A new species of the genus *Cranopygia* (Dermaptera: Pygidicranidae: Pygidicraninae) from Vietnam

Новый вид рода *Cranopygia* (Dermaptera: Pygidicranidae: Pygidicraninae) из Вьетнама

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A new earwig of the genus *Cranopygia*, *C. nova* **sp. nov.**, is described from South Vietnam (Kon Tum Province). A detailed morphological description of the new species is given.

В статье описывается новый вид уховерток рода *Cranopygia*, *C. nova* **sp. nov.**, из Южного Вьетнама (провинция Контум). Дается детальное морфологическое описание нового вида.

Key words: earwigs, taxonomy, morphology, South Vietnam, Dermaptera, Pygidicranidae, Pygidicraninae, *Cranopygia*, new species

Ключевые слова: уховертки, таксономия, морфология, Южный Вьетнам, Dermaptera, Pygidicranidae, Pygidicraninae, *Cranopygia*, новый вид

INTRODUCTION

In this paper, a new species of the large and widely distributed in Asia and Australia genus *Cranopygia* Burr, 1908 is described. This genus belongs to the primitive family Pygidicranidae with rather obscure phylogenetic position (Grimaldi & Engel, 2005; Engel & Haas, 2007).

The material studied was collected and preserved in 70% ethanol. The male genitalia were processed with alkali by means of a standard procedure (Anisyutkin, 2014). The illustrations were sketched by means of a drawing tube on a Leica MZ 16 binocular microscope; further drawing and examination were made with a MBS-10 binocular microscope.

The type of the new species is deposited at the Zoological Institute, Russian Academy of Sciences, St Petersburg, Russia.

DESCRIPTION

Order **DERMAPTERA** de Geer, 1773

Family **PYGIDICRANIDAE** Verhoeff, 1902

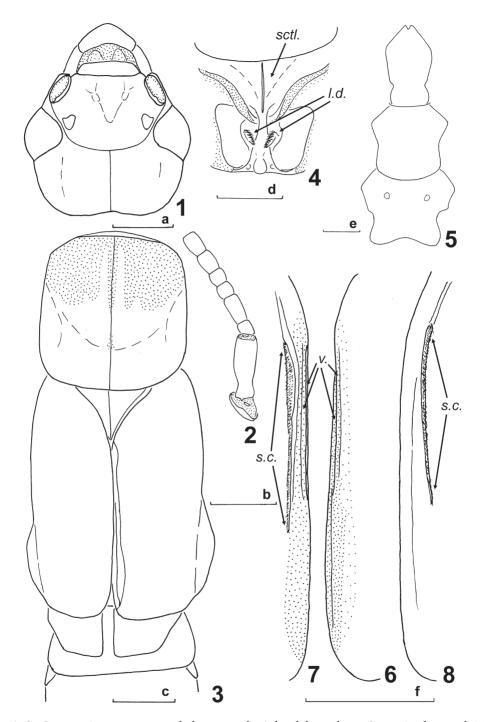
Subfamily **PYGIDICRANINAE** Verhoeff, 1902

Genus Cranopygia Burr, 1908

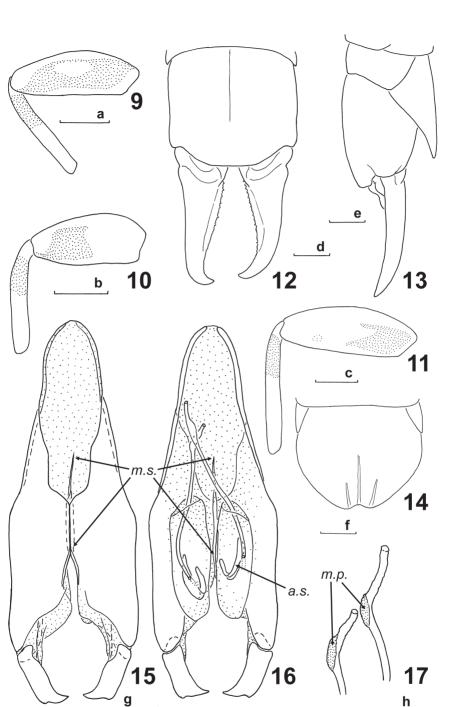
Cranopygia nova sp. nov. (Figs 1–17)

Holotype. Male; **Vietnam**, Kon Tum Prov., Kon Plong Distr., Xa Hieu Vill., commune Kon Plinh, 14°36.190'N, 108°28.885'E, 950 m, 15–23 June 2014, L.K. Iogansen, N.L. Orlov.

Description. Male (holotype). Colouration. Head from above, scapi (excepting yellowish apices), anterior part of pronotum (Fig. 3), scutellum, epimera, episterna, tegmina, spots on femora and tibiae (Figs



Figs 1–8. *Cranopygia nova* **sp. nov.**, holotype, male. **1**, head from above; **2**, proximal part of right antenna; **3**, thorax from above, tegmina slightly moved apart; **4**, median part of meso- and metathorax from above, tegmina moved apart; **5**, thoracic sternites from below; **6**, **7**, anal part of right tegmen from above (**6**) and from below (**7**); **8**, anal part of left tegmen from below (**8**). Dotted areas show dark colour (**3**) or membranous parts (**1**, **2**, **4**, **6**, **7**). Abbreviations: *l.d.*, locking device; *s.c.*, spiny crest; *sctl.*, scutellum, *v.*, veins. Scale bars: 1 mm (**a** for 1; **b** for 2; **c** for 3; **d** for 4; **e** for 5; **f** for 6–8).



Figs 9–17. *Cranopygia nova* **sp. nov.**, holotype, male. **9–11**, femora and tibiae of fore (9), middle (10) and hind (11) legs from lower (anterior) side; **12**, **13**, abdominal apex from above (12) and from side (13); **14**, penultimate sternite from below; **15**, **16**, male genitalia, general view from below (15) and from above (16); **17**, virga apices. Dotted areas show dark colour (9–11) or membranous parts (15–17). Abbreviations: *a.s.*, accessory sclerite; *m.p.*, membranous patch; *m.s.*, medial sclerite. Scale bars: 1 mm (**a** for 9; **b** for 10; **c** for 11; **d** for 12; **e** for 13; **f** for 14; **g** for 15 and 16; **h** for 17).

9–11) dark brown; abdomen darker, in distal half nearly black; eyes black; antennae (except scapus), distal segments of maxillary and labial palpi, meso- and metasternum in median part, metathorax from above, first abdominal tergite, and distal half of tarsi light brown; rest parts of body, legs and wings light yellow; cerci blackish, shaded with red.

Integuments (except abdominal ones) mat, covered with numerous short and sparse long setae; abdominal tergites and sternites finely punctate, shining.

Head longer than wide (Fig. 1); frontal and occipital regions weakly differentiated; frons slightly prominent; caudal margin weakly concave; epicranial sutures distinct; distance between eyes about 1.5 length of scapus; eve almost as long as part of head situated behind eye (= "gena" sensu Hincks, 1955); ocular spots distinct; post-ocular carinae very weak. Antennae with more than 22 segments (their apices broken off); scapus slightly thicker and much longer than other segments (Fig. 2); length ratio of six proximal antennal segments approximately 3.9 : 1.0 : 1.7 : 0.8 : 1.0 : 1.2. Pronotum slightly longer than wide, nearly rectangular (Fig. 3), weakly divided into pro- and metazona; median sulcus distinct. Scutellum large, triangular, with distinct median sulcus (Figs 3, 4, sctl.). Metanotum with well developed locking device (sensu Haas, 1995) located on outgrowths (Fig. 4, l.d.). Prosternum elongate; mesosternum almost as long as wide; metasternum broader than long (Fig. 5). Tegmina and wings fully developed (Fig. 3). Tegmina "asymmetrical" (sensu Haas, 1995), without keels, caudally truncate; ventral side of tegmina along anal margin with well developed "spiny crest" (sensu Giles, 1963) bearing irregular rows of laterally directed setae (Figs 7, 8, s.c.); right tegmen (Figs 3, 6, 7) with longitudinal membranous area ("translucent overlapping margin" sensu Haas, 1995) along anal margin, with two subobsolete longitudinal veins (Figs 6, 7, v.); this membranous area overlapped by left tegmen in repose. Wingscales short (Fig. 3). Femora and tibiae as in Figs 9–11, with very weak keels. Abdomen weakly widened caudally; 3rd and 4th tergites without tubercles; ultimate (10th) tergite subquadrate, with lateral margins nearly straight and caudal margin widely convex in median part (Fig. 12); lateral keels absent (Fig. 13). Cerci elongated and asymmetrical, distinctly denticulate on inner side (Figs 12, 13). Penultimate sternite wide, with distinct posteromedian emargination and three inconspicuous longitudinal depressions (Fig. 14).

Male genitalia (Figs 15-17) nearly symmetrical. Metaparameres short; outer margin nearly straight; apex slightly curved downward; outer tooth indistinct; inner tooth directed medially, simple, not bifurcated (Figs 15, 16). Proparameres about 1.5 times as long as distance between place of distal fusion of proparameres and their base. with medial sclerite situated along line of fusion (Fig. 15, m.s.). Penis lobes (= genital lobes or praeputial sacs) with weak sclerites on dorsal side, without membranous dilatations in apical part. Virga comparatively short and thick (Figs 16, 17), with membranous patch situated near apex (Fig. 17, m.p.). Single curved accessory sclerite situated near base of virga (Fig. 16, a.s.).

Female unknown.

Measurements (mm). Length of head 2.9; width of head 2.6; length of pronotum 2.3; width of pronotum 2.2; length of tegmina 3.9; width of tegmina 1.4; length of fore / middle / hind femora 2.2 / 2.6 / 3.2-3.3; length of fore / middle / hind tibiae 1.8-2.0 / 2.1/2.9; length of cerci 3.5.

Comparison. Cranopygia nova **sp. nov.** can be distinguished from the other species of the genus *Cranopygia* owing to the following combination of characters: completely developed wings (Fig. 3), indistinct outer teech, a simple inner tooth at the metaparamere apex (Figs 15, 16), and a characteristic structure of the virga (Figs 16, 17).

The new species is somewhat similar to *C. crockeri* Anisyutkin, 2014, described from Sabah State, Borneo Island (Anisyutkin, 2014), in the shape of metaparameres (indistinct outer teeth) and virga (the presence of a membranous patch near the virga apex) but easily differs from the latter species in completely developed wings, a simple (not bifid) inner tooth of the metaparameres and the structure of virga apex [compare pictures in Anisyutkin (2014: figs 11-14) with Figs 15-17 of this paper].

Cranopygia nova **sp. nov.** readily differs from *C. gialaiensis* Gorochov et Anisyutkin, 1993, described from Gia Lai Province of Vietnam (Gorochov & Anisyutkin, 1993), in completely developed wings and a simple apex of the virga [in *C. gialaiensis*, the virga is characteristically bifurcate; see Gorochov & Anisyutkin (1993: figs 5, 1, 2)].

Etymology. This species name is the Latin word "nova" (new).

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