

Cephazteca, a new Neotropical genus of Cephenniini
(Coleoptera: Staphylinidae: Scydmaeninae)

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ABSTRACT. A new Neotropical genus *Cephazteca* gen. nov. of the tribe Cephenniini (Staphylinidae, Scydmaeninae) is described, with five new species: *C. xilitla* sp. nov. (the type species of *Cephazteca*) and *C. chiapasana* sp. nov. from Mexico, *C. matagalpana* sp. nov. from Nicaragua, *C. media* sp. nov. and *C. testacea* sp. nov. from Costa Rica. Habitus and aedeagi of all new species are illustrated; diagnostic characters of *Cephazteca* are discussed and compared to all other genera of Cephenniini.

Key words: entomology, taxonomy, Coleoptera, Staphylinidae, Scydmaeninae, Cephenniini, *Cephazteca*, Neotropical, new genus.

INTRODUCTION

The Neotropical Cephenniini is an exceptionally poorly known group of ant-like stone beetles. The first Neotropical species was described by SCHAUFUSS (1866) from Colombia and placed in *Cephennium* MÜLLER & KUNZE. This new species, *Cephennium spinicolle* SCHAUFUSS, was described as having the terminal maxillary palpomere broad and short, the hind pronotal angles impressed, and the elytral base with a small impression or pit (SCHAUFUSS 1866). These characters are not precise enough to decide whether *Cephennium spinicolle* truly belongs to *Cephennium*, currently known to be restricted to the Holarctic region. Nearly 20 years later REITTER described *Pseudocephennium*, with a single species *P. integricolle* from Venezuela, and stated that *C. spinicolle* must also belong to this new genus ("In dieser Gattung gehört sicher auch wohl das *Cephennium spinicolle* SCHAUF. von Neu-Granada") (REITTER 1883). The diagnostic set of characters used by REITTER to separate *Pseudocephennium* from other Cephenniini

included a highly modified abdomen, with some sternites presumably fused, the elytral base without foveae, and the pronotum with indistinct impressions near hind angles. These two species for more than a hundred years have been the only known Neotropical Cephenniini, until O'KEEFE described another new genus, *Paracephennium*, with four species inhabiting Costa Rica (O'KEEFE 1999). According to the original description, *Paracephennium* also has the abdominal sternites strongly modified, the procoxae divided by the prosternal process, the hind pronotal angles with depressions but without foveae, and the elytra without the basal foveae (O'KEEFE 1999). In the key to the New World genera of Cephenniini O'KEEFE (1999) stated that *Paracephennium* differs from *Pseudocephennium* in lacking "a cuticular process between procoxae". However, the prosternal process was not even mentioned by REITTER (1883) or SCHAUFUSS (1866), and this source of the information given by O'KEEFE was not explained in his paper. It seems possible that "die beieinanderstehenden Hinterhüften" (proximate hind coxae) described by REITTER were erroneously interpreted as the front coxae, and this would imply that the intercoxal process is missing. However, I was not able to locate the depository of the type material of *Pseudocephennium integricolle*, and the status and identity of this enigmatic genus remain unclear. The identity of *Cephennium spinicolle* will be clarified and discussed in a separate paper (JAŁOSZYŃSKI, in preparation). In the present study a new genus is described, bearing diagnostic characters clearly differentiating it from the hitherto known Cephenniini.

MATERIALS AND METHODS

Depositories of the studied material:

- INBio – National Biodiversity Institute (Instituto Nacional de Biodiversidad), Santo Domingo de Heredia, Costa Rica;
- NMC – Canadian Museum of Nature, Ottawa, Canada;
- PCPJ – collection of the author, Wrocław, Poland;
- SEMC – University of Kansas, Natural History Museum and Biodiversity Research Center (Snow Entomological Collections).

For comparative purposes, the holotypes of all species of *Paracephennium* described by O'KEEFE (1999) were examined: *Paracephennium monteverde* (the type species of *Paracephennium*) (NMC), *Paracephennium laselva* (SEMC; final depository: INBio); *Paracephennium penasblancas* (NMC) and *Paracephennium newtoni* (NMC).

Illustrated structures were observed in permanent mounts in Canada balsam (ae-deagi and antennae) or in temporary mounts in glycerol (intact type specimens). The measurements and abbreviations used in text are as follows: body length (BL) is a sum of lengths of the head, pronotum and elytra measured separately; length of head (LH) was measured from a hypothetical line joining posterior margins of eyes to anterior margin of the frontoclypeal area; width of head (HW) includes eyes; length of antennae (AnL) was measured in ventral position in order to include the basal part of the scapus, that in dorsal view is concealed under the supraantennal tubercle; length of pronotum (PL) was measured along midline; width of pronotum (PW) is maximum; length of

elytra (EL) was measured along suture, from a hypothetical line joining the humeral denticles to the apex; width of elytra (EW) is maximum, combined; elytral index (EI) is length divided by combined width; length of aedeagus (AeL) is that of the median lobe. All type specimens were measured; measurements are given in millimeters; mean values are given in parentheses when at least three specimens were studied.

TAXONOMY

Cephazteca gen. nov.

TYPE SPECIES

Cephazteca xilitla sp. n.

NAME DERIVATION

The genus name is a combination of “ceph-” derived from the tribe name Cephenniini, the stem “Aztec” after the Aztec people of Mesoamerica who have inhabited the area where the new genus occurs, and the grammatical suffix “-a” added in order to render the name feminine in gender.

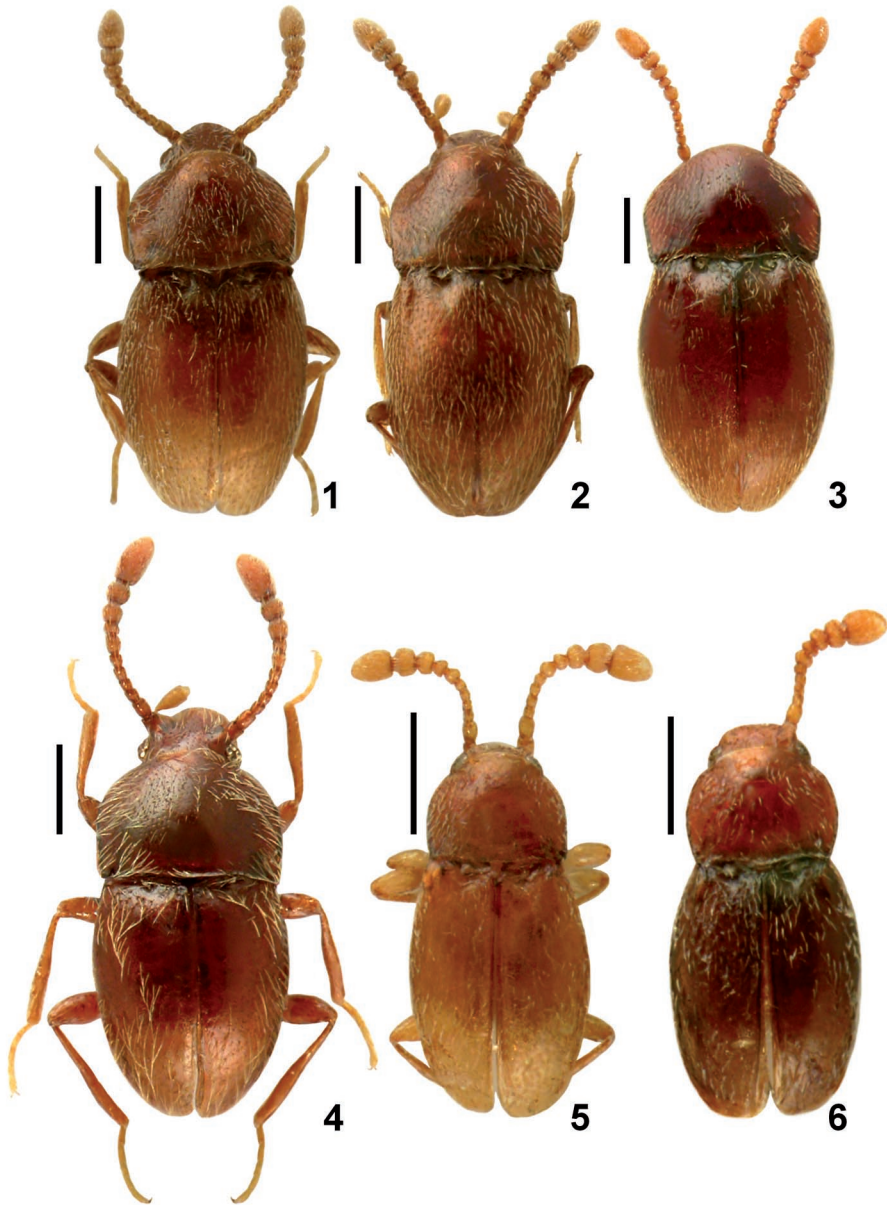
DIAGNOSIS

Maxillary palpomere IV approximately subconical, short and broad, with broadly rounded apex (Fig. 7); mandibles curved, with convex dorsal and concave ventral surface, without subapical teeth, with slender and sharp apical tooth; head without tempora and without frontal glands; pronotum without antebasal foveae, with narrow lateral marginal carinae (Figs 1-6); prosternum with very narrow but very long intercoxal prosternal process, with pointed triangular apex directed ventrad and only slightly curved caudad (Figs 7, 8); pronotal hypomera without transverse carinae (Fig. 7); each elytron with distinct basal fovea filled with short and dense setae (Figs 1-6); mesepimera and mesanepisterna entirely separated (Fig. 7); mesoventral intercoxal process narrow and without open vertical foramen (Fig. 7); abdominal sternites without modifications; aedeagus lightly sclerotized and thin-walled, with dorsal orifice located nearly on base of median lobe (Figs 11-20); parameres free (Figs 11-20).

DESCRIPTION

Body (Figs 1-6) stout, oval, strongly convex, covered with setae; constriction between pronotum and elytra shallow. Head (Fig. 7) large, without tempora and without frontal glands; with coarsely faceted, strongly convex eyes; mandibles moderately large and curved, with dorsal surface convex and ventral concave, without subapical teeth, with long, slender and pointed apical tooth; antennae (Figs 9, 10) slender, gradually thickened towards apices, in some species with enlarged antennomere VII, especially in females; antennomere XI without separated apical part.

Prothorax (Figs 1-8) in dorsal view approximately semicircular or semielliptical in shape, with rounded anterior and lateral margins and bisinuate posterior margin, without antebasal foveae, with narrow marginal carinae not separated from margins. Prosternum



1-6. *Cephazteca* gen. nov., habitus of holotype males (1, 3-6) and paratype female (2). 1-2 – *Cephazteca xilitla* sp. nov.; 3 – *Cephazteca chiapasana* sp. nov.; 4 – *Cephazteca matagalpana* sp. nov.; 5 – *Cephazteca testacea* sp. nov.; 6 – *Cephazteca media* sp. nov. (scale bar: 0.2 mm)

with short basisternal part; hypomera without transverse carinae, divided into narrow internal and very broad outer part; intercoxal prosternal process (Figs 7, 8) very narrow but very long, in lateral view subtriangular in shape, slightly curved and with pointed apex, in ventral view apex triangular and pointed; procoxal sockets closed.

Elytra (Figs 1-7) broadly oval, entire, each elytron with distinct humeral denticle, and distinct basal fovea filled with setae; without humeral carina and with feebly marked, short and non-carinate subhumeral line. Scutellum large, subtriangular. Hind wings studied only in two species, well developed, about twice as long as elytra.

Mesoventrite (Fig. 7) with broad lateral parts; mesoventral process narrow, without vertical foramen; lateral transverse and oblique lines on mesoventrite well marked; mesothoracic pleural sutures entirely separating mesepimera and mesanepisterna.

Metaventre (Fig. 7) subrectangular, broader than long; metaventral foveae small and narrowly separated from anterior margin of mesocoxal cavities; posterior adcoxal margin strongly concave at each side of broad metaventral process with broadly emarginate posterior margin.

Legs (Fig. 7) moderately long and slender; coxae approximately ovoid; all trochanters elongate; all femora weakly clavate; tibiae nearly straight or slightly curved; tarsi slender.

Six abdominal sternites visible in ventral view, without modifications, all sutures between sternites clearly visible.

Aedeagus (Figs 11-20) lightly sclerotized and thin-walled, elongate and symmetrical, with symmetrical internal armature; parameres free, slender and with single apical seta, their bases and dorsal orifice of median lobe located at base.

Sexual dimorphism clearly marked in some species; females have strongly enlarged antennomere VII, with shallow lateral depression (Fig. 10).

DISTRIBUTION

Five species described below are distributed in Central America: Mexico, Nicaragua and Costa Rica; two females of an undescribed species are known to the author from Honduras.

REMARKS

Recently three informal groups were recognized in Cephenniini, based on results of a preliminary phylogenetic analysis: the *Cephennomicrus* group, *Cephennium* group and *Cephennodes* group (JAŁOSZYŃSKI 2011). The Neotropical taxa were not included in this analysis, also Palearctic *Etelea* CSIKI was omitted. All genera of the *Cephennomicrus* group have the head capsule with short but distinct tempora, the maxillary palpomere IV extremely short, button-like, and rudimental or very small and asetose basal elytral foveae. *Cephazteca* differs from this group of genera in having the head capsule without tempora, the palpomere IV subconical and distinct basal elytral foveae filled with setae. Two genera included in the *Cephennium* group (i.e., *Cephennium* and *Nanophthalmus* MOTSCHULSKY) differ from *Cephazteca* in: their mandibles are darkly sclerotized at apices and weakly at bases (uniformly in *Cephazteca*); the short and blunt apical mandibular tooth is accompanied by subapical tooth located dorso-mesally

(*Cephozteca* has slender apical tooth and lacks subapical tooth); and the prosternum lacks the intercoxal process (present in *Cephozteca*). The *Cephennodes* group (including *Cephennodes* REITTER and *Hlavaciellus* JAŁOSZYŃSKI) differs from *Cephozteca* in having a large, open vertical foramen in the mesoventral process (lacking in *Cephozteca*), presence of distinct antebasal pronotal foveae (lacking in *Cephozteca*), and asymmetrical internal armature of the aedeagus (symmetrical in *Cephozteca*); additionally *Cephennodes* has the prosternal process broad and strongly bent caudad (very narrow and slightly curved in *Cephozteca*) and in *Hlavaciellus* the prosternal process is very short and broadly triangular (very long and slender in *Cephozteca*). The characters that differentiate *Cephozteca* and *Paracephennium* are: the shape of the prosternal process (in *Paracephennium* (Figs 22, 23) broad, with notched or emarginated apex and strongly bent caudad; in *Cephozteca* (Figs 7, 8) very narrow, slightly curved and with pointed apex); the pronotal antebasal foveae (present in *Paracephennium* (Fig. 23); absent in *Cephozteca* (Fig. 8)); the basal elytral foveae (very small and asetose in *Paracephennium*; large and filled with setae in *Cephozteca* (Figs 1-6)); and the abdomen (strongly modified in all species and both sexes of *Paracephennium*; without modifications in *Cephozteca*). *Pseudocephennium* remains enigmatic and without the type specimens it is not possible to interpret the brief diagnosis of this genus and revise it. However, REITTER mentioned the modified abdomen and the absence of basal elytral foveae in *Pseudocephennium integricolle*, and these characters clearly differentiate this genus from *Cephozteca* (which has non-modified abdomen and distinct, setose basal elytral foveae). Finally, *Etelea*, the genus not included in the previously published reconstruction of the phylogeny of Cephenniini (JAŁOSZYŃSKI 2011) differs from all other genera of the tribe, including *Cephozteca*, in having extremely long basisternal part of the prosternum and strongly flattened, long body.

***Cephozteca xilitla* sp. nov.**

(Figs 1, 2, 7-12)

NAME DERIVATION

Locotypical; the municipality name Xilita (a noun in apposition) was adopted as a specific epithet.

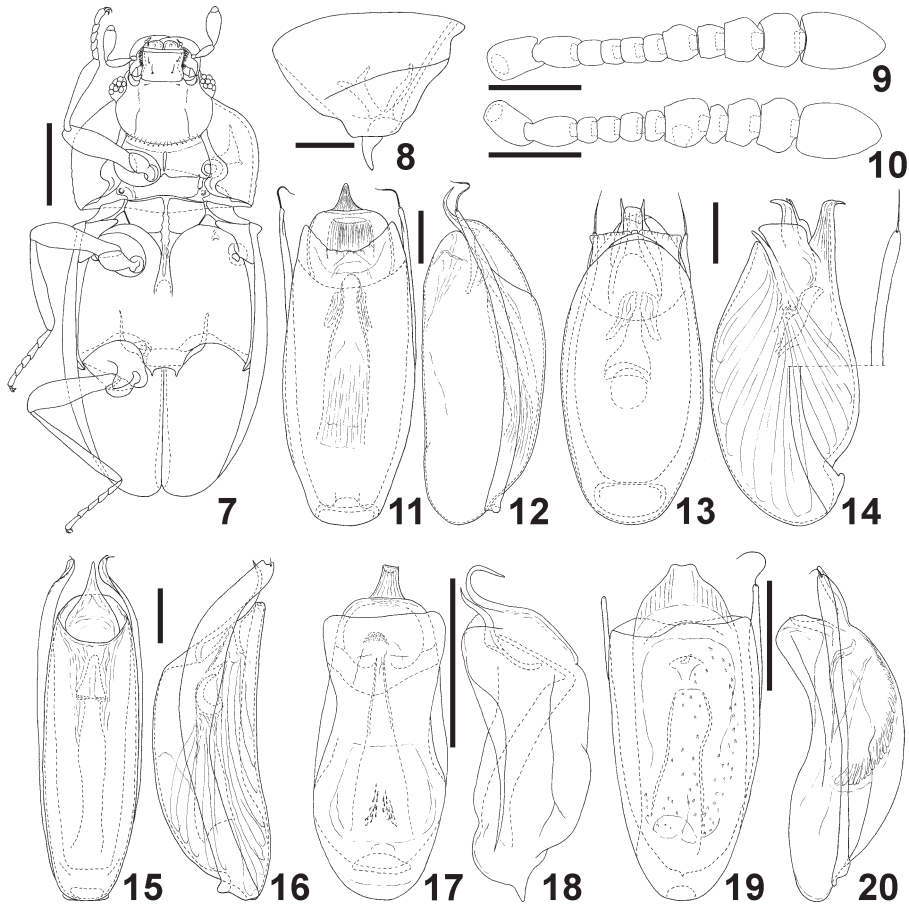
DIAGNOSIS

Body length > 1 mm; antennomere VII in female strongly broadened; aedeagus in ventral view with sharply delimited subtriangular apex, in lateral view parameres slender and distinctly curved, with convex margin directed dorsally.

DESCRIPTION

Male. Body (Fig. 1) elongate and strongly convex, with shallow constriction between pronotum and elytra, BL 1.13, moderately light brown, covered with yellowish vestiture.

Head broadest at eyes, HL 0.15, HW 0.25; vertex weakly and regularly convex; frons flattened; clypeus convex; supraantennal tubercles well marked; eyes large and strongly convex, coarsely faceted; frons and vertex with fine punctures, barely noticeable at magnification 80 \times ; setae short and sparse, suberect. Antennae (Fig. 9) short and moderately slender, AnL 0.43, antennomeres I-II strongly elongate, III slightly longer than broad, IV-V about as long as broad, VI slightly transverse, VII enlarged, distinctly broader and longer than VI, slightly broader than long, VII distinctly smaller than VII and slightly larger than VI, slightly broader than long, IX larger than VII, distinctly transverse, X yet larger than IX, transverse, XI about as long as IX-X together, broader than X, only 1.6 \times as long as broad, with broadly rounded apex.



7-20. *Cephazteca* gen. nov., body venter (abdomen removed) (7), pronotum in left lateral view (8), antenna of male (9) and female (10) in dorsal view, aedeagus in ventral (11, 13, 15, 17, 19) and lateral (12, 14, 16, 18, 20) views. 7-12 – *Cephazteca xilitla* sp. nov.; 13-14 – *Cephazteca chiapasana* sp. nov.; 15-16 – *Cephazteca matagalpana* sp. nov.; 17-18 – *Cephazteca testacea* sp. nov.; 19-20 – *Cephazteca media* sp. nov. (scale bar: 7 – 0.2 mm, 8-10 – 0.1 mm, 11-20 – 0.05 mm)

Pronotum in dorsal view trapezoid with rounded anterior margin, broadest in anterior fourth, PL 0.33, PW 0.45; lateral margins strongly rounded in anterior half, in posterior half slightly convex and strongly convergent towards obtuse and blunt hind angles; posterior margin shallowly bisinuate. Disc very finely punctate, punctures barely noticeable under magnification 40×, very small, shallow and with diffused margins, separated by spaces 1-1.5× as wide as puncture diameters; setae sparse and short, only slightly suberect.

Elytra elongate oval, broadest slightly anterior to middle, EL 0.65, EW 0.53, EI 1.24. Each elytron with moderately large basal fovea, rudimental subhumeral line and rounded apex. Punctures on elytral disc more distinct than those on pronotum, small and very shallow, diffused, separated by spaces comparable to puncture diameters; setae sparse, short, suberect. Hind wings not studied.

Legs moderately long, slender, without modifications; all tibiae straight or nearly straight.

Aedeagus (Figs 11, 12) elongate, AeL 0.31, median lobe in ventral view approximately oval, with sharply delimited subtriangular apex; in lateral view dorsal wall convex; internal armature composed of elongate median tubular structure; parameres long and slender, in lateral view distinctly curved, each with single long and thick apical seta.

Female (Fig.2). Differs from male only in strongly enlarged antennomere VII, which is as broad as X and bears lateral circular depression (Fig. 10); BL 1.09-1.10, HL 0.13-0.15, HW 0.24-0.25, AnL 0.43, PL 0.33-0.34, PW 0.46-0.48, EL 0.63, EW 0.50-0.53, EI 1.19-1.25.

TYPE MATERIAL

Holotype (male): two labels: "Mex.: SLP: 1600m / 20km W. Xilitla / 12.vi.83, S&J. Peck / cloud for. litter" [white, printed]; "*CEPHAZTECA / xilitla* m. / det. P. JAŁOSZYŃSKI '11 / HOLOTYPUS" [red, printed] (SEMC). Paratypes: 2♀, same data as for holotype, with standard yellow "PARATYPE" label (SEMC).

DISTRIBUTION

Mexico, San Luis Potosi State, Xilitla municipality.

Cephozteca chiapasana sp. nov.

(Figs 3, 13-14)

NAME DERIVATION

Locotypical; after the state name Chiapas.

DIAGNOSIS

Body length > 1 mm; aedeagus in ventral view with sharply delimited, narrowly trapezoid apex accompanied at each side by slender and pointed projection, in lateral view parameres slender and weakly curved, with convex margin directed ventrally.

DESCRIPTION

Male. Body (Fig. 3) elongate and strongly convex, with relatively distinct constriction between pronotum and elytra, BL 1.20, chestnut brown, covered with light brown vestiture.

Head broadest at eyes, HL 0.13, HW 0.28; vertex weakly, regularly convex; frons flattened; clypeus convex; supraantennal tubercles well marked; eyes small but strongly convex, coarsely faceted; frons and vertex with very fine punctures, appears nearly impunctate at magnification 80 \times ; setae short and sparse, suberect. Antennae short and moderately slender, AnL 0.50, antennomeres I-II strongly elongate, III-V slightly longer than broad, VI as long as broad; VII distinctly broadened, about as long as broad, VIII much narrower and shorter than VII, distinctly broader than long; IX broader but shorter than VII, strongly transverse, X distinctly larger than IX, strongly transverse, XI broader than X, slightly longer than IX-X together, 1.8 \times as long as broad, with broadly rounded apex.

Pronotum in dorsal view nearly semicircular, broadest slightly anterior to middle, PL 0.35, PW 0.53; anterior margin broadly rounded; lateral margins strongly rounded in anterior half, in posterior half nearly straight and strongly convergent towards slightly obtuse and blunt hind angles; posterior margin shallowly bisinuate. Disc covered with very fine punctures, barely noticeable under magnification 40 \times , very small and very shallow, with diffused margins, separated by spaces about as wide as puncture diameters; setae sparse and short, only slightly suberect.

Elytra elongate oval, broadest in anterior third, EL 0.73, EW 0.58, EI 1.26. Each elytron with moderately large basal fovea, rudimental subhumeral line and rounded apex. Punctures on elytral disc about as small and shallow as those on pronotum but distinctly denser, separated by spaces equal to 1-1.5 puncture diameters; setae sparse, short, suberect. Hind wings not studied.

Legs moderately long, slender, without modifications; all tibiae slightly curved.

Aedeagus (Figs 13-14) elongate, AeL 0.26, median lobe in ventral view approximately oval, with sharply delimited trapezoid apex and two slender and pointed lateral projections; in lateral view dorsal wall convex in proximal half and nearly straight in distal third; internal armature composed of elongate median bell-shaped structure; parameres long and slender, in lateral view weakly curved, each with single long and thick apical seta.

Female. Unknown.

TYPE MATERIAL

Holotype (male): three labels: "MEXICO: Chiapas, Mpio: Villa / Corso, Ejido Sierra Morena / R. Biosfera La Sepultura / 6°09'10.6N, 93°35'25.1W / 1400m, 17-18-VII-2003 / R. Anderson, mixed oak/pine / forest litter, MEX1A03 111" [white, printed]; barcode label: "SM0475770 / KUNHM-ENT" [white, printed]; "CEPHAZTECA / *chiapasana* m. / det. P. JAŁOSZYŃSKI '11 / HOLOTYPUS" [red, printed] (SEMC).

DISTRIBUTION

Mexico, Chiapas State, Biosphera La Sepultura Reserve.

Cephozteca matagalpana sp. nov.

(Figs 4, 15-16)

NAME DERIVATION

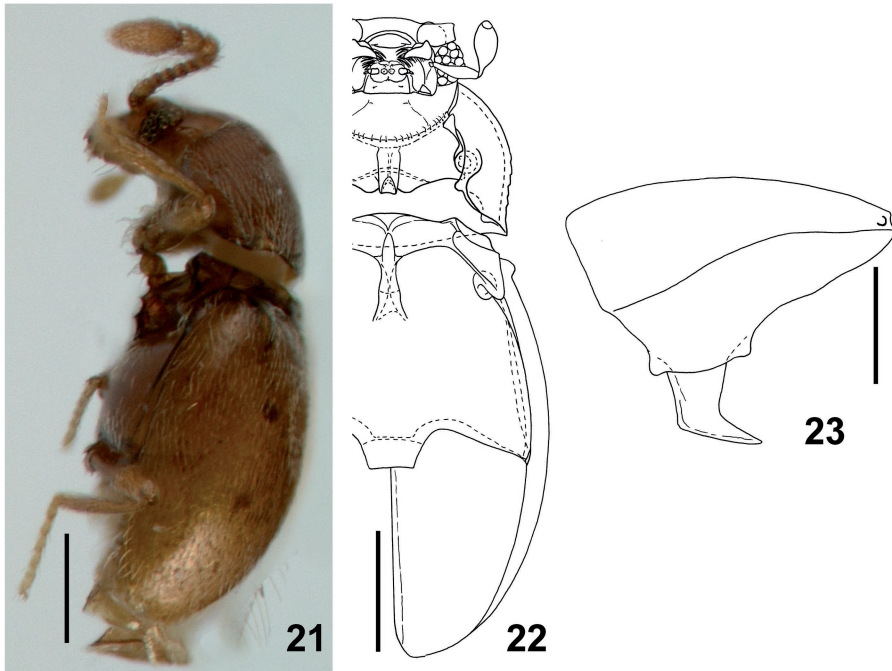
Locotypical; the adjective *matagalpana* is derived from the department name Matagalpa.

DIAGNOSIS

Body length ca. 1 mm; antennomere VII in males and females similar, only slightly larger than VIII; aedeagus in ventral view with sharply delimited triangular apex, in lateral view parameres very broad and distinctly curved, convex margin directed ventrally.

DESCRIPTION

Male. Body (Fig. 4) elongate and strongly convex, with moderately deep constriction between pronotum and elytra, BL 0.95-1.01 (0.98), moderately dark brown, covered with light brown vestiture.



21-23. *Paracephennium monteverde* O'KEEFE, holotype male. 21– habitus in lateral view; 22 – venter (abdomen removed); 23 – pronotum in left lateral view (scale bar: 21-22 – 0.2 mm, 23 – 0.1 mm)

Head broadest at eyes, HL 0.13-0.14 (0.13), HW 0.25-0.28 (0.26); vertex weakly, regularly convex; frons flattened; clypeus convex; supraantennal tubercles well marked; eyes moderately large, strongly convex and coarsely faceted; vertex and posterior part of frons covered with small and shallow but distinct punctures, well discernible at magnification 40 \times and separated by spaces equal to or slightly shorter than puncture diameters; anterior part of frons and clypeus with gradually smaller, shallower and sparser punctures; setae short and sparse, suberect. Antennae moderately long and slender, AnL 0.48-0.50 (0.49), antennomeres I-II strongly elongate, III-V slightly longer than broad; VI as long as broad; VII slightly enlarged, broader and longer than VI and distinctly longer than broad; VIII distinctly shorter and narrower than VII but larger than VI, as long as broad; IX broader and longer than VII, as long as broad; X distinctly larger than IX, slightly broader than long; XI broader than X, distinctly longer than IX-X together, 2.5 \times as long as broad, with broadly rounded apex.

Pronotum in dorsal view semielliptical, broadest in anterior third, PL 0.30-0.33 (0.32), PW 0.43-0.48 (0.45); anterior and lateral margins in anterior half rounded, lateral margins in posterior third nearly straight and distinctly convergent towards nearly right and blunt hind angles; posterior margin shallowly bisinuate. Disc covered with punctures distinctly smaller and shallower than those on vertex but similarly dense; setae short, sparse and suberect.

Elytra elongate oval, broadest in anterior third, EL 0.53, EW 0.45-0.48 (0.47), EI 1.11-1.17. Each elytron with small basal fovea, rudimental subhumeral line and rounded apex. Punctures on elytral disc slightly larger and sparser than those on pronotum but still very small and shallow; setae moderately long, sparse, suberect. Hind wings not studied.

Legs moderately long, slender, without modifications; all tibiae straight.

Aedeagus (Figs 15–16) strongly elongate, AeL 0.30, median lobe in ventral view approximately oval, with sharply delimited triangular apex; in lateral view dorsal wall slightly concave; internal armature composed of elongate median tubular structure; parameres long and very broad, in lateral view distinctly curved, each with single short and thin apical seta.

Female. Externally indistinguishable from male; BL 0.99-1.01 (1.00); HL 0.13-0.14 (0.13), HW 0.25, AnL 0.48-0.50 (0.49); PL 0.30-0.33 (0.32), PW 0.43-0.45 (0.43); EL 0.55, EW 0.48-0.50 (0.49), EI 1.10-1.16.

TYPE MATERIAL

Holotype (male): three labels: "NICARAGUA: Matagalpa / Dept. 6 km N Matagalpa / Selva Negra, 21-V-2002 / 12°59.9'N 85°54.6'W, 1550m / ridgetop cloud forest litter / R. Anderson, RSA2002-024" [white, printed]; barcode label: "SM0452385 / KUNHM-ENT" [white, printed]; "CEPHAZTECA / matagalpana m. / det. P. JAŁOSZYŃSKI '11 / HOLOTYPUS" [red, printed] (SEMC). Paratypes (10♂♂, 3♀♀): same data as for the holotype; all with standard yellow "PARATYPUS" label (SEMC, PCPJ).

DISTRIBUTION

Nicaragua, Matagalpa Dept., Selva Negra.

***Cephaezteca testacea* sp. nov.**

(Figs 5, 17-18)

NAME DERIVATION

The Latin adjective *testaceus* (fem. *testacea*) refers to the pale, yellowish-brown body pigmentation.

DIAGNOSIS

Body length <0.7 mm; aedeagus in ventral view with sharply delimited, narrowly trapezoid apex, in lateral view apical part strongly curved dorsally.

DESCRIPTION

Male. Body (Fig. 5) strongly elongate and moderately convex, with shallow but distinct constriction between pronotum and elytra, BL 0.68, testaceus in colour, covered with yellowish vestiture.

Head broadest at eyes, HL 0.08, HW 0.15; vertex weakly, regularly convex; frons flattened; clypeus convex; supraantennal tubercles well marked; eyes large, strongly convex and coarsely faceted; vertex and frons covered with very fine and sparse punctures, barely discernible at magnification 100×; setae very short and sparse, suberect. Antennae moderately long and with strongly broadened club, AnL 0.28, antennomeres I-II strongly elongate, III-VI about as long as broad; VII slightly enlarged, broader and longer than VI and slightly broader than long; VIII about as long as VII but slightly shorter, much larger than VI, strongly transverse; IX much broader and longer than VIII, transverse; X distinctly larger than IX, transverse; XI broader than X, as long as IX-X together, 1.6× as long as broad, with broadly rounded apex.

Pronotum in dorsal view semielliptical, broadest in anterior third, PL 0.20, PW 0.23; anterior and lateral margins in anterior half rounded, lateral margins in posterior third nearly straight and weakly convergent towards slightly obtuse and blunt hind angles; posterior margin shallowly bisinuate. Disc covered with very fine punctures, appears impunctate at magnification 80×; setae short, sparse and suberect.

Elytra elongate oval, broadest slightly anterior to middle, EL 0.40, EW 0.29, EI 1.39. Each elytron with small basal fovea, rudimental subhumeral line and rounded apex. Punctures on elytral disc more distinct than those on pronotum, noticeable at magnification 40× but still very fine and shallow; setae short, sparse, suberect. Hind wings well developed.

Legs moderately long, slender, without modifications; all tibiae straight.

Aedeagus (Figs 17–18) elongate, AeL 0.10, median lobe in ventral view approximately oval, with sharply delimited trapezoid apex; in lateral view dorsal wall convex and apical part strongly curved dorsally; internal armature indistinct, lightly sclerotized; parameres in the holotype broken off.

Female. Unknown.

TYPE MATERIAL

Holotype (male): three labels: "COSTA RICA: Puntarenas Prov. / Las Alturas Biol. Sta., 1660m / 08°56.17'N, 82°50.01'W / 31-V-3-VI-2004. J.S. Ashe, Z. / Falin, I. Hinojosa. Ex: flight / intercept trap. CR1AFH04 092" [white, printed]; barcode label: "SM0614629 / KUNHM-ENT" [white, printed]; "CEPHAZTECA / testacea m. / det. P. JAŁOSZYŃSKI '11 / HOLOTYPUS" [red, printed] (INBio).

DISTRIBUTION

Costa Rica, Puntarenas Prov.

***Cephazteca media* sp. nov.**

(Figs 6, 19–20)

NAME DERIVATION

The specific epithet *medius* (fem. *media*, a Latin adjective meaning "that is in the middle") refers to the body size intermediary between the largest and smallest *Cephazteca*.

DIAGNOSIS

Body length 0.7 mm; aedeagus in ventral view with gradually narrowed, broadly trapezoid apex, in lateral view not curved dorsally.

DESCRIPTION

Male. Body (Fig. 6) strongly elongate and moderately convex, with deep constriction between pronotum and elytra, BL 0.70, elytra chestnut-brown, remaining body parts slightly lighter, vestiture light brown.

Head broadest at eyes, HL 0.08, HW 0.16; vertex weakly, regularly convex; frons flattened; clypeus convex; supraantennal tubercles well marked; eyes small, strongly convex and coarsely faceted; vertex and frons covered with very fine and sparse punctures, barely discernible at magnification 100×; setae very short and sparse, suberect. Antennae relatively short, with strongly broadened club, AnL 0.30, antennomeres I-II strongly elongate, III-VI about as long as broad; VII distinctly enlarged, broader and longer than VI and distinctly broader than long; VIII distinctly shorter and narrower than VII, only slightly larger than VI, strongly transverse; IX much broader and longer than VIII, transverse; X distinctly broader and much longer than IX, transverse; XI broader than X, as long as IX-X together, 1.5× as long as broad, with broadly rounded apex.

Pronotum in dorsal view semielliptical, broadest in anterior third, PL 0.20, PW 0.26; anterior and lateral margins in anterior half rounded, lateral margins in posterior third feebly rounded and strongly convergent towards obtuse and blunt hind angles; posterior margin shallowly bisinuate. Disc covered with very fine and sparse punctures, appears impunctate at magnification 80×; setae short, sparse and suberect.

Elytra elongate oval, broadest slightly anterior to middle, EL 0.43, EW 0.33, EI 1.31. Each elytron with moderately large basal fovea, rudimental subhumeral line and rounded apex. Punctures on elytral disc only slightly more distinct than those on

pronotum, noticeable at magnification 40× but still very fine and shallow; setae short, sparse, suberect. Hind wings well developed.

Legs moderately long, slender, without modifications; all tibiae straight.

Aedeagus (Figs 19–20) elongate, AeL 0.15, median lobe in ventral view approximately oval, with gradually narrowed trapezoid apex; in lateral view dorsal wall strongly convex; internal armature indistinct, lightly sclerotized; parameres in lateral view nearly straight, long and slender, each with single long and thin apical seta.

Female. Unknown.

TYPE MATERIAL

Holotype (male): three labels: “COSTA RICA: Puntarenas / Monteverde, Estacion Biologica / Monteverde, 1650m / 10°18'53"N, 84°47'49"W / 10-VI-2001, montane forest / litter, R. Anderson, CR1A01 103” [white, printed]; barcode label: “SM0482603 / KUNHM-ENT” [white, printed]; “*CEPHAZTECA / media m. / det. P. JAŁOSZYŃSKI '11 / HOLOTYPUS*” [red, printed] (INBio).

DISTRIBUTION

Costa Rica, Puntarenas Prov.

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