Sa Pa, Sin Chai, Sin Chai stream\ site 1, 27.X.2013\ leg. Tran A.D. et al., TAD1363\ Acquis.-Nr. 2017-05”.

### *Metrocoris nieseri* CHEN & ZETTEL, 1999 (Fig. 47)

*Metrocoris nieseri* CHEN & ZETTEL, 1999b: 14. – Type locality: Thailand, Chiang Mai Province, Doi Suthep, Hui Kaew waterfall; holotype in PPCC. – Type region: Thailand, Chiang Mai Province, Doi Suthep and Doi Inthanon.

**Type material. Paratypes** (apterous male, #10306; 4 macropterous males, #10307–10310; 1 dealate male, #10311; 12 macropterous females, #10313–30315, 10320, 10321, 10323–10326, 10329–10331; 4 dealate females, #10316, 10322, 10327, 10327; 3 apterous females, #10317–30319): “Thailand: Chiang Mai Prov., Doi\ Suthep, Huai Palad, stream\ falls, 660 m, 15.1.2009,\ leg. H. Zettel & S. Silalom (60)”; paratype (1 macropterous male, #10332): “Thailand: Chiang Mai Prov.\ Doi Inthanon NP, Mae Klang\ Falls, 4.11.1995\ leg. H. Zettel (6)””; paratypes (2 apterous males, #10333, 10334): “Thailand: Chiang Mai\ Doi Sutep NP, Monthatarn\ Falls, 24.III.1994\ leg.W.D.Shepard (1044)”; paratype (1 apterous male, #10335): “Thailand: Chiang Mai, Doi Sutep NP, Wang, Bua Boon, 24.III.1994, leg.W.D.Shepard (1042)”.

### *Metrocoris pardus* ZETTEL, 2011 (Fig. 48)

*Metrocoris pardus* ZETTEL, 2011b: 110. – Type locality: West Malaysia, Kelantan, 30 km northwest of Gua Musang, Kampong Sungai Om, at slopes of Bukit Ulu Lalat, 800–1000 m a.s.l., N 4°59'–5°00', E 101°52'–101°53'; holotype in NHMW.

**Type material. Holotype** (apterous male, #9001) and **paratypes** (2 apterous males, #9002, 9003; 1 macropterous male, #9004; 1 apterous female, #9005) “MALAYSIA W. KELANTAN\ 30 km NW of Gua Musang\ Ulu Lalat Mt. 800–1000 m\ KAMPONG SUNGAI OM\ 21.vi. – 14. vii 2010\ Petr Cechovsky lgt.”.

### *Metrocoris quynhi* TRAN & ZETTEL, 2005 (Fig. 49)

*Metrocoris quynhi* TRAN & ZETTEL, 2005: 45. – Type locality: Vietnam, Lao Cai Province, Sa Pa, Hoang Lien National Park, upstream of Thac Bac waterfall, 2001 m a.s.l., 22°21.823' N, 103°46.757' E; holotype in ZVNU. – Type region: Vietnam, Lao Cai Province, Sa Pa area.

**Type material. Paratypes** (3 apterous males, #10231–10233, 1 macropterous male, #10234; 2 apterous females, #10235, 10236; 1 macropterous female, #10237): “VIETNAM: Lao Cai Prov., Sa\ Pa, Nui Ke, a small branch of Suoi Vang stream, 3.VI.2003\ Coll. Tran A.D., TAD0345b”.

### *Metrocoris schillhammeri* CHEN, 1995 (Fig. 50)

*Metrocoris schillhammeri* CHEN, 1995: 156. – Type locality: China, Yunnan (NW), 10 km SW Lijiang; holotype in NHMW.

**Type material. Holotype** (macropterous male, #8993) and **paratype** (1 macropterous female, #8994): “CHINA: NW-Yunnan\ 10 km S W Lijang\ 2500 m, 5.7.1994\ leg. Schillhammer (13)”.

### *Metrocoris shepardi* CHEN & ZETTEL, 1999

*Metrocoris shepardi* CHEN & ZETTEL, 1999b: 19. – Type locality: Thailand, Phetchabun Province, Phu Hin Rong Kla National Park, Hui Kaew Waterfall, Waterwheel Falls; holotype in NHMW.

**Type material. Holotype** (apterous female, #10377) and **paratypes** (3 apterous females, #10378–10380): “Thailand: Petchabun\ Phu Hin Rong Kla NP\ Waterwheel Falls, 27.III.\ 1994, leg.W.D.Shepard (1047)”.

### ***Metrocoris sicilis* TRAN & POLHEMUS, 2017 (Fig. 51)**

*Metrocoris sicilis* TRAN & D. POLHEMUS, 2017: 131. – Type locality: Vietnam, Hanoi, Ba Vi National Park, stream near Coste 400, ca. 550 m a.s.l.; holotype in ZVNU. – Type region: Vietnam, Hanoi and Phu Tho Province.

**Type material. Paratypes** (1 apterous male, #31116; 1 apterous female, #31117): “VIETNAM: Ba Vi Nat.Park\ small creek by main road to\ summit, 9.5 km from park head\ quarter, 600 m, 11.VI.2010,\ leg. Tan A.D. TAD 1014\ Acquis.-Nr. 2017-05”.

### ***Metrocoris sinuosus* CHEN & NIESER, 1993**

*Metrocoris sinuosus* CHEN & NIESER, 1993: 53. – Type locality: Sri Lanka, Sabaragamuwa Province, Karuwita, Derwood; holotype in MZLU. – Type region: Sri Lanka, Sabaragamuwa, Southern, and Western Province.

**Type material. Paratypes** (2 apterous males, #8989, 8990; 2 apterous females, #8991, 8992): “Ceylon, Sabaragamuwa\ Prov. Deerwood Kuruwita\ 6 mls NNW Ratnapura\ 18.II.62.Loc.90:II:1\\ stream”, “Lund University\ Ceylon Expedition 1962\ Brinck-Andersson-Cederholm”.

### ***Metrocoris triangulatus* ZETTEL & CHEN, 1996 (Fig. 52)**

*Metrocoris triangulatus* ZETTEL & CHEN, 1996: 177. – Type locality: Vietnam (South), Gia Lai-Kontum Province, Buon Luoi, 40 km NW Gia-Lai Kontum [“An Khe”]; holotype in NHMW.

**Type material. Holotype** (apterous male, #8995) and **paratype** (apterous female; #8996): “S VIETNAM, 40 km NW An Khe\ Buon Luoi, 14°10'N, 108°30'E\ 620–750 m, 28.3.–12.4.1995\ leg. Pacholátko & Dembicky”.

### ***Metrocoris vietnamensis* TRAN & ZETTEL, 2005 (Fig. 53)**

*Metrocoris vietnamensis* TRAN & ZETTEL, 2005: 42. – Type locality: Vietnam, Da Nang Province, Ba Na – Nui Chua, Suoi Nai – Thac Cau Vong (Nai stream and Rainbow waterfall), 1370 m a.s.l., 15°59.615' N 107°59.466' E; holotype in ZVNU. – Type region: Vietnam, Da Nang Province, Ba Na – Nui Chua area.

**Type material. Paratypes** (4 apterous males, #10381–10384; 4 apterous females, #10385–10388): “Vietnam: Da Nang Province, Ba Na – Nui Chua, GPS: 15°59.615'N 107°59.466'E, 1340 m, leg. Tran A.D., 26 May 2003”.

### ***Metrocoris xiei* CHEN, 1994**

*Metrocoris xiei* CHEN, 1994: 129. – Type locality: China, Guangdong Province, Ruyang Babao Shan Nature Reserve, Dongu Keng stream, 1130 m a.s.l.; holotype in NKUM. – Type area: China, Guangdong Province, Ruyang area.

**Type material. Paratypes** (3 apterous males, #10408–10410; 1 apterous female, #10411): “CHINA: Guangdong Prov.\ Ruyang Net. Res.\ Lao Peng Keng stream\ 1100 m, 13.8.1990\ leg.P.P. Chen C9008”.

### ***Metrocoris zetteli* POLHEMUS, 1998**

*Metrocoris zetteli* D. POLHEMUS, 1998: 264. – Type locality: Philippines, Mindanao, Misamis Oriental Province, Mount Kibungol, 20 km SE Gingoog, 700–800 m a.s.l.; holotype in BPBM.

**Type material. Paratype** (macropterous male, #6661): “P. I., MISAMIS OR.\ Mt. Kibungol, 20 km\ SE of Cingoog, 700–800 m, 9.–18.IV.1960”, “H.M. Torrevillas\ Collector\ BISHOP”.

### ***Naboandelus bergevini orientalis* ZETTEL, 1996 (Fig. 54)**

*Naboandelus bergevini orientalis* ZETTEL, 1996: 250. – Type locality: Iraq, Chabaish; holotype in ZSMC.

**Type material. Paratypes** (3 apterous males, #31315–31317; 3 apterous females, #31318–31320): “Irak\ Chabaish\ 28.6.80\ Coll. Weber\ Staatslsg.\ München”.

### *Naboandelus bergevini pygmaeus LINNAUORI, 1971*

*Naboandelus bergevini* ssp. *pygmaea* LINNAUORI, 1971: 360. – Type locality: Sudan, Dschanub Kurdufan, Lake Keilak; holotype in AMNH. – Type region: Sudan (Dschanub Kurdufan) and South Sudan (Western Bahr el Ghazal, Western Equatoria, Central Upper Nile).

**Type material. Paratypes** (2 apterous females, #31521, 31522): “Sudan, Kordofan\ Lake Keilak\ 8–11. II. 63\ Linnavuori”.

**Notes.** For correct spelling of subspecies (*pygmaeus*) see KMENT & KOLÍNOVÁ (2013).

### *Neogerris philippinensis ZETTEL, 2004* (Fig. 55)

*Neogerris philippinensis* ZETTEL, 2004: 367. – Type locality: Philippines, Marinduque, 10 km W of Boac, Mainit, Mainit Hot Spring; holotype in UPLB. – Type region: Philippines: Luzon, Marinduque, Siquijor, Mindanao.

**Type material. Paratypes** (4 apterous males, #31483–31485, 31487; 1 brachypterous male, #31486; 5 apterous females, #31488–31492; 3 macropterous males, #31493–31495; 1 macropterous female, #31496): “Philippines: Marinduque\ 10 km W Boac, Mainit\ Mainit Hot Spring, 14.2.\ 1998, leg. H. Zettel (137)”.

### *Onychotrechus jaechi ZETTEL & TRAN, 2007* (Fig. 56)

*Onychotrechus jaechi* ZETTEL & TRAN, 2007: 44. – Type locality: Bhutan, Sarpang Province, along road between Geylephug and Shempang, ca. 10 km NNE Geylephug, 26°56'43" N, 90°31'29" E, alt. ca. 400 m a.s.l.; holotype in NHMW.

**Type material. Holotype** (apterous male, #6484): “BHUTAN: Sarpang Prov.\ Geylephug – Shemgang rd.\ 10 km NNE Geylephug, 400 m\ 26°56'43"N 90°31'28"E\ 26.11.2005, leg. M. Jäch (29)”.

### *Onychotrechus major ANDERSEN, 1980*

*Onychotrechus major* ANDERSEN, 1980: 133. – Type locality: India, Karnataka, Shikmagalur District, Mudigere area, Kelaguru, ca. 900 m a.s.l.; holotype in ZMUC. – Type region: India: Maharashtra and Karnataka States.

**Type material. Paratypes** (2 apterous males, #6462, 6463; 2 apterous females, #6461, #6464): “S.India: Karnataka,\ Mudigere area, c. 900 m\ 2.–10.xi.1977\ Zool.Mus.Copenhagen Exp.”.

### *Onychotrechus robustus ANDERSEN, 1980*

*Onychotrechus robustus* ANDERSEN, 1980: 140. – Type locality: India, Uttar Pradesh, Dehra Dun Valley, ca. 700 m a.s.l.; holotype in ZMUC. – Type region: India (Uttar Pradesh), Pakistan, Nepal.

**Type material. Paratypes** (3 apterous males, #6471–6473): “India (Uttar Pradesh)\ Dehra Dun Valley, c. 700 m\ 4.–13.viii. 1978\ Copenhagen Zool. Mus. Exp.”.

### *Onychotrechus rupestris ANDERSEN, 1980*

*Onychotrechus rupestris* ANDERSEN, 1980: 132. – Type locality: India, Karnataka State, Shikmagalur District, Kemmangundi, 1200–1500 m a.s.l.; holotype in ZMUC.

**Type material. Paratypes** (2 apterous males, #6465, 6466; 2 apterous females, #6467, 6468): “S.India: Karnataka,\ Kemmangundi, 1200–1500 m\ 11.–16.xi.1977\ Zool.Mus.Copenhagen Exp.”.

### ***Onychotrechus tuberculatus* ANDERSEN, 1980**

*Onychotrechus tuberculatus* ANDERSEN, 1980: 136. – Type locality: Sri Lanka (“Ceylon”), Western Province, Labugama, 24 miles ESE of Colombo; holotype in MZLU. – Type region: Sri Lanka: Sabaragamuwa, Uva, Western, Southern, and Central Provinces.

**Type material.** Paratype (1 apterous male, #6486): “Ceylon, Sabaragamuwa\ Prov. Stream at 2500ft\ 5 mls NNW Balagoda\ 22.II.62.Loc.96”, “Swept above surface\ of stream”, “Lund University\ Ceylon Expedition 1962\ Brinck-Andersson-Cederholm”; paratypes (1 apterous male, #6487; 1 apterous female, #6488): “Ceylon, W.Prov.\ Labugama,\ 24 mls ESE Colombo\ 21.I.62.Loc.17:I”, “on rocks covered by trickling water”, “Lund University\ Ceylon Expedition 1962\ Brinck-Andersson-Cederholm”.

### ***Pleciobates pacholatkoi* ZETTEL & CHEN, 1996 (Fig. 57)**

*Pleciobates pacholatkoi* ZETTEL & CHEN, 1996: 164. – Type locality: Vietnam, (South), Song Be, Nam Cat Tien National Park; holotype in NHMW. – Type region: South Vietnam (Song Be Province) and North Thailand (Phitsanulok Province).

**Type material.** Holotype (apterous male, #11223) and paratypes (1 dealate male, #11224; 2 apterous females, #11225, 11226): “S VIETNAM, 1.–15.5.1994\ Nam Cat Tien NP\ P. Pacholátko &\ L. Dembicky leg.”; paratypes (1 apterous male, #11228; 1 apterous female, #11227): “CHINA: Hainan (192)\ Maoyang, 100 m\ Changhua river\ 17.1.1996, leg. Jäch”; paratypes (2 apterous males, #11229, 11230; 1 apterous female, #11231): “THAILAND: Phitsanulok Prov.\ 55 km E Phitsanulok\ sdiv. of Tungsaleang Nat.Pk., Khek river, water fall, 17.XI.\ 1994, leg. Chen & Piyapichart”; paratypes (2 apterous males, #11232, 11233; 2 apterous females, #11234, 11235): “THAILAND: Phitsanulok Prov.\ Tung Saleangluang NP, 300 m\ 101 km E Phitsanulok, 17. XI.\ 1994, leg. Chen & Piyapichart”.

### ***Pleciobates vietnamensis* ZETTEL & CHEN, 1996 (Fig. 58)**

*Pleciobates vietnamensis* ZETTEL & CHEN, 1996: 163. – Type locality: Vietnam (South), Lam Dong Province, 18 km north of Dalat-Ankreot; holotype in NHMW. – Type region: Vietnam: Lam Dong.

**Type material.** Holotype (apterous male, #11240) and paratypes (1 apterous male, #11241; 2 apterous females, #11424, 11243): “S VIETNAM, 16 km N Dalat\ Ankreot, 12°05'N, 108°24'E\ 1400 m, 15.4.1995 leg. Pacholátko & Dembicky”; paratypes (1 dealate male, #11244; 1 dealate female, #11245): “S VIETNAM, 28.–30.4.1994\ 12 km N of Dalat-LangBian\ P. Pacholátko &\ L. Dembicky leg.”; paratypes (1 apterous male, #11246; 1 apterous female, #11247 – both shriveled): “S-VIETNAM: 28.–30.4.1994\ 12 km N Dalat-LangBian\ P. Pacholátko &\ L. Dembicky leg.”.

### ***Pleciogonus narumonae* ZETTEL & LACINY, 2021 (Fig. 59)**

*Pleciogonus narumonae* ZETTEL & LACINY, 2021b: 446. – Type locality: Thailand: Phang-Nga Province, Khuraburi District, Baan Tumnang, W of Si Phang Nga National Park; holotype in NHMW.

**Type material.** Holotype (apterous female, #31308): “Thailand: Phang-Nga Prov.\ Khuraburi distr., Baan\ Tumnang, W of Si Phang\ Nga NP, 29.11.2006\ leg. Herbert Zettel (48)”.

### ***Pleciogonus wongsirii* CHEN, NIESER & WATTANACHAIYINGCHAROEN, 2002 (Fig. 60)**

*Pleciogonus wongsirii* CHEN, NIESER & WATTANACHAIYINGCHAROEN, 2002: 207. – Type locality: Thailand, Lampang Province, Chaehom National Park, Chae Sorn Waterfall; holotype in RMNH. – Type region: North Thailand: Lampang, Chiang Mai, Chiang Rai.

**Type material.** Paratypes (1 apterous male, #11161; 1 apterous female; #11162) “Thailand: Chiang Mai Prov.\ Chiang Dao, Ban Yang Thung\ Pong, 500 m, 8.11.1995\ leg. H. Zettel (10)”.

### ***Potamobates shuar* BUZZETTI, 2006 (Fig. 61)**

*Potamobates shuar* BUZZETTI, 2006: 52. – Type locality: Ecuador, Morona Santiago Province, Bomboiza, 800 m a.s.l.; holotype in ZMUC.

**Type material. Paratype** (1 apterous male, #10136): “ECUADOR – Mor. Sant.\ Bomboiza 800 m\ 22.III.04\ Legit Carotti & Tirello”.

### **Potamometra linnavuorii CHEN, 2016**

*Potamometra linnavuorii* CHEN, 2016: 50. – Type locality: China, Hunan Province, Changde District, Taoyuan County, Wu-yun-jie National Park, Sha-ping Sub-Beureau, Sha-ping Town, Zhushan Village, N 28°64'31.92", E 111°31'83.62"; holotype in RMNH. – Type region: China: Hunan, Hubei, and Guizhou Provinces.

**Type material. Paratype** (1 apterous male, #31513): “CHINA: NW-Hunan Prov., Bez. Dayong\ Wulingyuan, Zhangjiajie\ Forest NP, Pipaxi\ 29.X.1993, 650 m\ leg. H. Schillhammer (1)”; paratypes (2 apterous males, #31514, 31515): “CHINA: NW-Hunan Prov., Bez. Dayong\ Wulingyuan, Zhangjiajie\ Forest NP, Shuiraosimen\ 30.X.1993, 450 m\ leg. H. Schillhammer (4)”; paratype (1 apterous female, #31516): “CHINA: NW-Hunan Prov., Bez. Dayong\ Wulingyuan, Suoxiyu Nat.\ Reserve, Suoxi-Zufluss [tributary to Suoxi River]\ 31.X.1993, 450 m\ leg. H. Schillhammer (6)“.

**Note.** When this catalogue was compiled, the specimens were on loan.

### **Potamometropsis anomalis CHEN & NIESER, 1992 (Fig. 62)**

*Potamometropsis anomalis* CHEN & NIESER, 1992: 154. – Type locality: Indonesia, Sulawesi Utara, Dumoga Bone National Park, Tumpah River barrage; holotype in ZMAN. – Type region: Indonesia, Sulawesi Utara, Dumoga Bone National Park.

**Type material. Paratypes** (1 apterous male, #4925; 1 apterous female, #4926; 1 macropterous female, #4927): “SULAWESI: Dumoga\ Base Camp, Bridge\ 16.X.1985\ leg. G. Zimmermann”.

### **Potamometropsis bruneiensis POLHEMUS & ZETTEL, 1997**

*Potamometropsis bruneiensis* J. POLHEMUS & ZETTEL, 1997: 30. – Type locality: Brunei, Sungai Belalong; holotype in ZRC.

**Type material. Paratype** (1 apterous male, #11025): “BRUNEI: Sg. Balakong\ waterfall, 15.6.1995\ leg. S. L. Goh”.

### **Potamometropsis crassifemur POLHEMUS & ZETTEL, 1997**

*Potamometropsis crassifemur* J. POLHEMUS & ZETTEL, 1997: 37. – Type locality: Malaysia (East), Sabah, Gunung Antulai, ca. 5 km S Sapulut; holotype in NHMW. – Type region: Malaysia (East), Sabah.

**Type material. Holotype** (apterous male, #10995) and **paratypes** (2 apterous females, #10996, 10997): “Malaysia, Sabah, Gn. Antulai\ ca. 5 km S Sapulut, 2.VII.1996\ 13 a, river about 7 m wide,\ flowing through secondary forest”; paratype (1 apterous female, #10998): “Malaysia, Sabah, Batu\ Punggut Resort env., 24.VI.-\ 1.VII.1996. 11b, shaded stream\ 1.5–2.0 m wide, flowing through\ dense primary forest”.

### **Potamometropsis fischeri ZETTEL, 1994 (Fig. 63)**

*Potamometropsis fischeri* ZETTEL, 1994b: 89. – Type locality: Malaysia (East), Sarawak, Kelabit Highlands, between Bareo and Arur Dalam; holotype in NHMW. – Type region: Malaysia (East), Sarawak, Kelabit Highlands.

**Type material. Holotype** (apterous male, #11126) and **paratypes** (14 apterous males, #11127–11140; 18 apterous females, #11141–11158): “MALAYSIA: Sarawak\ Kelabit Highland\ 1000–1200 m, (11)\ Bareo – Arur Dalam”, “Bach durch Regenwald\ 26.2.–1.3.1993\ leg. H.Zettel”; paratypes (1 apterous male, #11159; 1 apterous female, #11160): “MALAYSIA: Sarawak\ Kelabit Highland\ 5 km E Bareo Pa Ukat\ 1000 m, 1.3.1993”, “breiter Fluss [broad stream]\ leg. M. Jäch”.

### *Potamometropsis ikarus* ZETTEL, 1994

*Potamometropsis ikarus* ZETTEL, 1994b: 95. – Type locality: Philippines, Luzon Island, Camarines Sur, Mount Iriga, 500 m a.s.l.; holotype in BPBM. – Type region: Philippines, Luzon Island. – Paratypes from Northern Luzon were later separated from this species, so that the true distribution is restricted to Southern Luzon.

**Type material. Paratype** (1 apterous male, #4893): “P.I., CAMARINES\ SUR, Mt. Iriga\ 500 m, 25.III.1962\ H.M. Torrevillas\ Collector\ BISHOP”. The following paratypes from Northern Luzon were later separated from *P. ikarus* and designated as paratypes of *P. sumaldei* ZETTEL, 1999: paratypes (2 apterous males, #19297, 19298); “PHILIPPINES\ Ifugao Province\ Jacmal Bunhiam\ 24 km E Mayoyao, 800\ 1000 m, 7.–8.IV.1967”, “H.M. Torrevillas\ Collector\ BISHOP MUSEUM”; paratypes (1 dealate male, # 19299; 1 macropterous female, #19301); “PHILIPPINES\ Ifugao Province\ Jacmal Bunhiam\ 24 km E Mayoyao, 800\ 1000 m, 19.–21.IV.1967”, “H.M. Torrevillas\ Collector\ BISHOP MUSEUM”; paratype (1 macropterous female, #19300); “PHILIPPINES\ Ifugao Province\ Jacmal Bunhiam\ 24 km E Mayo-yao, 800\ 1000 m, 25.–26.IV.1967”, “H.M. Torrevillas\ Collector\ BISHOP MUSEUM”.

### *Potamometropsis kundesan* POLHEMUS & ZETTEL, 1997

*Potamometropsis kundesan* J. POLHEMUS & ZETTEL, 1997: 31. – Type locality: Malaysia (East), Sabah, Mesilau River, 8 km N of Kundesan; holotype in USNM. – Type region: Malaysia (East), Sabah.

**Type material. Paratypes** (2 apterous males, #19316, 19317; 2 apterous females, #19318, 19319): “MALAYSIA, Sabah: Borneo\ Mesilau River, 8 km, N.\ of Kundessan, 2100 m,\ CL.2020 VIII-1-85\ J.T. & D.A.Polhemus”; paratypes (2 apterous males, #19320, 19323; 4 apterous females, #19321, 19322, 19324, 19325); “MALAYSIA: Sabah\ Mt. Kinabalu, Silau-Silau Riv.\ 1450 m, 17.2.1997\ leg. H. Zettel (19)”; paratypes (7 apterous males, #19326, 19327, 19331, 19335–19337); “Malaysia, Sabah, Crocker\ Range, around km 56 of road\ Kota Kinabalu Tambunen, Sun-\ suron Waterfall env., 1100–1200 m\ a.s.l. 8. VI. 1996, 5 a”; paratypes (2 apterous males, #19339, 19340); “MALAYSIA: Sabah\ Mt. Kinabalu, Liwagu Riv.\ 1500 m, 18.2.1997\ leg. H. Zettel (20)”; paratypes (1 apterous male, #19341; 1 apterous female, #19342); “MALAYSIA: Sabah\ Mt. Kinabalu, small creek,\ pool, 1700 m, 17.2.1997\ leg. H. Zettel (18)”; paratypes (1 apterous male, #19343; 1 apterous female, #19344); “MALAYSIA: Sabah\ Maliau Basin, fast flow\ stream, 17.5.1996\ MB11, leg. T.B.Lim”; paratype (1 apterous male, #19345); “Malaysia, Sabah, Crocker\ Range, Mawar Waterfall env.,\ 17.VI. 1996, 9a, river about\ 3–4 m wide, flowing through\ primary forest, shaded”.

### *Potamometropsis luzonica* ZETTEL, 1994

*Potamometropsis luzonica* ZETTEL, 1994b: 86. – Type locality: Philippines, Luzon Island, Laguna Province, Mount Banahaw, San Pablo; holotype in NHMW. – Type region: Philippines, Luzon Island.

**Type material. Holotype** (apterous male, #11054) and **paratypes** (2 apterous males, #11055, 11056; 3 apterous females, #11057–11059); “PHILIPPINEN: Luzon\ San Pablo, Mt. Banahaw\ 15.11.1992\ leg. H.Zettel (6)”; paratypes (6 apterous males, #11060–11065; 5 apterous females, #11066–11070); “PHILIPPINEN: Laguna, 1992\ Los Banos, Rest Area\ Bach von Tampalit Falls\ 17.11., leg. H.Zettel (1a)”; paratypes (3 apterous females, #11071–11073); “PHILIPPINEN: Laguna\ Los Banos, Bach von\ Tampalit Falls, 15.11.\ leg.H.Zettel 1993(22b)”; paratype (1 apterous female, #11074); “PHILIP-PINEN: Luzon\ San Pablo, Mt. Banahaw\ 15.11.1992\ leg. H.Zettel (6)”; paratype (1 apterous female, #11075); “PHILIPPINEN: Luzon\ SE San Pablo, Kinabuhayan\ Mt. Banahaw 16.11.1992\ leg. Schillhammer (5)”; paratype (1 apterous male, #11076); “PHILIPPINES\ Ifugao Province\ Jacmal Bunhiam\ 24 km E Mayoyao, 800\ 1000 m, 7.–8.IV.1967”, “H.M. Torrevillas\ Collector\ BISHOP MUSEUM”; paratype (1 apterous male, #11077); “PHILIPPINES\ Ifugao Province\ Jacmal Bunhiam\ 24 km E Mayoyao, 800\ 1000 m, 9.–12.IV.1967”, “H.M. Torrevillas\ Collector\ BISHOP MUSEUM”; paratype (1 apterous male, #11078); “PHILIPPINES\ Ifugao Province\ Jacmal Bunhiam\ 24 km E Mayo-yao, 800\ 1000 m, 22.–24.IV.1967”, “H.M. Torrevillas\ Collector\ BISHOP MUSEUM”; paratype (1 macropterous female, #11079); “PHILIPPINES\ Mt. Province\ Mayoyao, Ifugao\ 1200–1500 m\ 11.–13.VIII.'66”, “H.M. Torrevillas\ Collector\ BISHOP MUSEUM”; paratype (1 macropterous male, #11080); “PHILIPPINES\ Camarines Sur: Mt.\ Isarog, 500–600 m.\ 11.IV.1963\ H.M. Torrevillas\ Collector\ BISHOP”.

### **Potamometropsis poring POLHEMUS & ZETTEL, 1997**

*Potamometropsis poring* J. POLHEMUS & ZETTEL, 1997: 28. – Type locality: Malaysia (East), Sabah, Poring Hot Springs, Sungai Langanan; holotype in USNM. – Type region: Malaysia (East), Sabah.

**Type material. Paratypes** (1 apterous male, #11040; 1 apterous female, #11041): “MALAYSIA, Sabah, Borneo\ Langanan River at Poring) Hot Springs, 550 m.\ CL 2022 VIII-2-85\ J.T. & D.A.Polhemus”; paratype (1 macropterous female, #11042): “MALAYSIA: Sabah\ Maliau Basin, fast flow\ stream, 16.5.1996 leg. T.B. Lim (MB9a)”; paratypes (4 apterous males, #11043–11064; 5 apterous females, #11047–11052): “MALAYSIA: Sabah\ Danum Valley, Waterfall\ 3.2.1997 leg. H. Zettel (5)”; paratype (1 apterous male, #11053): “Malaysia, Sabah, Kuamut river\ env. near Kampung Pisang\ Pisang, 3.–4.VII.1996, 14 a\ shaded stream in primary\ forest with submerged wood”.

### **Potamometropsis sabah POLHEMUS & ZETTEL, 1997**

*Potamometropsis sabah* J. POLHEMUS & ZETTEL, 1997: 34. – Type locality: Malaysia (East), Sabah, km 60 on Keningau Highway; holotype in USNM. – Type region: Malaysia (East), Sabah.

**Type material. Paratypes** (2 apterous males, #10999, 11000; 2 apterous females, #11001, 11002): “MALAYSIA, Sabah; Borneo\ small stream 12 km. S. of Ranau, waterfalls & pools\ CL 2027 VIII-3-85\ J.T.&D.A.Polhemus”; paratypes (3 apterous males, #11003–11005): “BRITISH N. BORNEO\ Tenompok, 1460 m.\ Jesselton, 30 ml.\ E., III-16-1959”, “T.C.Maa\ Collector\ BISHOP”; paratypes (2 apterous males, #11006, 11007; 4 apterous females, #11008–11011): “Malaysia, Sabah, Crocker\ Range, around km 56 of road\ Kota Kinabalu Tambunan, Sun-\ suron Waterfall env., 1100–1200 m\ a.s.l. 8. VI. 1996, 5 a”; paratypes (4 apterous females, #11012–11015): “Malaysia, Sabah, Crocker\ Range, Mawar Waterfall env.,\ 17.VI. 1996, 9a, river about\ 3–4 m wide, flowing through\ primary forest, shaded”; paratype (1 apterous male, #11016): “Malaysia, Sabah, Crocker\ Range, Crocker Range, around km 50 of road\ Kota Kinabalu – Tambunan, ca\ 1300 m a.s.l., 19.VI.1996, 3a”.

### **Potamometropsis sumaldei ZETTEL, 1999 (Fig. 64)**

*Potamometropsis sumaldei* ZETTEL, 1999: 156. – Type locality: Philippines, Luzon Island, Mountain Province, Balitian River, 5 km south of Bontoc; holotype in UPLB. – Type region: Philippines, Northern Luzon (Mountain Province, Ifugao, Benguet, Ilocos Norte).

**Type material. Paratypes** (2 dealate males, #19297, 19298; also paratypes of *P. ikarus*): “PHILIPPINES\ Ifugao Province\ Jacmal Bunhian\24 km E Mayoyao, 800–\ 1000 m, 7.–8.IV.1967”, “H.M. Torrevillas\ Collector\ BISHOP MUSEUM”; paratypes (1 dealate male, # 19299; 1 macropterous female, #19301; also paratypes of *P. ikarus*): “PHILIPPINES\ Ifugao Province\ Jacmal Bunhiam\ 24 km E Mayoyao, 800\ 1000 m, 19.–21.IV.1967”, “H.M. Torrevillas\ Collector\ BISHOP MUSEUM”; paratype (1 macropterous female, #19300; also paratype of *P. ikarus*): “PHILIPPINES\ Ifugao Province\ Jacmal Bunhiam\ 24 km E Mayoyao, 800\ 1000 m, 25.–26.IV.1967”, “H.M. Torrevillas\ Collector\ BISHOP MUSEUM”; paratypes (4 apterous males #19303–19305, 19308; 4 apterous females #19302, 19306, 19307, 19309): “Philippines: LZ, Mount.Pr.\ 5 km S Bontoc, Balitian Riv.\ 900 m, 27.2.1999\ leg. H. Zettel (190)”.

### **Potamometropsis werneri aberrans ZETTEL, 1994 (Fig. 65)**

*Potamometropsis werneri aberrans* ZETTEL, 1994b: 95. – Type locality: Philippines, Mindanao Island, Zamboanga del Norte, 20 km south of Manukan, 400 m a.s.l.; holotype in BPBM. – Type region: Philippines: Mindanao (Zamboanga Peninsula) and Leyte Islands.

**Type material. Paratypes** (2 apterous males, #4968, 4969; 2 apterous females, #4970, 4971): “PHILIPPINES, Leyte\ Lusig River at Hilusig\ VII-15-85 CL 1979\ J.T. & C.A.Polhemus”.

### **Ptilomera occidentalis ZETTEL, 2003**

*Ptilomera* (s. str.) *occidentalis* ZETTEL, 2003: 1131. – Type locality: India, Uttar Pradesh, Bhimtal, 1500 m a.s.l.; holotype in ZSMC.

**Type material. Paratype** (1 apterous male, #18430): “NW-India, Bhimtal, 1500 m\ leg. Smetacek, 16.III.1977”, “ZOOLOGISCHE\ STAATSSAMMLUNG\ MÜNCHEN”; paratype (1 apterous male, #18431): “NW-India, Bhimtal, 1500 m\ leg. Smetacek, 19.III.1977”, “ZOOLOGISCHE\ STAATSSAMMLUNG\ MÜNCHEN”; paratype (1 apterous male, #18432): “Himalaya\ Bhimtal, 1500 m\ K. P. India”, “11.1.75\ Smetacek leg.”; paratype (1 apterous female, #18433): “NW-India, Bhimtal, 1500 m\ leg. Smetacek, 17.III.1977”, “ZOOLOGISCHE\ STAATSSAMMLUNG\ MÜNCHEN”; paratypes (2 apterous females, #18434, 18436): “Indien\ Bhim Tal\ 14.1.75”, “ZOOLOGISCHE\ STAATSSAMMLUNG\ MÜNCHEN”; paratype (1 apterous female, #18435): “Himalaya\ Bhimtal, 1500 m\ K. P. India”, “27.1.75\ Smetacek leg.”.

### *Ptilomera palawanensis* POLHEMUS, 1998

*Ptilomera palawanensis* D. POLHEMUS, 1998: 261. – Type locality: Philippines, Palawan Island, 17 km SW Narra, Estrella falls at Estrella; holotype in USNM. – Type area: Philippines, southern and central part of Palawan Island.

**Type material. Paratypes** (1 apterous male, #31518; 1 apterous female, #31519): “PHILIPPINEN: Palawan\ 20 km WSW P. [Puerto] Princesa\ Montible River, 26.3.1994\ leg. H. Zettel (50)”; paratype (1 apterous female, #31517): “PHILIPPINEN: Palawan\ 7 km N Narra, Estrella\ Falls, 5.4.1994\ leg. H. Zettel (59)”; paratype (1 apterous female, #31520): “PHILIPPINEN: Palawan\ 9 km W P. [Puerto] Princesa\ Iwahig, Balsahan riv.\ Ig. Zettel, 7.4.1994 (60)”.

**Note.** When this catalogue was compiled, the specimens were on loan.

### *Ptilomerella akekawati* ZETTEL, 2009 (Abb. 66)

*Ptilomerella akekawati* ZETTEL, 2009: 32. – Type locality: Thailand, Phang-Nga Province, southeast of Khao Lak, Tan Chong Pho Waterfall; holotype in NHMW. – Type region: Southern Thailand (Surat Thani, Phang-Nga, Phuket).

**Type material. Holotype** (apterous male, #19354), **allotype** (apterous female, #19368), and **paratypes** (11 apterous males, #19355, 19356, #19358–19361, #19363–19367; 10 apterous females, #19369–19378): “Thailand: Phang-Nga Prov.\ SE Khao Lak, Tan Chong\ Pho Waterf., 26.11.\ 2006, leg. H. Zettel”; paratype (1 apterous male, #19357): “THAILAND 2003\ PROV. SURATHANI\ KHAO SOK N.P. 15.1.\ leg. Horst FORSTER”; paratype (1 apterous male, #19362): “THAILAND: Surat Thani\ Khao Sok NP, N 08°54'\ E 98°31', 30.11.- 1.12.\ 2002, leg. F. Seyfert (15)”.

### *Rhagadotarsus palawanensis* ZETTEL, 2004 (Fig. 67)

*Rhagadotarsus (Rhagadotarsus) palawanensis* ZETTEL, 2004: 363. – Type locality: Philippines, Palawan Island, Sabang; holotype in NHMW.

**Type material. Holotype** (apterous male, #7344) and **paratype** (macropterous male, #7345): “PHILIPPINEN: Palawan\ Sabang, 0–30 m\ 27.3.1994\ leg. H. Zettel (52b)”.

### *Rheumatobates crassifemur* ESAKI, 1926 (Fig. 68)

*Rheumatobates crassifemur* ESAKI, 1926: 149. – Type localities: Argentina, Posadas, and Paraguay, Chaco; syntypes in HNHM and NHMW.

**Type material. Syntypes** (2 apterous males, #31497, 31498; 2 apterous females, #31499, 31500; 1 macropterous male, #31501; 2 macropterous females, #31502, 31503): “Fiebrig\ Paraguay, Chaco”, “Rheumatobates\ crassifemur\ Type\ det. T. Esaki”.

**Current status.** *Rheumatobates crassifemur crassifemur*.

**Notes.** ESAKI (1926) studied and listed nine syntypes from Chaco in NHMW. Today, NHMW keeps seven specimens labelled as types by Esaki (Fig. 68), and further 63 specimens (imagines and nymphs) from the same locality, but without Esaki’s type labels.

### ***Rheumatobates mexicanus* DRAKE & HOTTES, 1951**

*Rheumatobates mexicanus* DRAKE & HOTTES, 1951b: 152. – Type locality: Mexico, Acapulco; holotype in USNM. – Type region: Mexico (various localities).

**Type material.** Paratype (1 apterous male, #6359): “Puebla, Mex.\ July, 20 1951\ Drake & Hottes”; paratype (1 apterous female, #6360): “Aguasclientes, Mex.\ Aug. 5 1950\ Drake & Hottes”.

### ***Rheumatogonus seyferti* ZETTEL, 1994 (Fig. 69)**

*Rheumatogonus seyferti* ZETTEL, 1994a: 79. – Type locality: Philippines, Negros Island, Canlaon City, Pula; holotype in NHMW.

**Type material.** Holotype (apterous male, #6290) and paratypes (5 apterous males, #6291–6296; 2 apterous females, #6297, 6298): “PHILIPPINEN: Negros\ Umg. Canlaon City\ Pula, 9.2.1994\ leg. Seyfert & Graindl”.

### ***Rheumatogonus vietnamensis* ZETTEL & CHEN, 1996 (Fig. 70)**

*Rheumatogonus vietnamensis* ZETTEL & CHEN, 1996: 171. – Type locality: Vietnam (South), Gia Lai-Kontum Province, Buon Luoi, 40 km NW An Khe; holotype in NHMW. – Type region: South Vietnam, Gia Lai-Kontum and Ha Son Binh Provinces.

**Type material.** Holotype (apterous male, #21782) and paratypes (8 apterous males, #21990–21797; 7 apterous females, #21783–21789): “S VIETNAM, 40 km NW An Khe\ Buon Luoi, 14°10'N, 108°30'E\ 620–750 m, 28.3.–12.4.1995\ leg. Pacholátko & Dembicky”.

### ***Rheumatometra philarete* KIRKALDY, 1902 (Fig. 71)**

*Rheumatometra philarete* KIRKALDY, 1902: 281. – Type locality: Australia, Victoria, Alexandra (“Alexandria”); lectotype (ANDERSEN & WEIR 1998: 517) in IRSN.

**Type material.** Paralectotypes (2 apterous males, #31525, 31526; 2 apterous females, #31525, 31526; 1 macropterous female, #31527; apterous pairs glued together on cardboards): “VICTORIA\ Alexandra\ F.L.Billinghurst.”.

**Notes.** The specimens were recently recognized as types. Way of preparation and labelling (Fig. 71) agree with a pair of paralectotypes deposited in NMPC (see KMENT & KOLÍNOVÁ 2013).

### ***Rheumatometroides serena* LANSBURY, 1992 (Fig. 72)**

*Rheumatometroides serena* LANSBURY, 1992: 1. – Type locality: Papua New Guinea, Madang Province, Madang, Nagada Harbour; holotype in OXUM.

**Type material.** Paratypes (3 apterous males, #12557–12559; 4 apterous females, #12560–12563): “PAPUA NEW GUINEA\ Madang Pr., Nagada\ Harbour, 16.III.\ 1990, leg.I.Lansbury”.

**Current status.** *Thetibates serena* (transferred to *Thetibates* by J. POLHEMUS & D. POLHEMUS 1996: 345).

### ***Rhyacobates abdominalis* ANDERSEN & CHEN, 1995**

*Rhyacobates abdominalis* ANDERSEN & CHEN, 1995: 58. – Type locality: China, Guangdong Province, Lao Peng, Ruyang Nature Reserve, 1100 m a.s.l.; holotype in NKUM.

**Type material.** Paratypes (2 apterous males, #12628, 12629; 2 apterous females, #12630, 12631): “CHINA: Guangdong Prov.\ Ruyang Nat. Res.\ Lao Peng Keng stream\ 1100 m, 14.8.1990\ leg. P.P.Chen C9012”.

### *Rhyacobates anderseni* TRAN & YANG, 2006 (Fig. 73)

*Rhyacobates anderseni* TRAN & YANG, 2006: 14. – Type locality: Vietnam, Ha Tinh Province, Vu Quang National Park, Khe Lim, 18°16.416' N, 105°26.467' E, 291 m a.s.l.; holotype in ZVNU. – Type region: Northern Vietnam: Ha Tinh Province.

**Type material. Paratypes** (1 apterous male, #12646; 1 apterous female, #12647): “VIETNAM: Ha Tinh Province, Vu\ Quang N’Park, Khe Lim\ waterfall, Coll. Tran A.D., 24 Apr\ 2003, TAD0304”.

### *Rhyacobates constrictus* TRAN & NGUYEN, 2016 (Fig. 74)

*Rhyacobates constrictus* TRAN & NGUYEN, 2016: 508. – Type locality: Vietnam, Phu Tho Province, Xuan Son National Park, Lap stream, site 1, at Ngoc waterfall, N 21°07.817', E 104°55.506', 390 m a.s.l.; holotype in ZVNU. – Type region: Vietnam, Phu Tho Province, Xuan Son National Park.

**Type material. Paratypes** (2 apterous males, #31112, 31113; 2 apterous females, #31114, 31115): “VIETNAM: Phú Tho Prov.\ Xuan Son N’Park, Lap stream,\ site 3, second concrete bridge\ from Ngoc waterfall, 30.VIII.\ 2013, leg. Tran A.D. et al.,\ TAD1354, Acquis.-Nr. 2017-05”.

### *Rhyacobates edentatus* ANDERSEN & CHEN, 1995

*Rhyacobates edentatus* ANDERSEN & CHEN, 1995: 63. – Type locality: China, Guangdong Province, Lian County, Yao-An Xiaoang; holotype in NKUM. – Type region: South China: Guangdong and Guangxi Provinces.

**Type material. Paratype** (1 apterous female; #12645): “CHINA: Guangxi, Bez. Lipu\ 120 km S Guilin, 80 km E\ Liuzhou, Siuren\ 12.11.1993, 350 m\ leg. H. Schillhammer (19)”.

### *Rhyacobates gongvo* TRAN & YANG, 2006

*Rhyacobates gongvo* TRAN & YANG 2006: 16. – Type locality: Vietnam, Lao Cai Province, Sa Pa, Hoang Lien National Park, Sin Chai, 22°20.421' N, 103°48.844' E, 1366 m a.s.l.; holotype in ZVNU.

**Type material. Paratypes** (1 apterous male, #12648; 1 apterous female, #12649): “VIETNAM, Lao Cai Prov. Sa\ Pa, Hoang Lien N’Park, Sin\ Chai, Coll. Tran A D, 3 July\ 2004, TAD0415”.

### *Rhyacobates malaisei* ANDERSEN & CHEN, 1995 (Fig. 75)

*Rhyacobates malaisei* ANDERSEN & CHEN, 1995: 59. – Type locality: Myanmar (“Burma”), Bumgah-tuang-Hpungan; holotype in NHRS. – Type region: North Myanmar, Southwest China (Yunnan), North Thailand (Chieng Mai).

**Type material. Paratypes** (2 apterous males #12643, 12644): “CHINA, Yunnan 1993\ 100 km W Kunming\ Diaolin Nat.Res. 22.5.–2.6.\ leg. E. Jendek & O. Sausa”.

### *Rhyacobates zetteli* TRAN & NGUYEN, 2016

*Rhyacobates zetteli* TRAN & NGUYEN, 2016: 506. – Type locality: Vietnam, Lao Cai Province, Sa Pa, Hoang Lien National Park, Nui Xe, Suoi Vang, N 22°20.835', E 103°46.446', 1366 m a.s.l.; holotype in ZVNU. – Type region: Vietnam, Lao Cai Province, Sa Pa area.

**Type material. Paratypes** (2 apterous males, #12650, 12651; 2 apterous females, #12652, 12653): “VIETNAM, Lao Cai Prov., Sa Pa\ Hoang Lien N’Park, Nui Xe, Suoi\ Vang, Coll. Tran A.D., 4 July\ 2004, TAD0417”.

### *Stenobates australicus* POLHEMUS & POLHEMUS, 1991

*Stenobates australicus* J. POLHEMUS & D. POLHEMUS, 1991: 3. – Type locality: Australia, Queensland, Deeral Landing, Lower Mulgrave River; holotype in ANIC. – Type region: Australia: North Queensland.

**Type material. Paratypes** (4 apterous males, #12549–12552; 4 apterous females, #12553–12556): “AUST., Queensland\ Deeral Landing,\ lower Mulgrave River\ CL 1724 VIII-15-83\ J.T. & D.A. Polhemus”.

### ***Stenobatopsis coronensis* ZETTEL, 2004 (Fig. 76)**

*Stenobatopsis coronensis* ZETTEL, 2004: 365. – Type locality: Philippines, Palawan Province, coast of Coron Island, near Lake Cayangan; holotype in UPLB.

**Type material. Paratype** (1 apterous female, #5520): “PHILIPPINEN: Palawan Pr.\ Coron Is., nr. Lake\ Cayangan, 28.2.1996\ leg. H. Zettel (84)”.

### ***Stridulobates anderseni* ZETTEL & THIRUMALAI, 2001 (Fig. 77)**

*Stridulobates anderseni* ZETTEL & THIRUMALAI, 2001: 434. – Type locality: India, Karnataka, Coorg, Napoklu; holotype in NHMW. – Type region: South India: Karnataka and Kerala.

**Type material. Holotype** (apterous male, #12654) and **paratypes** (6 apterous males, #12655–12660; 1 dealate male, #12661; 5 apterous females, #12662–12666): “INDIA: Karnataka, Coorg\ Napoklu, 24.12.1998\ 12°20'N 75°40'E, 900–1200 m\ leg. D. Boukal (19)”; paratype (1 apterous female, #12667): “INDIA: Kerala, 28.12.1998\ 10 km N Pathanamthitta, 70 m\ Perunad, 09°21'N 76°50'E\ leg. D. Boukal (23)”, paratype (1 apterous female, #12668): “INDIA: Kerala, 6.1.1999\ 10 km W Munnar, 1100 m\ Peschadu – Mangulam rd.\ 10°04'N 76°58'E\ leg. D. Boukal (48)”.

### ***Tachygerris hecherae* BUZZETTI & ZETTEL, 2011 (Fig. 78)**

*Tachygerris hecherae* BUZZETTI & ZETTEL, 2011: 76. – Type locality: Ecuador, Morona Santiago Province, northeast of Macas, 78°04' W, 02°20' S, 900 m a.s.l.; holotype in NHMW. – Type region: Ecuador, Morona Santiago and Napo Provinces.

**Type material. Holotype** (macropterous male, #10187), **allotype** (macropterous female, #10192) and **paratypes** (4 macropterous males, #10188–10191; 1 macropterous female, #10193): “ECUADOR: Morona Santiago\ NE Macas, 28.7.1998\ 78°04'W 02°20'S, 900 m\ leg. Ch. Hecher (3b)”.

### ***Tachygerris tuberculatus* BUZZETTI & ZETTEL, 2011 (Fig. 79)**

*Tachygerris tuberculatus* BUZZETTI & ZETTEL, 2011: 83. – Type locality: Ecuador, Napo Province, Jatún Sacha, 77°37' W, 01°04' S, 400 m; holotype in NHMW. – Type region: Ecuador, Napo Province.

**Type material. Holotype** (macropterous male, #10179), **allotype** (macropterous female, #10182) and **paratypes** (2 brachypterous males, #10180, 10181; 1 macropterous female, #10186): “ECUADOR: Napo Prov.\ Jatún Sacha, 1.8.1998\ 77°37'W 01°04'S, 40 m\ leg. Ch. Hecher (17a)”; paratype (1 brachypterous male, #10183): “ECUADOR: Napo Prov.\ Jatún Sacha, 30.7.1998\ 77°37'W 01°04'S, 400 m\ leg. Ch. Hecher (6)”; paratype (1 brachypterous male, #10184): “ECUADOR: Napo Prov.\ Jatún Sacha, 31.7.1998\ 77°37'W 01°04'S, 400 m\ leg. Ch. Hecher (16)”; paratype (1 brachypterous male, #10185): “ECUADOR: Napo Prov.\ Jatún Sacha, 7.8.1998\ 77°37'W 01°04'S, 400 m\ leg. Ch. Hecher (42)”.

### ***Telmatometra indentata* KENAGA, 1941**

*Telmatometra indentata* KENAGA, 1941: 179. – Type locality: Bolivia, Vaca Díez Province, Cachuela [“Cacheula” sic!] Esperanza, River Beni; holotype in SEMC.

**Type material. Paratype** (1 apterous male, #15211): “Bolivia S. A.\ R. Beni Cachuela\ Esperanza 9–37\ A. M. Olalla”.

### ***Tenagogonus australiensis* ANDERSEN & WEIR, 1997 (Fig. 80)**

*Tenagogonus australiensis* ANDERSEN & WEIR, 1997: 229. – Type locality: Australia, Queensland, Mount Spec National Park via Paluma; holotype in ANIC. – Type region: Australia, Northern Queensland.

**Type material. Paratypes** (1 apterous male, #31510; 1 apterous female, #31511): “AUSTRALIA: Queensland\ Kirrama, Ross' Creek\ 11.XI.1985\ leg. Rudie Hauser”.

### *Tenagogonus curvatus* ZETTEL, 2014 (Fig. 81)

*Tenagogonus curvatus* ZETTEL, 2014: 125. – Type locality: Luzon, Quezon Province, W of Atimonan, Quezon National Park, near Old Zigzag Road; holotype in PNM. – Type region: central and southern Luzon: Laguna, Quezon, and Camarines Norte Provinces.

**Type material. Paratypes** (4 apterous males, #17486–17489; 3 apterous females, #17490–17492): “Philippinen: LZ, Quezon\ Atimonan, Old Zigzag Road\ Quezon NP, 16.3.1999\ leg. H. Zettel (202)”; paratypes (1 apterous male, #17493; 1 apterous female, #17494): “Philippinen: Luzon, Laguna\ Los Banos, Mt. Makiling\ Mud Spring, 11.2.1998\ leg. H. Zettel (134)”.

### *Tenagogonus madagascariensis* HOBERLANDT, 1947

*Tenagogonus madagascariensis* HOBERLANDT, 1947: 105. – Type locality: Madagascar (North), Vohémar; holotype in NMPG. – Type region: North Madagascar.

**Type material. Paratypes** (2 apterous males, #16112, 16113; 1 apterous female, #16114): “Vohémar\ Madagascar”; paratype (1 apterous female, #16115): “Madagascar\ Inv.č.”.

### *Tenagogonus nicobarensis* ANDERSEN, 1964

*Tenagogonus* (s. str.) *nicobarensis* ANDERSEN, 1964: 322. – Type locality: Nicobar Islands, Nangkovri; holotype in ZMUC. – Type region: Nicobar Islands.

**Type material. Paratypes** (1 macropterous male, #31506; 1 macropterous female, #31507): “Nangkov-\ ri\ Galatea”; paratype (1 macropterous female, #31508): “Lille Nico-\ bar\ Galatea”; paratype (1 micropterous male, #31509): “Kar Nico-\ bar\ Galatea”.

### *Trepobates citatus* DRAKE & CHAPMAN, 1953

*Trepobates citatus* DRAKE & CHAPMAN, 1953: 111. – Type locality: U.S.A., Florida, Ocala; holotype in USNM. – Type region: U.S.A., Florida and Mississippi.

**Type material. Paratype** (1 apterous female, #15212): “Apopka, Fla.\ XI-6-1952\ H. C. Chapman”.

**Current status.** *Trepobates subnitidus* ESAKI, 1926 (syn. KITTLE 1991: 945).

### *Trepobates vasquezae* DRAKE & HOTTE, 1951

*Trepobates vasquezae* DRAKE & HOTTE, 1951a: 141. – Type locality: Mexico, Acapulco; holotype in USNM.

**Type material. Paratypes** (2 macropterous males, #31322, 31326; 2 apterous females, #31324, 31325; 1 macropterous female, #31323; 1 macropterous dealate female, #31321): “Acapulco, Mex.\ Aug. 3, 1951\ Drake & Hottes”.

### *Ventidius heissi* CHEN & ZETTEL, 1999 (Fig. 82)

*Ventidius* (*Ventidioides*) *heissi* CHEN & ZETTEL, 1999a: 197. – Type locality: Malaysia (East), Sarawak, Kapit District, Merirai Village, 30–300 m a.s.l.; holotype in BPBM.

**Type material. Paratype** (1 apterous male, #4821): “BORNEO Sarawak\ Kapit Dist., Marirai\ V., 30–300 m, 1.–6. Aug.\ 1958, T. Maa”.

### *Ventidius kuiteri* HUNGERFORD & MATSUDA, 1960

*Ventidius* (*Ventidioides*) *kuiteri* HUNGERFORD & MATSUDA, 1960: 333. – Type locality: Myanmar (“Burma”), Shingbwiyang; holotype in SEMC.

**Type material. Paratypes** (2 apterous males, #15111, 15112; 2 apterous females; #15113, 15114): “Shingbwiyang\ Burma\ III.24.1944\ Lt L C Kuitert”.

### *Ventidius longitarsus* CHEN & ZETTEL, 1999 (Fig. 83)

*Ventidius* (s. str.) *longitarsus* CHEN & ZETTEL, 1999a: 155. – Type locality: Vietnam, Da Lak Province, M'Drak E Ban Me Thuot, 400–600 m a.s.l.; holotype in BPBM. – Type region: Vietnam: Da Lak and Gia Lai-Kontum Provinces.

**Type material. Paratypes** (2 apterous males, #6941, 6942; 3 apterous females, #6943–6945): “S VIETNAM, 40 km NW An Khe\ Buon Luoi, 14° 10'N, 108°30'E\ 620–750 m, 28.3.–12.4.1995\ leg. Pacholátko & Dembicky”; paratype (1 apterous female, #6946): “VIET NAM, M'Drak\ E. of BanMe Thuot\ 4–600 m, 8.–19.XII.60”, “C.M. Yoshimoto\ Collector”.

### *Ventidius nieseri* CHEN & ZETTEL, 1999 (Fig. 84)

*Ventidius* (*Ventidioides*) *nieseri* CHEN & ZETTEL, 1999a: 196. – Type locality: Brunei, Kuala Belalong Field Research Station; holotype in RMNH. – Type region: Brunei; East Malaysia: Sarawak; Indonesia: Kalimantan.

**Type material. Paratypes** (9 apterous males, #22163–22171; 11 apterous females, #22172–22182): “MALAYSIA: Sarawak 1993\ Batang Ai NP, Engkari rv\ E Bandar Sri Amman,\ 19.–20.2., leg. Zettel (7)”; paratypes (3 apterous males, #22183–22185): “MALAYSIA: Sarawak\ Mulu NP, 3.–5.3.\ 1993, leg. H. Zettel (14)”, “(e) rechter Zufluß des Tutoh River bei\ Long Iman,\ ca. 8 m breit, 4.3.”; paratype (1 apterous male, #22186): “BRUNEI: Kuala Belalong\ Field Res. Center\ 16.IV.1993, N9363\ leg. N. Nieser”; paratype (1 macropterous female, #22187): “BRUNEI: Sg. Belalong\ Kuala Belalong Field\ Studies Cr., 16.VI.1995\ leg. S.L. Goh (GSL 9504)”; paratype (1 apterous male, #22188): “BRUNEI: Temburong\ Kuala Belalong Field\ Res. Cr., sungai Bakit\ 17.IV.1993, N9364\ leg. N. Nieser”; paratype (1 apterous female, #22189): “MALAYSIA: Sarawak (12)\ Kelabit Highland\ 5 km E Bareo, Pa Ukat\ 1000 m, 27.2.1993”, “(a) määndrierender\ ca. 6 m breiter Fluß\ leg. H. Zettel”; paratype (1 macropterous male, #22190): “C. BORNEO\ Sg. Birang\ leg. Mjöberg 1925”.

### *Ventidius pilosus* CHEN & ZETTEL, 1999 (Fig. 85)

*Ventidius* (s. str.) *pilosus* CHEN & ZETTEL, 1999a: 169. – Type locality: Indonesia, Nusa Tenggara Timur Province, Sumba, Patawang, 55 km E of Waingapu; holotype originally in JTPC. – Type region: Indonesia, Nusa Tenggara Timur Province, Sumba and Sumbawa Islands.

**Type material. Paratypes** (4 apterous males, #4831–4834; 2 apterous females, #4835, 4836): “INDONESIA: Sumba, Nusa\ Tenggara Timur Prov.\ Petawang, 55 km E Waingapu\ 15.IX.1991, CL 2603\ leg. D.A. & J.T.Polhemus”; paratypes (4 apterous males, #4837–4840; 3 apterous females, #4841–4843): “INDONESIA: Sumba, Nusa\ Tenggara Timur Prov.\ Mata River, 49 km E Waingapu\ 15 m, 15.IX.1991, CL 2604, leg. D.A. & J.T.Polhemus”; paratypes (4 apterous males, #4844–4847; 3 apterous females, #4848–4850): “INDONESIA: Sumbawa, Nusa\ Tenggara Barat Prov.\ Bele River, 28 km SW Bima\ 100 m, CL 2172, 19.X.1985”.

### *Ventidius polhemorum* CHEN & ZETTEL, 1999 (Fig. 86)

*Ventidius* (s. str.) *polhemorum* CHEN & ZETTEL, 1999: 165. – Type locality: Malaysia (East), Sabah, 34 km NE of Kota Belud; holotype originally in JTPC. – Type region: East Malaysia: Sabah and Sarawak.

**Type material. Paratypes** (7 apterous males, #6947–6953, 1 macropterous male, #6954, 3 apterous females, #6955–6957, 1 macropterous female, #6958): “MALAYSIA: Sabah (Borneo)\ 34 km NE of Kota Belud\ CL 2033, 5. VIII.1985\ leg. J.T. & D.A. Polhemus”, paratypes (2 apterous females, #6959, #6960): “MALAYSIA: Sabah\ Danum Valley, Sapat\ Kalisan, 12.2.1997\ leg. H. Zettel (15)”; paratype (1 apterous male, #6961): “MALAYSIA: Sabah\ Danum Valley, Palum\ Tambun, 7.–12.2.1997\ leg. Zettel & al. P90”; paratype (1 apterous female, #6962): “MALAYSIA: Sabah\ Danum Valley, Palum\ Tambun, 7.–12.2.1997\ leg. Zettel & al. P87”.

### *Ventidius xiphibion* CHEN & NIESER, 1992

*Ventidius xiphibion* CHEN & NIESER, 1992: 156. – Type locality: Indonesia, Sulawesi Tenggara, 8 km E Sungai Sampara along road Kendari – Wawotobi; holotype in RMHN. – Type region: Indonesia, Sulawesi Utara and Pulau Buton.

**Type material. Paratypes** (2 apterous males, #15115, 15116; 2 apterous females, #15117, 15118): “INDONESIA: Sulawesi Tenggara\ 8 km E Sungai Sampara\ along road Kendari – Wawotobi\ N8911, 22.II.1989, leg. Nieser”; paratypes (2 apterous males, #15119, 15120; 2 apterous females, #15121, 15122): “INDONESIEN: Sulawesi\ Tenggara, Tamborasi\ 1.3.1989\ leg.N.Nieser (N8925)”.

### *Ventidius yangae* CHEN & ZETTEL, 1999 (Fig. 87)

*Ventidius* (*Ventidiopsis*) *yangae* CHEN & ZETTEL, 1999a: 203. – Type locality: Malaysia (East), Sabah, Danum Valley, Palum Tambun; holotype in BUMS. – Type region: Malaysia (East), Sabah, Danum Valley.

**Type material. Paratypes** (1 apterous female, #22141; 1 apterous male, #22142): “MALAYSIA: Sabah\ Danum Valley, Palum\ Tambun, 7.–12.2.1997\ leg. Zettel & al. P90”; paratypes (2 apterous males, #22143, 22144): “MALAYSIA: Sabah\ Danum Valley, Segama river\ “Beach”, 4.2.1997\ leg. H. Zettel (10)”; paratype (1 apterous female, #22145): “MALAYSIA: Sabah\ Danum Valley, Segama\ River 2.2.1997\ leg. H. Zettel (1)”; paratypes (2 apterous females, #22146, 22148; 2 apterous males, #22147, 22149): “MALAYSIA: Sabah\ Danum Valley, Sapati\ Kalisan, 12.2.1997\ leg. H. Zettel (15)”; paratype (1 apterous female, #22150): “MALAYSIA: Sabah\ Danum Valley, Palum\ Tambun, 7.–12.2.1997\ leg. Zettel & al. P46”; paratype (1 apterous male, #22151): “MALAYSIA: Sabah\ Danum Valley, Palum\ Tambun, 7.–12.2.1997\ leg. Zettel & al. P3”; paratype (1 apterous female, #22152): “MALAYSIA: Sabah\ Danum Valley, Palum\ Tambun, 7.–12.2.1997\ leg. Zettel & al. P61”; paratypes (1 apterous male, #22153, 1 apterous female, #22154): “MALAYSIA: Sabah\ Danum Valley, Palum\ Tambun, 7.–12.2.1997\ leg. Zettel & al. P9”; paratype (1 apterous male, #22155): “MALAYSIA: Sabah\ Danum Valley, Palum\ Tambun, 7.–12.2.1997\ leg. Zettel & al. P91”; paratype (1 apterous female, #22156): “MALAYSIA: Sabah\ Danum Valley, Palum\ Tambun, 7.–12.2.1997\ leg. Zettel & al. P77”; paratype (1 apterous female, #22157): “MALAYSIA: Sabah\ Danum Valley, Palum\ Tambun, 7.–12.2.1997\ leg. Zettel & al. P62”; paratype (1 apterous female, #22158): “MALAYSIA: Sabah\ Danum Valley, Palum\ Tambun, 7.–12.2.1997\ leg. Zettel & al. P73”; paratype (1 apterous female, #22159): “MALAYSIA: Sabah\ Danum Valley, Palum\ Tambun, 7.–12.2.1997\ leg. Zettel & al. P67”.

### Excluded species

#### *Limnogonus ignotus* DRAKE & HARRIS, 1934

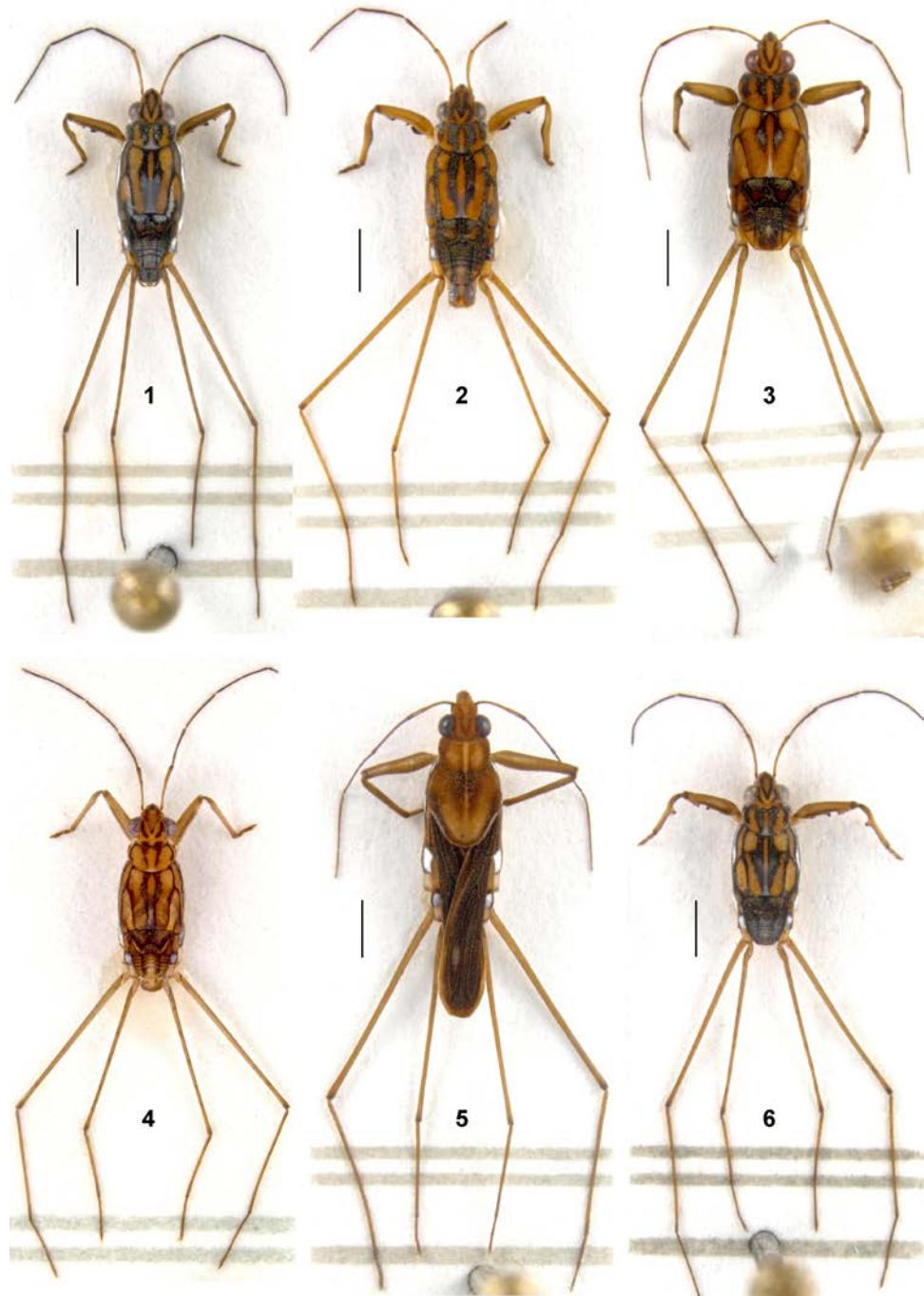
*Limnogonus ignotus* DRAKE & HARRIS, 1934: 205. – Type locality: Paraguay, Villa Rica; holotype in SEMC. – Type region: Paraguay, Bolivia, Guyana, Brazil, Argentina.

**Non-type specimen: “Paratype”** (macropterous female, #31457): “Chaco am\ Rio Negro”, “Reimoser\ Paraguay”.

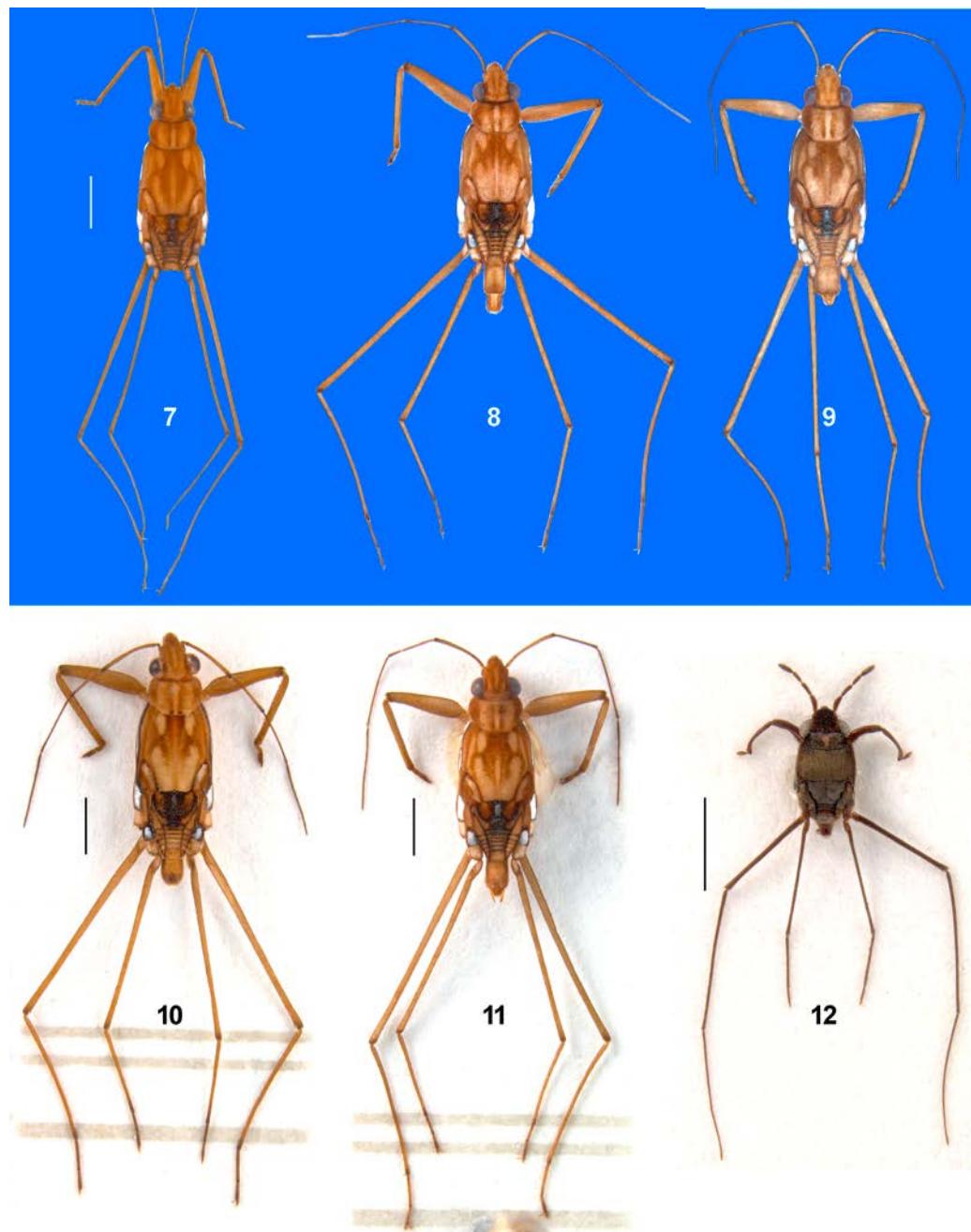
**Notes.** This specimen was labelled as a paratype by Drake, but it does not appear in the original description by DRAKE & HARRIS (1934); therefore, it is not a type.

### Acknowledgements

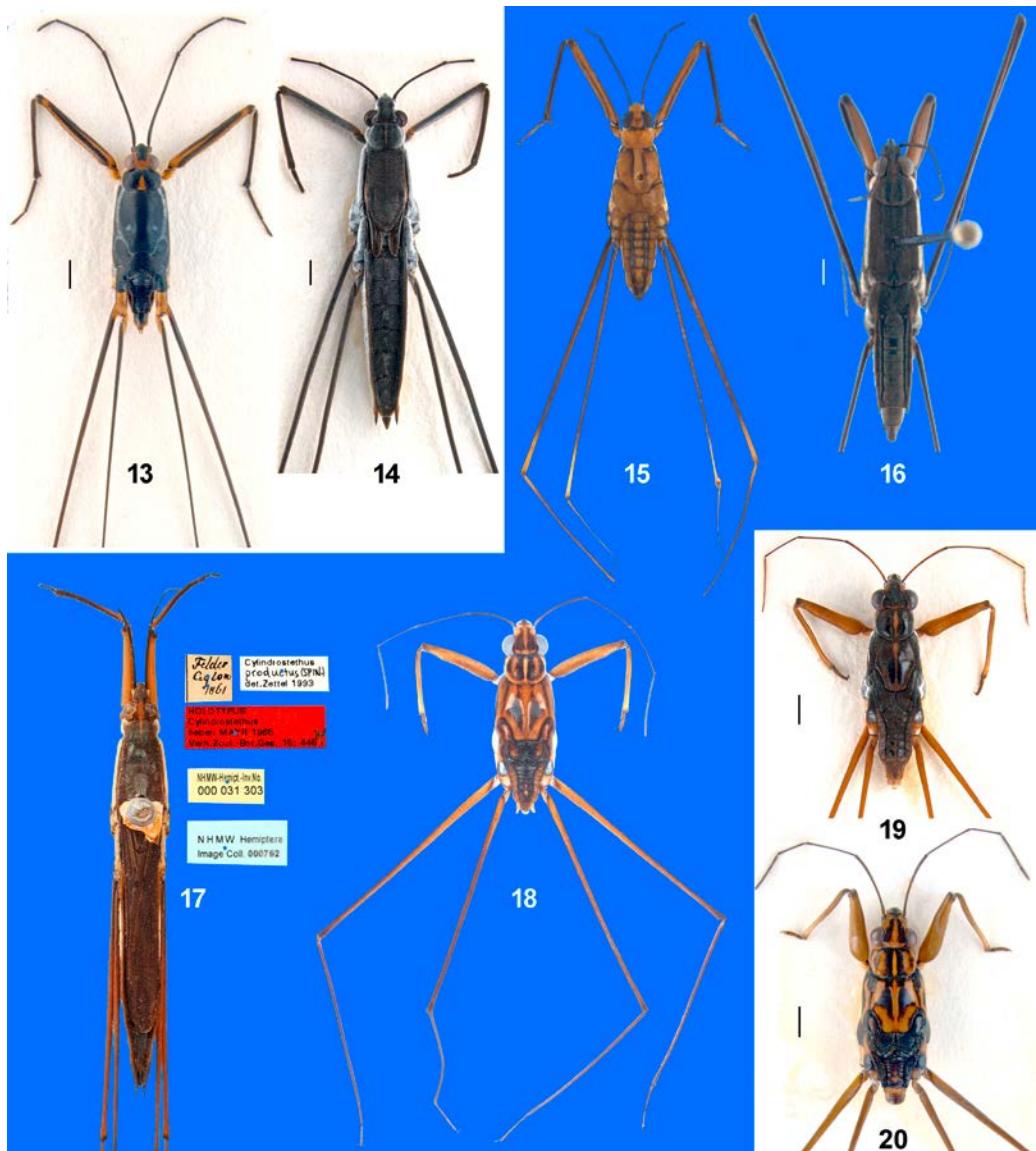
The Natural History Museum Vienna is thankful to all persons who enriched the Gerridae collection of NHMW by donations or exchange of type specimens, especially to Nils Møller Andersen†, Filippo Buzzetti, Ping-ping Chen, Carl J. Drake, Petr Kment, Nico Nieser, Dan A. Polhemus, John T. Polhemus†, Klaus Schönitzer, Tran Anh Duc, Vásárhelyi Tamás, and Yang Chang Man. We cordially thank Sabine Schoder (NHMW) for preparing Figure 80 and further assistance, and the two reviewers, Wolfgang Rabitsch and Tran Anh Duc, for valuable comments.



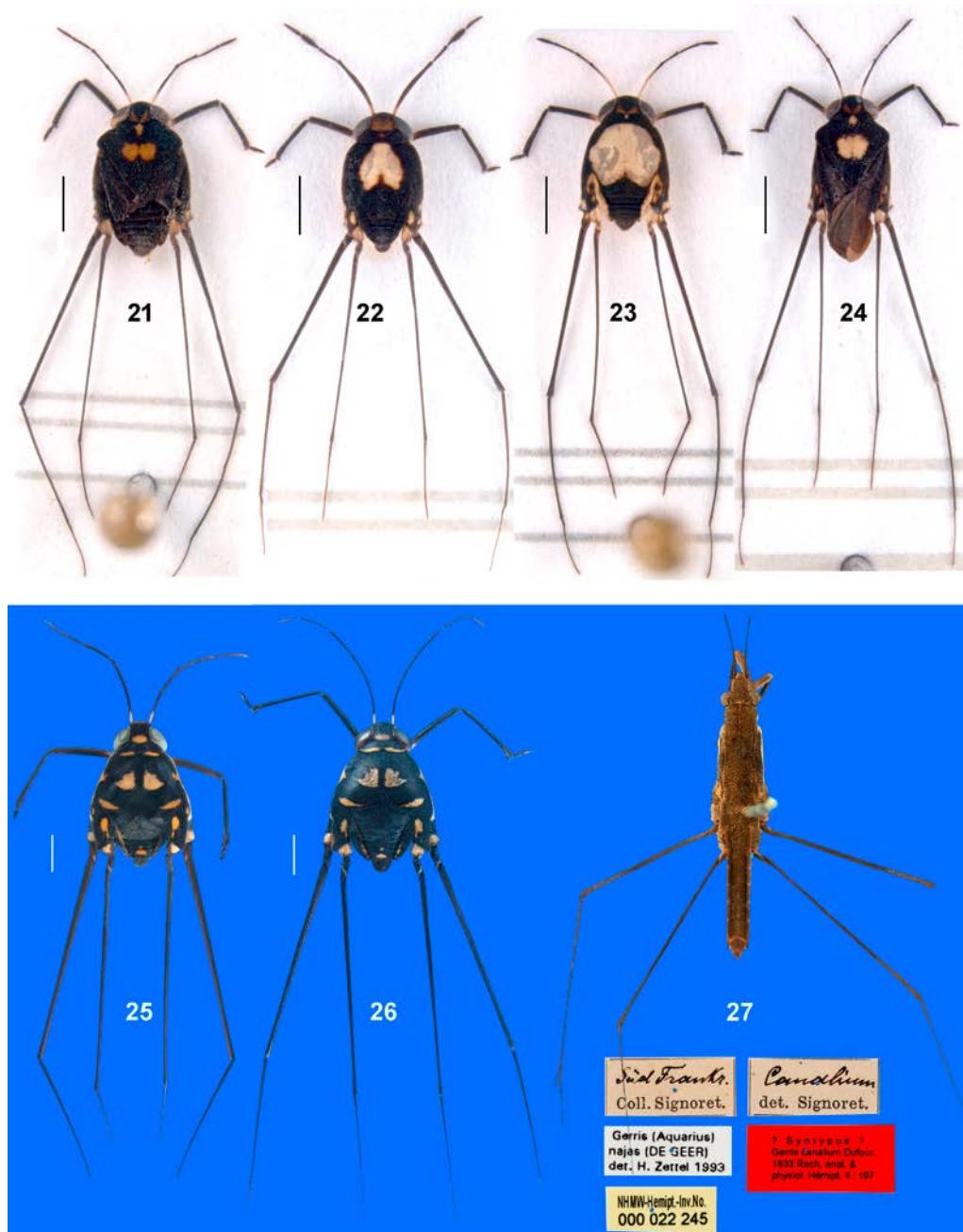
Figs 1–6: (1) Holotype (male, #6347) of *Amemboa aquafrigida*; (2) paratype (male, #6548) of *Amemboa intermedia*; (3) holotype (male, #7001) of *Amemboa laotica*; (4) holotype (male, #6498; BL = 3.2 mm) of *Amemboa mathildae*; (5) paratype (male, #8778) of *Amemboa pilifera*; (6) holotype (male, #6340) of *Amemboa schwendingeri*. Photos: 1–6: Alice Laciny.



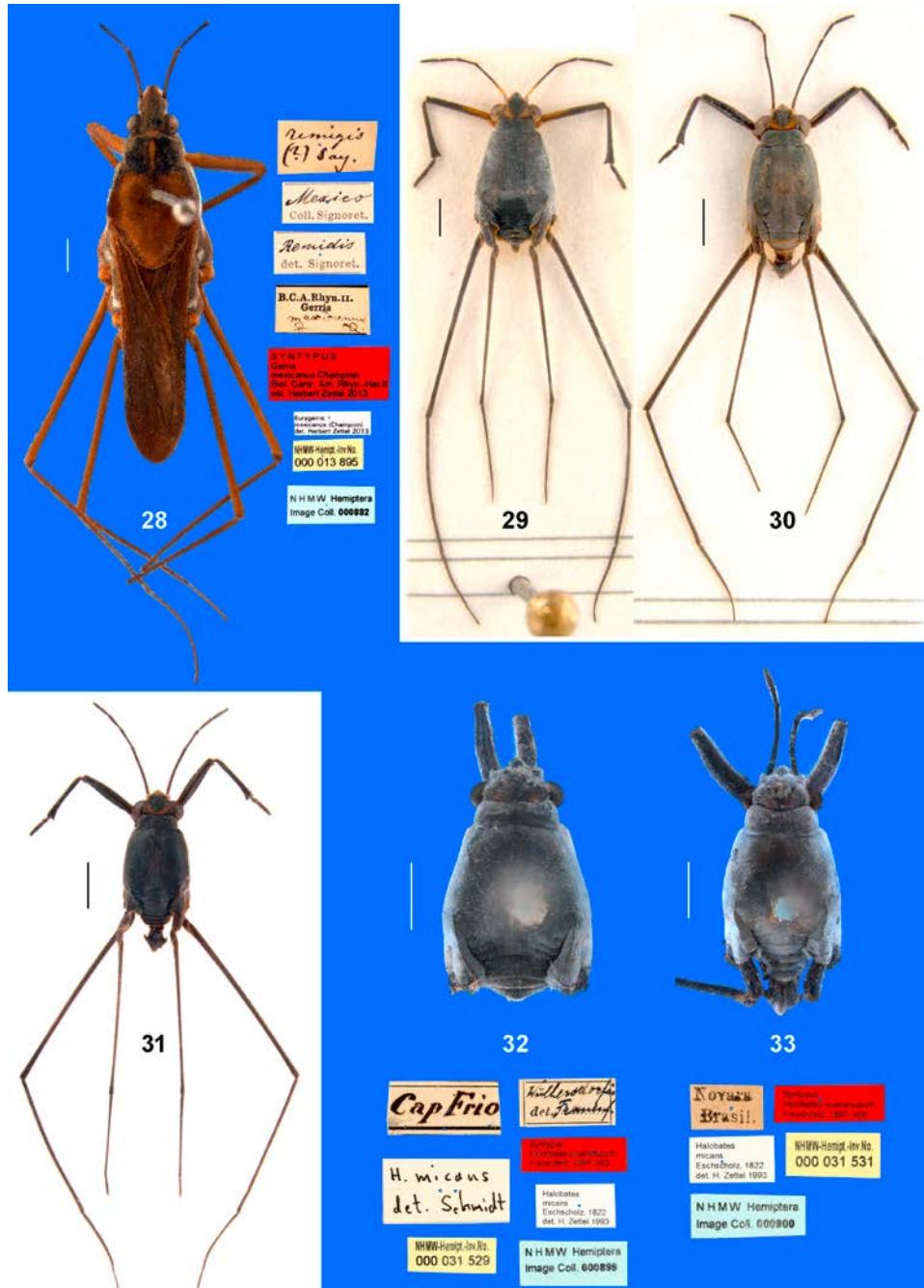
Figs 7–12: (7) Paratype (male, #8823) of *Amemboea vasarhelyii*; (8) paratype (male, #8515; BL = 4.3 mm) of *Amemboides falcatus*; (9) paratype (male, #8513; BL = 4.2 mm) of *Amemboides gladiolus*; (10) holotype (male, #8844) of *Amemboea velaris orientalis*; (11) paratype (male, #8516) of *Amemboea yunnana*; (12) paratype (male, #31300) of *Andersenella nilsi*. Photos: 7–9: Harald Bruckner; 10–12: Alice Laciny.



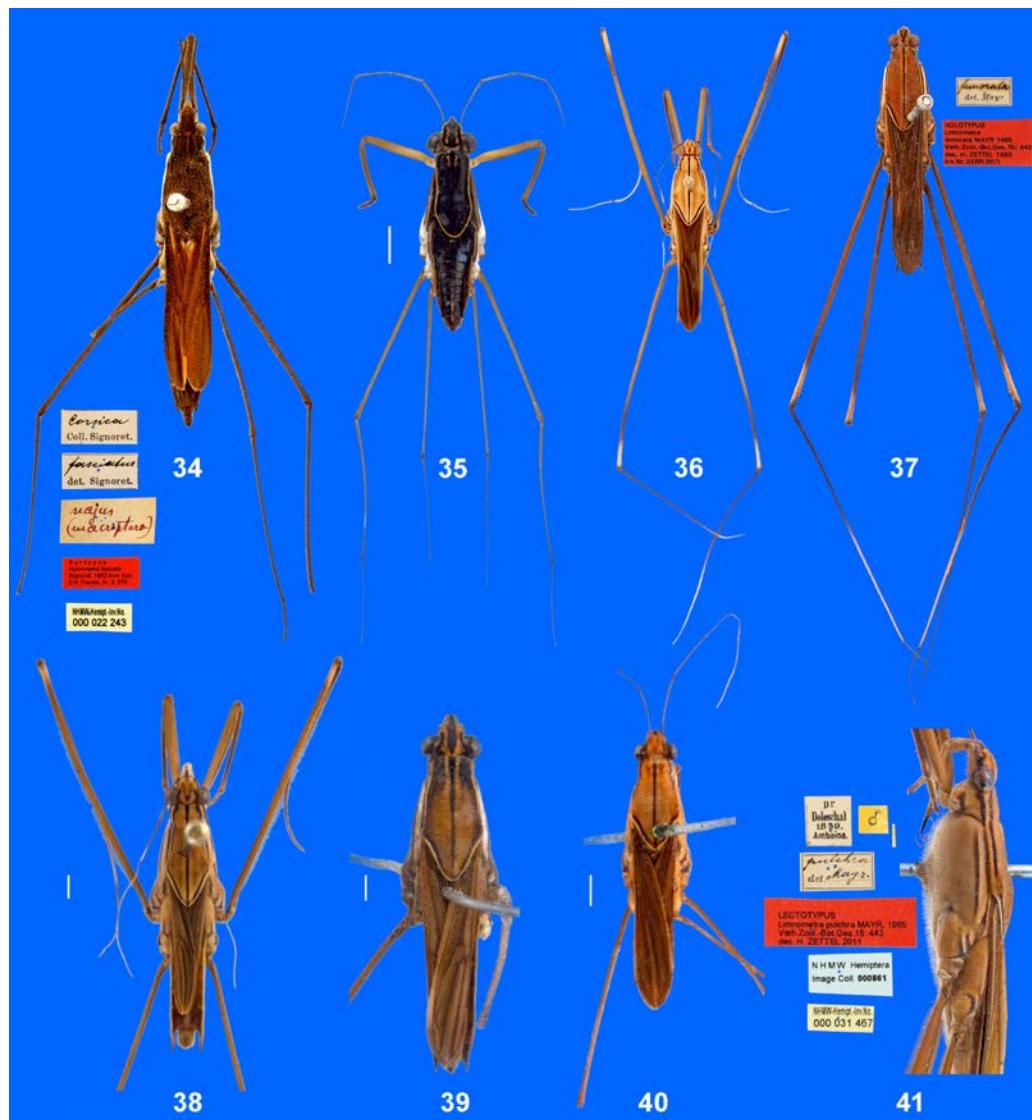
Figs 13–20: (13) Paratype (male, #11170) of *Andersenius dentifer*; (14) allotype (female, #6441) of *Aquarius philippinensis*; (15) holotype (female, #19379; BL = 8.4 mm) of *Archaeoptilomera kodadai*; (16) paratype (male, #31304) of *Cylindrostethus brachyakanthinos*; (17) holotype (female, #31303; BL = 26 mm) of *Cylindrostethus fieberi*; (18) paratype (male, #6446; BL = 5.1 mm) of *Eotrechus vietnamensis*; (19) paratype (male, #6449) of *Eotrechus luuae*; (20) holotype (male, #6444) of *Eotrechus pilicaudatus*. Photos: 13, 14, 16, 17, 19, 20: Alice Laciny; 15, 18: Harald Bruckner.



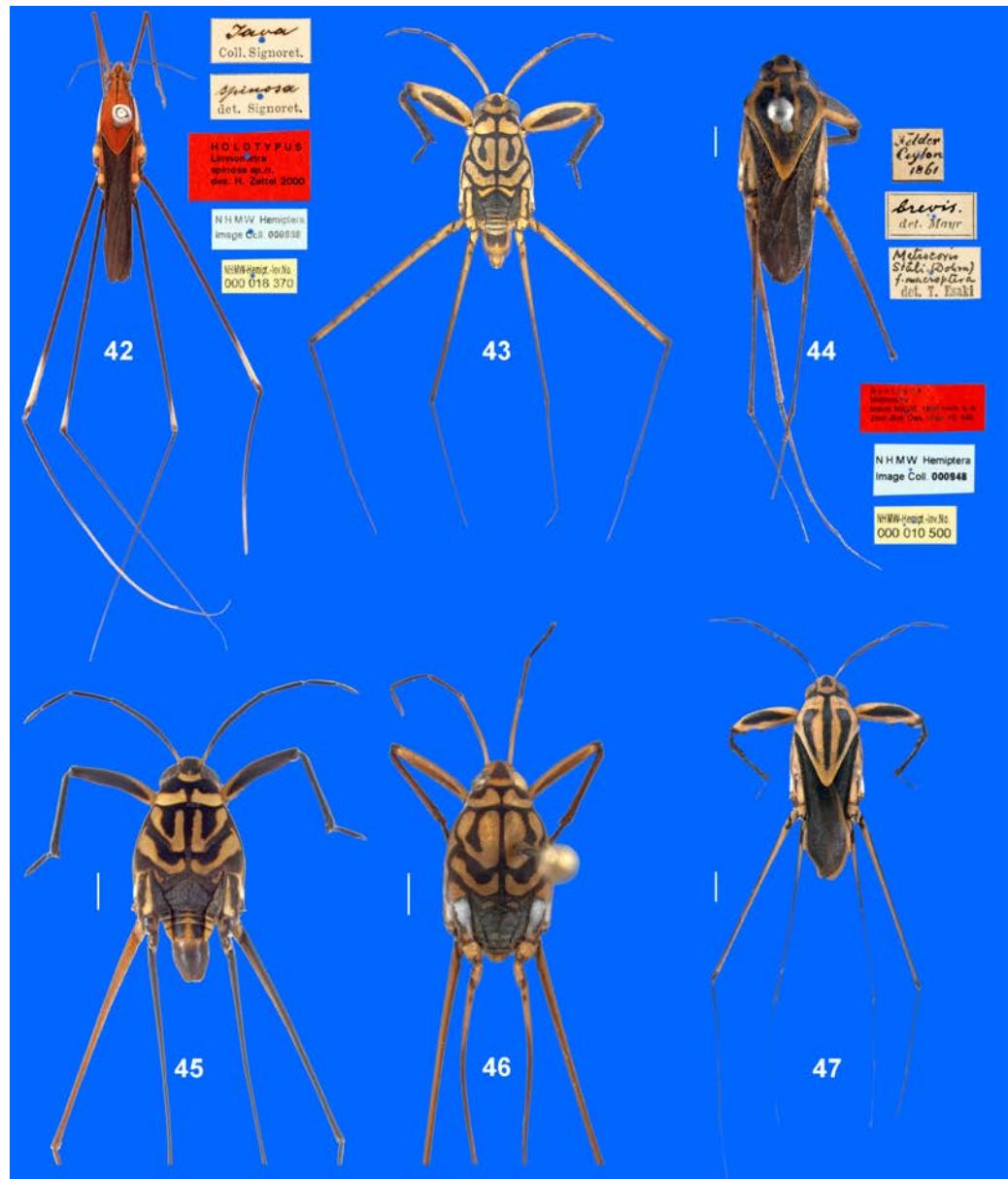
Figs 21–27: (21) Paratype (female, #26086) of *Esakia borneensis*; (22) paratype (male, #4622) of *Esakia ceniae*; (23) allotype (female, #9686) of *Esakia latonota*; (24) paratype (female, #4619) of *Esakia palawanensis*; (25) holotype (male, #5303) of *Eurymetra papaceki* (from ZETTEL 2020); (26) holotype (male, #5292) of *Eurymetra santamariae* (from ZETTEL 2020); (27) syntype (?) (male, #22245; BL = 18 mm) of *Gerris canalium*. Photos: 21–24, 27: Alice Laciny; 25, 26: Harald Bruckner.



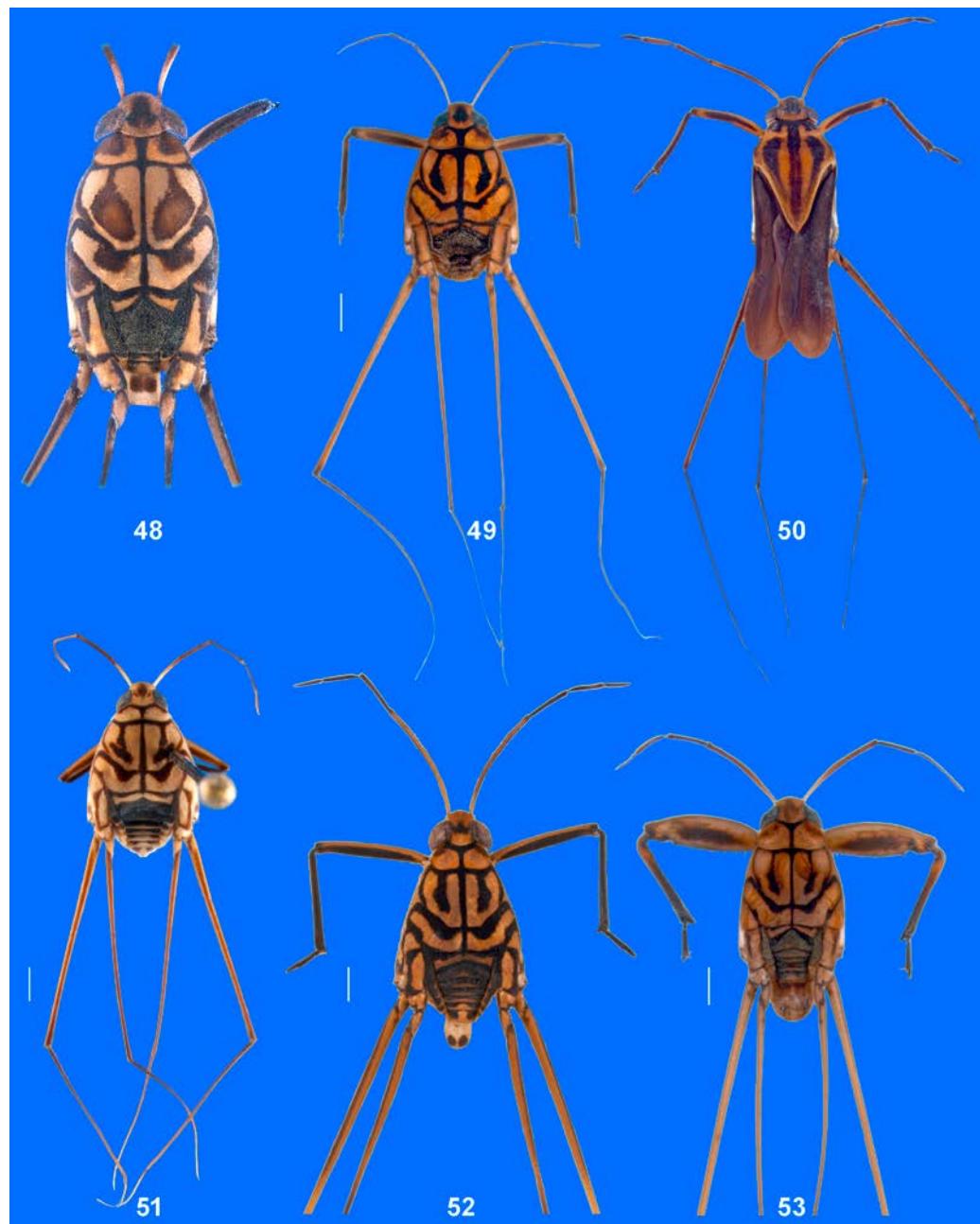
Figs 28–33: (28) Syntype (female, #13895) of *Gerris mexicanus*; (29) paratype (female, #5638) of *Halobates dianae*; (30) paratype (male, #5532) of *Halobates liaoii*; (31) paratype (male, #31445) of *Halobates pangantihoni* (from ZETTEL & LACINY 2021a); (32) syntype (female, #31529) of *Halobates wuellerstorffi*; (33) syntype (male, #31531) of *Halobates wuellerstorffi*. Photos: 28–31: Alice Laciny; 32, 33: Harald Bruckner.



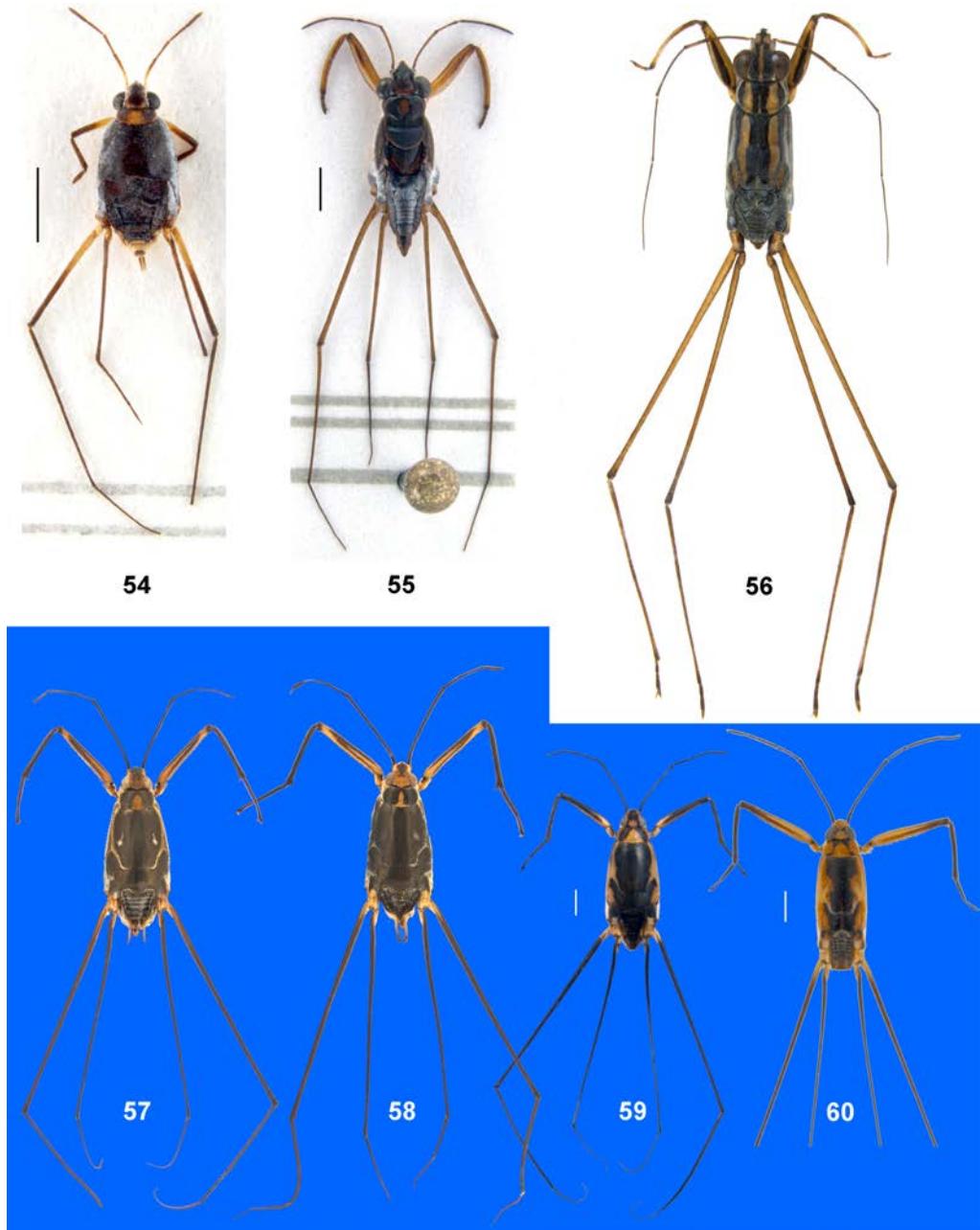
Figs 34–41: (34) Syntype (female, #22243; BL = 11.8 mm) of *Hydrometra fasciata*; (35) paratype (male, #6798) of *Limnogonus anderseni*; (36) paratype (male, #31470; BL = 18 mm) of *Limnometra arachnis*; (37) holotype (male, #31466; BL = 21 mm) of *Limnometra femorata*; (38) paratype (male, #31458) of *Limnometra genitalis*; (39) holotype (female, #31465) of *Limnometra inermis*; (40) holotype (male, #18379) of *Limnometra minuta*; (41) lectotype (male; #31467; BL = 16 mm) of *Limnometra pulchra* (from ZETTEL 2011c). Photos: 34–40: Alice Laciny; 41: Harald Bruckner.



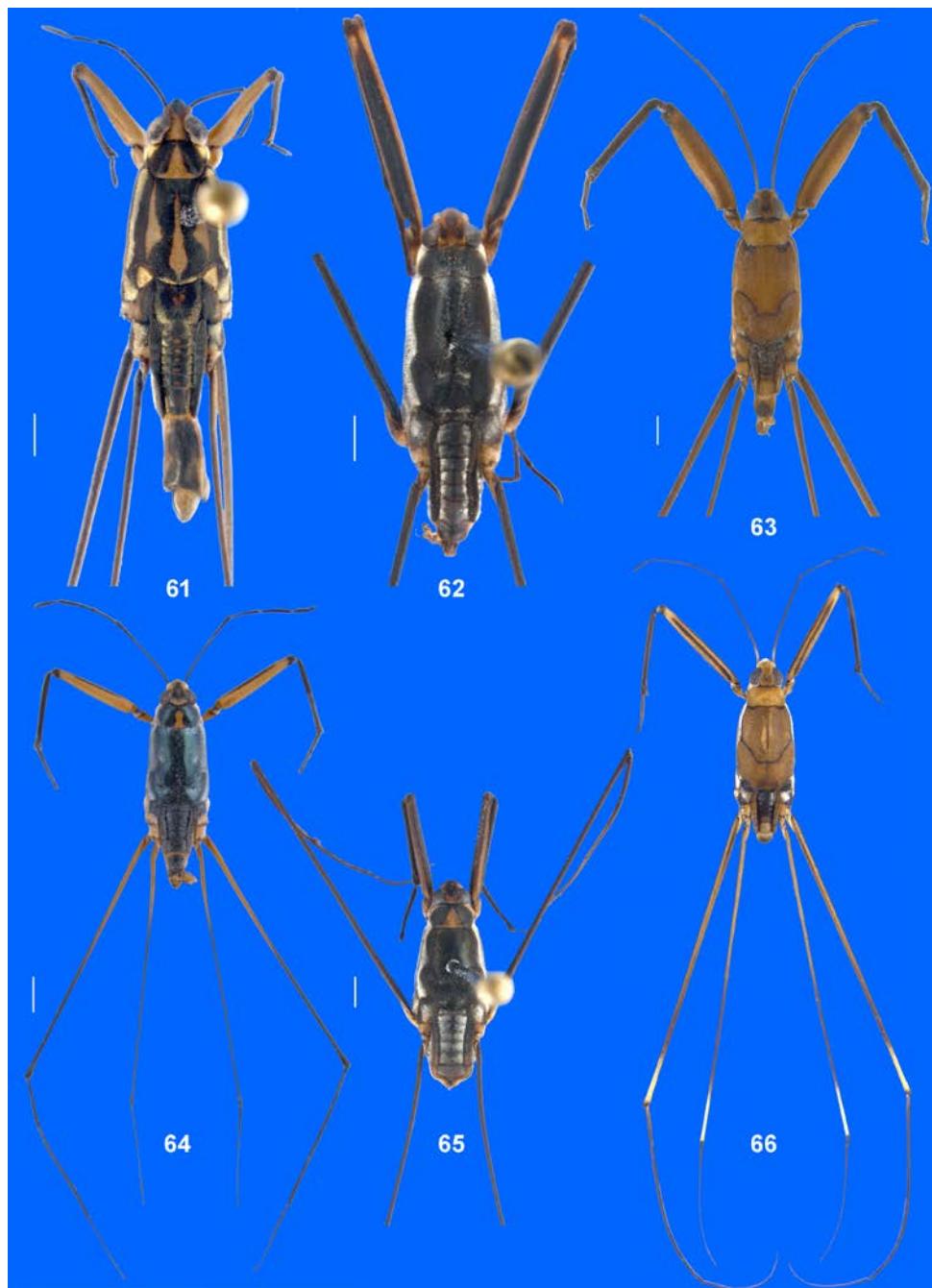
Figs 42–47: (42) Holotype (male, #18370; BL = 23 mm) of *Limnometra spinosa*; (43) holotype (male, #10238; BL = 6.2 mm) of *Metrocoris atlas* (from ZETTEL 2011a); (44) syntype (male, #10500) of *Metrocoris brevis*; (45) holotype (male, #4514) of *Metrocoris dembickyi*; (46) paratype (female, #31118) of *Metrocoris monticola*; (47) paratype (male, #10308) of *Metrocoris nieseri*. Photos: 42, 44–46: Alice Laciny; 43, 47: Harald Bruckner.



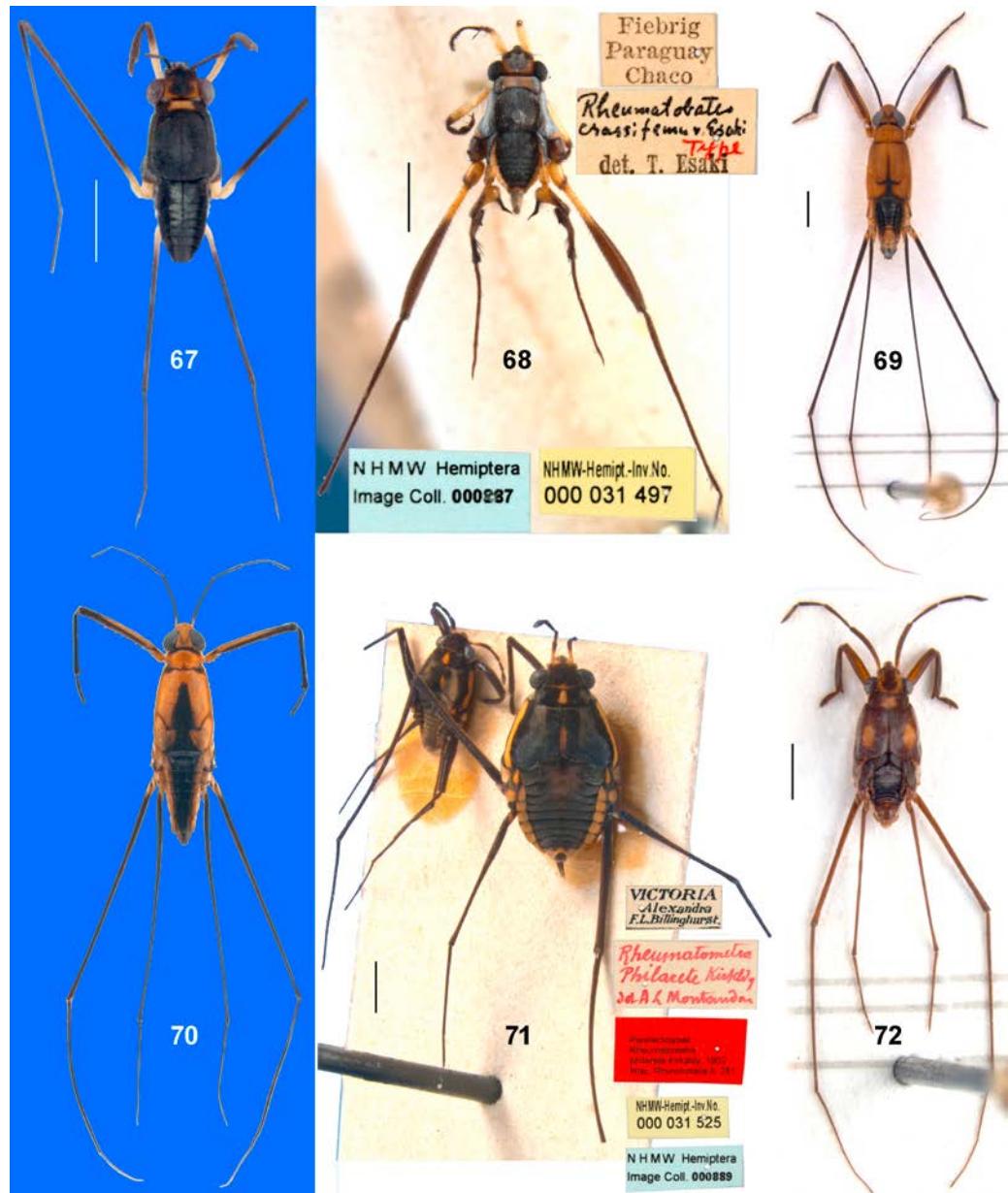
Figs 48–53: (48) Holotype (male, #9001; BL = 5.2 mm) of *Metrocoris pardus* (from ZETTEL 2011b); (49) paratype (female, #10235) of *Metrocoris quynhi*; (50) holotype (male, #8993; BL (incl. wings) = 7.2 mm) of *Metrocoris schillhammeri*; (51) paratype (female, #31117) of *Metrocoris sicilis*; (52) paratype (male, #8995) of *Metrocoris triangulatus*; (53) paratype (male, #10382) of *Metrocoris vietnamensis*. Photos: 48: Harald Bruckner; 49–53: Alice Laciny.



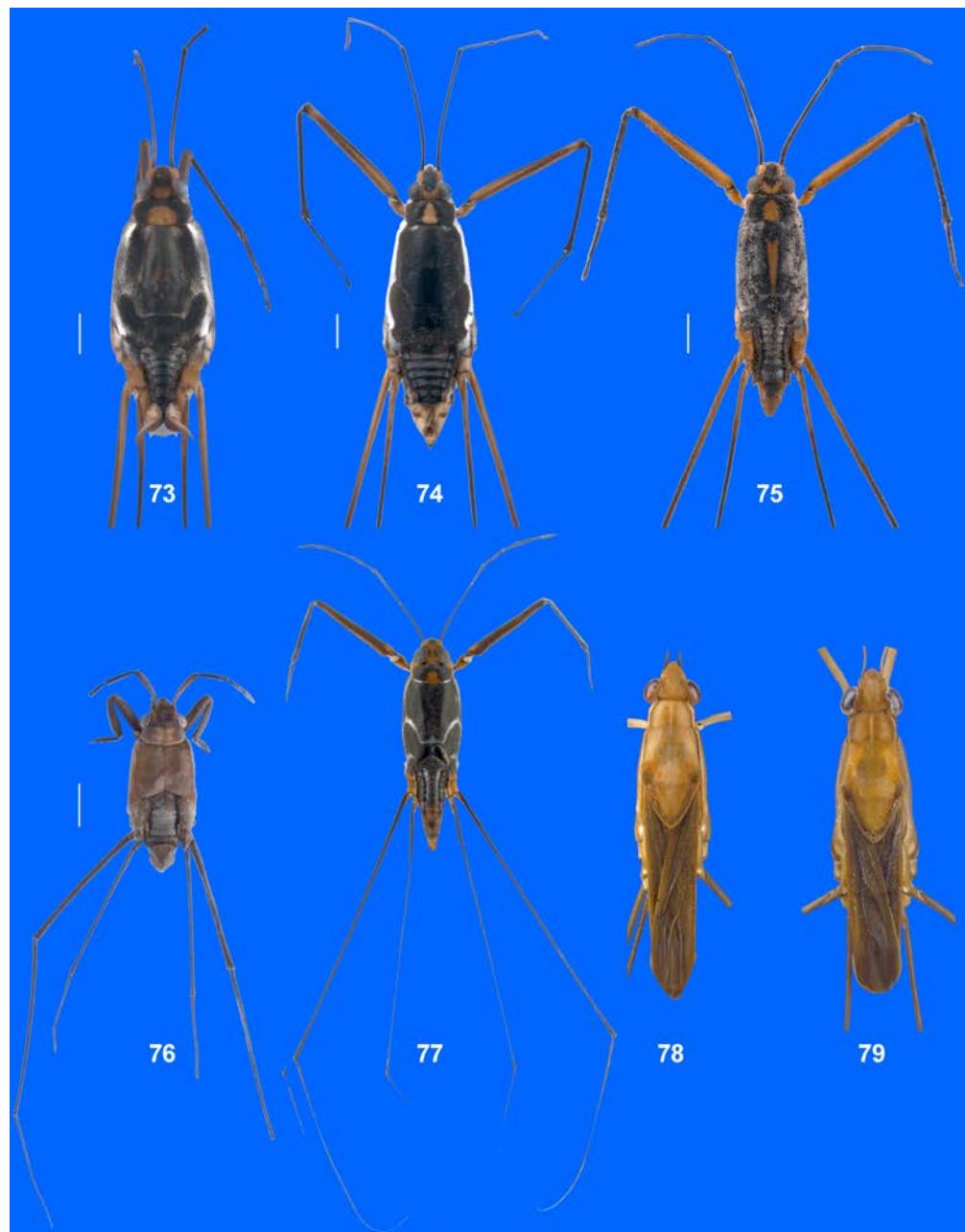
Figs 54–60: (54) Paratype (male, #31315) of *Naboandelus bergevini orientalis*; (55) paratype (male, #31486) of *Neogerris philippinensis*; (56) holotype (male, #6484; BL = 3.6 mm) of *Onychotrechus jaechi* (from ZETTEL & TRAN 2007); (57) paratype (female, #11226; BL = 7.0 mm) of *Pleciobates pacholatkoi*; (58) paratype (female, #11243; BL = 6.9 mm) of *Pleciobates vietnamensis*; (59) holotype (female, #31308) of *Plecigonous narumonae* (from ZETTEL & LACINY 2021b); (60) paratype (male, #11161) of *Plecigonous wongsirii*. Photos: 54, 55, 59, 60: Alice Laciny; 56–58: Harald Bruckner.



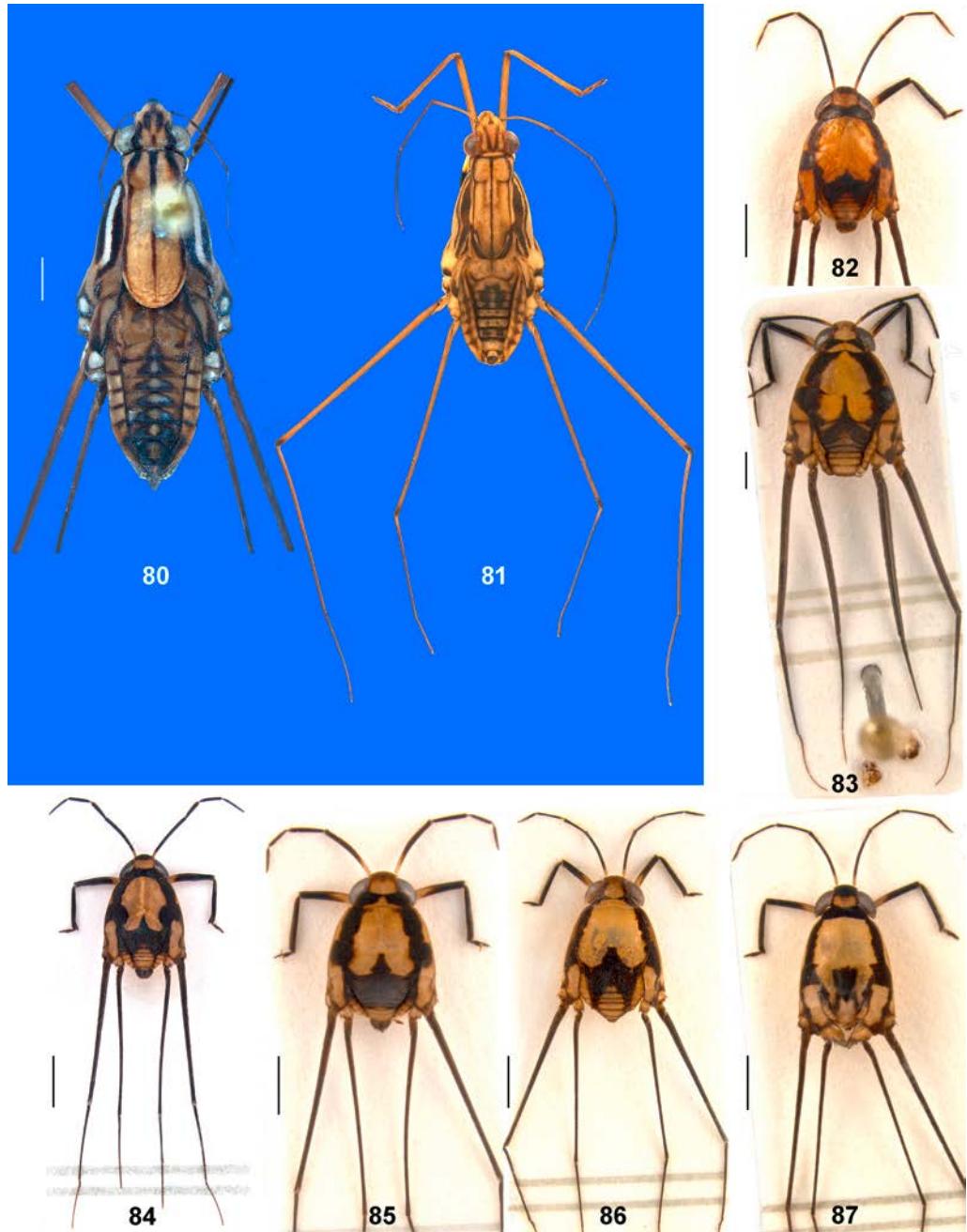
Figs 61–66: (61) Paratype (male, #10136) of *Potamobates shuar*; (62) paratype (male, #4925) of *Potamometropsis anomalis*; (63) holotype (male, #11126) of *Potamometropsis fischeri*; (64) paratype (male, 19305) of *Potamometropsis sumaldei*; (65) paratype (female, #4971) of *Potamometropsis wernerii aberrans*; (66) paratype (male, #19367; BL = 6.2 mm) of *Ptilomerella akekawati*. Photos: 61–65: Alice Laciny; 66: Harald Bruckner.



Figs 67–72: (67) Holotype (male, #7344) of *Rhagadotarsus palawanensis*; (68) syntype (male, #31497) of *Rheumatobates crassifemur*; (69) paratype (male, #6293) of *Rheumatogonus seyferti*; (70) paratype (female, #21785; BL=6.0 mm) of *Rheumatogonus vietnamensis*; (71) Paralectotypes (male (left) and female, #31525) of *Rheumatometra philarete*; (72) paratype (male, #12559) of *Rheumatometroides serena*. Photos: 67–69, 71, 72: Alice Laciny; 70: Harald Bruckner.



Figs 73–79: (73) Paratype (female, #12647) of *Rhyacobates anderseni*; (74) paratype (female, #31114) of *Rhyacobates constrictus*; (75) paratype (male, #12644) of *Rhyacobates malaisei*; (76) paratype (female, #5520) of *Stenobatopsis coronensis*; (77) paratype (male, #12657; BL = 5.8 mm) of *Stridulobates anderseni*; (78) paratype (male, #10188; BL = 8.4 mm) of *Tachygerris hecherae* (from BUZZETTI & ZETTEL 2011); (79) holotype (male, #10179; BL = 6.0 mm) of *Tachygerris tuberculatus* (from BUZZETTI & ZETTEL 2011). Photos: 73–77: Alice Laciny; 78, 79: Harald Bruckner.



Figs 80–87: (80) paratype (female, #31511) of *Tenagogonus australiensis*; (81) paratype (female, #17490; BL = 5.4 mm) of *Tenagogonus curvatus*; (82) paratype (male, #4821) of *Ventidius heissi*; (83) paratype (male, #6941) of *Ventidius longitarsus*; (84) paratype (male, #22170) of *Ventidius nieseri*; (85) paratype (male, #4837) of *Ventidius pilosus*; (86) paratype (female, #6959) of *Ventidius polhemorum*; (87) paratype (female, #22146) of *Ventidius yangae*. Photos: 80: Sabine Schoder; 81, 84: Harald Bruckner; 82, 83, 85–87: Alice Laciny.

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