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Revision of the genus *Kunungua* (Hemiptera, Heteroptera, Miridae) with descriptions of three new species and new generic synonymy

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Abstract

This study provides a taxonomic revision of the genus *Kunungua* Carvalho, 1951 (Hemiptera, Heteroptera, Miridae, Bryocorinae, Eccritotarsini) with the description of three new species, *K. atramentomaculata* **sp. nov.**, *K. gemina* **sp. nov.**, and *K. ornata* **sp. nov.** Revised diagnoses for the genus and three additional species are given, along with a key to the species. Habitus photographs, illustrations of male genitalic structures, and distributional information are provided for each species. The placement of *Kunungua* within the *Prodromus* group of genera is discussed. The genus *Duducoris* Odhiambo, 1962 is recognised as a new junior subjective synonym of *Prodromus* Distant, 1904, resulting in new combinations for the five species contained in the subsumed genus. *Kunungua pallida* Linnavuori, 1975 is excluded from the genus *Kunungua* and treated as a species of uncertain generic placement.

Key Words

Central Africa, morphology, taxonomy, distribution

Introduction

This paper focuses on the small African plant bug genus *Kunungua* Carvalho, 1951 (Hemiptera, Heteroptera, Miridae, Bryocorinae, Eccritotarsini). Bryocorines include more than 1000 species assigned to ca. 200 genera and have a principally tropical distribution, with a relatively few taxa inhabiting temperate regions (Konstantinov et al. 2018). Representatives of the group exhibit fascinating structural diversity not only in general appearance, but also in characters which are generally uniform across other tribes of plant bugs, e.g., in thoracic, pretarsal, and genitalic structures. Four tribes are currently recognised within the subfamily, with Eccritotarsini comprising more than 60 percent of all described species of the Bryocorinae (Konstantinov and Knyshov 2015; Namyatova et al. 2016).

While the majority of eccritotarsine taxa are confined to the New World, the existing data suggest an Oriental origin for this clade (Konstantinov et al. 2018). No attempt has been made to infer phylogenetic relationships within the Eccritotarsini on a global scale. The only cladistic analysis within the group was that of Stonedahl (1988) for a group of six genera from the Indo-Pacific and West Africa. However, according to the results of our preliminary analysis, several apparently monophyletic lineages could be tentatively recognised within the tribe.

One of these groups, which we refer to as the *Prodromus* group of genera, is distinguished by a unique modification of the aedeagus which takes the form of a simple sclerotised tubule. Notably, the outer section (phallotheca) and the inner section (endosoma) of the aedeagus in the genera of *Prodromus* complex lack a clear demarcation. While in other bugs, the endosoma is membranous and eversible, in the genera of the *Prodromus* complex, it remains consistently everted and sclerotised. Additionally, the ductus seminis in this group remains entirely membranous (Konstantinov and Zinovjeva 2016; Konstantinov et al. 2018) and terminates with a secondary gonopore which lacks ornamentation. Some members of this group

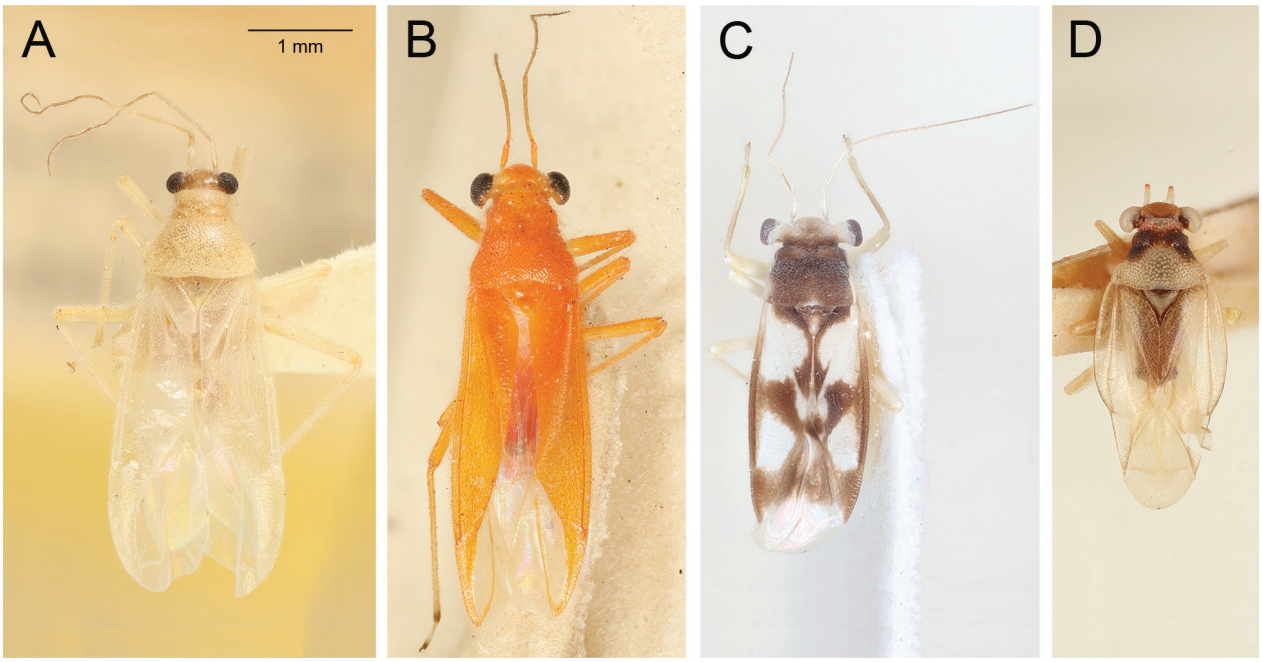

Figure 1. Species of *Prodromus* group, dorsal view. **A.** *Myiocapsus mindanao*, ZISP_ENT 00013938; **B.** *Stenopterocoris nigricornis*, ZISP_ENT 00013937; **C.** *Stylopomiris malayensis*, ZISP_ENT 00013939; **D.** *Zikaniola elegans*, ZISP_ENT 00013939.

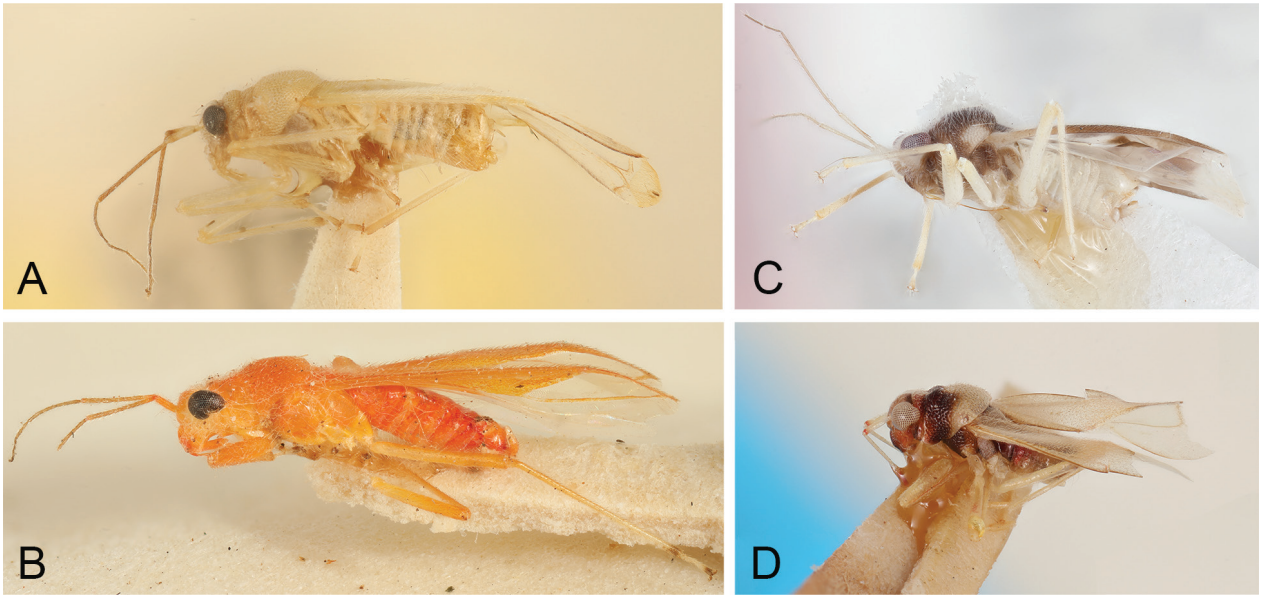

Figure 2. Species of *Prodromus* group species, lateral view. **A.** *Myiocapsus mindanao*, ZISP_ENT 00013941; **B.** *Stenopterocoris nigricornis*, ZISP_ENT 00013937; **C.** *Stylopomiris malayensis*, ZISP_ENT 00013939; **D.** *Zikaniola elegans*, ZISP_ENT 00013939.

exhibit small, non-retractable membranous lobes at the apex of the aedeagus. In addition, taxa belonging to the *Prodromus* group typically exhibit substylate eyes, a deeply punctate pronotum, a generally elongated body with long and comparatively thin legs, and a broad head in dorsal view.

The genera comprising the *Prodromus* group are: *Ambunticoris* Carvalho, 1981 (Konstantinov and Zinovjeva 2016: figs 1–13), *Duducoris* Odhiambo, 1962 (Fig. 3 F–H), *Ernestinus* Distant, 1911 (Yasunaga and Ishikawa 2016: figs 1–7), *Frontimiris* Carvalho, 1981 (Cassis et al. 2016: fig. 1), *Grossicoris* Carvalho, 1973 (Carvalho 1973: fig. 1), *Kunungua* (Fig. 6), *Myiocapsus* Poppius, 1914 (Figs 1A, 2A), *Namyatovia* Yeshwanth & Konstantinov, 2021 (Yeshwanth and Konstantinov 2021: figs 3D–F, 4A–C), *Prodromus* Distant, 1904 (Fig. 3A–E), *Sinervus* Stål, 1860 (Henry and Howard 2016: figs 1–16), *Sinervaspartus* Henry & Howard, 2016 (Henry and Howard 2016: figs 17–20), *Spartacus* Distant, 1884 (Alvarez-Zapata et al. 2022: fig. 37), *Stenopterocorisca* Carvalho, 1981 (Carvalho 1981: fig. 183), *Stonedahlia* Yeshwanth & Konstantinov, 2021 (Yeshwanth and Konstantinov 2021: fig. 4D–F), *Stylopomiris* Stonedahl, 1986 (Figs 1C, 2C), *Taricoris* Carvalho, 1981 (Carvalho 1981: figs 187, 188), *Thaumastomiris* Kirkaldy,

1902 (Yeshwanth and Konstantinov 2021: figs 9G–J, 10), and *Zikaniola* Carvalho, 1946 (Figs 1D, 2D).

This lineage is broadly distributed, found primarily in tropical regions, extending from the southern part of North America and the Neotropics to the Philippines, New Guinea, and northern Australia. Three genera from this group, *Duducoris*, *Kunungua*, and *Prodromus*, are known to inhabit the Ethiopian Region. Among these, *Duducoris* and *Kunungua* are restricted to this region, while *Prodromus* has a more widespread distribution that includes the Oriental Region.

Kunungua was established by Carvalho (1951) to comprise two African species with a wide head and stylate eyes, namely *K. boxi* Carvalho, 1951 from Ghana, the type species of the genus and *K. cinnamomea* Carvalho, 1951 from Congo. Since then, two more species have been described, *K. ukerewensis* Odhiambo, 1962 from Tanganyika and *K. pallida* Linnavuori, 1975, the latter being known from a single female collected in Equatoria, Sudan. No new information regarding the genus has been published since then, spanning nearly half a century.

In this paper, we provide redescriptions for all known *Kunungua* species and descriptions of three new species. We propose the exclusion of *K. pallida* from *Kunungua* due to the presence of a set of characters atypical for the genus and present a key to all *Kunungua* spp. A notable feature for distinguishing *Kunungua* species is their specific colour patterns with distinct bands. Additionally, the shape of the parameres plays a crucial role in distinguishing species that may appear habitually similar.

While working on the updated diagnosis of the genus, a thorough analysis of morphological characters was conducted to distinguish *Kunungua* from the two most closely related genera, viz. *Prodromus* and *Duducoris*. Our results led to the conclusion that *Kunungua* warranted recognition as a separate genus and no distinct differences were observed between *Duducoris* with *Prodromus*. We propose that the former genus be treated as a junior synonym of *Prodromus*. A detailed discussion of this matter and a revised diagnosis for *Prodromus* are also provided.

Table 1. Measurements (mm). Abbreviations. Pronot. – width and length of pronotum at base and along midline, respectively, Head length – distance between apex of clypeus and the highest point of vertex, AI – length of antennal segment I, Pr. disc – length of posterior part of pronotum behind calli measured at midline.

Specimens		Width					Length						
		Head	Vertex	Pronot.	Calli	Collar	Head	AI	Pronot.	Pr. disc	Calli	Collar	Body
Kunungua atramentomaculata sp. nov.													
♀, N = 1		0.95	0.58	1.14	0.61	0.48	0.26	0.45	0.95	0.63	0.18	0.15	4.20
Kunungua boxi Carvalho, 1951													
♂, N = 1		0.88	0.50	0.92	–	–	–	0.50	1.80	–	–	–	3.53
♀, N = 1		0.74	0.45	0.86	–	–	–	0.38	1.63	–	–	–	3.20
Kunungua cinnamomea Carvalho, 1951													
♂, N = 3	Mean	0.91	0.46	1.10	0.56	0.48	0.35	0.45	1.09	0.66	0.27	0.16	3.98
	Min	0.83	0.43	0.99	0.53	0.45	0.33	0.43	0.98	0.56	0.24	0.15	3.50
	Max	0.95	0.48	1.18	0.60	0.50	0.38	0.48	1.18	0.73	0.30	0.18	4.30
♀, N = 2	Mean	0.93	0.45	1.15	0.57	0.48	0.33	0.46	1.10	0.65	0.28	0.17	4.05
	Min	0.88	0.45	1.10	0.56	0.46	0.33	0.45	1.03	0.60	0.26	0.16	3.70
	Max	0.98	0.45	1.20	0.58	0.50	0.33	0.48	1.18	0.70	0.30	0.18	4.40
Kunungua gemina sp. nov.													
♀, N = 3	Mean	0.81	0.48	1.04	0.51	0.43	0.25	0.48	0.90	0.59	0.18	0.13	4.22
	Min	0.80	0.48	1.03	0.50	0.43	0.24	0.48	0.85	0.55	0.18	0.13	4.20
	Max	0.83	0.49	1.05	0.53	0.44	0.25	0.48	0.94	0.63	0.18	0.14	4.25
Kunungua ornata sp. nov.													
♂, N = 2	Mean	0.99	0.58	1.14	0.61	0.49	0.30	0.55	1.04	0.70	0.19	0.15	4.03
	Min	0.98	0.56	1.14	0.60	0.49	0.28	0.53	1.03	0.70	0.18	0.15	3.90
	Max	1.00	0.59	1.15	0.63	0.49	0.33	0.58	1.05	0.70	0.20	0.15	4.15
Kunungua ukerewensis Odhiambo, 1962													
♂, N = 3	Mean	0.80	0.45	0.97	0.55	0.44	0.24	0.43	0.90	0.56	0.19	0.15	3.58
	Min	0.78	0.45	0.95	0.53	0.43	0.23	0.41	0.89	0.55	0.18	0.15	3.55
	Max	0.81	0.46	0.98	0.58	0.45	0.25	0.44	0.93	0.58	0.20	0.15	3.60
♀, N = 3	Mean	0.82	0.45	1.03	0.61	0.46	0.25	0.43	0.91	0.58	0.18	0.15	3.77
	Min	0.80	0.45	1.00	0.60	0.44	0.25	0.40	0.88	0.55	0.18	0.14	3.70
	Max	0.84	0.46	1.05	0.63	0.48	0.25	0.48	0.95	0.63	0.19	0.15	3.80
Kunungua ukerewensis Odhiambo, 1962 (light)													
♂, N = 3	Mean	0.83	0.46	1.00	0.56	0.46	0.24	0.45	0.91	0.58	0.19	0.14	3.72
	Min	0.80	0.46	0.98	0.55	0.45	0.23	0.45	0.86	0.55	0.16	0.13	3.60
	Max	0.84	0.46	1.05	0.58	0.48	0.25	0.45	1.00	0.64	0.21	0.15	3.90
♀, N = 3	Mean	0.82	0.47	1.03	0.58	0.47	0.23	0.45	0.93	0.59	0.19	0.15	3.75
	Min	0.81	0.45	0.99	0.58	0.46	0.20	0.44	0.90	0.58	0.18	0.15	3.70
	Max	0.83	0.48	1.05	0.59	0.48	0.28	0.48	0.95	0.61	0.20	0.15	3.80

Specimens		Width					Length						
		Head	Vertex	Pronot.	Calli	Collar	Head	AI	Pronot.	Pr. disc	Calli	Collar	Body
Prodromus abuyog Stonedahl, 1988													
♂, N = 3	Mean	0.90	0.40	1.16	0.74	0.52	0.40	0.65	0.87	0.48	0.26	0.13	5.23
	Min	0.90	0.39	1.13	0.70	0.50	0.40	0.63	0.83	0.45	0.25	0.13	5.20
	Max	0.90	0.40	1.18	0.76	0.53	0.40	0.68	0.90	0.50	0.28	0.13	5.30
♀, N = 1		0.95	0.43	1.25	0.76	0.53	0.43	0.65	0.90	0.48	0.30	0.13	5.30
Prodromus aethiopicus (Poppius, 1910)													
♂? N = 1		0.76	0.36	0.99	0.73	0.55	0.48	0.53	0.78	0.38	0.25	0.15	4.20
♀, N = 1		0.75	0.38	1.01	0.75	0.58	0.48	0.61	0.85	0.43	0.30	0.13	5.10
Prodromus angulatus (Odhiambo, 1962)													
♂, N = 3	Mean	0.77	0.38	1.01	0.72	0.57	0.48	0.57	0.75	0.35	0.26	0.13	4.52
	Min	0.75	0.36	0.98	0.70	0.55	0.45	0.55	0.73	0.33	0.25	0.13	4.30
	Max	0.78	0.40	1.03	0.74	0.58	0.49	0.58	0.78	0.38	0.28	0.15	4.65
♀, N = 3	Mean	0.75	0.37	0.97	0.70	0.56	0.45	0.52	0.69	0.29	0.28	0.13	4.33
	Min	0.68	0.33	0.85	0.63	0.50	0.43	0.46	0.59	0.26	0.23	0.10	3.90
	Max	0.79	0.40	1.03	0.75	0.60	0.48	0.58	0.76	0.31	0.30	0.15	4.60
Prodromus apoensis Stonedahl, 1988													
♂, N = 1		0.75	0.35	1.06	0.68	0.50	0.40	0.55	0.78	0.43	0.23	0.13	4.70
♀, N = 1		0.73	0.35	0.98	0.60	0.48	0.38	0.55	0.73	0.39	0.24	0.10	4.50
Prodromus clypeatus Distant, 1904													
♂, N = 1		0.83	0.40	1.25	0.73	0.53	0.40	0.53	0.76	0.44	0.20	0.13	4.85
♀, N = 1		0.80	0.40	1.18	0.68	0.50	0.34	0.50	0.73	0.38	0.23	0.13	4.55
Prodromus ibbaicus Linnavuori, 1975													
♂, N = 3	Mean	0.68	0.33	1.01	0.64	0.51	0.35	0.41	0.68	0.34	0.23	0.12	4.47
	Min	0.66	0.33	0.98	0.63	0.50	0.35	0.40	0.65	0.30	0.21	0.10	4.30
	Max	0.69	0.33	1.04	0.65	0.53	0.35	0.43	0.70	0.36	0.25	0.13	4.60
♀, N = 3	Mean	0.66	0.32	1.00	0.65	0.51	0.35	0.39	0.68	0.33	0.23	0.12	4.37
	Min	0.65	0.31	0.95	0.63	0.49	0.34	0.38	0.65	0.33	0.23	0.10	4.10
	Max	0.68	0.33	1.05	0.68	0.53	0.35	0.40	0.73	0.35	0.25	0.13	4.60
Prodromus incisus (Odhiambo, 1962)													
♂, N = 3	Mean	0.85	0.44	1.13	0.78	0.58	0.45	0.47	0.67	0.31	0.24	0.12	4.82
	Min	0.83	0.43	1.13	0.75	0.58	0.43	0.45	0.65	0.30	0.23	0.10	4.75
	Max	0.88	0.45	1.15	0.80	0.59	0.48	0.49	0.68	0.33	0.25	0.13	4.90
♀, N = 1		0.84	0.43	1.04	0.74	0.58	0.45	0.49	0.65	0.28	0.28	0.10	4.70
Prodromus kawandanus Odhiambo, 1962													
♂, N = 3	Mean	0.68	0.33	0.96	0.58	0.47	0.35	0.43	0.66	0.32	0.22	0.12	4.02
	Min	0.68	0.33	0.94	0.58	0.46	0.34	0.43	0.65	0.30	0.21	0.10	4.00
	Max	0.69	0.34	0.99	0.60	0.48	0.35	0.44	0.68	0.34	0.23	0.14	4.05
♀, N = 3	Mean	0.67	0.34	0.94	0.59	0.45	0.35	0.43	0.65	0.33	0.20	0.12	4.05
	Min	0.66	0.34	0.93	0.58	0.45	0.33	0.43	0.65	0.31	0.20	0.11	4.00
	Max	0.68	0.35	0.98	0.60	0.46	0.38	0.44	0.66	0.34	0.21	0.13	4.10
Prodromus melanonotus Carvalho, 1951													
♂, N = 3	Mean	0.69	0.33	0.96	0.58	0.45	0.35	0.58	0.73	0.46	0.16	0.10	3.83
	Min	0.69	0.33	0.95	0.55	0.45	0.34	0.58	0.73	0.43	0.14	0.10	3.80
	Max	0.70	0.35	0.99	0.60	0.45	0.36	0.60	0.73	0.49	0.20	0.10	3.90
♀, N = 1		0.73	0.38	1.00	0.60	0.45	0.34	0.60	0.79	0.48	0.21	0.10	3.90
Prodromus oculatus (Poppius, 1912)													
♂, N = 3	Mean	0.82	0.39	1.14	0.64	0.52	0.38	0.73	0.88	0.51	0.24	0.13	5.13
	Min	0.81	0.38	1.09	0.63	0.51	0.35	0.73	0.78	0.40	0.23	0.10	4.80
	Max	0.83	0.40	1.18	0.65	0.53	0.40	0.75	0.95	0.58	0.25	0.15	5.45
♀, N = 1		0.79	0.36	1.15	0.64	0.53	0.38	0.70	0.85	0.50	0.20	0.15	5.25
Prodromus pilosus (Odhiambo, 1962)													
♀, N = 3	Mean	0.76	0.40	1.17	0.77	0.58	0.48	0.63	0.87	0.43	0.29	0.15	5.37
	Min	0.74	0.39	1.15	0.75	0.55	0.48	0.63	0.83	0.40	0.28	0.13	5.20
	Max	0.78	0.40	1.20	0.78	0.60	0.48	0.65	0.90	0.45	0.30	0.18	5.50
Prodromus thaliae China, 1944													
♂, N = 3	Mean	0.70	0.35	0.93	0.56	0.44	0.32	0.43	0.70	0.43	0.19	0.09	3.93
	Min	0.68	0.35	0.93	0.55	0.43	0.31	0.43	0.69	0.41	0.18	0.08	3.80
	Max	0.73	0.35	0.95	0.58	0.45	0.33	0.45	0.73	0.44	0.20	0.10	4.10
♀, N = 3	Mean	0.67	0.35	0.93	0.57	0.43	0.32	0.44	0.71	0.41	0.19	0.11	4.05
	Min	0.66	0.35	0.90	0.55	0.43	0.30	0.43	0.68	0.38	0.18	0.10	4.00
	Max	0.68	0.35	0.98	0.58	0.45	0.33	0.45	0.75	0.45	0.20	0.13	4.10

Materials and methods

Specimens

About 350 specimens of *Kunungua*, *Prodromus*, and *Duducoris* were examined. Unique Specimen Identifiers (USIs) were attached to each specimen and are available in the material examined section. Additional label information can be accessed through the Planetary Biodiversity Inventory (PBI) Plant Bug locality database: http://research.amnh.org/pbi/heteropteraspeciespage. Most specimens used in this study, including holotypes of new species, are kept at the Royal Museum for Central Africa, Tervuren, Belgium (MRAC), with some specimens borrowed from the following collections:

AMNH American Museum of Natural History, New York (R.T. Schuh and R. Salas);
NHM Natural History Museum, London (M. Webb);
NMWC National Museum of Wales, Cardiff (M. R. Wilson);
ZISP Zoological Institute, Russian Academy of Sciences, St. Petersburg;
USNM Smithsonian National Museum of Natural History (T. J. Henry).

Measurements

Measurements were taken using an eyepiece micrometer from one to six specimens, depending on the quantity of intact specimens available. On average, three males and three females were measured for each species (Table 1). The measurements include body length, head length and width, width of vertex, length of antennal segment I, length and width for the pronotal collar, calli, and disk. All measurements are in millimetres.

Microscopy and illustrations

Observations and measurements were made with a Nikon SMZ 1500 stereomicroscope. Digital colour images of all specimens were taken using Canon EOS 5D Mark IV equipped with a Canon MP-E 65 mm f/2.8 1–5× Macro lens and Twin-Lite MT-26EX-RT flash. Partially focused images of each specimen or structure were stacked using the Helicon Focus 7.5.4 software. Dissections of genitalia were made following the methodology in Kerzhner and Konstantinov (1999). Images of the genitalic structures were made with a Leica DM 2500 microscope equipped with a drawing tube.

Terminology

The terminology used in this paper follows Schuh and Weirauch (2020) except for male (Konstantinov 2003, 2019) and female (Schwartz 2011) genitalia.

Results

Taxonomy

Prodromus Distant, 1904

Figs 3–5

Prodromus Distant, 1904: 436. Type species by original designation: *Prodromus subflavu*s Distant, 1904.

Prodromopsis Poppius, 1911: 4. Type species by original designation: *Prodromus cuneatus* Distant, 1909. Synonymised with *Sinervus* Stål, 1860 by Carvalho (1948: 191), with *Prodromus* by Odhiambo (1962: 248) and Stonedahl (1988: 70).

Duducoris Odhiambo, 1962: 264. Type species by original designation: *Duducoris incisus* Odhiambo, 1962. New synonym.

Prodromus: Odhiambo (1962: 248) (redescription, comparative discussion, key to spp.), Carvalho (1981: 80) (description, discussion, key to spp.), Stonedahl (1988: 53) (synonymy, redescription, discussion, phylogeny, key to spp.).

Prodromopsis: Carvalho (1948: 191) (synonymy), Odhiambo (1962: 248) (synonymy), Carvalho (1981: 80) (as valid genus), Stonedahl (1988: 70) (synonymy).

Revised diagnosis. Body elongate; head about twice as wide as long (Fig. 3); antennal segment I 1.1–2.0 times as long as head, with basal one-half to one-fourth distinctly narrowed (Fig. 5); eyes kidney-shaped, occasionally elongate; vertex with medial sulcus; calli usually distinctive, posterior lobe of pronotum from flattened to convex (Fig. 4); pronotum densely punctate; posterior margin of pronotal disk from straight to deeply emarginate (Fig. 3); scutellum equilateral.

Hosts. Host plant associations are poorly known. *Prodromus clypeatus* Distant, 1904 and *P. oculatus* (Poppius, 1912) have been reported to feed on banana (Musaceae) and young *Musa* leaves (Odhiambo 1962). *Prodromus melanonotus* Carvalho, 1951 and *P. thaliae* China, 1944 have been documented as inhabitants of *Marantochloa* and *Thalia* (Marantaceae) (Stonedahl 1988).

Distribution. Paleotropical.

Discussion. *Prodromus* was established by Distant (1904), with *P. subflavus* designated as the type species. Three species, *P. subflavus*, *P. clypeatus*, and *P. subviridis* Distant, 1904 were originally described within *Prodromus* (Distant, 1904) with 23 additional species subsequently added to the genus. The original diagnosis of *Prodromus* was based on the following combination of characters: a broad head with pedunculate eyes and a longitudinal sulcus on the vertex, antennal segment I longer than the head, segment II approximately 1.5 times longer than segment I, pronotum having a narrow collar, constriction behind calli, and swollen, coarsely punctate disk with a concave posterior margin, and cuneus longer than broad.

Poppius (1911) erected a monotypic genus *Prodromopsis* to accommodate *Prodromus cunealis* Distant, 1907 based on the more vertical head with projecting clypeus, longer antennal segments III and IV, long and narrow cuneus, and short vestiture. Carvalho (1957) synonymised *Prodromopsis*, within which nine species were

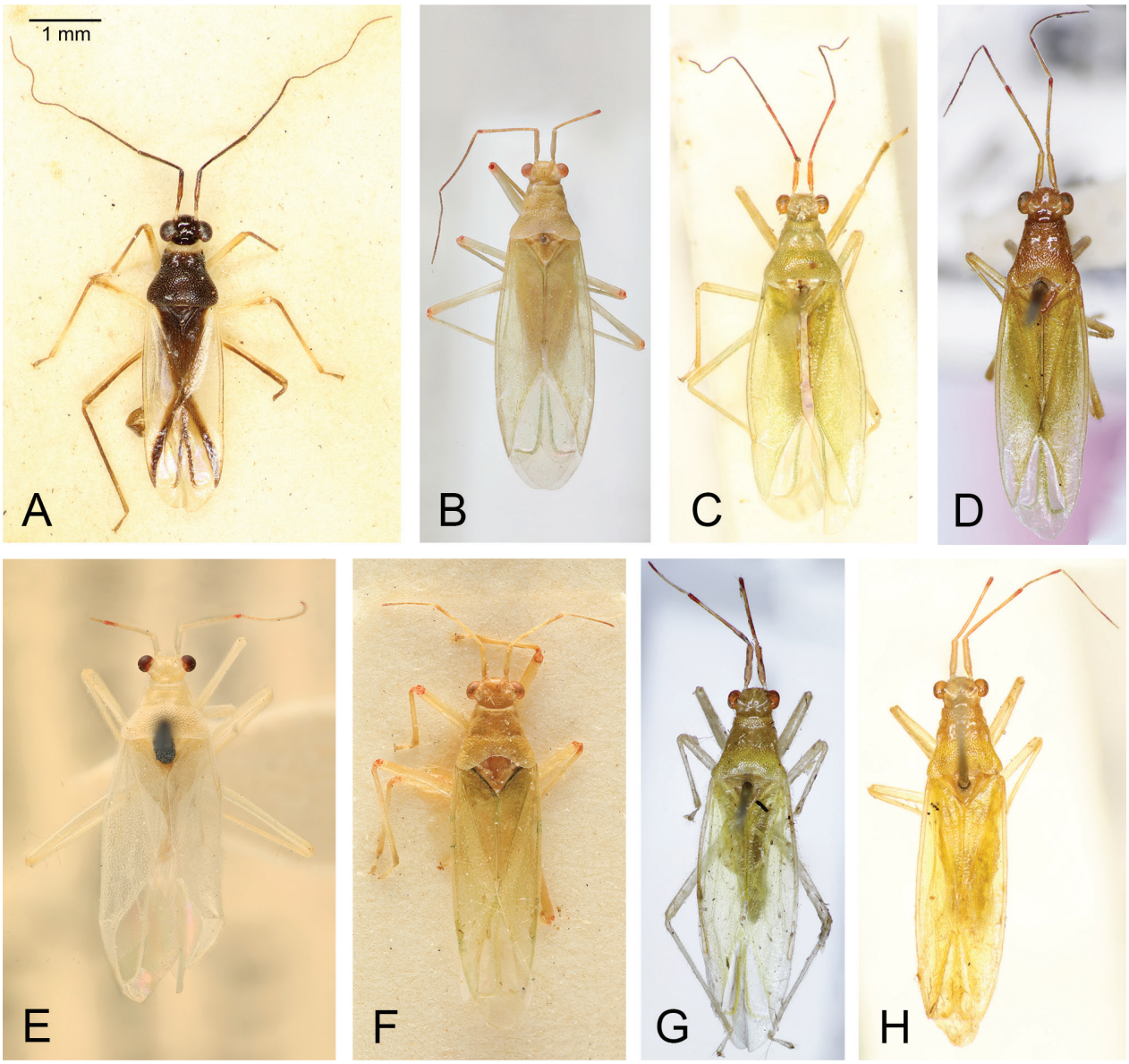

Figure 3. *Prodromus* species, dorsal view. **A.** *P. melanonotus*, AMNH_PBI 00340373; **B.** *P. ibbaicus*, ZISP_ENT 00008385; **C.** *P. kawandanus*, AMNH PBI 00340355; **D.** *P. angulatus*, AMNH_PBI 00340389; **E.** *P. clypeatus*, ZISP_ENT 00008400; **F.** *P. incisus*, ZISP_ENT 00008403; **G.** *P. pilosus*, AMNH_PBI 00340363; **H.** *P. wardi*, AMNH_PBI 00340365.

recognised at the time, with *Sinervus*. However, subsequently he reinstated the genus as valid, differentiating it from *Sinervus* based on the less pedunculate eyes, the somewhat convex anterior margin of the collar, the hind margin of disc being slightly convex, and the less narrowed cuneus (Carvalho 1981).

Carvalho (1981) considered the much longer cuneus and the more pedunculate eyes as characters suitable for unambiguously distinguishing *Prodromopsis* from *Prodromus*. Stonedahl (1988), however, treated *Prodromopsis* as a junior synonym of *Prodromus*. Thus, he characterised *Prodromus* as having substylate to strongly pedunculate eyes and an elongate, curved cuneus, three times or more as long as broad.

Odhiambo (1962) described *Duducoris* to accommodate three newly described species from Uganda. He considered this genus to be closely allied to *Prodromus*, suggesting that *Duducoris* can be differentiated by a more flattened body, a non-sulcate vertex, eyes only weakly projecting above the vertex, a relatively short narrowed basal part of the antennal segment I, weakly raised calli, a pronotum deeply emarginated posteriorly, and shorter legs.

Akingbohungbe (1975) described a new Nigerian species of *Duducoris*, *D. wardi* Akingbohungbe, 1975, characterised by a pubescent pronotal disk, a broadly emarginate posterior margin of pronotum, and a labium reaching apex of mesosternum. A key allowing for distinguishing the four *Duducoris* species was also provided.

Stonedahl (1988), in his comprehensive revision of six eccritotarsine genera including *Prodromus*, performed cladistic analysis of *Prodromus* species based on a matrix of 16 bistate characters. *Duducoris* sp. was cho-

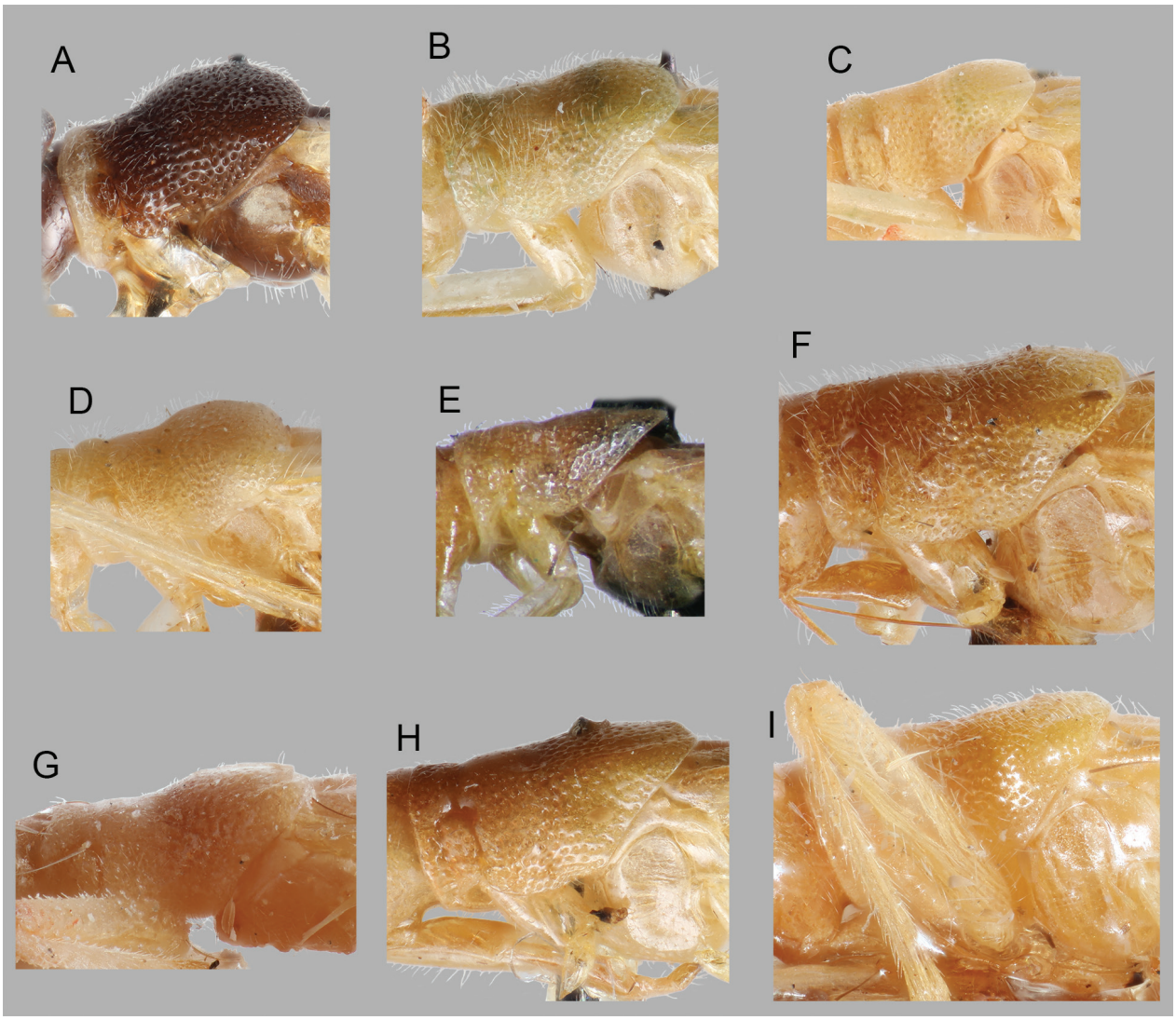

Figure 4. Pronotum of *Prodromus* spp. in lateral view. **A.** *P. melanonotus*, ZISP_ENT 00008406; **B.** *P. kawandanus*, ZISP_ENT 00008364; **C.** *P. ibbaicus*, ZISP_ENT 00008372; **D.** *P. thaliae*, ZISP_ENT 00008390; **E.** *P. subflavus*, AMNH_PBI 00340343; **F.** *P. pilosus*, ZISP_ENT 00008409; **G.** *P. incisus*, ZISP_ENT 00008402; **H.** *P. angulatus*, ZISP_ENT 00008378; **I.** *P. aethiopicus*, ZISP_ENT 00008418.

sen as the outgroup taxon, with all the characters coded as 0. Importantly, the character matrix used for analysis did not include a specific *Duducoris* species, and no apomorphies of *Prodromus* were presented during this study. Stonedahl concluded that *Prodromus* can be distinguished from *Duducoris* based on the combination of the following characters: a longer, less hypognathous head, a frons weakly convex or nearly straight, the basal 1/4–1/2 of the antennal segment I distinctly narrowed, the length of antennal segment III greater than or equal to the length of segment II, a pronotal disk moderately convex, femora relatively longer and narrower, usually slightly swollen distally, and the apex of the left paramere usually unmodified.

However, after we conducted a thorough examination of the specimens of various species within *Prodromus* and *Duducoris*, a set of characters allowing for unambiguous discrimination of these genera was not revealed.

The body of *Prodromus* spp., in particular the pronotal disk, can be weakly convex, like in *P. kawandanus* Odhiambo, 1962 (Fig. 4B), *P. ibbaicus* Linnavuori, 1975 (Fig. 4C) and *P. tafoensis* Stonedahl, 1988, while the pronotum of *Duducoris* can be raised posteriorly as in some *Prodromus* species. The latter condition may be observed in *D. incisus* (Fig. 4G). The clypeus is not always flattened in *Prodromus*. For instance, in *P. ibbaicus* (Fig. 5C) and *P. kawandanus* (Fig. 5D) the clypeus is as swollen as in *Duducoris* species. The thin basal part of antennal segment I may occupy from one-quarter to one-half of the segment, so that the slender basal part of the segment in *Prodromus* and *Duducoris* may be subequal as compared to the length of antennal segment I. Eyes may be both rounded and kidney-shaped, which is typical for the majority of species, and rarely elongated, as in *P. kawandanus*, resembling the condition observed in *Duducoris*.

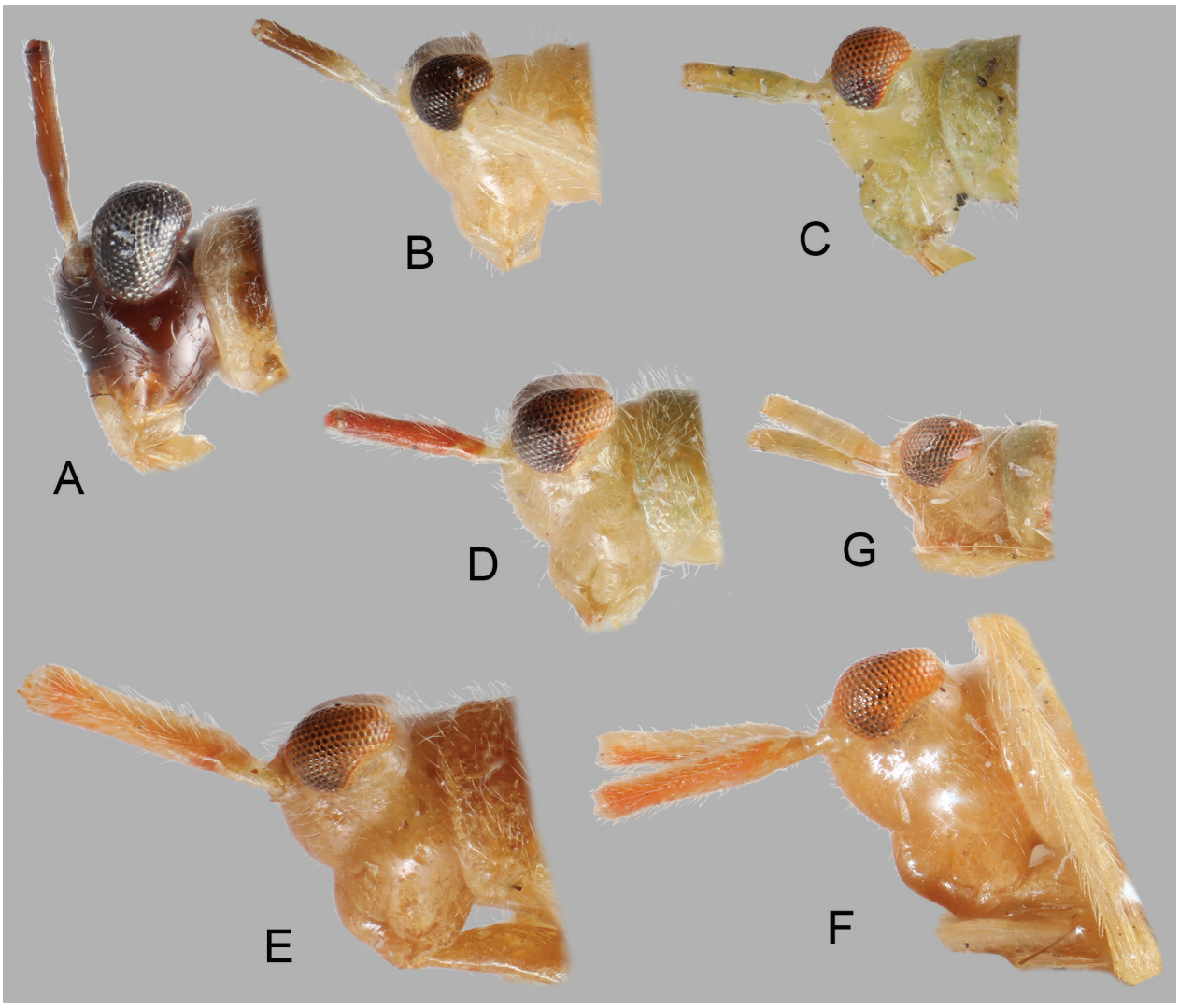

Figure 5. Head of *Prodromus* spp. in lateral view. **A.** *P. melanonotus*, ZISP_ENT 00008406; **B.** *P. thaliae*, ZISP_ENT 00008390; **C.** *P. ibbaicus*, ZISP_ENT 00008383; **D.** *P. kawandanus*, ZISP_ENT 00008364; **E.** *P. pilosus*, ZISP_ENT 00008409; **F.** *P. aethiopicus*, ZISP_ENT 00008418; **G.** *P. incisus*, ZISP_ENT 00009324.

According to Odhiambo (1962), the posterior margin of the pronotum in *Duducoris* is deeply emarginate. Based on our observations, this medial depression is always present, but may be poorly expressed. For instance, in *D. pilosus* Odhiambo, 1962 (Fig. 3G) the posterior margin of the pronotum resembles that of such *Prodromus* species as *P. ibbaicus* (Fig. 3B), *P. kawandanus* (Fig. 3C), and *P. tafoensis*. The pronotum in *Prodromus* spp. may be straight posteriorly, as in *P. melanonotus* (Fig. 3A), or slightly depressed, as in *P. subviridis*, *P. abuyog* Stonedahl, 1988, *P. apoensis* Stonedahl, 1988, and others.

According to Stonedahl (1988), *P. ibbaicus* was the sister taxon to all remaining *Prodromus* spp. with *P. kawandanus* branching off next. These species exhibit characters traditionally considered typical for *Duducoris*: eyes weakly elevated above the vertex, frons moderately convex, anteclypeus distinctly swollen and pronotal disk flattened. In *P. kawandanus*, eyes are also elongate in dorsal and lateral views, resembling those of *Duducoris* species. However, we believe *P. ibbaicus* and *P. kawandanus* should not be placed in *Duducoris*, as such a taxonomic act will further blur the line between *Prodromus* and *Duducoris*.

Our investigation revealed no significant differences, which allowed us to distinguish between *Prodromus* and *Duducoris*. Therefore, we suggest that *Duducoris* represents a specific form of the highly polymorphic genus *Prodromus*, and thus synonymise *Duducoris* Odhiambo, 1962 with *Prodromus* Distant, 1904. Consequently, *Prodromus* is here redefined, containing the following 31 species:

Prodromus abuyog Stonedahl, 1988 – Philippine Islands and North Borneo.
Prodromus aethiopicus (Poppius, 1910), comb. nov. – Kilimanjaro, Kenya, South Sudan, Natal in South Africa.
Prodromus alboviridescens (Motschulsky, 1863) nomen dubium.
Prodromus angulatus (Odhiambo, 1962), comb. nov. – Uganda.
Prodromus apoensis Stonedahl, 1988 – Mindanao, Philippine Islands.

Prodromus bakeri Stonedahl, 1988 – Luzon, Philippine Islands.
Prodromus borneoensis Stonedahl, 1988 – Sabah and Sarawak, Malaysia.
Prodromus cambodiensis Stonedahl, 1988 – Cambodia; Sarawak, Malaysia.
Prodromus chiangmaiensis Stonedahl, 1988 – Northwestern Thailand.
Prodromus clypeatus Distant, 1904 – Sri Lanka, Vietnam, India (Kerala), Thailand, southern China, Taiwan, Malaysia, Java, Ambon.
Prodromus gressitti Stonedahl, 1988 – Northwestern Thailand.
Prodromus ibbaicus Linnavuori, 1975 – Equatoria Province, South Sudan.
Prodromus incisus (Odhiambo, 1962), comb. nov. – Uganda, Democratic Republic of the Congo.
Prodromus joveri Delattre, 1950 – Ivory Coast.
Prodromus kawandanus Odhiambo, 1962 – Uganda and South Sudan.
Prodromus melanonotus Carvalho, 1951 – Ghana, Cameroon, Democratic Republic of the Congo (Haut Uele, Mauda).
Prodromus mindanao Stonedahl, 1988 – Mindanao and Samar, Philippine Islands.
Prodromus nigrus (Carvalho, 1981) – New Guinea.
Prodromus nimbus Delattre, 1950 – Guinea.
Prodromus novoguinensis Stonedahl, 1988 – Western New Guinea.
Prodromus oculatus (Poppius, 1912) – New Guinea, Bismark Archipelago, Solomon Islands.
Prodromus pelagus Stonedahl, 1988 – Sarawak, Malaysia.
Prodromus philippinensis (Poppius, 1915) – Luzon, Philippine Islands.
Prodromus pilosus (Odhiambo, 1962) comb. nov. – Uganda.
Prodromus ranau Stonedahl, 1988 – North Borneo.
Prodromus sabah Stonedahl, 1988 – North Borneo.
Prodromus subflavus Distant, 1904 – Sri Lanka and Vietnam.
Prodromus subviridis Distant, 1904 – Tanintharyi Region of Myanmar.
Prodromus tafoensis Stonedahl, 1988 – Ghana.
Prodromus thaliae China, 1944 – Ghana.
Prodromus wardi (Akingbohungbe, 1975), comb. nov. – Nigeria.

Kunungua Carvalho, 1951

Figs 6–10

Kunungua Carvalho, 1951: 107. Type species by original designation: *Kunungua boxi* Carvalho, 1951.
Kunungua: Carvalho (1957: 107) (catalogue), Odhiambo (1962: 269) (discussion).

Revised diagnosis. Head hammer-shaped, 0.2–0.4 times as long as wide; vertex longitudinally sulcate at middle; eyes distinctly pedunculate; collar and pronotal disk deeply punctate, punctures dense, spacing between punctures smaller than punctures diameter, rarely fusing; posterior angles of pronotal disk rounded; calli prominently raised, divided by deep longitudinal depression; scutellum very small, only about 0.3 times as wide and 0.3–0.4 times as long as pronotum, strongly pointed at apex; membrane with thick vein, apical angle acute, membranal cell nearly reaching apex of cuneus.

Redescription. Male. ***Colouration.*** Antenna usually with entirely or partly darkened segments I and II; head and pronotum from ochraceus to dark brown; clavus brown to dark brown, corium cinnamon or whitish with brown bands or spots apically or medioapically, cuneus from pale brownish yellow to dark brown (as in Fig. 6A–D, F–H).

Surface and vestiture. Body shining, covered with dense pale erect to semierect setae; pronotum deeply punctate, punctures dense, rarely fusing, the distance between punctures less than puncture's size; punctures on calli smaller, sparse, but more dense at sides; scutellum wrinkly.

Structure. Body elongate, 3.4–4.1 times as long as width of pronotum; total length 3.5–4.3 mm.

Head. Strongly transverse, short in dorsal view, 0.3–0.4 times as long as wide, triangular in frontal view; eyes pedunculate, distinctly projecting above vertex in frontal view, kidney-shaped in lateral view; vertex about 1.0–1.3 times as wide as length of antennal segment I; antennal segment I 0.4–0.6 times as long as pronotum and 0.4–0.5 times as long as its width; clypeus swollen; mandibular plate subquadrate, maxillary plate trapeziform; labium relatively short, reaching from middle of fore coxa almost to hind coxa.

Thorax. Pronotum campanulate, 1.0–1.2 times as wide as long, 1.1–1.3 times as wide as head; collar 0.5–0.9 times as long as calli; calli prominently raised, divided by a deep longitudinal depression, 0.3–0.6 times as wide as pronotum; collar and calli combined length 0.3–0.4 times as long as pronotum, with deep depression behind calli extending at sides of pronotum; pronotal disk, calli and collar 0.6–0.7 times, 0.2–0.3 times, 0.1–0.2 times as long as entire pronotum, respectively; posterior angles of pronotum rounded, posterior margin straight to moderately concave; mesoscutum entirely covered with pronotum; scutellum small, 0.3–0.4 times as long as pronotum, triangular, equilateral, apically tapering.

Legs. Femora cylindrical, usually gradually thickening distally, less than two times as wide as tibiae; tarsus three-segmented, segment II almost twice as long as segment I, segment III slightly longer than segment I.

Hemelytron. Long, apex of cuneus far surpassing apex of abdomen, from semitransparent to opaque; membrane with one cell, membranal vein strongly curved apically, nearly reaching apex of cuneus; cuneus about 2.0–2.5 times as long as wide at base.

Genitalia. Genital capsule wider than long; aperture large, dorsoposteriorly oriented; apex of ventral wall

with lobe-shaped sclerotised processes forming paramere sockets; supragenital bridge absent (Fig. 9A–E).

Aedeagus tubular, C-shaped, with strongly sclerotised basal part and entirely membranous, non-eversible, single-lobed apical portion, without clear demarcation between phallotheca and endosoma, sometimes with a dorsal outgrowth at base (Fig. 8); ductus seminis entirely membranous, apically terminating with barely recognisable secondary gonopore devoid of distinctive sculpture.

Parameres subequal in size, left paramere more or less falciform, right one somewhat S-shaped, sometimes with a flattened sensory lobe (Fig. 10).

Female. Similar to male in colouration, surface, vestiture, structure, and measurements. Sexual dimorphism not apparent.

Genitalia. Bursa copulatrix membranous, vulvar region and posterior wall devoid of any distinctive sclerotisations; sclerotised rings of dorsal labiate plate very thin and weakly sclerotised, with medially oriented outgrowth (Fig. 9F).

Discussion. *Kunungua* appears to be most closely related to *Prodromus* due to the hammer-shaped head with distinctly pedunculate eyes, deeply punctate pronotum, and elongate body. However, *Kunungua* can be unambiguously distinguished from *Prodromus* on the basis of the following combination of characters: head only 0.24–0.39 times as long as wide, eyes strongly pedunculate, calli prominently raised, scutellum small, only about 0.3 times as wide and 0.3–0.4 times as long as pronotum, and parameres subequal in size.

Kunungua resembles New World genera of the *Prodromus* complex e.g., *Sinervus*, *Sinervaspartus*, and *Spartacus*, possessing the distinctively stalked eyes, sulcate vertex, strongly elevated calli, distinctly convex pronotal disk, and more or less falciform left paramere. The colouration of *K. ukerewensis* (Fig. 6G), *K. atramentomaculata* sp. nov. (Fig. 6C), *K. gemina* sp. nov. (Fig. 6F), and *K. ornata* sp. nov. (Fig. 6D) with specific bands is similar to that of some *Sinervus* species, in particular *S. baerensprungi* Stål, 1860 and *S. minezi* Carvalho, 1990. However, these genera differ from *Kunungua* spp. in having a long and slender, sickle-shaped cuneus, a narrower collar, and confluent calli that are distinctly separated posteriorly from the pronotal disk with a deep constriction dorsally and at sides.

The external characters of *Kunungua*, specifically colouration, suggest that two groups can be recognised within *Kunungua*, the first one comprising *K. boxi* and *K. cinnamomea*, and the second one including the remaining species. *Kunungua boxi* (Fig. 6B) and *K. cinnamomea* (Fig. 6A) share the brown hemelytra, a fuscous membrane, distinctly swollen clypeus and frons, an extremely short labium, reaching procoxa only (Fig. 7F, G), antennal segment I reddish, short, 1.3–1.6 times as long as head, a comparatively short eye peduncle, oblique, longer in the basal part, a cinnamon-coloured pronotum, and a strongly curved distally membranal vein, forming an acute angle.

Kunungua ukerewensis, *K. atramentomaculata* sp. nov., *K. gemina* sp. nov., and *K. ornata* sp. nov. are characterised by yellowish white hemelytra with specific brownish bands (Fig. 6C, D, F–H), gradually darkening from pale yellow to brown antennal segment I, a transparent membrane, strongly pedunculate eyes, slightly swollen frons, labium reaching approximately the middle of the mesothorax, and a distinctly curved distally membranal vein, forming a right angle. Interestingly, *K. cinnamomea* appears to be the only species to possess denticles on the apex of the right paramere (Fig. 10C, E). Unfortunately, we have not dissected male genitalia of *K. boxi*, and the only existing picture of *K. boxi* parameres and aedeagus (Odhiambo 1962) appears to be of a relatively poor quality. Therefore, no conclusions can be drawn about the presence of denticles on the apex of the right paramere in *K. boxi*.

Key to species

1 Posterior margin of pronotum straight; eye peduncle short, oblique, with longer posterior margin (Fig. 6A, B)..... 2
– Posterior margin of pronotum slightly concave; eye peduncle distinctive, about as long as the width of the eye from above (Fig. 6C, D, F–H) 3
2 Femora and tibiae covered with extremely dense, robust brown setae, antennal segment II pale yellow, apically and basally darkened; antennal segment III pale yellow (Fig. 6A) ..... *K. cinnamomea*
– Femora and tibiae covered with dense, relatively thin brownish yellow setae, antennal segment II reddish brown; antennal segment III brownish (Fig. 6B)..... *K. boxi*
3 Pronotal collar dirty yellow to pale yellow (Fig. 6D, G, H)..... 4
– Pronotal collar dark brown (Fig. 6C, F)..... 5
4 Apical two thirds of antennal segment I, segment II, calli, pronotal disk, and band along inner margin of cuneus dark brown 6
– Antennal segment I except for the apex, basal two thirds of segment II, pronotal disk, and band along inner margin of cuneus yellowish; calli yellowish brown (Fig. 6H)..... *K. ukerewensis* (light form)
5 Corium with distinct brown transverse band starting near the apex of clavus and almost reaching costal margin (Fig. 6C)..... *K. atramentomaculata* sp. nov.
– Corium with brown longitudinal semicircular spot near apex of clavus, not extending to mesocorium (Fig. 6F) ..... *K. gemina* sp. nov.

6 Corium whitish, with longitudinal medioapical spot far not reaching exocorium, brown spot along medioapical margin; cuneus dark brown, membrane smoky brown, except for transparent apical part (Fig. 6G) ....*K. ukerewensis* (dark form)
– Corium whitish, with wide, oblique subapical brown band running from medioapical to costal margin; cuneus whitish yellow, with brown stripe along inner margin and narrow brown edging along costal margin; membrane transparent, whitish hyaline, with brown veins. (Fig. 6D) ..... *K. ornata* sp. nov.

Kunungua atramentomaculata sp. nov.

https://zoobank.org/6FB02238-D303-47CA-8330-D102B4E33410

Figs 6C, 7C

Material examined. ***Holotype.*** ♀, Democratic Republic of the Congo: Haut Uelé: Mabaya [Mabao], 3.32°N, 28.74°E, L. Burgeon1 (ZISP_ENT 00008427) (MRAC).

Paratype. Democratic Republic Of The Congo: 1♀, Haut Uelé: Moto, 3.056°N, 29.47°E, 1920, L. Burgeon (ZISP_ENT 00014326) (MRAC).

Diagnosis. Recognised by the following combination of characters: collar dark brown; corium pale yellow, with brown transverse band starting slightly above claval apex and not quite reaching costal margin, blurring distally; cuneus brown, with brown spot blurring towards base.

This species can be unambiguously distinguished from all other congeners by the presence of a brown band crossing the corium transversely, starting slightly above the claval apex, but not reaching the outer margin of the corium.

Description. Female. ***Colouration*** (Figs 6C, 7C). Head, except for pale yellow antennal fossa, dark brown; antennal segment I pale yellow basally, gradually darkening to brown apically, segment II dark brown, segments III and IV yellowish brown; eyes commonly dark brown; pronotum, scutellum, and clavus dark brown; corium pale yellow, with transverse brown band crossing corium, starting slightly above claval apex and nearly reaching costal margin, blurring distally; corium narrowly dark brown along costal margin in apical half; cuneus brown, basally with blurring brown spot and dark brown outer margin; membrane transparent, basal two-thirds of membrane fuscous, apical one-third whitish; coxae brown anteriorly, pale yellow posteriorly; femora pale yellow basally, dark brown at middle, brownish yellow distally; fore tibia pale yellow, darkened basally; middle tibia pale yellow, except for brown basal one-third; basal one-half of hind tibia brown, apical half pale yellow; tarsal segments I and II pale yellow, the latter slightly darkened apically; segment III greyish brown; abdomen dark brown basally and apically, middle part, comprising about one-half of abdomen, whitish yellow.

Vestiture. Clothed with long whitish simple setae, adpressed on hemelytron, semierect elsewhere, subequal to width of antennal segment I at middle, somewhat shorter on pronotum.

Structure. Total length 4.2 mm; body 3.7 times as long as width of pronotum and 4.4 times as long as pronotal length.

Head 0.3 times as long as wide, 2 times as wide as collar; antennal fossa large, removed from inner eye margin by distance subequal to its own width, located at the level of inferior eye margin; frons only slightly convex; vertex about 1.3 times as wide as length of antennal segment I; segment I 1.7 times as long as head, 0.5 times as long as pronotum, 0.4 times as long as pronotal width; labium long, almost reaching hind coxa (Fig. 7C).

Thorax. Posterior margin of pronotum slightly concave medially (Fig. 6C); pronotum 1.2 times as wide as long, 1.2 times as wide as head; calli 0.5 times as wide as basal width of pronotum; pronotal disk, calli and collar 0.7 times, 0.2 times, and 0.2 times as long as pronotum, respectively; calli and collar together about 0.3 times as long as pronotum.

Hemelytron. Semitransparent, long, corium reaching apex of abdomen; cuneus about 1.5 times as long as wide at base (Figs 6C, 7C).

Legs. Slender, femora gradually thickening apically (Fig. 6C, 7C).

Genitalia. Bursa copulatrix as in *K. ukerewensis*, weakly sclerotised, with indistinct sclerotised rings of dorsal labiate plate, posterior wall entirely membranous.

Male. Unknown.

Distribution. Known from two localities in Congo, Haut Uelé.

Host. Unknown.

Etymology. The specific epithet is a Latin adjective composed of the noun *atramentum*, meaning “ink” and the adjective *maculatus*, *-a*, *-um*, meaning “spotted”, referring to the shape of the band on the corium, blurring distally and thus resembling an ink spot.

Discussion. While this species is known solely from two females, its distinct colouration prompted us to describe it despite the lack of known males. Given the observed variation in colour patterns within *Kunungua*, we are confident that with further collecting efforts, males could be readily associated with females.

Kunungua boxi Carvalho, 1951

Figs 6B, 7F

Kunungua boxi Carvalho, 1951: 108.
Kunungua boxi: Carvalho (1957: 107) (catalogue).

Material examined. ***Holotype.*** ♂, Ghana: Gold coast, Amentia, 6.22°N, 1.17°W, 15 Sep 1943, H. E. Box, *Aframomum* sp. (Zingiberaceae) (AMNH_PBI 00340367) (NHM).

Paratypes. Ghana: Gold coast, Amentia, 6.22°N, 1.17°W, 15 Sep 1943, H. E. Box, *Aframomum* sp. (Zingiberaceae), 2♂ (AMNH_PBI 00340368, AMNH_PBI 00340369) (NHM). Gold coast, Asuansi, 5.3°N, 1.23°E, 15 Dec 1942, H. E. Box, *Aframomum* sp. (Zingiberaceae), 1♀ (AMNH_PBI 00340370) (NHM).

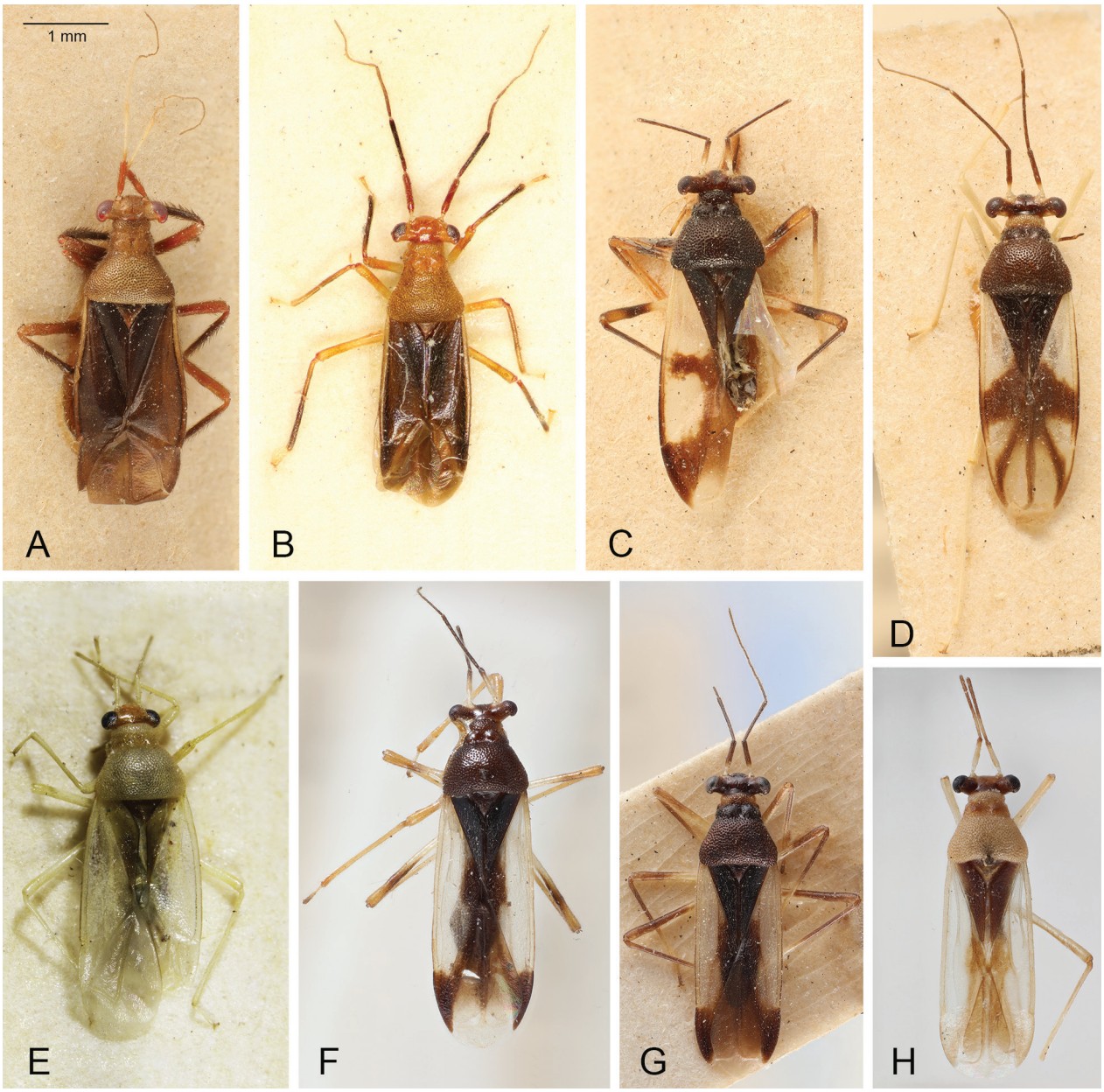

Figure 6. *Kunungua* species, dorsal view. **A.** *K. cinnamomea*, ZISP_ENT 00008425; **B.** *K. boxi*, AMNH_PBI 00340368; **C.** *K. atramentomaculata*, ZISP_ENT 00008427; **D.** *K. ornata*, ZISP_ENT 00008428; **E.** *K. pallida*; **F.** *K. gemina*, ZISP_ENT 00008589; **G.** *K. ukerewensis* (dark form), ZISP_ENT 00008413; **H.** *K. ukerewensis* (light form), ZISP_ENT 00008433.

Revised diagnosis. Recognised by the following combination of characters: antennal segment I terracotta, segment II dark brown, basally terracotta, segment III brownish yellow, segment IV sandy; head reddish yellow; pronotum ochraceus; hemelytron dark brown, with dirty yellow costal margin; femora reddish yellow. Parameres similar to those of *K. ornata*.

Kunungua boxi is most similar to *K. cinnamomea* (Fig. 6A) in the structure, body proportions, and colouration, differing from the latter species in the comparatively sparsely distributed, pale brown setae on tibiae, especially fore tibia, as well as in the colouration of antenna, head, and femora. Refer to the discussion section of the genus for additional details.

Redescription. Male. ***Colouration*** (Figs 6B, 7F). Head reddish; antennal segment I terracotta, segment II dark brown, basally terracotta, segment III brownish yellow, segment IV sandy; eyes brownish scarlet; labium pale yellow, apex dark brown; collar, calli, and pronotal disk ochraceus, calli with reddish tinge; clavus and cuneus dark brown, corium dark brown with dirty yellow, gradually darkening apically costal margin; membrane fuscous, cinnamon, semitransparent; coxae pale yellow; femora reddish yellow, apically with reddish tinge; fore tibia brown, reddish basally; middle tibia brownish yellow; hind tibia brownish yellow basally, gradually darkening towards apex; tarsi pale yellow; abdomen uniformly brown.

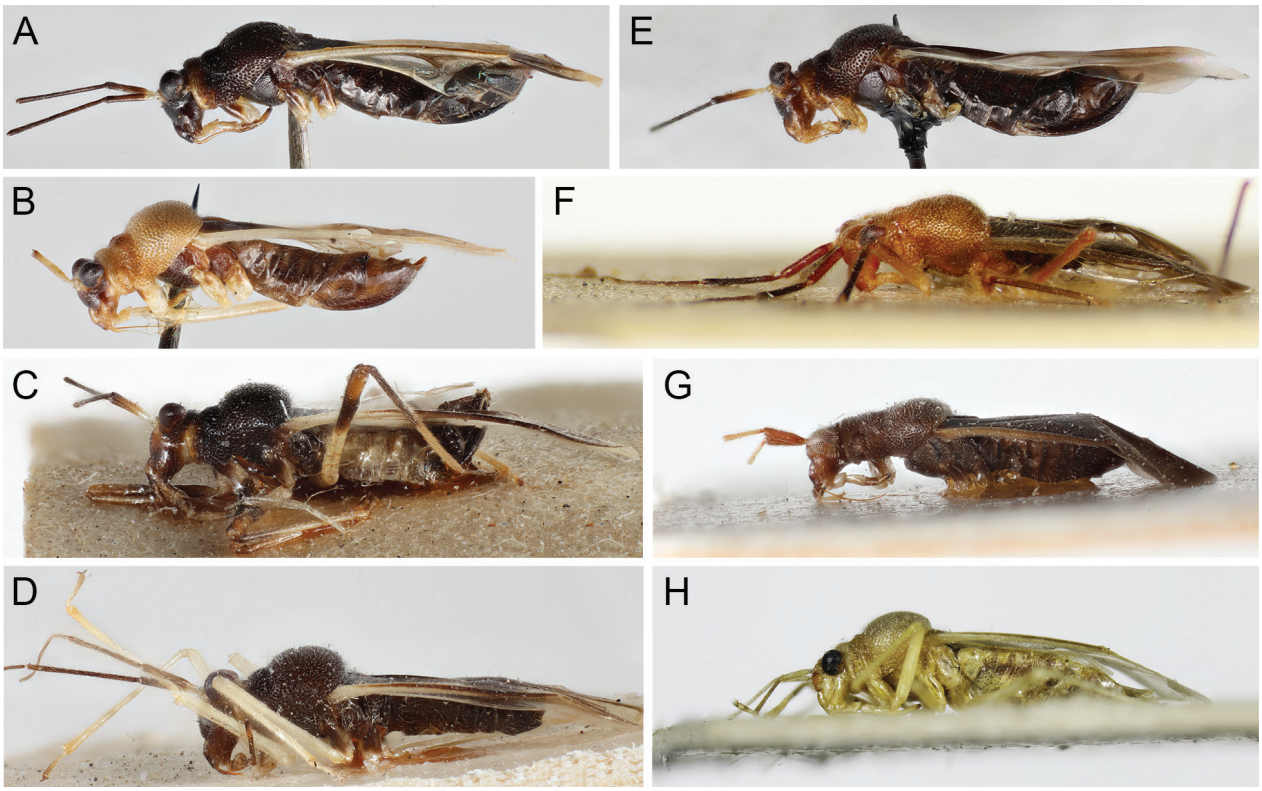

Figure 7. *Kunungua* species, lateral view. **A.** *K. ukerewensis* (dark form), ZISP_ENT 00008437; **B.** *K. ukerewensis* (light form), ZISP_ENT 00008430; **C.** *K. atramentomaculata*, ZISP_ENT 00008427; **D.** *K. ornata*, ZISP_ENT 00008428; **E.** *K. gemina*, ZISP_ENT 00008415; **F.** *K. boxi*, AMNH_PBI 00340368; **G.** *K. cinnamomea*, ZISP_ENT 00008426; **H.** *K. pallida*.

Vestiture. Body covered with comparatively long simple setae, subequal to width of antennal segment I at middle, adpressed on hemelytron, semierect elsewhere, goldish on dorsum, pale brown on legs and antennal segment I.

Structure. Total length 3.2–3.5 mm; body 3.7–3.8 times as long as basal width of pronotum.

Head. Eye peduncle short, oblique, with longer posterior margin; antennal fossa large, removed from inner eye margin by about half of fossa width, located at the level of inferior eye margin; frons short, swollen; vertex about 1.0–1.2 times as wide as length of antennal segment I; segment I 0.5 times as long as pronotum; labium short, slightly surpassing fore coxa.

Thorax. Pronotum comparatively narrow, 1.0–1.1 times as wide as long, 1.0–1.2 times as wide as head; pronotal disk, calli, and collar 0.6 times, 0.3 times, and 0.1 times as long as entire pronotum, respectively; calli and collar together about 0.4 times as long as pronotum; posterior margin straight, not concave (Fig. 6B).

Hemelytron. Opaque, long, cuneus distinctly surpassing the apex of abdomen; cuneus narrowly triangular, with slightly concave inner margin, about 1.5 times as long as wide at base (Figs 6B, 7F).

Legs. Relatively short, robust, femora cylindrical, of about the same diameter along entire length (Fig. 6B).

Genitalia. Parameres. Left paramere falciform (Odhiambo 1962: figs 62–63), tapering toward the apex, apex hook-like from the inner side; right paramere (Odhiambo 1962: figs 64–65) somewhat S-shaped, with relatively wide sensory lobe and with needle-shaped, upturned apex in lateral view. Aedeagus C-shaped, apically with single large membranous lobe (Odhiambo 1962: fig. 66).

Female. Colouration, structure, body proportions, and vestiture as in male.

Distribution. The species was originally described and is still known from two localities in Ghana, which are ca. 130 kilometers apart from each other.

Host. *Aframomum* sp. (Zingiberaceae).

Kunungua cinnamomea Carvalho, 1951

Figs 6A, 7G, 8A, 9A, 10A–E

Kunungua cinnamomea Carvalho, 1951: 109.
Kunungua cinnamomea: Carvalho (1957: 107) (catalogue).

Material examined. Democratic Republic of the Congo: Nord-Kivu: Rutshuru, 1.18°S, 29.45°E, May 1937, J. Ghesquiere, 1♀ (ZISP_ENT 00008425) (MRAC). Tshuapa: Bokuma, 0.67°S, 21.02°E, Mar 1954, R.P. Lootens, 1♂ (ZISP_ENT 00008426) (MRAC). GABON: Estuaire: Mbel, 0.25°N, 10.18°E, Oct 1969, A. Villiers, 3♂ (ZISP_ENT 00009332, ZISP_ENT 00009333, ZISP_ENT 00009335), 2♀ (ZISP_ENT 00009334, ZISP_ENT 00014341) (MNHN).

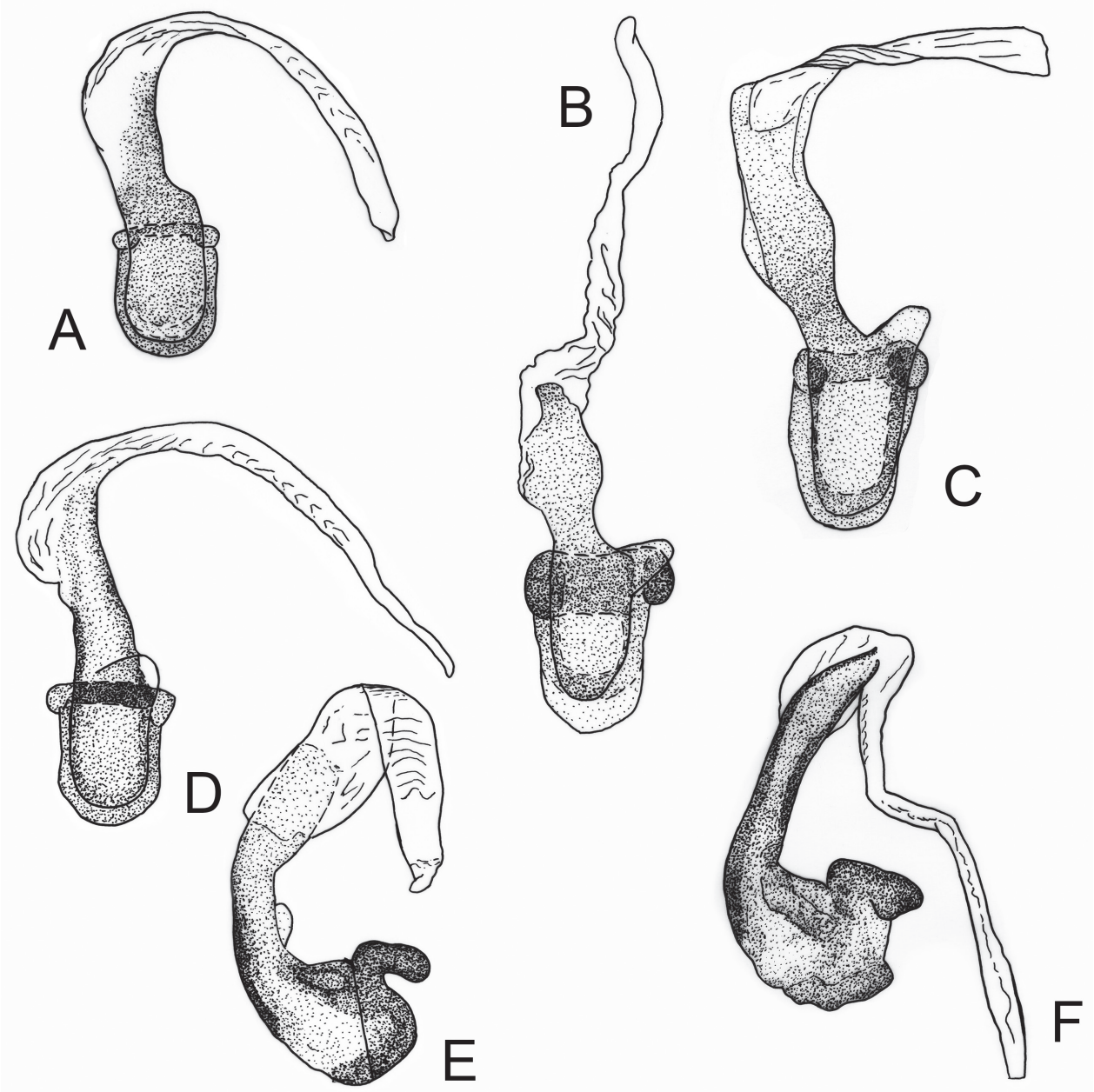

Figure 8. *Kunungua* species, aedeagus. **A.** *K. cinnamomea*, ZISP_ENT 00008426; **B.** *K. ukerewensis* (dark form), ZISP_ENT 00014329; **C.** *K. ukerewensis* (light form), ZISP_ENT 00008433; **D, E.** *K. gemina*, ZISP_ENT 00014338; **F.** *K. ornata*, ZISP_ENT 00008429.

Revised diagnosis. Recognised by the following combination of characters: antennal segment I reddish, segments II–IV pale yellow; head cinnamon; femora reddish; right paramere apically serrate.

Most similar to *K. boxi* in the structure and colouration (see the discussion section of the genus for more details), differing from the latter species in the colour of antenna, specifically pale yellow antennal segment II, sandy head, reddish femora, and the more dense, dark brown setae on fore tibia.

Redescription. Male. ***Colouration*** (as in Figs 6A, 7G). Head sandy; antennal segment I reddish, segments II–IV pale yellow, sometimes segment II with reddish tinge basally; eyes scarlet; clypeus brownish; labial segments I and II pale yellow, segments III and IV brownish yellow; pronotum sandy; corium and cuneus brown to cinnamon; clavus brown; membrane fuscous, cinnamon, semitransparent; fore coxa yellowish, middle and hind coxa brownish; femora reddish; fore tibia brown, middle and hind tibiae reddish brown; tarsus pale yellow; abdomen brown.

Vestiture. Body covered with simple semierect setae, brown on legs and antennal segment I, goldish brown on hemelytron, goldish elsewhere. Setae on tibiae, especially fore tibia, extremely dense, longer than tibia diameter, dark brown to brown.

Structure. Total length 3.5–4.3 mm; body 3.4–3.7 times as long as basal width of pronotum and 3.6–3.7 times as long as pronotal length.

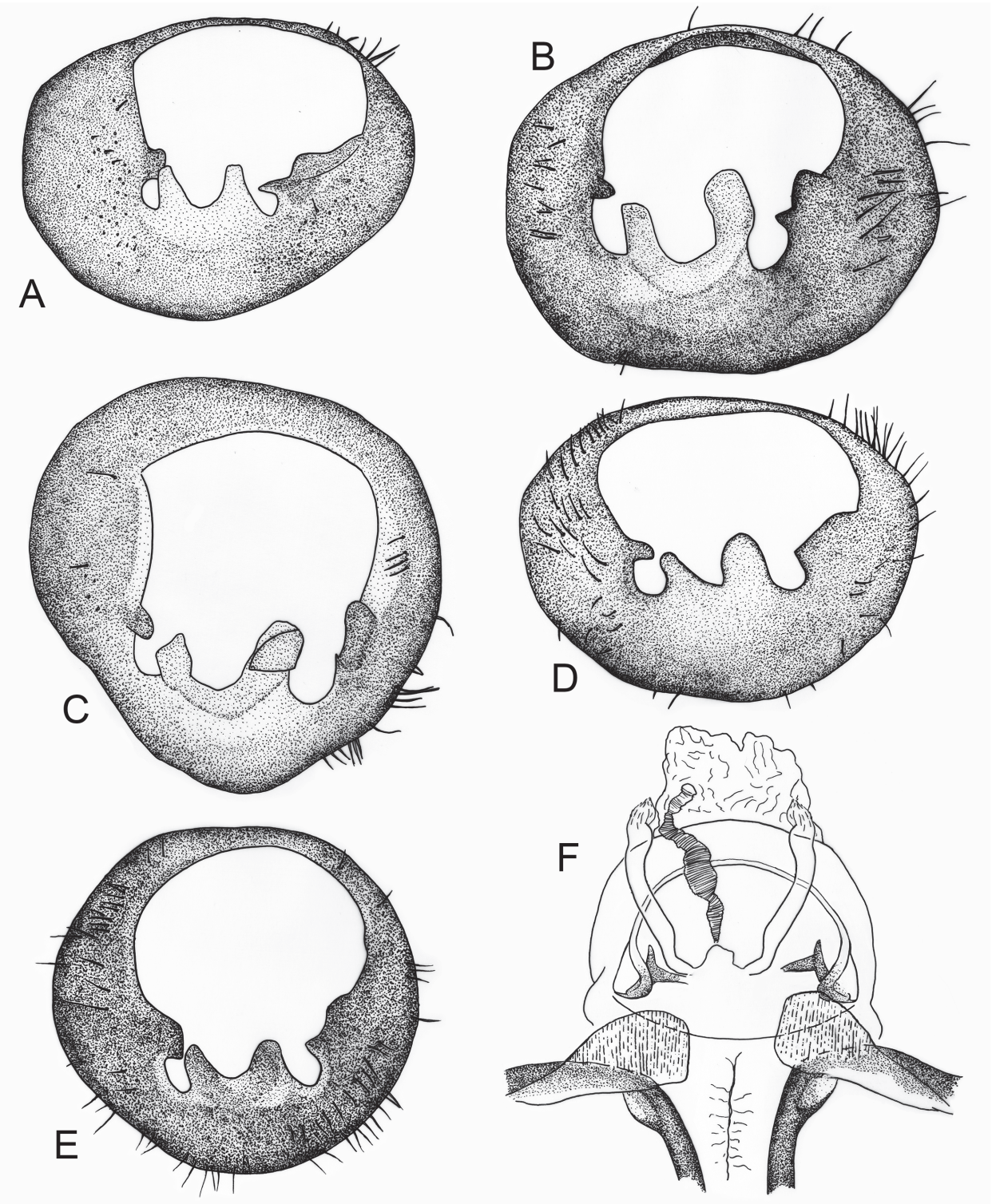

Figure 9. *Kunungua* species, male genital capsule and female bursa copulatrix. **A.** *K. cinnamomea*, ZISP_ENT 00008426; **B, F.** *K. ukerewensis* (dark form), ZISP_ENT 00014329 (male), ZISP_ENT 00014327 (female); **C.** *K. ukerewensis* (light form), ZISP_ENT 00008433; **D.** *K. gemina*, ZISP_ENT 00014338; **E.** *K. ornata*, ZISP_ENT 00008429. **A–E.** genital capsule; **F.** dorsal labiate plate of bursa.

Head 0.4 times as long as wide, 1.8–2 times as wide as collar; eye peduncle short, oblique, longer in basal part; antennal fossa large, removed from inner eye margin by distance comprising about half of its own width, located at the level of inferior eye margin; frons short, swollen; vertex about as wide as length of antennal segment I; segment I 1.3 times as long as head, 0.4 times as long as pronotum, 0.4 times as long as pronotal width; labium short, reaching middle of fore coxa.

Thorax. Pronotum nearly as wide as long, 1.2 times as wide as head; calli 0.5 times as wide as basal width of pronotum; posterior margin slightly concave medially

(Fig. 6A); pronotal disk, calli, and collar 0.6 times, 0.2–0.3 times, and 0.1–0.2 times as long as pronotum, respectively; calli and collar together about 0.4 times as long as pronotum.

Hemelytron. Opaque, long, cuneus reaching distinctly beyond the apex of abdomen; cuneus about 1.5 times as long as wide at base (as in Fig. 6A, 7G).

Legs. Relatively short, robust, femora cylindrical, of about the same diameter along entire length (as in Fig. 6A).

Genitalia. Genital capsule. Lateral portions of cuplike sclerite lobe-shaped, apically tapering, subequal in size. Outgrowth forming outer side of right paramere socket spike-like, left outer outgrowth blunt, apically widened (Fig. 9A).

Parameres. Left paramere falciform, tapering towards apex (Fig. 10A, B); right paramere with wide, flattened sensory lobe, serrated apically, with needle-shaped, upturned apex in lateral view (Fig. 10C–E).

Aedeagus. As in Fig. 8A, C-shaped, basal part without any outgrowths.

Female. Colouration, surface, and vestiture as in male. Total body length 3.7–4.4 mm; antennal segment I 1.4–1.5 times as long as head; head 0.3–0.4 times as long as wide.

Distribution. The species was originally described from Kunungu and is currently known from two localities in Congo and one in Gabon.

Host. Unknown.

Kunungua gemina sp. nov.

https://zoobank.org/6B7D4A25-3851-4E6B-AE05-F6DC0C4466F5

Figs 6F, 7E, 8D, E, 9D, 10N–Q

Material examined. ***Holotype.*** ♀, Democratic Republic of the Congo: P.N.U. (Upemba National Park), Kamitungula af. Lusinga, 8.93°S, 27.21°E, 1700 m, 04 Mar 1947–07 Mar 1947, Miss G. F. de Witte, 6a (ZISP_ENT 00008589) (MRAC).

Paratypes. Democratic Republic of the Congo: P.N.U. (Upemba National Park), Lusinga, 8.93°S, 27.21°E, 1760 m, 19 Mar 1947, Miss G. F. de Witte, 75a, 5♀ (ZISP_ENT 00008415, ZISP_ENT 00008416, ZISP_ENT 00008417, ZISP_ENT 00014336, ZISP_ENT 00014337), 1♂ (ZISP_ENT 00014338); 22 Mar 1947, Miss G. F. de Witte, 95a, 4♀ (ZISP_ENT 00014331, ZISP_ENT 00014332, ZISP_ENT 00014333, ZISP_ENT 00014334) (MRAC). P.N.U. (Upemba National Park), Kamitungula af. Lusinga, 8.93°S, 27.21°E, 1700 m, 04 Mar 1947–07 Mar 1947, Miss G. F. de Witte, 6a, 1♀ (ZISP_ENT 00014335) (MRAC). Katanga: P.N.U. (Upemba National Park), Kabwoe sur Muye, 8.8°S, 26.85°E, 1.320 m, 13 May 1948–14 May 1948, Miss G. F. de Witte, 1603a, 1♀ (ZISP_ENT 00014318) (MRAC).

Other specimens examined. Democratic Republic of the Congo: P.N.U. (Upemba National Park), Lusinga, 8.93°S, 27.21°E, 17 Mar 1947, Miss G. F. de Witte, 1♀ (ZISP_ENT 00014317) (MRAC); 19 Mar 1947, Miss G. F. de Witte, 1♀ (ZISP_ENT 00008416) (MRAC).

Diagnosis. Recognised by the following combination of characters: antennal segment I pale yellow, with dark brown apex; collar dark brown; corium pale yellow, with elongate brown spot in medioapical area; cuneus dark brown; right paramere with needle-shaped apex.

Resembles the dark form of *K. ukerewensis* in the general appearance, body proportions, and colouration, particularly in the presence of an oval brown spot in the medioapical area of corium and the entirely darkened cuneus. *Kunungua ukerewensis* can be distinguished from the new species in having brownish yellow to yellow collar (figs 6G, H), and the shape of both parameres (Fig. 10D–G).

Description. Female. ***Colouration*** (Figs 6F, 7E). Head dark brown except for pale yellow antennal fossa; antennal segment I pale yellow, with dark brown apex, segments II–IV dark brown; eyes usually dark brown; pronotum, scutellum, and clavus dark brown; corium pale yellow, with longitudinal, more or less semicircular band along its inner margin starting slightly above claval apex; cuneus uniformly brown; membrane semitransparent, fuscous basally, whitish apically; coxae pale yellow; fore tibia and fore femur brownish yellow; middle and hind femora pale yellow basally, brown in middle part, brownish yellow apically; middle and hind tibiae brownish yellow, darker basally and gradually lightening apically; tarsal segment I pale yellow, segment II gradually darkening apically; segment III greyish brown; abdomen dark brown.

Vestiture. Clothed with whitish long simple setae, adpressed on hemelytron, semierect elsewhere, subequal to width of antennal segment I at middle, somewhat shorter on pronotum.

Structure. Total length 4.2–4.3 mm; body 4.0–4.1 times as long as width of pronotum and 4.5–4.9 times as long as pronotal length.

Head 0.3 times as long as wide, 1.9 times as wide as collar; antennal fossa large, removed from the inner eye margin by distance subequal to its own width, located at the level of inferior eye margin; frons flattened, only slightly convex distally; vertex about as wide as length of antennal segment I; antennal segment I 1.9–2.0 times as long as head, 0.5–0.6 times as long as pronotum, 0.4–0.5 times as long as pronotal width; labium relatively short, segment IV reaching middle of mesothorax (Fig. 7E).

Thorax. Posterior margin of pronotum slightly concave medially (Fig. 6F); pronotum 1.1–1.2 times as wide as long, 1.3 times as wide as head; calli 0.5 times as wide as basal width of pronotum; pronotal disk, calli, and collar 0.6–0.7 times, 0.2 times, and 0.1–0.2 times as long as pronotum, respectively; calli and collar together 0.3–0.4 times as long as pronotum.

Hemelytron. Semitransparent, long, corium reaching the apex of abdomen; cuneus about twice and a half as long as wide at the base (Figs 6F, 7E).

Legs. Slender, femora gradually thickening apically (Fig. 6F).

Genitalia. Bursa copulatrix weekly sclerotised, sclerotised rings not distinctive, posterior wall fully membranous.

Male. Colouration, structure, surface, and vestiture as in female.

Genitalia. Genital capsule. Lateral portions of cuplike sclerite lobe-shaped, right being about twice as large

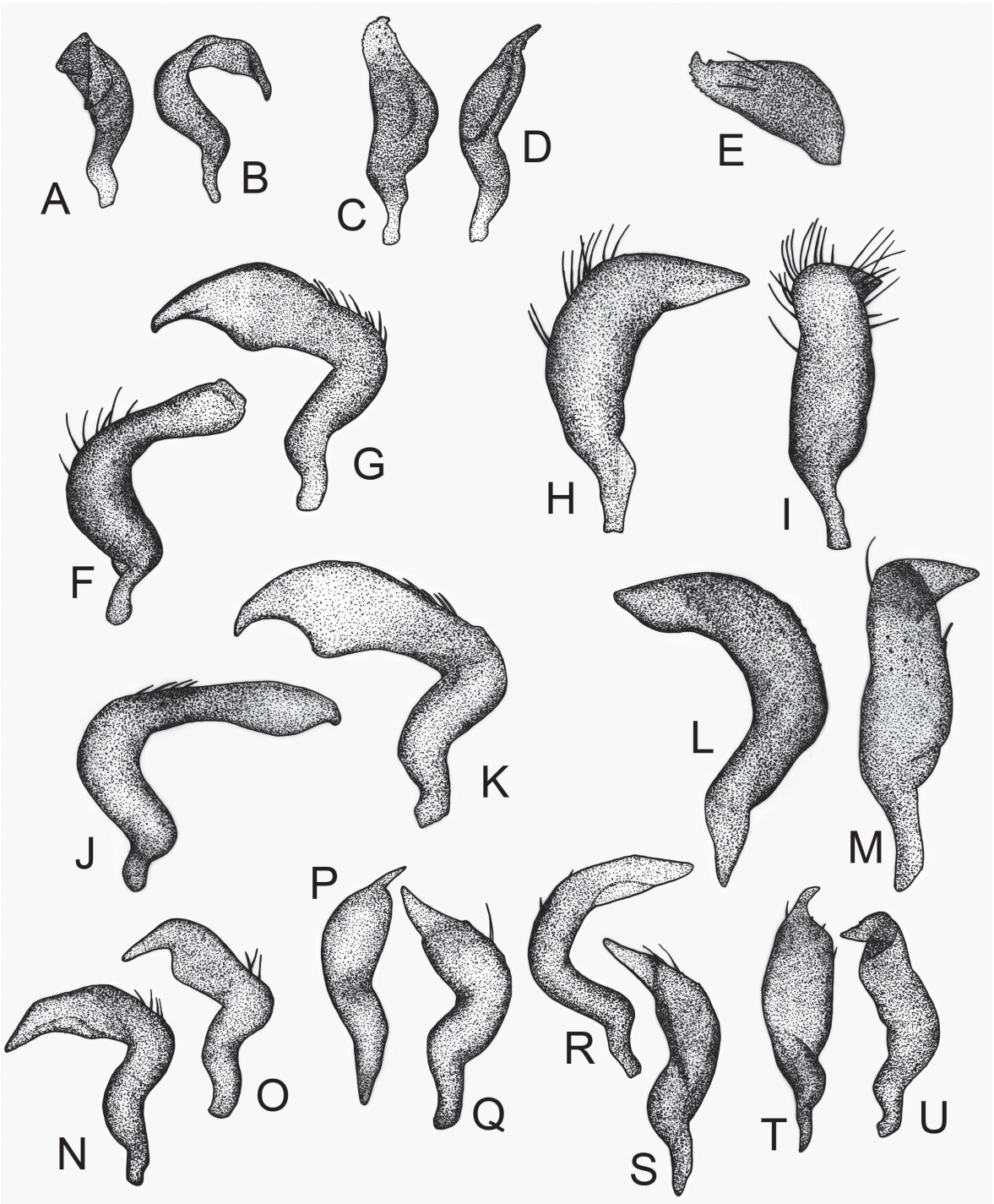

Figure 10. *Kunungua* species, parameres. **A–C.** *K. cinnamomea*, ZISP_ENT 00008426; **D, E.** *K. ukerewensis* (dark form), ZISP_ENT 00014329; **F, G.** *K. ukerewensis* (light form), ZISP_ENT 00008433; **H, I.** *K. gemina*, ZISP_ENT 00014338; **J, K.** *K. ornata*, ZISP_ENT 00008429. **A–E.** *K. cinnamomea*, ZISP_ENT 00008426; **F–I.** *K. ukerewensis* (dark form), ZISP_ENT 00014329; **J–M.** *K. ukerewensis* (light form), ZISP_ENT 00008433; **N–Q.** *K. gemina*, ZISP_ENT 00014338; **R–U.** *K. ornata*, ZISP_ENT 00008429. **A.** left paramere, lateral view; **B, R.** left paramere, ventral view; **C, I, M, T.** right paramere, lateral view; **D, H.** right paramere, dorsal view; **E.** right paramere, apex in lateral view; **F.** left paramere, anterioventral view; **G, K, N.** left paramere, dorsal view; **J.** left paramere, posteroventral view; **L, Q, U.** right paramere, ventral view; **O.** left paramere, anteriodorsal view; **P.** right paramere, dorsolateral view; **S.** left paramere, dorsolateral view.

as the left one. Outgrowth forming outer side of right paramere socket wide, trapeziform, left outer outgrowth small, claw-like (Fig. 9D).

Parameres. Subequal in size; right paramere somewhat S-shaped, apically needle-shaped (Fig. 10P, Q), left paramere falciform, apically tapering, somewhat expanded subapically (Fig. 10N, O).

Aedeagus as in Fig. 8D, E; C-shaped; with lobe-shaped, rounded, and devoid of pigmentation dorsal outgrowth of sclerotised part located close to phallobase.

Distribution. Known from Congo.

Host. Unknown.

Etymology. The specific epithet is the Latin adjective *geminus*, *-a*, *-um*, meaning "twin", in allusion to the similarity of the new species and the dark form of *K. ukerewensis* in general appearance.

Kunungua ornata sp. nov.

https://zoobank.org/E1E2B771-82ED-42E4-B14E-E1F6D40BB818

Figs 6D, 7D, 8F, 9E, 10R–U

Material examined. ***Holotype.*** ♂, Democratic Republic of the Congo: Bas-Uele: Djamba, 9.82°S, 22.12°E, 25 Dec 1924, Dr H. Schouteden (ZISP_ENT 00008428) (MRAC).

Paratype. Democratic Republic Of The Congo: Orientale: Yangambi, 0.78°N, 24.47°E, Jun 1948, P. L. G. Benoit, 1♂ (ZISP_ENT 00008429) (MRAC).

Diagnosis. Recognised by the following combination of characters: antennal segment I brown, pale yellow basally; collar brownish yellow; corium pale yellow, with wide, oblique brown band along cuneal fracture, starting near apex of clavus, reaching costal margin, and gradually narrowing laterally; cuneus pale yellow, with inner and outer margins narrowly brown; femora and tibiae pale yellow (Figs 6D, 7D).

The new species clearly differs from all congeners by the wide, oblique, gradually narrowing laterally, brown band, starting near the apex of the clavus and reaching the costal margin. While it somewhat resembles *K. gemina* in the shape of both parameres, it differs from that species in the shape of the apex of the right paramere (Fig. 10I, K), not to mention the striking differences in the colour-pattern (Fig. 6 D, F).

Description. Male. ***Colouration*** (Figs 6D, 7D). Head, except for pale yellow posterior and anterior margins of eye peduncle and antennal fossa, antennal segment I, except for basal pale yellow quarter, and antennal segment II dark brown, antennal segments III and IV brownish; eyes reddish brown; collar brownish yellow; calli, pronotal disk, and scutellum dark brown; corium pale yellow, with wide oblique transverse brown band along cuneal fracture, starting near apex of clavus and narrowing towards costal margin; clavus dark brown; membrane semitransparent, pale yellow, with brown membranal vein; coxae brownish, posteriorly pale yellow; femora and tibiae pale yellow; cuneus pale yellow, with brown inner and outer margins; tarsal segments I and II pale yellow, the latter brownish apically, segment III brownish; abdomen dark brown.

Vestiture. Clothed with whitish long simple setae, adpressed on hemelytron, semierect elsewhere, subequal to width of antennal segment I at middle, somewhat shorter on pronotum.

Structure. Total length 3.9–4.2 mm; body 3.4–3.6 times as long as width of pronotum and 3.7–4.0 times as long as pronotal length.

Head 0.3 times as long as wide, 2 times as wide as collar; antennal fossa large, removed from inner eye margin by distance subequal to its own width, located at the level of inferior eye margin; frons flattened, only slightly convex distally; vertex 1.0–1.1 times as wide as length of antennal segment I, segment I 1.6–2.1 times as long as head, 0.5–0.6 times as long as pronotum, 0.5 times as long as pronotal width; labium reaching middle coxa (Fig. 7D).

Thorax. Posterior margin of pronotum slightly concave medially (Fig. 6D); pronotum 1.1 times as wide as long, 1.1–1.2 times as wide as head; calli 0.5–0.6 times as wide as basal width of pronotum; pronotal disk, calli, and collar 0.7 times, 0.2 times, and 0.1–0.2 times as long as pronotum, respectively; calli and collar together 0.3 times as long as pronotum.

Hemelytron. Semitransparent, long, corium reaching slightly beyond apex of abdomen; cuneus nearly twice and a half as long as wide at base (Figs 6D, 7D).

Legs. Slender, femora gradually thickening apically (Fig. 6D).

Genitalia. Genital capsule. Lateral portions of cuplike sclerite forming inner parts of paramere sockets lobe-shaped, right lobe about twice as large as left one; outgrowths forming outer sides of right and left paramere sockets trapeziform, wide and short, right one medially depressed, about twice as large as left (Fig. 9E).

Parameres. Subequal in size, left paramere slightly larger, falciform, tapering at apex (Fig. 10R, S); right paramere with a flattened sensory lobe and upturned hook-like apex (Fig. 10T, U).

Aedeagus. As in Fig. 8F; C-shaped, sclerotised basal part without any outgrowths.

Female. Unknown.

Distribution. Known from two localities in Congo.

Host. Unknown.

Etymology. The specific epithet is the Latin adjective *ornatus*, *-a*, *-um*, meaning "ornate, adorned with decorative details", referring to the presence of a wide brown band on the corium.

Kunungua ukerewensis Odhiambo, 1962

Figs 6G, H, 7A, B, 8B, C, 9B, C, F, 10F–M

Kunungua ukerewensis Odhiambo, 1962: 269.

Material examined. ***Holotype.*** ♀, Tanzania: Mara, Tanganyika Terr. Ukerewe Island, 2.02°S, 32.98°E, R.P. Conrads (AMNH_PBI 00340366) (NHM).

Other specimens examined. Dark form: Democratic Republic of the Congo: Nord-Kivu: Massif Ruwenzori, riv. Kakalari, affl. Bombi, 0.32°N, 29.78°E, 1.680 m, 28 Sep 1956, P. Vanschuytbroeck, VS738, 1♀ (ZISP_ENT 00008437) (MRAC). Katanga: P.N.U. (Upemba National Park), Kabwoe sur Muye, 8.8°S, 26.85°E, 1.320 m, 13 May 1948–14 May 1948, Miss G. F. de Witte, 1603a, 1♂ (ZISP_ENT 00014329) (MRAC). Katanga: Upemba National Park (P.N.U.), Gorges de la Pelenge, 7.15°S, 27.02°E, 1.150 m, 19 Jun 1947, Miss G. F. de Witte, 520a, 2♀(ZISP_ENT 00014327, ZISP_ENT 00008436);

21 Jun 1947, Miss G. F. de Witte, 521a, 1♀ (ZISP_ENT 00008412) (MRAC). Nord-Kivu: Terr. Rutshuru, 1.18°S, 29.45°E, Sep 1937, Miss. Prophylactique, 1♀ (ZISP_ENT 00014328) (MRAC). Tanzania: Mara, Victoria Nyanza: Ukerewe, 2.02°S, 32.98°E, Feb 1938, R. P. Conrads, 469, 2♂ (ZISP_ENT 00008413), 1♀1♂ (ZISP_ENT 00008414) (MRAC). **Light form:** Democratic Republic of the Congo: Nord-Kivu: Massif Ruwenzori, riv. Lume, 0.41°N, 29.78°E, 1.860 m, 12 Dec 1956, P. Vanschuytbroeck, VS 840d, 1♂ (ZISP_ENT 00008435), 2♀ (ZISP_ENT 00008432, ZISP_ENT 00014330) (MRAC). Kinshasa: P.N.A. Mont Hoyo, 1.25°N, 29.82°E, 1.280 m, 07 Jul 1955–15 Jul 1955, P. Vanschuytbroeck, 13274-309, 2♂ (ZISP_ENT 00008433, ZISP_ENT 00008434), 2♀ (ZISP_ENT 00008430, ZISP_ENT 00008431) (MRAC).

Revised diagnosis. Recognised by the following combination of characters: antennal segment I dark brown, with pale yellow basis; collar brownish yellow; right paramere falciform, with swollen body, apically tapering (Fig. 10E, G); left paramere falciform, subapically widened, hook-like in lateral view (Fig. 10D, F).

The dark form resembles *K. gemina* sp. nov. in general appearance and colouration, particularly in the shape of the band on corium. However, this species differs from *K. ukerewensis* in having a needle-shaped apex of the right paramere (Fig. 10I), a pale yellow, apically darkened antennal segment I and a dark-brown collar (Figs 6F, 7E). The light form may be distinguished from all congeners by the same characters and additionally differs in having an almost entirely pale yellow corium and cuneus.

Redescription. Male. ***Colouration.*** **Dark form** (as in Figs 6G, 7A). Head dark brown except for brownish yellow antennal fossa, antennal segment I, except for pale yellow narrowed basal part, segments II–IV brown, clypeus from basis to apex gradually lightening from dark brown to yellowish brown; collar dirty yellow to brownish yellow; calli, pronotal disk, scutellum, clavus and cuneus dark brown; corium pale yellow, with brown, more or less rounded band along its inner margin starting slightly above claval apex; membrane transparent, fuscous basally, gradually lightening apically; coxae pale yellow, with brownish anterolateral margin; basal half of femora usually pale yellow, apical half brownish, sometimes femora uniformly pale yellow; basal half of tibiae usually brownish, apical half pale yellow, sometimes tibiae uniformly pale yellow; tarsal segment I pale yellow, segment II pale yellow basally, gradually darkening apically; segment III brownish; abdomen dark brown.

Light form (as in Figs 6H, 7B). Head brown except for brownish yellow antennal fossa and pale yellow clypeus, slightly darkened along margins, antennal segment I pale yellow with brown apex, basal one-third of segment II sandy, apical two-thirds brownish; eyes usually dark brown; calli and scutellum brownish yellow; collar and pronotal disk sandy; clavus brown; corium pale yellow, with sandy, indistinctly bordered band along its inner margin, starting slightly above claval apex; cuneus pale yellow, apically sandy; membrane transparent, pale fuscous basally; coxae pale yellow, with brownish anterolateral margin; femora and tibiae pale yellow; tarsal segment I pale yellow, segment II pale yellow basally, gradually darkening apically; segment III brownish yellow; abdomen brown.

Vestiture. Covered with whitish setae, adpressed on hemelytron, semierect elsewhere, subequal to or slightly longer than width of antennal segment I at middle.

Structure. Total length 3.6–3.9 mm; body 3.6–3.8 times as long as width of pronotum and 3.9–4.2 times as long as pronotal length.

Head 0.3 times as long as wide, 1.7–1.9 times as wide as collar; antennal fossa large, removed from the inner eye margin by distance subequal to its own width, located at the level of inferior eye margin; frons flattened, only slightly convex distally; vertex 1.0–1.1 times as wide as length of antennal segment I; segment I 1.7–2.0 times as long as head, 0.5 times as long as pronotum, 0.4–0.5 times as long as pronotal width; labium relatively short, reaching middle of mesothorax (as in Fig. 7A, B).

Thorax. Posterior margin of pronotum slightly concave medially (Fig. 6G, H); pronotum about 1.1 times as wide as long, 1.2 times as wide as head; calli 0.5–0.6 times as wide as basal width of pronotum; pronotal disk, calli, and collar 0.6 times, 0.2 times, and 0.2 times as long as pronotum, respectively; calli and collar together 0.4 times as long as pronotum.

Hemelytron. Semitransparent, long, corium reaching apex of abdomen; cuneus about two-and-a-half times as long as wide at base (as in Figs 6G, H, 7A, B).

Legs. Slender, femora gradually thickening apically (Fig. 6G, H).

Genitalia. Genital capsule. Lateral portions of cuplike sclerite forming inner margins of paramere sockets lobe-shaped, right lobe about twice as large as left one; outgrowth forming outer side of right paramere socket trapeziform, medially depressed, left outer outgrowth small, spike-like (Fig. 9B, C).

Parameres. Subequal in size; right paramere C-shaped, with swollen, not flattened body, apically tapering (Fig. 10H, I, L, M); left paramere falciform, subapically widened, tapering at apex, hook-like in lateral view (Fig. 10F, G, J, K).

Aedeagus. As in Fig. 8B, C; C-shaped, sclerotised part with dorsal, non-pigmented, trapeziform outgrowth located close to phallobase.

Female. Structure, surface, and vestiture as in male. Colouration as in male, but cuneus pale yellow, with brown outer and inner margins. Total length 3.7–3.8 mm. Head 1.7–1.8 times as wide as collar; antennal segment I 1.6–2.2 times as long as head.

Genitalia. Bursa copulatrix weekly sclerotised, vulvar region and posterior wall devoid of any distinctive sclerotisations; sclerotised rings of dorsal labiate plate very thin and weakly sclerotised, with medially oriented sclerotised outgrowth (Fig. 9F).

Distribution. Originally described from Tanganyika region (Tanzania). Currently known from Congo and Tanzania.

Host. Unknown.

Species excluded from *Kunungua*

***Kunungua pallida* Linnavuori, 1975**

Figs 6E, 7H

incertae sedis

Kunungua pallida Linnavuori, 1975: 4.

Redescription. (based on Linnavuori (1975) and images of the holotype). **Female.** ***Colouration.*** Pale, greenish yellow; head ochraceous; antennae, labium, calli, cuneus, and legs pale yellow, tarsal segment III darkened, greyish yellow; collar yellowish; pronotal disk and corium greyish yellow, probably greenish yellow in life; clavus uniformly greyish green.

Surface and vestiture. Dorsum with short, pale and erect simple setae, longest on clavus; pronotum deeply punctate; legs with short simple setae.

Structure. Total length 4 mm, body 2.75 times as long as broad.

Head 0.4 times as broad as pronotum; frons broadly rounded; clypeus slightly swollen; vertex with a medial furrow, 2.12 times as wide as eye; basal one-fourth of antennal segment I distinctly thinner than remainder of segment; antennal segment I related to segment II as 9:16; eye reaching collar dorsoposteriorly, neck not distinctive; labium reaching mesocoxa.

Thorax. Pronotum 1.17 times as broad as long; pronotal disk strongly convex, posterior margin straight; scutellum triangular, small, about 0.43 times as wide and 0.3 times as long as pronotum.

Legs. Slender.

Hemelytron. Semitransparent; cuneus relatively short, the distance between apex of cuneus and apex of membrane about three-quarters of cuneal length; membranal vein strongly curved distally, forming an acute angle.

Genitalia. Unknown.

Discussion

Kunungua pallida was described from a single female collected in Southern Sudan (Linnavuori 1975). The original description was brief, lacked illustrations, and did not provide a discussion on the generic placement. No new information on this species has been published since then. According to Linnavuori (1975), *K. pallida* differs from congeners in having uniformly pale colouration, robust body, short vestiture, long labium, and the antennal fossa located close to the inner eye margin. Examination of the dorsal and lateral images of the holotype preserved in NMC and kindly provided by Dr. Wilson (Figs 6E, 7H) lead us to the conclusion that *K. pallida* does not align with the diagnosis of *Kunungua*. In contrast to other species of the genus, *K. pallida* has sessile and moderately produced posteriorly eyes, transverse pronotum with weakly raised, punctured calli and strongly convex posterior part behind calli, long labium, reaching mesocoxa, and strongly angulate membranal vein.

A combination of available characters prevents the transfer of this species to any other eccritotarsine genus. Within the Ethiopian region, six genera of this tribe are currently known, including *Bunsua* Carvalho, 1951, *Monalocoropsis* Poppius, 1912, *Prodromus*, *Rhodocoris* Schmitz, 1979, and *Stenopterocoris* China, 1944. Of these, *Bunsua* (see Yeshwanth and Konstantinov 2021; Konstantinov 2021), *Monalocoropsis* (see China 1944), and *Rhodocoris* (see Štys 1985; Stonedahl 1988) clearly differ from *K. pallida* in virtually all respects, placing them in different groups of genera.

Stenopterocoris (Fig. 1B) exhibits superficial similarities to *K. pallida*, such as gracile, parallel-sided body, long and thin appendages, and a heavily punctured pronotum. However, *Stenopterocoris* clearly differs in many other respects, including eyes distinctly extended posteriorly, a non-demarcated pronotal collar, three distinct depressions at the middle of the pronotum near the anterior margin, an elongated pronotum that is weakly convex posteriorly, a falciform cuneus, and an almost straight membranal vein.

Prodromus spp. may share some features with *K. pallida*, such as an elongate body form, a short head, a vertex with longitudinal sulcus, a bottle-shaped antennal segment I with strongly narrowed basal part, semitransparent hemelytra, and an angulate membranal vein observed in some species (Fig 3B, Stonedahl 1988: fig. 76h). However, *K. pallida* differs from all *Prodromus* spp. in many crucial character states, including sessile, clearly not pedunculate eyes adjoining the anterior margin of the pronotum, a convex vertex that does not form a necklike area, and a transverse, non-campanulate pronotum with straight posterior margin.

On a global scale, *K. pallida* appears to be most similar to *Myiocapsus* Poppius, 1914 (Stonedahl 1988: fig. 42), a genus containing nine species known from Malaysia, Western Indonesia, and Southern Philippines. However, this genus can be most easily differentiated by the shape of the right paramere and the presence of a spinelike process on the left margin of the genital capsule (Stonedahl 1988). Given that male genitalic structures are crucial for the correct generic assignment of *K. pallida*, at present we refrain from transferring it to another genus and treat this species as of uncertain generic placement.

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