

RESEARCH PAPER

A revision of the types of Heteroptera species described by Géza Horváth based on specimens from collections of Ladislav Duda and Emil Holub

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Abstract. A recent cataloguing of the Heteroptera (Hemiptera) types held in the collection of National Museum, Prague (NMPC), revealed several specimens originating from the collection of Czech collectors Emil Holub and Ladislav Duda, being part of the same series as types described by Géza Horváth in his paper ‘*Hemiptera nova africana*’ and until now believed to be deposited exclusively in the Hungarian Natural History Museum, Budapest (HNHM). The publication date of that paper is fixed as March 20, 1893, affecting these taxa: Reduviidae: *Coranopsis* Horváth, 1893, *Coranopsis vittata* Horváth, 1893, *Cosmolestes fulvus* Horváth, 1893, *Edocla albipennis* Horváth, 1893, *Harpactor* (*Diphymus*) *dudae* Horváth, 1893, *Oncocephalus angustatus* Horváth, 1893, *Phonoctonus validus* Horváth, 1893, *Reduvius reuteri* Horváth, 1893, *Staccia inermis* Horváth, 1893; Blissidae: *Ischnocoridea* Horváth, 1893, *Ischnocoridea elegans* Horváth, 1893; Rhyparochromidae: *Aphanus* (*Graptopeltus*) *dilutus* Horváth, 1893 [= *Naphiellus dilutus* (Horváth, 1893)], *Pamera bergrothi* Horváth, 1893 [= *Horridipamera bergrothi* (Horváth, 1893)]; Coreidae: *Homoeocerus fuscicornis* Horváth, 1893, *Hypsilonotus balteatus* Horváth, 1893 [= *Hypsilonotus interruptus* Hahn, 1833]; Plataspidae: *Niamia* Horváth, 1893, *Niamia angulosa* Horváth, 1893; Scutelleridae: *Cantao africanus* Horváth, 1893, *Cryptacrus princeps* Horváth, 1893 [= *Cryptacrus comes comes* (Fabricius, 1803)], *Polytodes* Horváth, 1893 [= *Polytes* Stål, 1867], *Polytodes ochraceus* Horváth, 1893 [= *Polytes tigrinus* (Vollenhoven, 1868)]; Dinidoridae: *Dinidor vicarius* Horváth, 1893; Pentatomidae: *Caura modesta* Horváth, 1893, *Diploxys* (*Paracoponia*) *holubi* Horváth, 1893 [= *Coponia holubi* (Horváth, 1893)], *Paracoponia* Horváth, 1893 [= *Coponia* Stål, 1865], *Mecosoma spinosum* Horváth, 1893 [= *Macrorhaphis acuta* Dallas, 1851], *Menida distanti* Horváth, 1893 [= *Menida transversa transversa* (Signoret, 1861)], and *Stollia crucifera* Horváth, 1893. Only the following type specimens bearing Horváth’s original type label and deposited in HNHM are recognized and their status elucidated: *Coranopsis vittata* (1 syntype), *Cosmolestes fulvus* (holotype), *Edocla albipennis* (holotype), *Harpactor* (*Diphymus*) *dudae* (1 syntype), *Oncocephalus angustatus* (1 syntype), *Reduvius reuteri* (1 syntype), *Homoeocerus fuscicornis* (1 syntype), *Hypsilonotus balteatus* (1 syntype), *Niamia angulosa* (1 syntype), *Cryptacrus princeps* (1 syntype), *Polytodes ochraceus* (holotype), *Dinidor vicarius* (holotype), *Caura modesta* (lectotype), *Diploxys* (*Paracoponia*) *holubi* (lectotype), and *Menida distanti* (1 syntype). The syntype(s) of *Cantao africanus* and holotype of *Stollia crucifera* could not be located; a specimen in NMPC presumably from the same series is designated here as neotype of *Stollia crucifera*. Based on the examination of the type material the following subjective synonymies are proposed: *Neotrichedocla quadrisignata* (Stål, 1855) = *Reduvius reuteri* Horváth, 1893, confirmed synonymy; *Dinidor impicticollis* Stål, 1870 = *D. vicarius* Horváth, 1893, syn. nov.; *Parantestia* (*Chromantestia*) *cincticollis* (Schaum, 1853) = *Parantestia* (*Chromantestia*) *modesta* (Horváth, 1893), syn. nov. = *Parantestia* (*Chromantestia*) *cincticollis* var. *bergrothiana* Kirkaldy, 1909, syn. nov.; *Cosmopepla cruciaria* Stål, 1872 = *Stollia crucifera* Horváth, 1893, syn. nov. *Rhynocoris katangensis* Schouteden, 1929 (Reduviidae), erroneously considered as

junior synonym of *Rhynocoris dudae* by MALDONADO CAPRILES (1990), must be considered valid species. Type locality of the species described based on material collected by Emil Holub is discussed. New records are provided for *Edocla albipennis* (Namibia), *Homoeocerus fuscicornis* (Angola) and *Parantestia cincticollis* (Republic of the Congo).

Key words. Heteroptera, Coreidae, Dinidoridae, Pentatomidae, Plataspidae, Reduviidae, neotype, new synonym, taxonomy, type material, type depository, Afrotropical Region, Neotropical Region

ZooBank: <http://zoobank.org/urn:lsid:zoobank.org:pub:884E98BE-F098-47AC-99BF-A68AC8B197E3>

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Introduction

The type specimens preserved in the collections of the National Museum in Prague, Czech Republic (NMPC) are currently being inventoried and catalogued; taxa completed and published include certain families of Coleoptera (e.g., BEZDĚK & HÁJEK 2009, BEZDĚK et al. 2017, MACHÁČKOVÁ et al. 2017), Diptera (TKOČ et al. 2014), Hymenoptera (BEZDĚČKOVÁ et al. 2017), orthopteroid orders (MACHÁČKOVÁ & FIKÁČEK 2014) as well as Hemiptera (KMENT & KOLÍNOVÁ 2013, KMENT et al. 2015, MALENOVSKÝ et al. 2016). During the survey of the Heteroptera collection we found several specimens originating from the collections of the Czech scientists Emil Holub and Ladislav Duda, apparently originating from the same lot of specimens as the types of taxa described by renowned Hungarian entomologist Géza Horváth in his paper '*Hemiptera nova africana*' (HORVÁTH 1893). Discovery of these specimens initiated a critical revision of the type specimens found both in NMPC and the Hungarian Natural History Museum in Budapest (HNHM). In the present paper, the type status of the examined specimens is discussed and new synonymies are proposed. Additionally, the date of the publication of the paper by HORVÁTH (1893) and the probable geographic origin of the specimens collected by E. Holub in 'Africa centralis' are elucidated.

Géza Horváth (23rd November 1847–8th September 1937), an eminent hemipterist at the juncture of the 19th and 20th centuries, spent most of his long career in the Zoological Department of the Hungarian National Museum (now Hungarian Natural History Museum) in Budapest, Hungary (1873–1874 and 1895–1924 as employee, 1924–1937 as emeritus). For details on his life and bibliography see CHINA (1938), CSIKI (1944), VIDLIČKA & FÜRY (2013) and DEBRECZENI-DROPPÁN (2016). Horváth's extensive collection of Hemiptera is now preserved in the HNHM, but he also worked on specimens provided by his contemporaries and such materials are now scattered throughout collections of several museums. The case discussed in the present paper treats specimens sent to him for description by the Czech hemipterist Ladislav Duda.

Ladislav Duda (31st March 1854–28th August 1895) was a secondary school teacher and along with Franz Xaver Fieber and Friedrich Anton Kolenati one of the founders of Heteroptera research in the present territory of the Czech Republic. His main achievement was the compilation of the first check-lists of the Hemiptera of Bohemia (DUDA

1884, 1885–1886, 1892a,b). After his untimely death, his collection was donated by his sister in 1896 to the National Museum in Prague (KOLEŠKA 1980, KMENT & KOLÍNOVÁ 2013).

Emil Holub (7th October 1847–21st February 1902) was a Czech physician, explorer, naturalist, and ethnographer (e.g., ŠÁMAL 2013). He conducted two African expeditions. During his first journey (1872–1879) he served as physician in South Africa, mostly in the area of diamond fields around present Kimberley, from where he made three collecting trips visiting the areas of the current South Africa, Botswana, Zimbabwe, and Zambia, reaching the Zambezi River in the north (Figs 1–3). His second journey (1883–1887), in which he was accompanied by his wife Rosa and six companions, set out from Cape Town with the ambitious goal of crossing Africa from the south to the north. However, the expedition reached only the territory of Kafue River in the present-day Zambia, where one of his companions was killed and the rest had to flee south due to the hostility of the local Ila people (Fig. 4). He provided detailed accounts of his first (HOLUB 1880a,b, 1881a,b,c) and second (HOLUB 1890a,b) journey in his books published in Czech and German and translated into several other languages. He published also several original contributions to natural history, for example to the birds of South Africa (HOLUB & VON PELZEN 1882) or the fossils of the Uitenhage formation in South Africa (HOLUB & NEUMAYR 1881). Holub's contributions to vertebrate zoology were summarized by MLÍKOVSKÝ et al. (2011). Holub collected an unprecedented material composed of several tens of thousands of objects of ethnography, archaeology, anthropology, botany, zoology, mineralogy and palaeontology. Being too extensive for any single museum of that time, he divided his collection and donated or sold its parts to 467 different institutions including national and local museums, universities and schools (ŽELÍZKO 1931, JIROUŠKOVÁ et al. 2011, ŠÁMAL 2013). The insects brought from his journeys are estimated to over 46,000 specimens (first journey – over 18,000; second journey – ca. 28,000); a big part of them was acquired by the Prague entomologist Otakar Nickerl Sr. (KOLEŠKA 1982), who collaborated with Emil Holub on the identification of his beetle collection and preparation of his public exhibitions in Prague and Vienna (ŠÁMAL 2013).

The Nickerls collection, i.e., the joint collection of **František Antonín Nickerl** (lepidopterist, 1813–1871), **Otakar Nickerl Sr.** (lepidopterist and coleopterist, 1838–

1920) and **Otakar Nickerl Jr.** (heteropterist, 1873–1904) (for biographies see KOLEŠKA 1988) arrived at the National Museum in Prague as a legacy in 1920 (VÁVRA 1923).

Material and methods

Digital photographs were taken using a Nikon D90 camera equipped with an AF-S Micro Nikkor 60mm f/2.8G ED lens. Uncoated specimens were examined by a Hitachi S-3700N environmental scanning electron microscope at the Department of Palaeontology, National Museum, Prague.

For the type specimens, the exact label data are cited, further specified by our remarks given in square brackets: [p] – preceding text is printed on the label attached to the specimen, [hw] – preceding text is handwritten on the label; unless otherwise indicated, the data are written/printed in black ink on a white label. Separate labels are indicated by a double slash ‘//’ and lines within each label are separated by a slash ‘/’.

The material examined is deposited in the following collections:

ACPI	Attilio Carapezza collection, Palermo, Italy;
HNHM	Hungarian Natural History Museum, Budapest, Hungary;
ISNB	Institut Royal des Sciences Naturelles, Bruxelles, Belgium;
MMBC	Moravian Museum, Brno, Czech Republic;
MNHN	Musée National d'Histoire Naturelle, Paris, France;
NHMW	Naturhistorisches Museum, Vienna, Austria;
NHRS	Naturhistoriska Riksmuseet, Stockholm, Sweden;
NMPC	National Museum, Prague, Czech Republic;
ZJPC	Zdeněk Jindra collection, Prague, Czech Republic.

Results and discussions

Publication date of Horváth's ‘*Hemiptera nova africana*’

Horváth's paper ‘*Hemiptera nova africana*’ was published in volume 4 of the year 1892 of the journal *Természeti Füzetek*. The paper was treated as published in 1892 by a number of subsequent authors, e.g. LETHIERRY & SEVERIN (1893, 1894, 1896), SCHOUTEDEN (1903, 1904a, 1913a), KIRKALDY (1909b), JEANNEL (1913, 1919), HESSE (1925), VILLIERS (1948), LINNAVUORI (1974), LATTIN (1977), HARRINGTON (1980), McDONALD (1988), EGER (1990), LIS (1990, 1995), MALDONADO CAPRILES (1990), THOMAS (1994), ROLSTON et al. (1996), PACKAUSKAS (2010), TSAI et al. (2011), WEBB et al. (2018), etc. However, the cover and p. 309 of volume 4 explicitly give March 20, 1893 as the date of publication. We accept this date in accordance with RIDER (2006).

The correction of the date of valid publication concerns the following taxa:

- Coranopsis* Horváth, 1893 (Reduviidae)
- Coranopsis vittata* Horváth, 1893 (Reduviidae)
- Cosmolestes fulvus* Horváth, 1893 (Reduviidae)
- Edocla albipennis* Horváth, 1893 (Reduviidae)
- Harpactor* (*Diphymus*) *dudae* Horváth, 1893 (Reduviidae)
- Oncocephalus angustatus* Horváth, 1893 (Reduviidae)
- Phonoctonus validus* Horváth, 1893 (Reduviidae)
- Reduvius reuteri* Horváth, 1893 [= *Neotrichedocla quadrisignata* (Stål, 1855)] (Reduviidae)

- Staccia inermis* Horváth, 1893 (Reduviidae)
- Ischnocoridae* Horváth, 1893 (Blissidae)
- Ischnocoridae elegans* Horváth, 1893 (Blissidae)
- Aphanus* (*Graptopeltus*) *dilutus* Horváth, 1893 [= *Naphiellus dilutus* (Horváth, 1893)] (Rhyparochromidae)
- Pamera bergrothi* Horváth, 1893 [= *Horridiamera bergrothi* (Horváth, 1893)] (Rhyparochromidae)
- Homoeocerus fuscicornis* Horváth, 1893 (Coreidae)
- Hypselonotus balteatus* Horváth, 1893 [= *Hypselonotus interruptus* Hahn, 1833] (Coreidae)
- Niamia* Horváth, 1893 (Plataspidae)
- Niamia angulosa* Horváth, 1893 (Plataspidae)
- Cantao africanus* Horváth, 1893 (Scutelleridae)
- Cryptacrus princeps* Horváth, 1893 [= *Cryptacrus comes comes* (Fabricius, 1803)] (Scutelleridae)
- Polytodes* Horváth, 1893 [= *Polytes* Stål, 1867] (Scutelleridae)
- Polytodes ochraceus* Horváth, 1893 [= *Polytes tigrinus* (Vollenhoven, 1868)] (Scutelleridae)
- Dinidor vicarius* Horváth, 1893 [syn. nov., = *Dinidor impicticollis* Stål, 1870] (Dinidoridae)
- Caura modesta* Horváth, 1893 [syn. nov., = *Dinidor impicticollis* Stål, 1870] (Pentatomidae)
- Paracoponia* Horváth, 1893 [= *Coponia* Stål, 1865] (Pentatomidae)
- Diploxyx* (*Paracoponia*) *holubi* Horváth, 1893 [= *Coponia holubi* (Horváth, 1893)]
- Mecosoma spinosum* Horváth, 1893 [= *Macrorhaphis acuta* Dallas, 1851] (Pentatomidae)
- Menida distanti* Horváth, 1893 [= *Menida transversa transversa* (Signoret, 1861)] (Pentatomidae)
- Stollia crucifera* Horváth, 1893 [syn. nov., = *Cosmopepla cruciaria* Stål, 1872] (Pentatomidae)

Types of the species described in Horváth's ‘*Hemiptera nova africana*’

The way of acquisition of the specimens from the collections of the Czech naturalists L. Duda and E. Holub was explained by G. Horváth as follows: ‘Insectum hoc novum, sicut etiam species ceteras a celeberrimo viatore E. Holub in Africa centrali collectas et in sequentibus descriptas, mecum benevole communicavit Dom. Lad. Duda. [= This new insect, as well as other species collected by the celebrated traveler E. Holub in Central Africa and described below, was kindly shared by Mr. Lad. Duda.]’ (HORVÁTH 1893: 256). The NMPC specimens originating from Holub's collection bear the label ‘Coll. Nickerl / Mus. Pragense’ suggesting that the specimens came to NMPC via Nickerl's collection (KOLEŠKA 1988, VÁVRA 1923). We expect that L. Duda, the only Czech Heteroptera specialist in his time, served as mediator between E. Holub and/or Nickerl and G. Horváth.

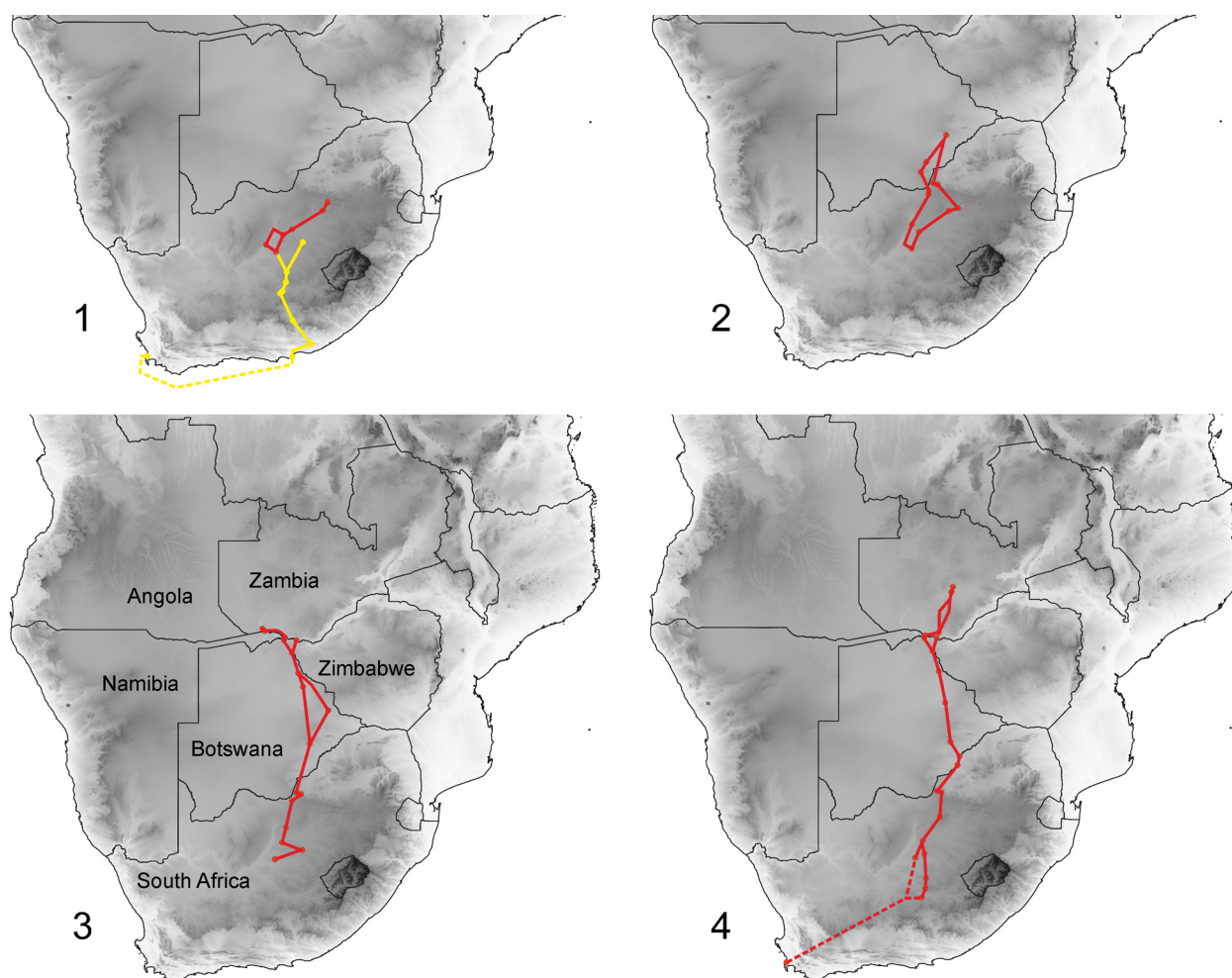
For all described species HORVÁTH (1893) indicated the sex of the specimen(s) (either female or male, never both) and the length and width of body (always two single numbers, never intervals) and provided the HNHM specimens (except a female of *Homoeocerus fuscicornis*) with his handwritten type and/or identification labels. On the other

hand, none of the specimens in NMPC bears labels written by Horváth's hand (cf. Figs 7, 11, 26 versus Fig. 62), and in some cases the sex (e.g., *Homoeocerus fuscicornis*, *Menida distanti*) and measurements of the NMPC specimens does not fit the original description. Based on these facts we may assume that L. Duda sent only singletons to G. Horváth who kept them in HNHN; these specimens are considered here the genuine types. Although the individuals deposited in NMPC originate from the same lot of specimens as those in HNHN, they did not form the basis of the descriptions, being merely topotypic specimens without type status.

When describing the new species, HORVÁTH (1893) usually did not state the number of specimens studied. Such specimens we interpret as syntypes (cf. ICZN 1999: Art. 73.2, Recommendation 73F). However, in five cases (*Cosmolestes fulvus*, *Edocla albipennis*, *Polytodes ochraceus*, *Dinidor vicarius*, and *Stollia crucifera*) it is implied in the text that he only had a single specimen. These characteristically mutilated singletons, all but one deposited in HNHN, are easily recognized and they must be considered as holotypes (ICZN 1999: Art. 73.1.2), despite the fact that there is another topotypic specimen of *Cosmolestes fulvus* and *Stollia crucifera* in NMPC.

The syntypes of *Caura modesta* and *Diploxys holubi*, deposited in HNHN, were listed by LINNAVUORI (1974, 1975, respectively) as 'type'. Although Article 74.6 of ICZN (1999) requires use of 'the type' (emphasis by us), we still accept the above wording as valid lectotype designation under the Article 74.6 of ICZN (1999). Our reason for doing so is that (1) Linnavuori used the word 'holotype' and 'type' interchangeably in at least the above two papers, frequently even within the same species (e.g. LINNAVUORI 1974: 16), indicating that he used the term 'type' in the sense of 'holotype'; (2) he frequently used the term 'cotype' (e.g. LINNAVUORI 1974: 29) and (3) he explicitly selected lectotypes from syntypes (termed as 'cotypes') (e.g. LINNAVUORI 1974: 34), making clear that he made an explicit distinction between syntypes and holotypes. Because of the above points, we consider that the usage of the noun 'type' in Linnavuori's papers in concern reflects his assumption that the species-group taxon was based upon a single type specimen in the sense of Article 74.6.

Of *Stollia crucifera* we were unable to trace the holotype in HNHN. For this reason, the only available topotypic specimen from NMPC is designated here as neotype to fix the identity of this taxon.



Figs 1–4. Schematic maps of Emil Holub's journeys in southern Africa. 1–3 – First journey (1872–1879): 1 – arrival / departure (1872 / 1878–79, yellow, ship route marked by a dashed line) and 1st expedition (1873, red); 2 – 2nd expedition (1873–74); 3 – 3rd expedition (1875–76). 4 – Second journey (1883–1887, train route marked by a dashed line). Based on Holub's original maps (HOLUB 1880a,b, 1881a,b, 1890a,b), MLÍKOVSKÝ et al. (2011) and ŠÁMAL (2013).

Indicating the sex of the type(s), HORVÁTH (1893) used besides the usual male symbol (a circle with arrow directed straight upwards, ♂ – *Cantao africanus*) and female symbol (♀ – *Coranopsis vittata*, *Cosmolestes fulvus*, *Cryptacrus princeps*, *Dinidor vicarius*, *Diploxys holubi*, *Hypselonotus balteatus*, *Niamia angulosa*, *Onccephalus angustus*, *Stollia crucifera*) also a third symbol, a circle with cross directed obliquely right upwards (♂) (*Edocla albipennis*, *Harpactor dudae*, *Homoeocerus fuscicornis*, *Menida distant*, *Reduvius reuteri*). All the type specimens of the latter species present in HNHM are males, therefore this unusual symbol is considered as an alternative of the regular male symbol, used for typographic reasons, without specific biological meaning.

Type locality of the specimens collected by Emil Holub

Twelve species were described by HORVÁTH (1893) based on specimens from Holub's collection, all of them bearing only a label with the name 'Holub', lacking locality; these are *Caura modesta*, *Coranopsis vittata*, *Cosmolestes fulvus*, *Diploxys holubi*, *Dinidor vicarius*, *Edocla albipennis*, *Homoeocerus fuscicornis*, *Hypselonotus balteatus*, *Menida distant*, *Polytodes ochraceus*, *Reduvius reuteri*, and *Stollia crucifera*. Two of them (*C. fulvus*,

H. fuscicornis) were provided by locality labels as 'Africa Centralis' or 'Africa (Holub)' by Horváth. HORVÁTH (1893) gave the type locality of those species as 'Africa centralis'. The precise origin of these specimens is impossible to be ascertained, but from the information available on Holub's expeditions (Table 1, Figs 1–4) they were probably collected in southern and southern-central Africa, in the vast area between Cape Town and Port Elisabeth (South Africa) in the south and the environs of Victoria Falls (Zambia/Zimbabwe) and Kafue River (Zambia) in the north, including territories of the present Republic of South Africa, eastern Botswana, north-western Zimbabwe (between Pandamatenga and Victoria Falls), and southern Zambia (between Zambezi and Kafue Rivers).

According to our present faunistic knowledge, *Caura modesta*, *Coranopsis vittata*, *Menida distant*, and *Reduvius reuteri* (or their respective senior synonyms) certainly occur in the area explored by Emil Holub and there is little doubt about their origin. In three cases the species are known to occur north or west of the area visited by Holub: *Cosmolestes fulvus* from Angola and the Democratic Republic of the Congo (SCHOUTEDEN 1932; VILLIERS 1950, 1954a), *Edocla albipennis* in Namibia (this paper), and *Homoeocerus fuscicornis* from Angola, the Democratic Republic of the Congo and the Republic of the Congo (SCHOUTEDEN 1938, VILLIERS

Table 1. Simplified itinerary of Emil Holub's journeys in South Africa based on HOLUB (1880a,b, 1881a,b, 1890a,b), MLÍKOVSKÝ et al. (2011) and ŠÁMAL (2013). The following abbreviations are used: BWA – Botswana, ZAF – South Africa, ZMB – Zambia, ZWE – Zimbabwe. Approximative co-ordinates were obtained using Wikipedia and Google Maps (www.google.com/maps); some historical sites (especially north of Zambezi) cannot be located.

First journey (1872–1879)	Arrival (1.vii.1872–August 1872)	Cape Town [ZAF, 33°55'S 18°25'E] → [ship] → Port Elisabeth [ZAF, 33°57'S 25°36'E] → Grahamstown [ZAF, 33°19'S 26°32'E] → Cradock [ZAF, 32°10'S 25°37'E] → Colesberg [ZAF, 30°43'S 25°06'E] → Philippolis [ZAF, 30°16'S 25°17'E] → Fauresmith [ZAF, 29°45'S 25°19'E] → Dutoitspan [now part of Kimberley, ZAF, 28°45'S 24°47"E]
	First expedition (18.ii.1873–7.iv.1873)	Dutoitspan → Pniel [ZAF, ?] → Klipdrift [ZAF, ?] → confluence of Vaal and Harts River [ZAF, 28°24'S 24°17'E] → Lekatlong [ZAF, ?] → Christiana [ZAF, 27°55'S 25°09'E] → Bloemhof [ZAF, 27°39'S 25°35'E] → Potschefstroom [ZAF, 26°43'S 27°06'E] → Wonderfontein Caves [ZAF, 26°18'S 27°21'E] → Potschefstroom → Christiana → Hebron [ZAF, ?] → Dutoitspan
	Second expedition (3.xi.1873–7.iv.1874)	Dutoitspan → Klipdrift → Hebron → Taung [ZAF, 27°32'S 24°47'E] → Musemañana [ZAF, ?] → Lothlakane [ZAF, 26°01'S 25°37'E] → Mahikeng [ZAF, 25°51'S 25°38'E] → Moshaneng [BWA, 24°54'S 25°14'E] → Molepolole [BWA, 24°24'S 25°31'E] → Shoshong [BWA, 26°31'S 23°02'E] → Dinokana [ZAF, 25°27'S 25°52'E] → Zeerust [ZAF, 25°32'S 26°05'E] → Potschefstroom → Klerksdorp [ZAF, 26°51'S 26°39'E] → Christiana → Dutoitspan
	Third expedition (2.iii.1875–25.xi.1876)	Dutoitspan → Bultfontein [ZAF, 28°17'S 26°09'E] → Christiana → Mamusa [ZAF, 27°11'S 25°20'E] → Mahikeng → Zeerust → Dinokana → Shoshong → Nata [BWA, 20°13'S 26°11'E] → Klamklenjana Forest [BWA, 19°33'S 25°57'E] → Pandamatenga [BWA, 18°33'S 25°38'E] → Lesuma Forest [BWA, 17°54'S 25°14'E] → confluence of Chobe and Zambezi River [BWA, 17°47'S 25°17'E] → Shesheke [ZMB, 17°28'S 24°18'E] → Pandamatenga → Victoria Falls [ZWE, 17°55'S 25°51'E] → Pandamatenga → Shesheke → Zambezi River up to Chiulu [ZMB, 17°21'S 24°10'E] → Shesheke → Pandamatenga → Klamklenjana Forest → Shashe [BWA, 21°23'S 27°26'E] → Shoshong → Dinokana → Kimberley → Bultfontein
	Departure (28.viii.1878–5.viii.1879)	Bultfontein → Colesberg → Kuilfontein [ZAF, 30°49'S 25°00'E] → Cradock → Port Elisabeth → [ship] → Cape Town
Second journey (1883–1887)	20.xii.1883–September 1887	Cape Town → [train] → Colesberg → Philippolis → Fauresmith → Boshof [ZAF, 28°33'S 25°14'E] → Christiana → Gestoptfontein Farm [ZAF, 26°44'S 26°00'E] → Zeerust → Dinokana → confluence of Marico and Limpopo river [ZAF/BWA, 24°11'S 26°52'E] → confluence of Notuani and Limpopo River [ZAF/BWA, 23°45'S 26°58'E] → Shoshong → E bank of Sua Pan Lake [BWA, 21°06'S 26°16'E] → Klamklenjana Forest → Pandamatenga → Victoria Falls → Pandamatenga → Lesuma Forest [two companions died on malaria] → Kazungula [ZMB, 17°47'S 25°17'E] → Senkobo [ZMB, 17°38'S 25°57'E] → Mo-Monquimbo [ZMB, ?] → Mo-Mponde [ZMB, ?] → crossing Kafue River [ZMB, ca. 15°23'S 26°39'E] → Galulonga [ZMB, ?, between Kafue River and Bullala Hills, ca. 15°38'S 26°34'E] [attack of Ila people, one companion killed] → Mo-Mponde → Gazungula → Pandamatenga → Shoshong → Dinokana → Christiana → Kimberley → [train] → Cape Town

1973, this paper); the ranges of these species probably include at least Zambia. Finally, *Diploxy's holubi*, has never been reported after its original description and therefore its precise distribution is unknown; however, it belongs to an African genus and therefore we do not doubt it is member of the Afrotropical fauna.

Four species (*Dinidor vicarius*, *Hypselonotus balteatus*, *Polytodes ochraceus*, *Stollia crucifera*) described from 'Africa Centralis' are junior synonyms of species known from the Neotropical Region (WHITEHEAD 1974, LATTIN 1977, this paper), therefore their type locality must be considered as erroneous. While *Hypselonotus interruptus* Hahn, 1833 (senior synonym of *H. balteatus*) is widely distributed in Central and Southern America from Mexico to Argentina (WHITEHEAD 1974, PACKAUSKAS 2010), the remaining three species are restricted to northwestern South America (Colombia, Ecuador, Peru) (e.g., SCHOUTEDEN 1913a, McDONALD 1986, DURAI 1987, EGER 1990). Such a coincidence may suggest a common source of these specimens.

The lack of precise localities is a major problem of Holub's zoological collection. According to MLÍKOVSKÝ et al. (2011) Holub's collection was actually composed of three main sources: i) Specimens collected by Holub or his fellows in the wild and fresh specimens obtained by him from local hunters in southern Africa. These are authentic specimens. ii) Specimens (excluding fresh ones) obtained by Holub in southern Africa from other persons by purchase, exchange or donation (cf. HOLUB & VON PELZEN 1882). Most of these specimens were of local origin, but some might have been brought to southern Africa from other parts of the world (MLÍKOVSKÝ et al. 2011). iii) Specimens obtained by Holub from outside of Africa. After spreading most of his collections from expeditions in Africa, Holub used specimens he bought, received or exchanged to donate them to other persons and institutions. These specimens may be of any geographic origin (ŽELÍZKO 1931, MLÍKOVSKÝ et al. 2011). The latter case is the probable explanation also for the above-mentioned mislabelled specimens.

Synopsis of the species described in Horváth's 'Hemiptera nova africana'

Family Reduviidae Latreille, 1807

Coranopsis vittata Horváth, 1893

(Figs 5–7)

Coranopsis vittata Horváth, 1893: 262–263 (original description).

Coranopsis vittata: LETHIERRY & SEVERIN (1896): 190 (catalogue); DISTANT (1903): 45, 51 (records); JEANNEL (1919): 302 (distribution); SCHOUTEDEN (1932): 212 (distribution); SCHOUTEDEN (1944): 45 (distribution); VILLIERS (1948): 42 (zoogeography), 134–135 (redescription, figures of habitus and male genitalia, distribution); VILLIERS (1949): 74 (records, distribution); VILLIERS (1950): 78 (record, distribution); VILLIERS (1952a): 147 (record, distribution); MILLER (1953): 642 (habitat, prey, record, descriptions and figures of eggs, larval instars and adult); VILLIERS (1954b): 915 (record); VILLIERS (1956b): 173 (record, distribution); VILLIERS (1958): 24 (records, distribution); VILLIERS (1964): 16 (listed), 41 (records, distribution); VILLIERS (1966): 1246 (records, distribution); VILLIERS (1967): 4 (records, distribution); VILLIERS (1983): 11 (record, distribution), SILVIE et al. (1989): 281 (listed). *Coranopsis vittatus*: DESCAMPS (1954): 182 (records, prey); VILLIERS (1955): 273 (record, distribution); MALDONADO CAPRILES (1990): 179 (catalogue); GÖLLNER-SCHIEDING (2012): 106 (distribution).

Coranopsis vitatus (incorrect subsequent spelling): VAN EEDEN et al. (1991): 256 (record, habitat):

Type locality. 'Africa centralis (HOLUB)' [= Southern and southern-central Africa between Cape Town and Kafue River, Zambia].

Type material examined. SYNTYPE: 1 ♀ (HNHM), 'Holub [p, pink label] // vittata [Horváth's hw] / det. Horváth [p, "det." corrected to "typ." by hw of Horváth] // Coranopsis / vittata Horv. [Horváth's hw]' (pinned through pronotum, both antennae, right fore and hind legs, distal part of left middle leg, and tarsi of all remaining legs lacking) (Figs 5–7).

Topotypic material examined. 1 ♀ (NMPC), 'Holub [p, green label] // COLL.NICKERL / MUS.PRAGENSE [p, with p frame submarginally] // Coranopsis / vittata [hw] // ♀ [p]' (pinned through pronotum); 2 ♀♀ (NMPC), 'Holub [p, green label] // COLL.NICKERL / MUS.PRAGENSE [p, with p frame submarginally] // ♀ [p]' (pinned through pronotum). All three specimens were provided with the following label: 'topotype, not syntype / CORANOPSIS / VITTATA / Horváth, 1893 / det. P. KMENT 2018 [p]'.

Additional material examined. ANGOLA: Dundo, Lunda, iv.1949, 1 ♂ 1 ♀, A. B. Machado lgt. (NMPC). NIGERIA: Gashaka Gumti NP, Gashaka env., 20 km SE of Serti, 07°22'N 11°29'E, 380 m a.s.l., 25.iv.–5.v.2011, 1 spec., V. Kremítovský lgt., D. Rédei det. (MMBC).

Current status. Valid species; it was accurately redescribed and illustrated by VILLIERS (1948). It is the type species of the genus *Coranopsis* Horváth, 1893, by monotypy (cf. HORVÁTH 1893, MALDONADO CAPRILES 1990). MILLER (1953) discussed its bionomics and provided figures of eggs, different larval instars, and the adult.

Distribution. Angola (VILLIERS 1950, 1958), Cameroon (DESCAMPS 1954, VILLIERS 1983), Central African Republic (VILLIERS 1948), Chad (SILVIE et al. 1989), Democratic Republic of the Congo (SCHOUTEDEN 1932, 1944; VILLIERS 1948, 1964, 1967), Guinea (JEANNEL 1919, VILLIERS 1954b), Ivory Coast (VILLIERS 1948, 1949), Kenya (JEANNEL 1919), Mali (VILLIERS 1948), Senegal (VILLIERS 1956b), South Sudan (JEANNEL 1919, as Dar-Banda), Togo (VILLIERS 1948, 1952a), Republic of the Congo (VILLIERS 1948, 1966), Republic of South Africa (DISTANT 1903, VAN EEDEN et al. 1991), Uganda (VILLIERS 1948, no exact locality), Zimbabwe (DISTANT 1903, MILLER 1953).

Remarks. HORVÁTH (1893) described the species based on an unspecified number of female(s); a female bearing Horváth's handwritten type label is deposited in HNHM (Figs 5–7).

HORVÁTH (1893) established the generic name *Coranopsis* as feminine, as it is indicated by the feminine ending of the combined adjective specific epithet *vittata*. Moreover, ICZN (1999: Article 30.1.2, Examples) explicitly mentions generic names containing the latinized Greek suffix *-opsis* (= appearance, vision) to be feminine. Accordingly, MALDONADO CAPRILES (1990) and a few other authors incorrectly treated this generic name as masculine.

Cosmolestes fulvus Horváth, 1893

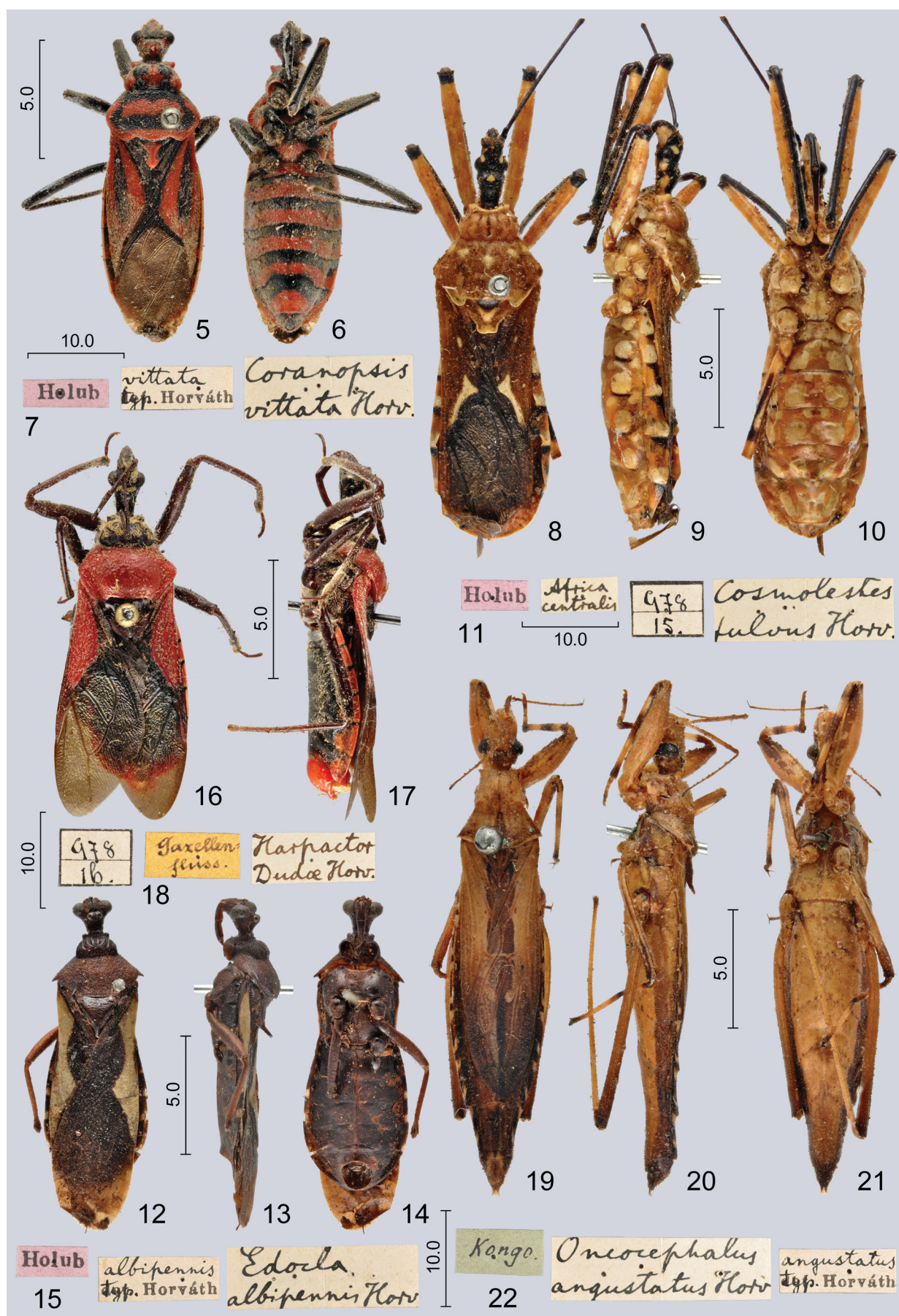
(Figs 8–11)

Cosmolestes fulvus Horváth, 1893: 263 (original description).

Cosmolestes fulvus: LETHIERRY & SEVERIN (1896): 190 (catalogue); SCHOUTEDEN (1932): 193 (list of species, distribution); VILLIERS (1950): 76 (record); VILLIERS (1954a): 18 (record); MALDONADO CAPRILES (1990): 188 (catalogue).

Type locality. 'Africa centralis (HOLUB)' [= Southern and southern-central Africa between Cape Town and Kafue River, Zambia].

Type material examined. HOLOTYPE: ♀ (HNHM), '978 / 15. [hw, with p frame and p horizontal line across middle] // Holub [p, pink label] // Africa / centralis [Horváth's hw] // Cosmolestes / fulvus Horv.



Figs 5–22. Habitus and labels of type specimens. 5–7 – *Coranopsis vittata* Horváth, 1893, ♀, syntype; 8–11 – *Cosmolestes fulvus* Horváth, 1893, ♀, holotype; 12–15 – *Edocla albipennis* Horváth, 1893, ♂, holotype; 16–18 – *Harpactor dudae* Horváth, 1893 [= *Rhynocoris dudae*], ♂, syntype; 19–22 – *Oncocephalus angustatus* Horváth, 1893, ♀, syntype. Scale bars in mm. (Photo: D. Rédei).

[Horváth's hw]' (pinned through pronotum, left antenna, pedicel and flagellum of right antenna, distal part of right fore tarsus, left fore and both mid tarsi, left hind leg, and tibia and tarsus of right hind leg lacking) (Figs 8–11).

Topotypic material examined. 1 ♀ (NMPC), 'Holub [p, pink label] // COLL.NICKERL / MUS.PRAGENSE [p, with p frame submarginally] // Cosmolestes / fulvus [hw] // ♀ [p] // topotype, not syntype / COSMOLESTES / FULVUS / Horváth, 1893 / det. P. KMENT 2018 [p]' (pinned through pronotum).

Current status. Valid species (MALDONADO CAPRILES 1990).

Distribution. Angola (VILLIERS 1950); Democratic Republic of the Congo (SCHOUTEDEN 1932, VILLIERS 1954a).

Remarks. The original description explicitly specified that it was based on a single female ('[t]ibiae posticae in exemplo descripto cum tarsis desunt' = hind tibiae of the described specimen lacking tarsi). Only the female deposited in the HNHM (Figs 8–11) matches this piece of information, therefore it is to be treated as the holotype of this species (ICZN 1999: Art. 73.1.2).

Edocla albipennis Horváth, 1893

(Figs 12–15)

Edocla albipennis Horváth, 1893: 264–265 (original description).

Edocla albipennis: LETHIERRY & SEVERIN (1896): 102 (catalogue); JEANNEL (1919): 136, 199, 200 (key to species, species list); MALDONADO CAPRILES (1990): 397 (catalogue).

Type locality. 'Africa centralis (HOLUB)' [= Southern and southern-central Africa between cape Town and Kafue River, Zambia].

Type material examined. HOLOTYPE: ♂ (HNHM), 'Holub [p, pink label] // albipennis [Horváth's hw] / det. Horváth [p, "det." corrected to "typ." by hw of Horváth] // Edocla / albipennis Horv [Horváth's hw]' (pinned through pronotum, both antennae, fore and hind legs, tarsus of left middle, tibia and tarsus of right hind leg, and genital capsule lacking) (Figs 12–15).

Additional material examined. NAMIBIA: HARDAP PROVINCE: 20 km S Rehoboth, 1.400 m a.s.l., 23°29'S 17°07'E, 11.iii.2014, 1 ♂, A. Kudrna jr lgt., A. Carapezza det. (ACPI). KHOMAS PROVINCE: 10 km S Nauzerud, 1.660 m a.s.l., 23°52'49"S 16°21'55"E, 30.iii.2017, 1 ♂, J. Halada lgt., A. Carapezza det. (ACPI); 30 km SE Windhoek, 1.880 m a.s.l., 22°35'S 17°20'E, 11.iii.2014, 1 ♂, J. Halada lgt., A. Carapezza det. (ACPI). KUNENE PROVINCE: 50 km NEE Khorixas, 1.130 m a.s.l., 20°15'S 15°24'E, 25.iii.2014, 1 ♂, J. Halada lgt., A. Carapezza det. (ACPI). OMAHEKE PROVINCE: 35 km W Gobabis, 1.348 m a.s.l., 22°22'56"S 18°39'19"E, 7.iv.2017, 2 ♂♂, J. Halada lgt., A. Carapezza det. (1 ♂ ACPI, 1 ♂ NMPC).

Variability. In addition to the typical form in which the corium is characterized by a continuous longitudinal pale stripe, there is another colour form in which the longitudinal pale stripe of corium is centrally interrupted by a transverse black fascia. Also the colour of laterotergites IV–VI is highly variable, from almost completely pale to black in anterior two thirds. The body length varies from 11.9 to 14.0 mm (A. Carapezza, pers. comm.).

Current status. Valid species (MALDONADO CAPRILES 1990).

Distribution. 'Central Africa' (HORVÁTH 1893, MALDONADO CAPRILES 1990); Namibia (new record).

Remarks. The original description explicitly specified that the description of this species was based on a single strongly mutilated male ('[e]xemplum unicum' = unique specimen). This specimen (Figs 12–15) is deposited in the HNHM and it must be treated as the holotype of this species (ICZN 1999: Art. 73.1.2).

Harpactor (Diphymus) dudae Horváth, 1893

(Figs 16–18)

Harpactor (Diphymus) dudae Horváth, 1893: 264 (original description). *Harpactor Dudae*: LETHIERRY & SEVERIN (1896): 159 (catalogue).

Rhinocoris katangensis var. *disparilis* Schouteden, 1929a: 259 (description, distribution). Synonymized by SCHOUTEDEN (1932: 172).

Rhinocoris Dudae: SCHOUTEDEN (1932): 172 (species list, new synonymy).

Harpactor dudae: WU (1935): 468 (catalogue, distribution in China).

Rhinocoris dudae: MALDONADO CAPRILES (1990): 278 (catalogue).

Type locality. 'Territorium fluvii Gazellarum; communic. Dom. L. DUDA' [= South Sudan: environs of Bahr el-Ghazal River, the main western tributary of the (White) Nile].

Type material examined. SYNTYPE: 1 ♂ (HNHM), '978 / 16. [hw, with p frame and p horizontal line across middle] // Gazellen- / fluss. [hw, yellow label] // Harpactor / Dudae Horv. [Horváth's hw]' (pinned through scutellum, flagella of both antennae, left hind tarsus and right hind leg lacking, right fore tibia broken subapically) (Figs 16–18).

Current status. *Rhinocoris dudae* (Horváth, 1893) (MALDONADO CAPRILES 1990).

Distribution. Democratic Republic of the Congo (SCHOUTEDEN 1929a, as *R. katangensis* var. *disparilis*; 1932), South Sudan (HORVÁTH 1893). The distribution in China as listed by WU (1935) is certainly erroneous.

Remarks. This species was described based on an unspecified number of males; a single male syntype is found in the HNHM.

Rhinocoris katangensis Schouteden, 1929, and its var. *disparilis* Schouteden, 1929, were both described based on specimens from Elisabethville (now Lubumbashi, Democratic Republic of the Congo) (SCHOUTEDEN 1929a). *Rhinocoris katangensis* var. *disparilis* was subsequently synonymized with *Rh. dudae* by SCHOUTEDEN (1932: 172). MALDONADO CAPRILES (1990: 278) apparently considered this act as an implicit synonymization of *Rh. katangensis* with *Rh. dudae*, and accordingly listed both *Rh. katangensis* and its var. *disparilis* as junior synonyms of *Rh. dudae*. This was, however, erroneous, because SCHOUTEDEN (1932: 174) explicitly listed *Rh. katangensis* as a valid species different from *Rh. dudae*. The status of both *Rh. katangensis* and *Rh. katangensis* var. *disparilis* should be reconsidered based on their respective type materials. *Rhinocoris katangensis* must be treated as valid species.

Oncocephalus angustatus Horváth, 1893

(Figs 19–22)

Oncocephalus angustatus Horváth, 1893: 266–267 (original description).

Oncocephalus angustatus: LETHIERRY & SEVERIN (1896): 86 (catalogue); MALDONADO CAPRILES (1990): 511 (catalogue).

Type locality. 'Congo; communic. Dom. L. DUDA'. The locality refers to the region of the Congo River, currently covering the Democratic Republic of the Congo, the Republic of the Congo and the province of Cabinda, Angola.

Type material examined. SYNTYPE: 1 ♀ (HNHM), 'Kongo. [p, gray label] // angustatus [Horváth's hw] / det. Horváth [p, "det." corrected to "typ." by hw of Horváth] // Oncocephalus / angustatus Horv [Horváth's hw]' (pinned through scutellum, flagellum of left and distiflagellum of right antenna, tarsus of left middle, tibia and tarsus of right hind leg lacking) (Figs 19–22).

Current status. Valid species (MALDONADO CAPRILES 1990).

Distribution. 'Congo' (HORVÁTH 1893, MALDONADO CAPRILES 1990). Exact locality unknown.

Remarks. HORVÁTH (1893) described the species based on an unspecified number of female(s); there is one female syntype in HNHM.

***Reduvius reuteri* Horváth, 1893**

(Figs 23–26)

Reduvius reuteri Horváth, 1893: 265 (original description). Junior homonym of *Reduvius* (*Harpiscus*) *reuteri* Distant, 1879: 125. Synonymized with *Acanthaspis* (now *Neotrichedocla*) *quadrisignata* Stål, 1855, by JEANNEL (1919: 209).

Reduvius reuteri: LETHIERRY & SEVERIN (1896): 100 (catalogue).

Reduvius Reuterianus Kirkaldy, 1909a: 388, new substitute name for *Reduvius reuteri* Horváth, 1893.

Type locality. ‘Africa centralis (HOLUB)’ [= Southern and southern-central Africa between Cape Town and Kafue River, Zambia].

Type material examined. SYNTYPE: 1 ♂ (HNHM), ‘Holub [p, pink label] // Reuteri Horv. [Horváth’s hw, underlined in red hw] / det. Horváth [p] // 4-signata [Horváth’s hw] / det. Horváth [p] // Edocla / quadrisignata Stål [Horváth’s hw]’ (pinned through scutellum, flagellum of left, distiflagellum of right antenna, left fore and hind legs, right middle leg, tarsi of left middle and right hind legs lacking) (Figs 23–26).

Current status. Junior subjective synonym of *Neotrichedocla quadrisignata* (Stål, 1855) (synonymized by JEANNEL 1919: 209, hereby confirmed).

Distribution of *Neotrichedocla quadrisignata*. Angola (HESSE 1925, as *Trichedocla quadrisignata*); Botswana (SCHUMACHER 1913, as *Edocla quadrisignata*; KRÜGER & DECKERT 2006); Cameroon (SCHOUTEDEN 1931, as *Trichedocla quadrisignata*); Democratic Republic of the Congo (SCHOUTEDEN 1931, as *Edocla quadrisignata*); Namibia (HESSE 1925, as *Trichedocla quadrisignata*; REAVELL 2000); South Africa (STÅL 1855, as *Acanthaspis 4-signata*, type locality in Natal; REAVELL 2000), Zimbabwe (MILLER 1953, as *Trichedocla quadrisignata*; REAVELL 2000).

Remarks. HORVÁTH (1893) described the species based on an unspecified number of males. A single male syntype (Figs 23–26) is deposited in the HNHM.

The confused nomenclatural history involving the names *Acanthaspis dubius* Walker, 1873, *Acanthaspis dubia* Reuter, 1881, *Reduvius reuteri* Horváth, 1893, *Acanthaspis reuteri* Lethierry & Severin, 1896, *Reduvius reuterianus* Kirkaldy, 1909, *Acanthaspis reuteri* Schouteden, 1909, *Acanthaspis reuterianus* Schouteden, 1909, and *Acanthaspis reuteriellus* Schouteden, 1931 (see JEANNEL 1919, HESSE 1925, SCHOUTEDEN 1931, MALDONADO CAPRILES 1990), was correctly resolved by KERZHNER (1992: 53).

Family Coreidae Leach, 1815***Homoeocerus fuscicornis* Horváth, 1893**

(Figs 27–34)

Homoeocerus fuscicornis Horváth, 1893: 259–260 (original description).

Homœocerus fuscicornis: LETHIERRY & SEVERIN (1894): 36 (catalogue); SCHOUTEDEN (1938): 258 (comparison with *H. pallens*, distribution), 263 (comparison with *H. overlaeti*).

Homoeocerus fuscicornis: VILLIERS (1973): 398 (distribution); LINNAVUORI (1978): 15 (figures of male genital capsule).

Type locality. ‘Africa centralis (HOLUB)’ [= Southern and southern-central Africa between Cape Town and Kafue River, Zambia].

Type material examined. SYNTYPE: 1 ♂ (HNHM), ‘978 / 14. [hw, with p frame and p horizontal line across middle] // Africa / (Holub) [Horváth’s hw] // Homoeocerus / fuscicornis Horv [Horváth’s hw]’ (pinned through scutellum, right pedicel and flagellum, right mid and both hind legs, tarsus of right fore leg, tarsal segment III of left mid leg lacking) (Figs 27–30).

Topotypic material examined. 1 ♀ (HNHM), ‘Holub’ [p] (pinned through scutellum) (Figs 31–34); 1 ♂ (NMPC), ‘Holub [p] // COLL. NICKERL / MUS.PRAGENSE [p, with p frame submarginally] // ♂

[p] // Homoeocerus / fuscicornis / Horvath typ. Caffr. [hw with pencil]’ (pinned through right clavus); 1 ♂ (NMPC), ‘Holub [p, pink label] // 8. [hw, green label] // ♂ [p] // Homoeocerus / fuscicornis / Horv. n. sp. [hw with black ink]’ (pinned through right clavus); 1 ♂ (NMPC), ‘Holub [p, pink label] // ♂ [p]’ (pinned through pronotum); 1 ♀ (NMPC), ‘Holub [p, pink label] // ♀ [p]’ (pinned through scutellum). All four NMPC specimens bear the following label: ‘topotype, not syntype / HOMOEOCERUS / FUSCICORNIS / Horváth, 1893 / det. P. KMENT 2018’ [p].

Additional material examined. ANGOLA: ‘Africa occ. port., Angola’, 1 ♂, O. V. Schneider lgt. (NMPC).

Current status. Valid species, *Homoeocerus* (*Ornytoides*) *fuscicornis* Horváth, 1893 (see WEBB et al. 2018).

Distribution. Angola (this paper), Democratic Republic of the Congo (SCHOUTEDEN 1938) and Republic of the Congo (VILLIERS 1973).

Remarks. This species was described based on an unspecified number of male(s) (HORVÁTH 1893). Only one male bearing Horváth’s handwritten locality and identification label, deposited in HNHM, is considered as syntype. One female deposited in the HNHM and three males and one female in the NMPC do not fit the original description and therefore they are considered as specimens without type status.

***Hypselonotus balteatus* Horváth, 1893**

(Figs 35–37)

Hypselonotus balteatus Horváth, 1893: 260 (original description).

Hypselonotus balteatus: LETHIERRY & SEVERIN (1894): 82 (catalogue);

WHITEHEAD (1974): 226–228 (variability, new synonymy, distribution);

PACKAUSKAS (2010): 128 (catalogue, as synonym of *H. interruptus*).

Type locality. ‘Africa centralis (Holub)’ (in error).

Type material examined. SYNTYPE: 1 ♀ (HNHM), ‘Holub [p, pink label] // balteatus [Horváth’s hw, underlined in red hw] / det. Horváth [p] // Hypselonotus / balteatus Horv [Horváth’s hw]’ (pinned through scutellum, left antenna, tarsi of both fore and left mid leg, right mid and both hind legs lacking, apex of abdomen mutilated) (Figs 35–37).

Current status. Junior synonym of *Hypselonotus interruptus* Hahn, 1833 (see WHITEHEAD 1974).

Distribution of *Hypselonotus interruptus*. Central America: Belize, Costa Rica, El Salvador, Guatemala, Honduras, Mexico, Panama; South America: Argentina, Bolivia, Brazil, Colombia, Ecuador, Paraguay, Peru, Trinidad, Venezuela (WHITEHEAD 1974, PACKAUSKAS 2010).

Remarks. This species was described based on an unspecified number of female(s) (HORVÁTH 1893); a single female syntype is deposited in the HNHM.

Family Plataspidae Dallas, 1851***Niamia angulosa* Horváth, 1893**

(Figs 38–40)

Niamia angulosa Horváth, 1893: 254 (original description).

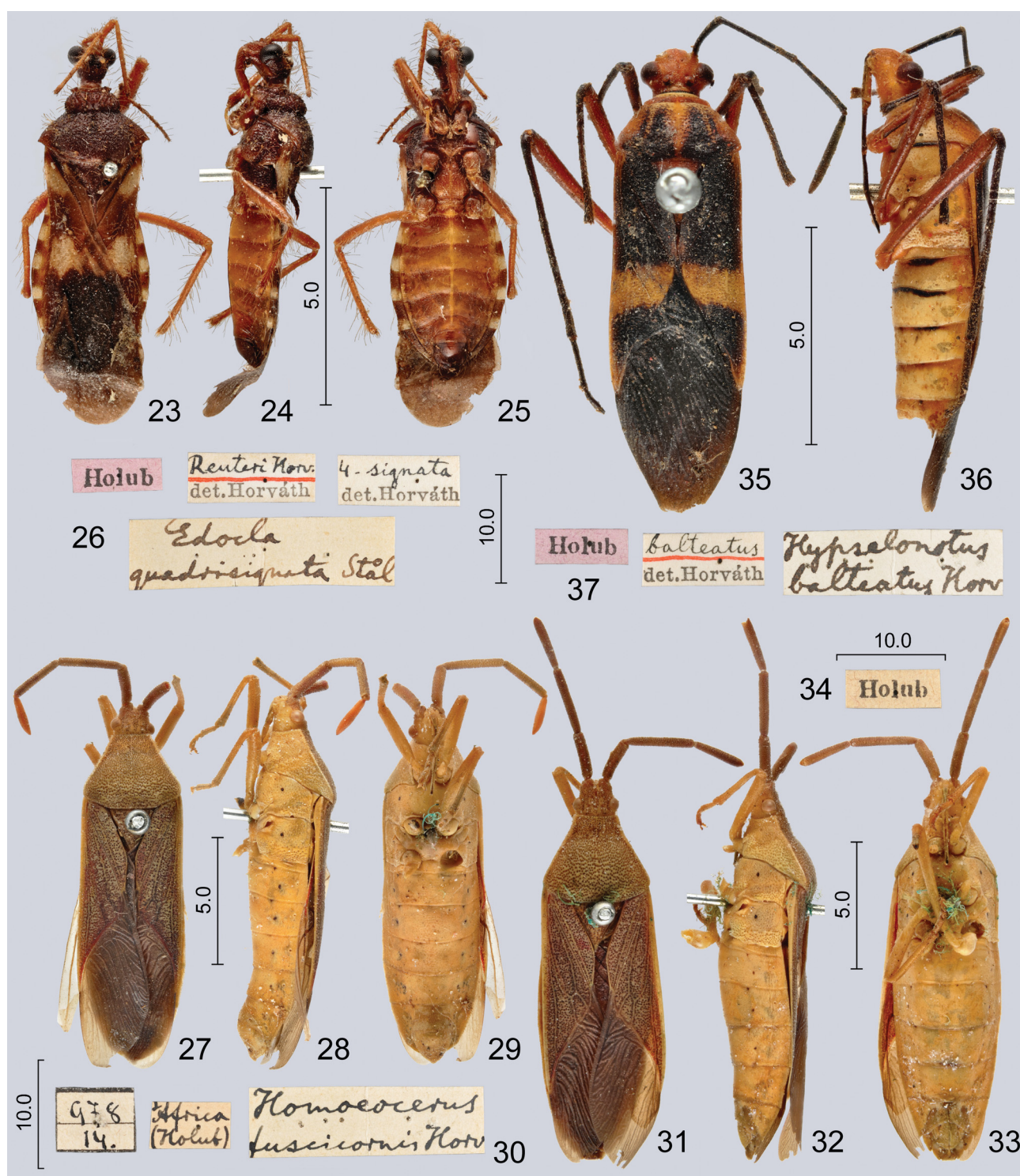
Niamia angulosa: LETHIERRY & SEVERIN (1893): 261 (catalogue); KIRKALDY (1909b): 320 (catalogue).

Plataspis (*Niamia*) *angulosa*: HAGLUND (1894): 388–389 (new combination, distribution).

Libyaspis (*Niamia*) *angulosa*: SCHOUTEDEN (1909): 16, pl. I: Fig. 7 (variability, new combination).

Niamia angulosa: SCHOUTEDEN (1918): 19 (new combination, distribution); VILLIERS (1952b): 308 (distribution); JESSOP (1983): 35 (habitus drawing), 45–46 (generic diagnosis, distribution).

Type locality. ‘Niam-Niam; communic. Dom. L. DUDA’. The name Niam-Niam (or Nyam-Nyam) was frequently used by foreigners to refer to the Azande in the 18th and early 19th century. The Azande (plural of ‘Zande’



Figs 23–37. Habitus and labels of type and non-type specimens. 23–26 – *Reduvius reuteri* Horváth, 1893 [= *Neotrichedocla quadrisignata* (Stål, 1855)], ♂, syntype. 27–34 – *Homoeocerus fuscicornis* Horváth, 1893: 27–30 – ♂, syntype; 31–34 – ♀, non-type from HNHM. 35–37 – *Hypsilonotus balteatus* Horváth, 1893 [= *H. interruptus* Hahn, 1833], ♀, syntype. Scale bars in mm. (Photo: D. Rédei).

in the Zande language) are an ethnic group of North Central Africa. They live primarily in the northeastern part of the Democratic Republic of the Congo (Orientale Province, specifically along the Uele River; Isiro, Dungu, Kisangani and Dorima), in south-central and southwestern part of South Sudan (Central and Western Equatoria States, Yei, Maridi, Yambio and Tombura), and in southeastern Central African Republic (the districts of Rafai, Bangasu and Obo) (ANONYMUS 2017).

Type material examined. SYNTYPE: 1 ♀ (HNHM), 'Africa / Niam-Niam' [hw, pink label] // *angulosa* [Horváth's hw, underlined in red hw] / det. Horváth [p] (pinned through scutellum, intact, wings abducted) (Figs 38–40).

Current status. Valid species; type species of the genus *Niamia* Horváth, 1893, by monotypy (cf. HORVÁTH 1893, JESSOP 1983).

Distribution. Cameroon (HAGLUND 1894); Democratic Republic of the Congo (SCHOUTEDEN 1918); Guinea (VILLIERS 1952b); Nigeria (JESSOP 1983, no exact record); Republic of the Congo (JESSOP 1983, no exact record); Uganda (JESSOP 1983, no exact record).

Remarks. This species was described based on an unspecified number of female(s) (HORVÁTH 1893); a single female syntype is deposited in the HNHN.

Family Scutelleridae Leach, 1815

Cantao africanus Horváth, 1893

Cantao africanus Horváth, 1893: 256 (original description).

Cantao Africanus: LETHIERRY & SEVERIN (1893): 263 (catalogue).

Cantao africanus: SCHOUTEDEN (1903): 28 (repeated original description); SCHOUTEDEN (1906): 137 (comparison with *C. pulcher* sp. nov.); SCHOUTEDEN (1909): 31 (list); McDONALD (1988): 289 (*nomen dubium*, comment on possible mislabelling and synonymy); TSAI et al. (2011): 100 (*nomen dubium*).

Cantao (Cantao) africanus: SCHOUTEDEN (1904a): 18 (catalogue, suspected mislabelling); KIRKALDY (1909b): 307 (catalogue).

Type locality. ‘Congo, commun. Dom. L. DUDA.’ (in error?). The locality refers to the region of the Congo River, currently covering the Democratic Republic of the Congo, the Republic of the Congo and the province of Cabinda, Angola.

Type material. SYNTYPE(s): Lost (SCHOUTEDEN 1903).

Current status. *Nomen dubium* (cf. TSAI et al. 2011).

Distribution. ‘Congo’ (HORVÁTH 1893) (in error?).

Remarks. This species was described based on an unspecified number of male(s) (HORVÁTH 1893). SCHOUTEDEN (1903: 28) claimed that the type material was lost. We also failed to locate any fitting specimen in either HNHN or NMPC.

Cantao Amyot & Serville, 1843, contains only four species other than *C. africanus*, three of them distributed in Indomalaya (extending to marginal areas of the Palaearctics), the fourth one in the Australian Region (TSAI et al. 2011). It is impossible to ascertain the identity of *C. africanus* from the original description. Since there are records of the common Indomalayan species *C. ocellatus* (Thunberg, 1784) from Africa, *C. africanus* is possibly a junior synonym of the latter species (cf. McDONALD 1988). However, HORVÁTH (1893) explicitly mentioned that its genital capsule lacks the median process characteristic of *C. ocellatus*, therefore it is not possible to make a conclusive decision, and accordingly, in agreement with McDONALD (1988), we consider it as a species of unknown identity. It is also possible that the type material was mislabelled and it did not originate from Africa.

Cryptocrus princeps Horváth, 1893

(Figs 41–43)

Cryptocrus princeps Horváth, 1893: 256 (original description). Synonymized by LESTON (1954: 678).

Cryptocrus princeps: LETHIERRY & SEVERIN (1893): 264 (catalogue).

Cryptocrus comes var. *princeps*: SCHOUTEDEN (1903): 48 (downgraded to variety of *C. comes*, key to varieties), 50 (redescription, distribution); SCHOUTEDEN (1904a): 41 (catalogue); SCHOUTEDEN (1904b): 153 (list, distribution); KIRKALDY (1909b): 290 (catalogue); SCHOUTEDEN (1909): 33 (distribution); SCHOUTEDEN (1910a): 403 (list, distribution); LEHMANN (1920): 142 (variability, distribution); SCHOUTEDEN (1929b): 59 (list, distribution); LESTON (1952a): 15 (variability); SCHOUTEDEN (1972): 94 (list, distribution); LINNAVUORI (1982a): 15 (host plant, distribution); GÖLLNER-SCHIEDING (2012): 101 (distribution).

Type locality. ‘Niam-Niam; commun. Dom. L. DUDA.’ The name Niam-Niam refers to homeland of Azande ethnic group (NE Democratic Republic of the Congo, S South Sudan, SE Central African Republic) (ANONYMUS 2017). For more details, see explanation under *Niamia angulosa*.

Type material examined. SYNTYPE: 1 ♀ (HNHN), ‘Africa / (Niam-Niam) [hw, pink label] // princeps [Horváth’s hw, underlined in red hw] / det. Horváth [p]’ (pinned through scutellum, both distiflagella and apex of right fore tarsus lacking) (Figs 41–43).

Current status. Junior synonym of *Cryptocrus comes* (Fabricius, 1803). LESTON (1954: 679) effectively synonymized all of the named varieties of this species by the following statement: ‘*Cryptocrus comes* [...] has four extreme colour forms (see SCHOUTEDEN 1903 for details) but intermediates are also found so that there is little point in retaining varietal names [...]’.

Distribution of *Cryptocrus comes*. Africa: Angola (LESTON 1952a), Burundi (SCHOUTEDEN 1972, no exact record), Cameroon (DISTANT 1877; HAGLUND 1894; KARSCH 1894; SCHOUTEDEN 1903, 1972; LEHMANN 1920; LINNAVUORI 1982a; CZAJA 2007), Central African Republic (SCHOUTEDEN 1903, LINNAVUORI 1982a), Democratic Republic of the Congo (DISTANT 1890, 1901; SCHOUTEDEN 1909, 1910a, 1911, 1929b, 1972; LESTON 1952a; CZAJA 2012, 2013a,b, 2016), Equatorial Guinea (SCHOUTEDEN 1904b), Ethiopia (SCHOUTEDEN 1903, MANCINI 1956), Gabon (SCHOUTEDEN 1903, 1972), Ghana (REUTER 1882, SCHOUTEDEN 1903), Guinea (FABRICIUS 1803, as *Tetyra comes*; FAIRMAIRE & SIGNORET 1858; STÅL 1865, as *Graptocoris comes*, 1873; WALKER 1867; SCHOUTEDEN 1903), Ivory Coast (SCHOUTEDEN 1963), Kenya (SCHOUTEDEN 1903, JEANNEL 1913), Malawi (DISTANT 1914), Mozambique (DISTANT 1914), Namibia (KARSCH 1892), Nigeria (FAIRMAIRE & SIGNORET 1858; STÅL 1865, as *Graptocoris comes*; WALKER 1867; SCHOUTEDEN 1903, 1972), Republic of the Congo (SCHOUTEDEN 1903, 1909; VILLIERS 1967a; GÖLLNER-SCHIEDING 2012), Rwanda (SCHOUTEDEN 1972, no exact record), Senegal (SCHOUTEDEN 1903), Somalia (SCHOUTEDEN 1903), South Africa (DALLAS 1851, as *Pæcilocoris ? pinguis*; STÅL 1865, as *Graptocoris pinguis*; STÅL 1873, as *Caffraria*; WALKER 1867; DISTANT 1898, as *C. pinguis*; SCHOUTEDEN 1903; BERGROTH 1914; LESTON 1953), South Sudan (LINNAVUORI 1985), Tanzania (GERSTAECKER 1873; SCHOUTEDEN 1903, 1910b, 1972; JEANNEL 1913), Uganda (SCHOUTEDEN 1903, 1972; DISTANT 1902, 1909, 1914; JEANNEL 1913; LESTON 1952b), Zimbabwe (DISTANT 1914, LESTON 1954).

Remarks. This species was described based on an unspecified number of female(s) (HORVÁTH 1893); a single female syntype is deposited in the HNHN.

Polytodes ochraceus Horváth, 1893

(Figs 44–45)

Polytodes ochraceus Horváth, 1893: 255–256 (original description).

Polytodes ochraceus: LETHIERRY & SEVERIN (1893): 264 (catalogue); SCHOUTEDEN (1903): 61–62, pl. I: Fig. 12 (redescription, colour habitus drawing); SCHOUTEDEN (1904a): 50–51 (generic redescription, catalogue, suspected mislabelling and synonymy of *Polytodes* and *Polytes*); KIRKALDY (1909b): 287 (catalogue, suspected mislabelling); SCHOUTEDEN (1909): 34 (list), 74 (suspected mislabelling); LATTIN (1977): 187–191 (type material, line drawings of hind wing and male genitalia of NMPC specimen, new synonymy).

Type locality. ‘Africa centralis (HOLUB.)’ (in error).

Type material examined. HOLOTYPE: sex? (genital segment mutilated) (HNHN): ‘Holub [p, pink label] // ochraceus [Horváth’s hw, underlined in red, hw] / Typ. [hw] Horváth [p]’ (pinned through scutellum, antennae and legs partly damaged, posterior portion of scutellum compressed, distorted) (Figs 44–45).

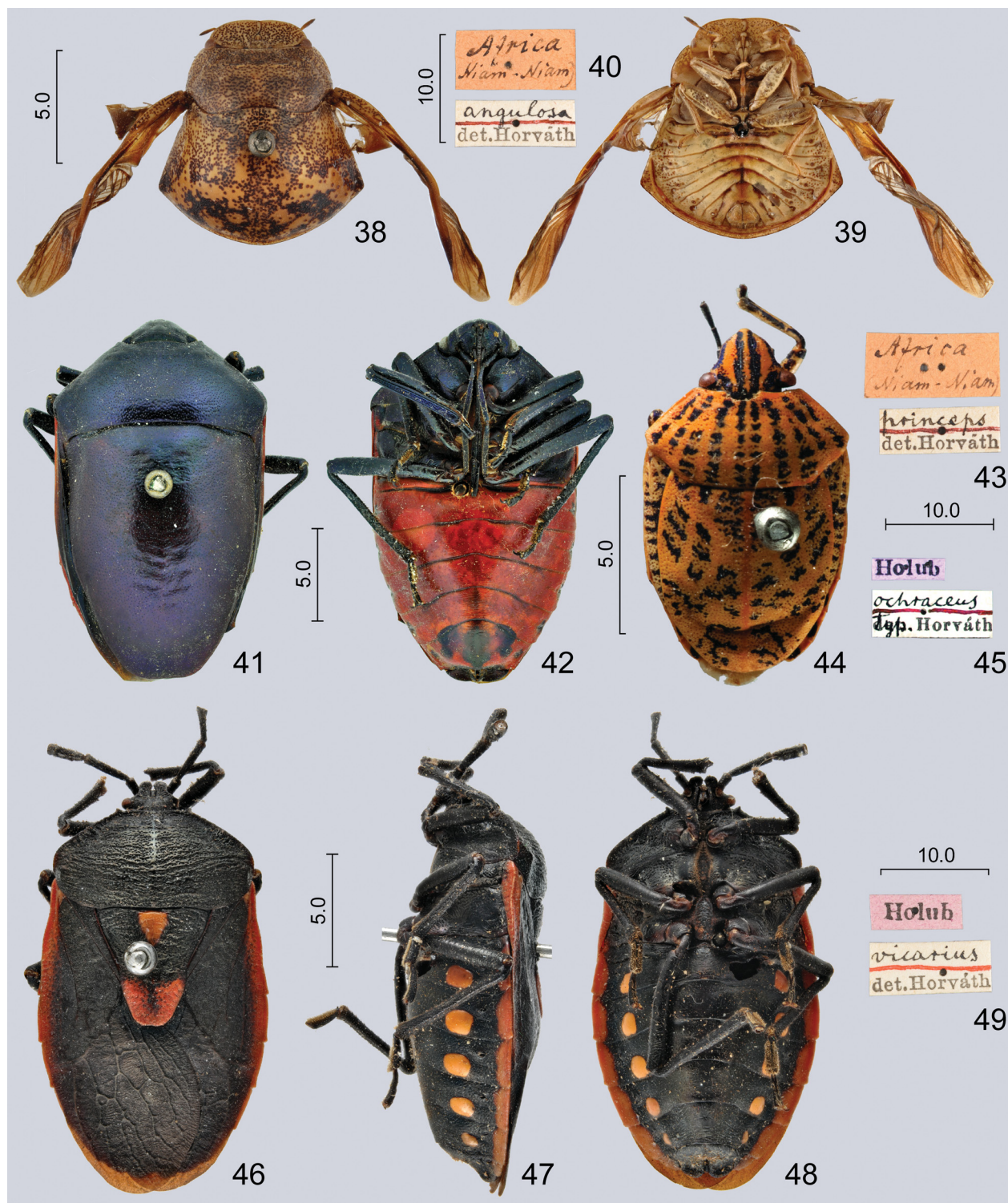
Additional material examined. 1 ♂ (NMPC), 'Zambesi / V. Frič [hw] // COLL.NICKERL / MUS.PRAGENSE [p, with p frame submarginally] // Polytodes / ochrac. [hw] // Polytodes / n. g. / ochraceus / Horváth n.sp. / Zambesi / Duda . Frič' [hw] (pinned through scutellum, wings abducted, antenna and legs partly damaged, dissected male genitalia placed in small glass vial attached to the same pin).

Current status. Junior synonym of *Polytes tigrinus* (Vollenhoven, 1868) (LATTIN 1977, EGER 2010). *Polytodes*

ochraceus is the type species of *Polytodes* Horváth, 1893 by monotypy (see HORVÁTH 1893), a junior synonym of *Polytes* Stål, 1867 (LATTIN 1977: 188).

Distribution of *Polytes tigrinus*. Colombia (VOLLENHOVEN 1868, as *Pachycoris tigrinus*; EGER 1990), Peru (BREDDIN 1904, as *Polytes onca* Breddin, 1904; EGER 1990).

Remarks. The remark '[s]egmentum genitale exempli descripti mutilatum. [= Genital segment of the descri-



Figs 38–49. Habitus and labels of type specimens. 38–40 – *Namia angulosa* Horváth, 1893, ♀, syntype; 41–43 – *Cryptacrus princeps* Horváth, 1893 [= *C. comes comes* (Fabricius, 1803)], ♀, syntype; 44–45 – *Polytodes ochraceus* Horváth, 1893 [= *Polytes tigrinus* (Vollenhoven, 1868)], ?sex, holotype; 46–49 – *Dinidor vicarius* Horváth, 1893 [= *D. impicticollis* Stål, 1870], ♀, holotype. Scale bars in mm. (Photo: 38–43, 46–49 – D. Rédei, 44–45 – Ch. Marshall).

bed specimen mutilated.]’ implies that this species was described based on a single specimen, to be treated as the holotype (ICZN 1999: Art. 73.1.2). LATTIN (1977: 187) wrote that the NMPC specimen agrees with the holotype in all respects and erroneously considered it as part of the same series; he also provided drawings of hind wing and male genitalia of this non-type specimen (LATTIN 1977: 189: Figs 5, 8–11).

For a long time, both the holotype (HNHM) and the non-type male (NMPC) were missing in the respective collections. The specimens were recently traced in John D. Lattin’s collection, deposited now in Oregon State Arthropod Collection, Oregon State University Department of Integrative Biology, Corvallis, USA (Ch. Marshall, pers. comm.), and returned to the respective institutions.

Family Dinidoridae Stål, 1867

Dinidor vicarius Horváth, 1893

(Figs 46–49)

Dinidor vicarius Horváth, 1893: 259 (original description).

Dinidor vicarius: LETHIERRY & SEVERIN (1893): 235 (catalogue); KIRKALDY (1909b): 254 (catalogue); SCHOUTEDEN (1909): 74 (listed, suspected mislabelling); SCHOUTEDEN (1913a): 4–5 (catalogue, suspected mislabelling); DURAI (1987): 234 (listed, *nomen dubium*); LIS (1990): 144 (listed, *nomen dubium*); LIS (1995): 27–28 (distribution in Africa, *nomen dubium*); ROLSTON et al. (1996): 60 (catalogue, *nomen dubium*).

Type locality. ‘Africa centralis (HOLUB)’ (in error).

Type material examined. HOLOTYPE: ♀ (HNHM), Holub [p, pink label] // *vicarius* [Horváth’s hw, underlined in red hw] / det. Horváth [p] (pinned through scutellum, distiflagella of both antennae, both fore tarsi, and apex of right hind tarsus lacking) (Figs 46–49).

Current status. New junior subjective synonym of *Dinidor impicticollis* Stål, 1870 (see below).

Distribution of *Dinidor impicticollis*. Colombia (STÅL 1870, type locality; SCHOUTEDEN 1913a), Ecuador (DURAI 1987), ? Suriname (SCHOUTEDEN 1913a, as questionable).

Remarks. *Dinidor vicarius* was described from ‘Central Africa’ and it has remained of unknown identity so far (cf. DURAI 1987, LIS 1990, ROLSTON et al. 1996). The remark ‘[a]rticulus quartus antennarum exempli descripti mutilatus’ [= fourth antennal segment of the described specimen mutilated] (HORVÁTH 1893: 259) implies that the original description was based on a single specimen, to be treated as the holotype (ICZN 1999: Art. 73.1.2); the respective specimen is now deposited in the HNHM.

HORVÁTH (1893) compared his new species with *D. impicticollis* Stål, 1870, and pointed out (in Latin) that it ‘seems to differ’ from the latter species by its somewhat narrower habitus and the ‘acetabula’ [= supracoxal lobes] lacking markings. A re-examination of the lectotype of *D. impicticollis* (type locality: Bogota, Colombia) (NHRS) and additional non-types of the latter species from Colombia, however, revealed that these differences are insignificant, and all specimens are recognized as conspecific. Accordingly, the following new synonymy is proposed: *Dinidor impicticollis* Stål, 1870 = *D. vicarius* Horváth, 1893, **syn. nov.**

Family Pentatomidae Leach, 1815

Caura modesta Horváth, 1893

(Figs 50–52)

Caura modesta Horváth, 1893: 256–257 (original description).

Caura modesta: LETHIERRY & SEVERIN (1893): 268 (catalogue); KIRKALDY (1909b): 70 (catalogue); SCHOUTEDEN (1909): 48 (list).

Caura (Caura) rufiventris modesta: LESTON & DUTTON (1957): 54 (taxonomy, distribution).

Antestia modesta: LINNAVUORI (1970): 115 (new combination, synonymy with *Caura rufiventris intermedia* rejected).

Parantestia modesta: LINNAVUORI (1974): 9, Figs 4 l, p (line drawings of head and spermatheca), 11 (new combination, inadvertant lectotype designation, compared to *P. propinqua* Linnavuori, 1974, type material).

Parantestia (Chromantestia) modesta: LINNAVUORI (1982a): 9 (zoogeography), 132–133 (subgeneric placement, key to species, line drawing of head and spermatheca, distribution).

Type locality. ‘Africa centralis (HOLUB).’ [= Southern and southern-central Africa between Cape Town and Kafue River, Zambia].

Type material examined. LECTOTYPE (designated by LINNAVUORI 1974: 11, as type): ♀ (HNHM), ‘Holub [p, pink] // modesta [Horváth’s hw] / det. Horváth [p, “det.” corrected to “typ.” by hw of Horváth] / Caura / modesta Horv [Horváth’s hw] / Antestia / modesta / (Hv.) [Linnavuori’s hw]’ (pinned through scutellum, left fore leg, apex of right fore tibia, tibia and tarsus of left hind leg lacking, abdomen macerated, glued back to thorax, apical receptacle of spermatheca glued to card, pinned with the specimen) (Figs 50–52).

Additional material examined. MOZAMBIQUE: bor. occ., 65 km S Vlongné, 15°43’S 34°19’E, 1250 m a.s.l., 8.xii.2005, 1 ♀, J. Halada lgt. (MMBC). REPUBLIC OF THE CONGO: Congo Brazzaville, Mission Chari-Tchad, vii.1904, 1 ♂, J. Decorse lgt. (MNHN); Plato Bateke, Mbé, No. 692, on savannah, 14.i.1964, 1 ♂, Soil Zoological Expedition, Endrödy-Younga lgt. (1 ♂ HNHM); riverside of Congo 20 km W Brazzaville, Loc. No. 558, netted, 30.xii.1963, 2 ♂♂, Soil Zoological Expedition, Endrödy-Younga lgt. (1 ♂ HNHM, 1 ♂ NMPC – Figs 63–66). TANZANIA: Dar-es-Salam, 1 ♀, R. v. Bennigsen lgt. (NMPC). UGANDA: Ouganda, no details, 1906, 1 ♂ 3 ♀♀, R. Oberthür coll. (MNHN). ZAMBIA: bor. occ., 27 km N Kasempa, 10.xii.2004, 1 ♂ 2 ♀♀, Snížek & Tichý lgt. (1 ♂ 1 ♀ PKPC, 1 ♀ NHMW); bor. occ., 50 km W Chingola, 1.–2.i.2003, 1 ♀, J. Halada (ZJPC); bor. occ., 190 km SW Solwezi, to Kasempa, 9.xii.2004, 1 ♂, Snížek & Tichý lgt. (NHMW); bor. or., 30–60 km NW Mpiki, 24.xi.2004, 1 ♂ 1 ♀, Snížek & Tichý lgt. (NHMW); bor. or., 50 km SW Luwingu, N Lake Bangweulu, 27.xi.2004, 1 ♂ 2 ♀♀, Snížek & Tichý lgt. (NHMW); bor. or., 70 km S Mpika, 12°18’S 31°07’E, 1500 m a.s.l., 25.xi.2005, 1 spec., M. Halada lgt. (ZJPC); centr., 45 km SE Kitwe, 12.–15.i.2013, 1 ♂, J. Halada lgt. (ZJPC); centr., Kundalila Falls env., 20 km S of Kanona, 27.xi.2006, 5 ♂♂ 5 ♀♀, Z. Jindra lgt. (ZJPC); mer., 20 km W of Lusaka, 25.xi.2006, 1 ♂, Z. Jindra lgt. (ZJPC); 30 km SE Choma, 27.xii.2002, 1 ♂, J. Halada lgt. (ZJPC); occ., Kaoma env., 14°47’20’S 24°50’21’E, 13.–15.xi.2006, 6 ♂♂ 5 ♀♀, Z. Jindra lgt. (ZJPC); occ., Nalweyl env., 80 km E of Mongu, 12.xi.2006, 1 ♂ 1 ♀, Z. Jindra lgt. (ZJPC); occ., Nguluwe env., 30 km NNE of Kaoma, 13.xi.2006, 2 ♂♂ 4 ♀♀, Z. Jindra lgt. (ZJPC). ZIMBABWE: Salisbury [= Harare], Central Hospital, 1.xii.1969, 1 ♂, Z. Cakl (MMBC).

Current status. New junior subjective synonym of *Parantestia (Chromantestia) cincticollis* (Schaum, 1853) (see below).

Distribution of *Parantestia cincticollis*. Cameroon (LINNAVUORI 1982a, as *P. modesta*), Democratic Republic of the Congo (BERGROTH 1891; DISTANT 1901; SCHOUTEDEN 1909, 1911, 1912, 1913b; LEHMANN 1922; MAYNÉ & GHESQUIÈRE 1934), Malawi (DISTANT 1898), Mozambique (SCHAUM 1853, 1862, both as *Cimex cincticollis*; type locality), ?Nigeria (MEDLER 1980, no exact record), Republic of the Congo (new record), Rwanda (SCHOUTEDEN 1957), Tanzania (HARRIS 1937; GREATHEAD 1966a,b; LINNAVUORI 1974),

Uganda (HANCOCK 1926, KIRKPATRICK 1937, TAYLOR 1945, LEPELLEY 1959), Zambia (LESTON 1952b), Zimbabwe (DISTANT 1898, LESTON 1952b). Record from Nigeria (MEDLER 1980) may belong to *P. propinqua* Linnavuori, 1982.

Remarks. *Caura modesta* was described based on an unspecified number of female(s) (HORVÁTH 1893). LINNAVUORI (1974: 9) cited the female deposited in the HNHM as follows: 'Central Africa, 1 ♀, type, Holub, in Mus. Budapest', and provided differential diagnosis and drawings based on it. The action of LINNAVUORI (1974) constitutes the valid lectotype designation under the Article 74.6 (ICZN 1999).

For a long time, the species was mentioned only in catalogues (LETHIERRY & SEVERIN 1893, KIRKALDY 1909b, SCHOUTEDEN 1909). As the species was compared with *Caura rufiventris* (Germar, 1838) in its original description, LESTON & DUTTON (1957) downgraded it to a subspecies of *C. rufiventris*, and considered *C. intermedia* Distant, 1901 as a junior synonym of *C. rufiventris modesta*. LINNAVUORI (1970) rejected this synonymy and transferred *C. modesta* to the genus *Antestia* Stål, 1865, pointing out its close relationship with *A. cincticollis*. In a subsequent paper, LINNAVUORI (1974), based on the study of a syntype, placed the species in *Parantestia* Linnavuori, 1973, illustrated its head and spermatheca, and compared it with *P. cincticollis* and *P. propinqua* Linnavuori, 1974. LINNAVUORI (1975) proposed the subgenus *Chromantestia* Linnavuori, 1975 for *Parantestia cincticollis* species group (sensu LINNAVUORI 1974). Finally, LINNAVUORI (1982) keyed species of the subgenus *Chromantestia*, and provided the first exact locality of *P. modesta* based on one specimen from Cameroon of unspecified sex. LINNAVUORI (1974, 1982) provided the following distinguishing characters of *P. modesta* and *P. cincticollis* (the latter in parentheses): Body length 11.0 mm (12.0–13.5 mm); colouration more opaque (more shiny); clypeus parallel-sided (tapering apicad); head less emarginated at sides, broader (less emarginated at sides, narrower); pronotum ca. 2.35 times (ca. 2.12 times) as broad as long; punctures on hemelytra brown (black); spermatheca with tubules long and simple, apical section broad, without apical process (tubules shorter, provided with branches). The male of *P. modesta* remained undescribed.

During preparation of this manuscript, we examined three males from Congo-Brazzaville with body length 9.2–9.7 mm, corresponding to the female lectotype of *P. modesta* and its diagnostic characters provided by LINNAVUORI (1974, 1982). The genitalia of these specimens (see Figs 63–66) matched well both the examined specimens of *P. cincticollis* from Zambia and the drawings of that species provided by LINNAVUORI (1974, 1982). Other characters used to differentiate the two species, i.e. the shape of head, clypeus, body size and black/brown puncturation of the hemelytra, is rather variable among the series of examined specimens. Finally, the processes of the apical receptacle of the spermatheca are subject of a broad individual variability in many Pentatominae and therefore they are not suitable for species delimitation (cf. MEMON et al. 2006, KMENT 2008, KMENT & JINDRA 2009). Accordingly, the following new subjective synonymy is established: *Parantestia (Chromantestia) cincticollis* (Schaum, 1853) = *Parantestia (Chromantestia) modesta* (Horváth, 1893), **syn. nov.**

BERGROTH (1891: 208) described an unnamed variety of *Antestia cincticollis* from Kibanga, Central Africa: 'Var.: Caput superne pallide luteum, basi anguste obscure viride. Macula magna postica hexagonalis pronoti secundum margines posticum et antico-laterales miniato-limbata. Corium vena externa miniata et macula purpurea ad angulum apicalem internum notatum.' [Head dorsally pale yellow, basally narrowly dark green. Large posterior hexagonal spot, posterior and antero-lateral margins of pronotum bordered by scarlet. Costal vein of corium scarlet and inner apical margin marked by purple spot.] KIRKALDY (1909b: 128) proposed a formal new name, var. *bergrothiana* Kirkaldy, 1909, for this variety. Judging from its description *P. cincticollis* var. *bergrothiana* falls within the range of variability of this species, therefore the following new subjective synonymy is proposed: *Parantestia (Chromantestia) cincticollis* (Schaum, 1853) = *Parantestia (Chromantestia) cincticollis* var. *bergrothiana* Kirkaldy, 1909, **syn. nov.**

Diploxys (Paracoponia) holubi Horváth, 1893

(Figs 53–55)

Diploxys (Paracoponia) holubi Horváth, 1893: 257 (original description).

Diploxys (Paracoponia) Holubi: LETHIERRY & SEVERIN (1893): 268 (catalogue).

Diploxys (Paracoponia) holubi: KIRKALDY (1909b): 74 (catalogue); LINNAVUORI (1975): 37–38 (differential diagnosis, inadvertent lectotype designation, line drawings of pronotum, last paratergite, apex of profemur, genital capsule and paramere, type material).

Diploxys Holubi: SCHOUTEDEN (1909): 51 (listed).

Coponia holubi: LINNAVUORI (1982a): 80 (new combination, diagnostic character).

Type locality. 'Africa centralis (HOLUB).' [= Southern and southern-central Africa between Cape Town and Kafue River, Zambia].

Type material examined. LECTOTYPE (designated by LINNAVUORI 1975: 37, as type): ♂, 'Holub [p] // Paracoponia / Holubi Horv. [Horváth's hw]' (Figs 53–55) (pinned through right corium, distiflagellum of right, flagellum of left antenna, left fore tarsus, apex of right middle tarsus, tibiae and tarsi of left middle and both hind legs lacking, genital capsule removed, macerated, dissected, its parts glued to card, pinned with the specimen).

Topotypic material examined. 1 ♀ (NMPC), 'Holub [p, pink label] // 9. [hw, green label] // ♀ [p] // Diploxys / Holubi / Horv. n. sp. [hw]' (pinned through scutellum); 1 ♀ (NMPC), 'Holub [p, green label] // COLL.NICKERL / MUS.PRAGENSE [p, with p frame submarginally] // Zambesi [hw] // Diploxys / Holubi [hw] // ♀ [p]' (pinned through scutellum); 1 ♂ (NMPC), 'Holub [p] // COLL.NICKERL / MUS.PRAGENSE [p, with p frame submarginally] // ♂ [p]' (glued on small triangular card). All specimens were provided with the following label: 'topotype, not syntype / DIPLOXYS (Paracoponia) / HOLUBI / Horváth, 1893 / det. P. KMENT 2018' [p].

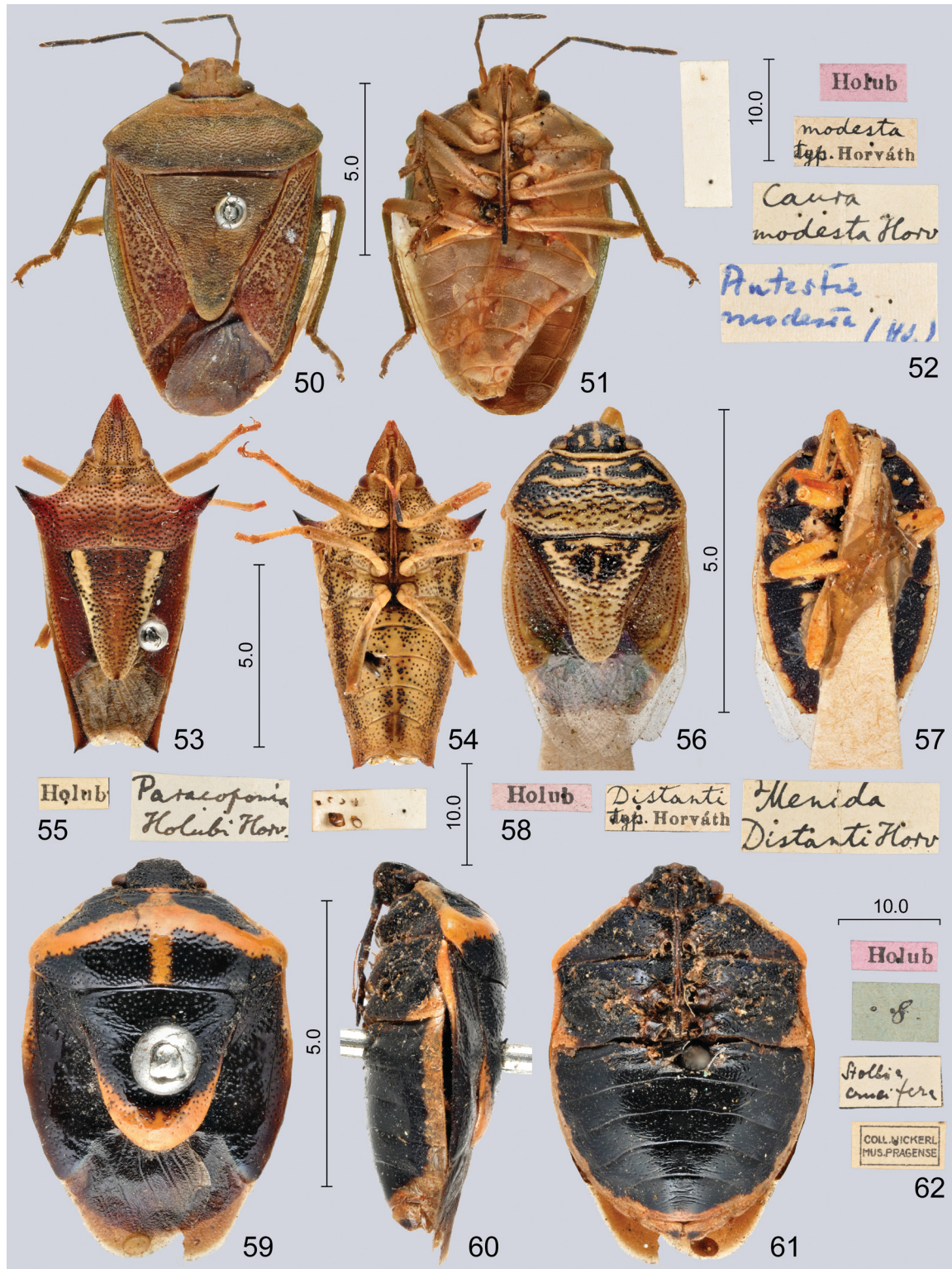
Current status. *Coponia holubi* (Horváth, 1893); type species of the subgenus *Paracoponia* Horváth, 1893 by original designation (cf. *Diploxys (Paracoponia) holubi*, HORVÁTH 1893), a junior synonym of *Coponia* Stål, 1865 (see LINNAVUORI 1982a: 80).

Distribution. Given as 'Central Africa' by HORVÁTH (1893) and 'East Africa' (LINNAVUORI 1975). One of the NMPC specimens bears locality label Zambesi, referring to the Zambezi River (flowing through Angola, Zambia, Namibia, Botswana, Zimbabwe and Mozambique). The exact locality is unknown.

Remarks. This species was described based on an unspecified number of female(s) (HORVÁTH 1893). However, only

a single male bearing Horváth's handwritten type label is found in HNHN; it is reasonable to regard it as part of the original type series even if it conflicts with the sex information provided in the original description; the latter is therefore considered as erroneous. An additional non-type male and two females fitting the original description are deposited in NMPC.

LINNAVUORI (1975: 37) referred to a male (E. Africa, Holub, 1 ♂, type, Mus. Budapest) specimen as the type and provided differential diagnosis and drawings based on it. His information contradicts HORVÁTH (1893) but it is in agreement with the fact that the single type specimen present in HNHN is male. We believe that HORVÁTH's (1893) mention of female type(s) was a mistake. The action



Figs 50–62. Habitus and labels of type specimens. 50–52 – *Caura modesta* Horváth, 1893 [= *Parantestia cincticollis* (Schaum, 1853)], ♀, lectotype; 53–55 – *Diloxys holubi* Horváth, 1893 [= *Caponia holubi*], ♂, lectotype; 56–58 – *Menida distanti* Horváth, 1893 [= *Menida transversa transversa* (Signoret, 1861)], ♂, syntype; 59–62 – *Stollia crucifera* Horváth, 1893 [= *Cosmopepla cruciaria* Stål, 1872], ♀, neotype. Scale bars in mm. (Photo: D. Rédei).

of LINNAVUORI (1975) must be considered a valid lectotype designation under the Article 74.6 (ICZN 1999).

***Menida distanti* Horváth, 1893**

(Figs 56–58)

Menida distanti Horváth, 1893: 258 (original description).

Menida Distanti: LETHIERRY & SEVERIN (1893): 174 (catalogue); SCHOUTEDEN (1909): 62 (list); SCHOUTEDEN (1910b): 90 (diagnosis, distribution); JEANNEL (1913): 94 (distribution).

Menida distanti: KIRKALDY (1909b): 132 (catalogue); LESTON (1952c): 518 (distribution); LESTON (1953): 54 (distribution); DESCAMPS (1954): 177 (record, host plant); LESTON (1955): 700 (junior synonym of *M. transversa*, distribution); VILLIERS (1956a): 211 (distribution); LINDBERG (1958): 30 (distribution); HERTING (1971): 89 (predator).

Type locality. 'Africa centralis (HOLUB).' [= Southern and southern-central Africa between Cape Town and Kafue River, Zambia].

Type material examined. SYNTYPE: 1 ♂ (HNHM), 'Holub [p, pink] // Distanti [Horváth's hw] / det. Horváth [p, "det." corrected to "typ." by hw of Horváth] // Menida / Distanti Horv [Horváth's hw]' (mounted on triangle, right flagellum, tibiae and tarsi of right fore and hind legs, and left hind leg lacking) (Figs 56–58).

Topotypic material examined. 1 ♀ (NMPC), 'Holub [p] // COLL. NICKERL / MUS. PRAGENSE [p with p frame submarginally] // Menida / Distanti [hw, white label] // ♀ [p] // "topotype, not syntype / MENIDA (Menida) / DISTANTI / Horváth, 1893 / det. P. KMENT 2018" [p]' (mounted on triangle).

Current status. Junior synonym of *Menida* (*Menida transversa transversa* (Signoret, 1861) (LESTON 1955: 700).

Distribution of *Menida transversa transversa*. Angola (LESTON 1955, no exact record), Cameroon (DESCAMPS 1954, as *M. distanti*), Cape Verde Islands (LINDBERG 1958), Ethiopia (LINDBERG 1958, no exact locality),

Guinea (VILLIERS 1956a), Ghana (LINNAVUORI 1982a), Kenya (SCHOUTEDEN 1910b), Madagascar (SIGNORET 1861, as *Rhaphygaster transversus*; CACHAN 1952), Nigeria (LINNAVUORI 1982a), Seychelles Islands: Aldabra (DISTANT 1913, as doubtful; GERLACH & MADL 2013), Somalia (LINNAVUORI 1982b), South Africa (LESTON 1952c, 1953), South Sudan (LINNAVUORI 1975), Sudan (LINNAVUORI 1975), Tanzania (SCHOUTEDEN 1910b), Zimbabwe (LESTON 1953); Saudi Arabia (RIDER 2006, no exact locality), Yemen (LINNAVUORI 1989).

Remarks. This species was described based on an unspecified number of male(s) (HORVÁTH 1893); a single male syntype is deposited in the HNHM, a non-type female in NMPC.

***Stollia crucifera* Horváth, 1893**

(Figs 59–62)

Stollia crucifera Horváth, 1893: 257–258 (original description).

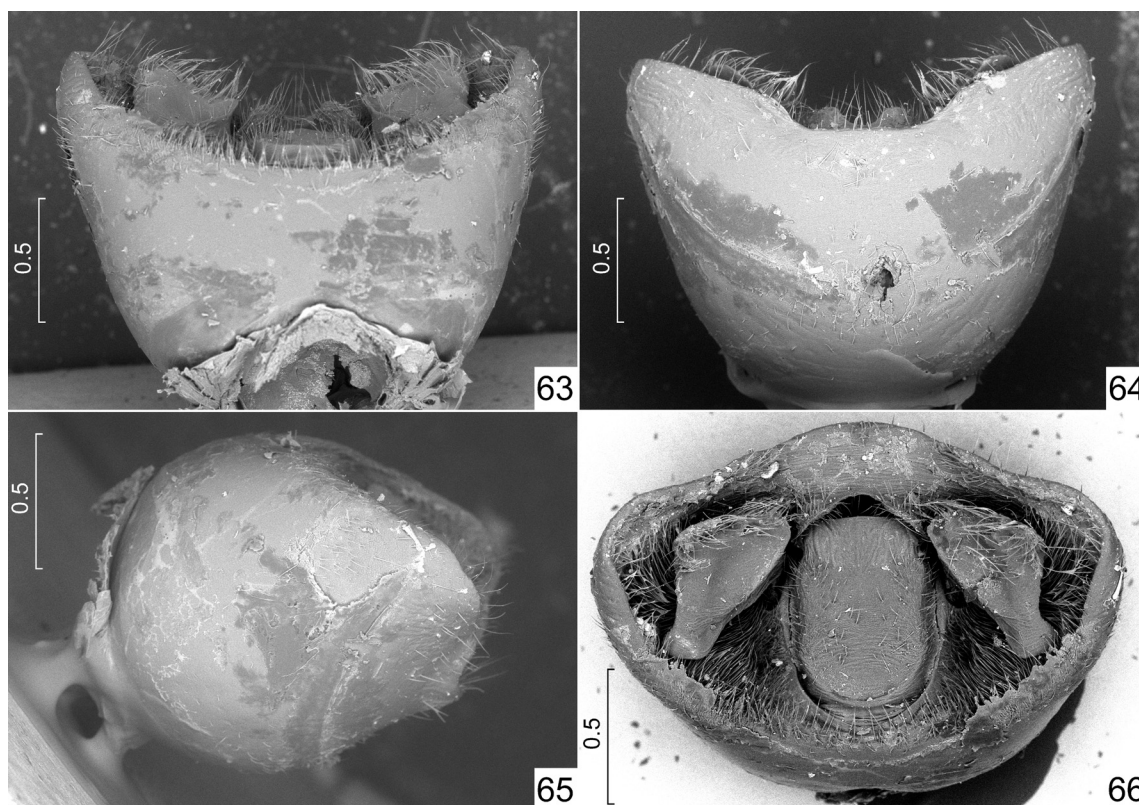
Eysarcoris crucifer: LETHIERRY & SEVERIN (1893): 268 (catalogue, new combination); KIRKALDY (1909b): 83 (catalogue); SCHOUTEDEN (1909): 52 (list).

Type locality. 'Africa centralis (Holub)' (in error).

Type material examined. HOLOTYPE: Lost.

NEOTYPE (here designated): ♀ (NMPC), 'Holub [p, pink label] // COLL. NICKERL / MUS. PRAGENSE [p, with p frame submarginally] // Stollia / crucifera [hw // 8. [hw, green label] // ♀ [p] // NEOTYPUS / STOLLIA / CRUCIFERA / Horváth, 1893 / des. KMENT & RÉDEI 2018' [p, red label] // COSMOPEPLA / CRUCIARIA / Stål, 1872 / det. P. KMENT 2016 [p]' (pinned through scutellum, both antennae and all legs lacking).

Additional material examined. MADAGASCAR: 1 ♀, 'Coll. R. I. Sc. N. B. / Madagascar / Tamatave / Ex Museo / R. Oberthür' [p, green label] (ISNB) [apparently mislabelled].



Figs 63–66. *Parantestia cincticollis* (Schaum, 1853), structure of pygophore of a male specimen (Republic of the Congo, 20 km W Brazzaville, body length 9.7 mm), compared to female lectotype of *Caura modesta* Horváth, 1893, syn. nov. (63 – dorsal view, magnification 55×; 64 – ventral view, 55×; 65 – lateral view, 60×; 66 – caudal (most exposed) view, 60×). Scale bars: 0.5 mm. (ESEM micrographs: P. Kment).

Current status. Junior subjective synonym of *Cosmopepla cruciaria* Stål, 1872 (see below).

Distribution of *Cosmopepla cruciaria*. Colombia (Stål 1872, McDonald 1986), Ecuador (McDonald 1986, no exact record). The record from southern Brazil (Rio Grande do Sul) (Pirán 1970: 126) needs verification.

Remarks. The original description explicitly specified that the description of this species was based on a single female: ‘Antennae et pedes in exemplo descripto desunt.’ [= antennae and legs in described specimen missing]; that specimen must be treated as the holotype of this species (ICZN 1999: Art. 73.1.2). However, no such specimen could be located in HNHM. A single female (Figs 59–62) lacking antennae and legs, thus matching well the original description, but lacking labels with Horváth’s handwriting was found in NMPC. The species is potentially the holotype of *S. crucifera*, or at least it is apparently part of the lot of specimens from which the holotype originated. As its status as holotype is doubtful, we designate it here as the neotype of *Stollia crucifera* with the expressed purpose of fixing the identity of this species in accordance with Article 75.3 of the ICZN (1999). The neotype of *Stollia crucifera* can safely be identified as *Cosmopepla cruciaria* Stål, 1872 (redescribed and illustrated in detail by McDonald 1988), therefore the following new subjective synonymy is hereby proposed: *Cosmopepla cruciaria* Stål, 1872 = *Stollia crucifera* Horváth, 1893, **syn. nov.** As this species (together with all other *Cosmopepla*) is of New World distribution, the type locality of *S. crucifera* is evidently erroneous.

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