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Cephenniini of the Philippines. Part 3. New species of *Cephenomicrus* REITTER and *Hlavaciellus* JALOSZYŃSKI from Palawan
(Coleoptera: Staphylinidae: Scydmaeninae)

PAWEŁ JALOSZYŃSKI

Wichrowe Wzg. 22/13, 61-678 Poznań, Poland, email: scydmaenus@yahoo.com

ABSTRACT. Two new species of Cephenniini (Scydmaenidae: Scydmaeninae) are described from the island of Palawan, the Philippines: *Cephenomicrus macrocephalus* n. sp. and *Hlavaciellus promissor* n. sp. The latter genus has been known so far only from Borneo. The habitus and aedeagi of new taxa are illustrated.

Key words: entomology, taxonomy, new species, Coleoptera, Staphylinidae, Scydmaeninae, Cephenniini, *Cephenomicrus*, *Hlavaciellus*, Oriental, Philippines.

INTRODUCTION

Five species of Cephenniini have been known to occur in the Philippines, four of them belonging to *Cephennodes* REITTER, and a single one to *Cephenomicrus* REITTER (BLATTNÝ, 1929; JALOSZYŃSKI, 2009b, c). Two previous parts of this paper (JALOSZYŃSKI, 2009b, c) treated taxa from Leyte and Mindanao, which together with Luzon are the only islands of the Philippines where Cephenniini have been reported from. Herein two new species are described from Palawan, representing genera *Cephenomicrus* and *Hlavaciellus* JALOSZYŃSKI, the latter genus known so far only from Borneo.

The type material is deposited in the Muséum d'Histoire Naturelle, Geneva, Switzerland (MHNG).

Cephenomicrus macrocephalus n. sp.

(Figs. 1, 3-5)

NAME DERIVATION

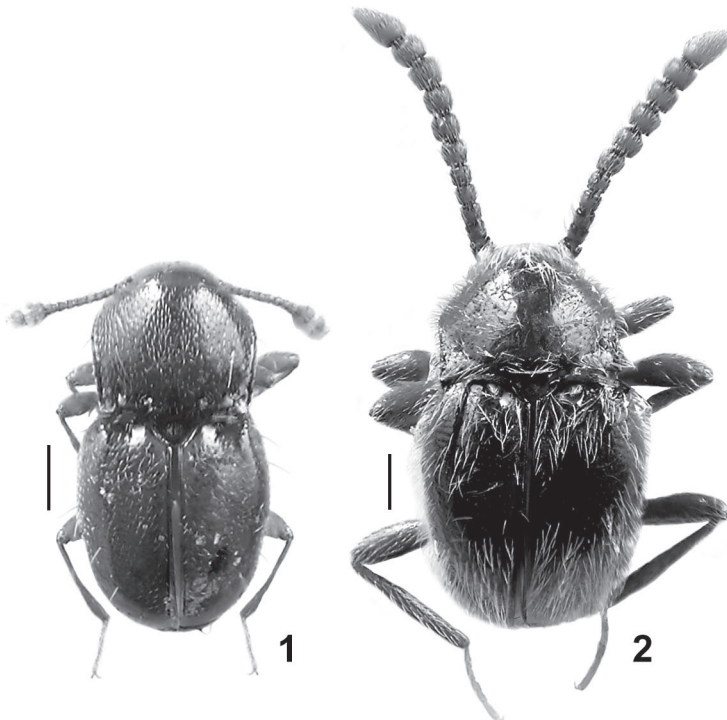
The specific epithet refers to unusually large head of this species.

DIAGNOSIS

This species clearly differs from all congeners in the following combination of characters: body large, exceeding 1 mm in length, slender; head very large, with vertex distinctly longer than frontoclypeal area and densely punctate; pronotum covered with dense punctures contrasting with glossy, very finely punctate elytra; very short and recumbent, barely noticeable basic vestiture and very long, erect additional setae: five pairs on pronotum and 8-10 on each elytron; aedeagus with distinct, bell-shaped internal armature, each paramere with two long and thick apical setae accompanied by single short and thin subapical one.

DESCRIPTION

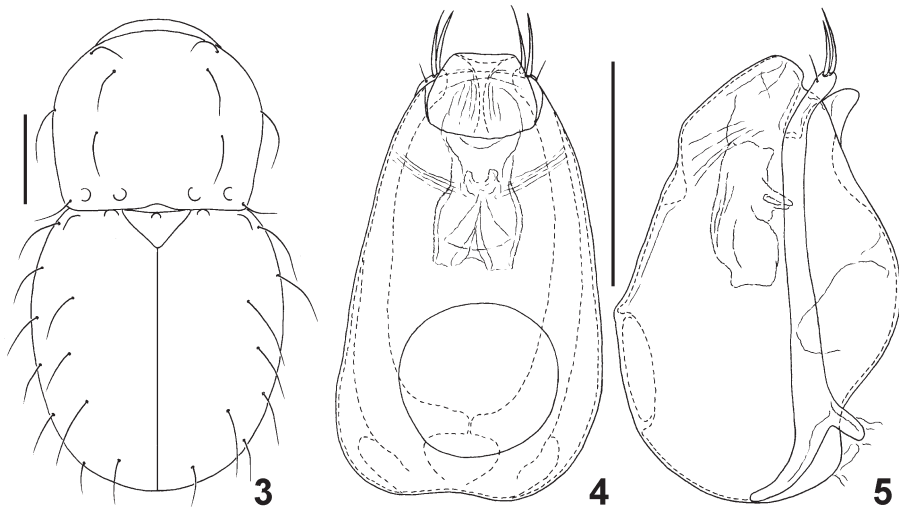
Male (Fig. 1). Body slender and strongly convex, nearly cylindrical, but with distinct constriction between pronotum and elytra, length 1.13 mm, pigmentation light



1-2. Holotype males. 1 – *Cephenomicrus macrocephalus* n. sp.; 2 – *Hlavaciellus promissor* n. sp. (scale bars: 0.2 mm)

reddish-brown, dorsum glossy; setae slightly lighter than cuticle. Head strikingly large, widest at large and convex, coarsely faceted eyes, length 0.13 mm, width 0.30 mm. Tempora not visible; vertex and frontoclypeal area confluent and strongly convex; vertex extremely large, longer than remaining part of head, so that eyes are located just below middle of head; frontal glands present but barely noticeable, each circular, slightly larger than single ommatidium and minimally paler than surrounding cuticle, located near internal anterior margin of eye; supraantennal tubercles indistinct. Punctures on frontoclypeal area and vertex moderately large and deep but very distinct, distributed slightly unevenly, distances between punctures equal to or slightly shorter than puncture diameters; setae very fine, sparse, barely discernible under magnification 80x. Antennae short, with slender flagellum and large, well delimited 2-segmented and flattened dorso-ventrally club; length 0.43 mm; antennomere I 1.2x as long as broad; II slightly narrower but much longer than I, 2.2x as long as broad; III-VIII subequal in length and width, each slightly narrower than II and slightly longer than broad; IX slightly broader than VIII, as long as broad; X about twice as broad as IX, distinctly transverse; XI as broad as X but nearly twice as long, with well marked division between cylindrical basal part and conical apical part. Antennomere I with a single long seta; II-IX covered predominantly with long, moderately dense, relatively erect setae; club with dense, short and moderately erect basic setation and several much longer, strongly erect setae.

Pronotum slightly broader than long, broadest near anterior fourth, in dorsal view subrectangular with rounded margins, length 0.38 mm, maximum width 0.44 mm. Anterior margin shallowly arcuate, convex; sides strongly rounded in anterior third, then nearly straight up to obtuse and blunt hind angles, lateral margins very indistinctly microscerrate (serrations rounded); posterior margin slightly arcuate with very



3-5. *Cephenomicrus macrocephalus* n. sp. 3 – simplified body outline and chaetotaxy; 4, 5 – aedeagus in ventral (4), and lateral (5) views (scale bars: 3 – 0.2 mm, 4, 5 – 0.1 mm)

distinct, rounded median notch; base with four circular, distinct pits located very close to posterior margin. Punctures on disc dense and distinct, but smaller and shallower than those on head, distances between punctures equal to puncture diameters; basic setation very fine but discernible under magnification 40x, composed of moderately dense, thin, recumbent setae; additionally pronotum bears five pairs of thicker, very long and strongly erect setae, as in Fig. 3.

Elytra oval, elongate, broadest slightly anterior to middle, length 0.63 mm, width 0.55 mm, elytral index (length/width) 1.14. Humeral calli very small but distinct, each prolonged posteriorly to form short longitudinal wrinkle, humeral denticles in natural position not visible; each elytron bears single, small basal fovea located closer to scutellum than humerus; apices of elytra separately rounded. Punctures very fine, barely noticeable under magnification 40x; basic setation shorter and less distinct than that on pronotum, additionally each elytron bears 8-10 very long, upright setae distributed as in Fig. 3. Hind wings long, functional.

Mesoscutellum triangular, with median basal impression.

Legs slender, moderately long, without specific characters.

Metaventricle slightly raised in middle just anterior to metacoxae, forming indistinctly delimited median tubercle; each side of metaventricle bears longitudinal carina running posteriorly and slightly toward middle from posterior external margin of mesocoxal cavity, not reaching posterior margin of ventricle.

Aedeagus (Figs. 4, 5) length 0.20 mm, in ventral view oval and broadest near base, with subtrapezoidal apex; internal armature composed of bell-shaped structure located in subapical part of median lobe; parameres moderately slender, bent dorsally near apices, each with two long and broadened apical setae and short, thin subapical seta.

Female. Unknown.

TYPE MATERIAL

Holotype (male): two labels: "PHILIPPINES Central Palawan \ St Paul N. P., 3.5 km N Sabang \ 23.xii.1996, 30 m, G. Cuccodoro \ #2: sifting dry leaf litter and \ vegetable debris in forest" [white, printed], "*CEPHENNOMICRUS \ macrocephalus* m. \ HOLOTYPUS \ det. P. JAŁOSZYŃSKI '09" [red, printed] (MHNG).

DISTRIBUTION

Philippines: Palawan Is.; Palawan Prov.

REMARKS

This species has remarkable morphology and can be easily distinguished from all known congeners on the basis of its large body and the very large, oval head covered with dense punctures; also the pattern of long setae on the pronotum is unique and differs from chaetotaxy known in any other species of *Cephenomicrus*. Interestingly, the general shape and some details of the aedeagus of *C. macrocephalus* are similar to structures known in *C. japonigenus* JAŁOSZYŃSKI & HOSHINA, 2003 and *C. pseudojaponigenus* JAŁOSZYŃSKI, 2009a (both species from Japan), and *C. taitungensis* JAŁOSZYŃSKI, 2009a (from Taiwan). Moreover, all these species have the antennae

with strongly enlarged and flattened two terminal antennomeres, and the body shape of *C. macrocephalus*, *C. pseudojaponigenus* and *C. taitungensis* is similar. Further study is needed to clarify possibly close relationships between these species.

An interesting character found in this species is the lateral longitudinal carina running from the external posterior margin of each mesocoxal cavity toward posterior margin of the metaventrite. Such a structure in Cephenniini is known only in *Trurlia* JALOSZYŃSKI, 2009d. All other characters found in *C. macrocephalus* are typical for *Cephennomicrus* and the carina alone is not sufficient to separate this taxon as a new genus. However, the presence or absence of lateral carinae may be important for solving relationships within this large and still poorly studied genus.

***Hlavaciellus promissor* n. sp.**

(Figs. 2, 6-7)

NAME DERIVATION

The specific epithet *promissor* (Latin “a promiser”) refers to the name “Land of Promise” given to Palawan (terra typica of this species) by Antonio Pigafetta, a chronicler of Ferdinand Magellan.

DIAGNOSIS

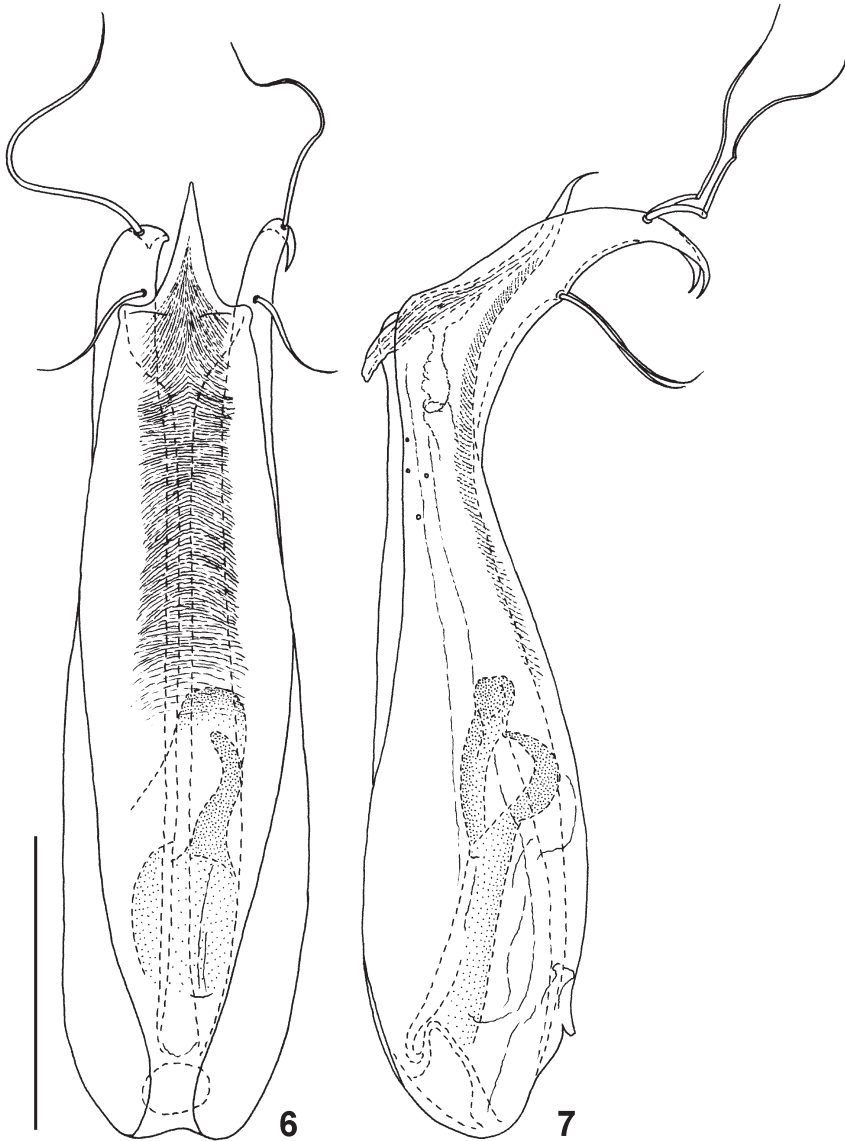
Extremely massive, broad parameres with their apical parts bent and curved to form robust hooks with very long setae are unique for this species; also small body (ca. 1.6 mm) distinguishes it from remaining congeners, which are longer than 1.9 mm.

DESCRIPTION

Male (Fig. 2). Body oval, moderately stout, strongly convex, dark brown, covered with vestiture slightly lighter than cuticle; body length 1.63 mm. Head large, widest at very large and convex, coarsely faceted eyes, length 0.23 mm, width 0.43 mm. Vertex convex, delimited from flattened and subtrapezoidal frontoclypeal area by indistinct transverse impression, with pair of small round tubercles just above impression, distance between tubercles equal to distance between each tubercle and eye; central point of impression marked by surrounding setae directed toward it; supraantennal tubercles prominent. Punctures on vertex and frontoclypeal area small and moderately deep, slightly less distinct in middle than on sides, separated by spaces 1-2x as long as puncture diameters; setae dense, moderately long, recumbent to suberect. Antennae long and massive, gradually thickening toward apices and uniformly covered with long, suberect setae, length 1.08 mm; antennomere I 1.3x as long as broad; II slightly narrower and much shorter than I, 1.1x as long as broad; III-V equal in shape, each as broad as II and subquadrate; VI slightly broader and longer than II, minimally longer than broad; VII-IX gradually enlarged, each slightly longer than broad; X as long as broad; XI twice as long as broad.

Pronotum slightly broader than long, broadest at base, in dorsal view subtrapezoidal; length 0.50 mm, maximum width 0.69 mm. Anterior margin and sides in anterior third strongly rounded; lateral margins in posterior half slightly but distinctly concave;

hind angles sharp and acute; posterior margin biemarginate; lateral ante-basal pits shallow but distinct, equally distant from posterior and lateral margins of pronotum. Punctures on disc very fine, barely discernible under magnification 40x; setae dense, long, suberect to erect.



6-7. *Hlavaciellus promissor* n. sp. Aedeagus in ventral (6), and lateral (7) views (scale bar: 0.1 mm)

Elytra oval and stout, broadest distinctly anterior to middle, length 0.90 mm, width 0.80 mm, elytral index 1.13. Humeral denticles large and sharp; subhumeral line on each elytron distinct, nearly as long as half length of elytron, developed as border between more convex humeral area and less convex adsutural region; single basal fovea large, filled with dense setae, located closer to scutellum than to humerus; apices of elytra separately rounded. Punctures dense and distinct but very small and shallow, separated by spaces 1.5-2x as long as puncture diameters; setae as dense as those on pronotum but distinctly longer and more erect. Hind wings not studied.

Legs slender and long, without specific characters.

Metaventricle with very large, deep and sharply delimited postmesocoxal impressions.

Aedeagus (Figs. 6, 7) length 0.33 mm, long and slender, median lobe in ventral view with rapidly narrowed, triangular and pointed apex, in lateral view recurved dorsally; parameres extremely massive, in lateral view very broad and with their apical parts bent dorsally at an obtuse angle and additionally curved to form strong hooks, each paramere with two very long and thick setae located subapically; internal armature simple, composed of moderately darkly sclerotized tubular structures located in basal part of median lobe.

Female. Unknown.

TYPE MATERIAL

Holotype (male): two labels: "PALAWAN \ Cabayagan, nr. \ Lions Cave, 1.XII.1995 \ I.Löbl, forestfloor litter" [white, printed], "*HAVACIELLUS \ promissor* m. \ HOLO-TYPUS \ det. P. JAŁOSZYŃSKI '09" [red, printed] (MHNG).

DISTRIBUTION

Philippines: Palawan Is.; Palawan Prov.

REMARKS

Only two species of *Hlavaciellus* have been known so far: *H. vampirus* JAŁOSZYŃSKI, 2006 and *H. sabahensis* STEVANOVIĆ, 2009, both occur in Borneo. The new finding proves that this genus is not endemic to Borneo and its known range extends more to the north. *Hlavaciellus promissor* is the smallest species (body length 1.63 mm vs. 1.94 in *H. vampirus* and 2.10 in *H. sabahensis*), and besides different proportions of body parts it has distinctly different aedeagus. The median lobe is similar in all three species, but the parameres in *H. promissor* are extremely massive and with apical parts bent at an obtuse angle, where they form robust hooks. Parameres in the remaining species are much narrower and recurved or curved, not bent.

ACKNOWLEDGMENTS

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