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SCIENTIFIC NOTE

REDESCRIPTION OF *CEPHALOLYCUS MAJOR* PIC, 1926 (COLEOPTERA:
ELATEROIDEA: LYCIDAE) AND A DISCUSSION ON ITS TAXONOMIC POSITION

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In her revisionary work on the definition of the Calopterini, Bocáková (2003, 2005) was unable to see the type and sole known specimen of the Colombian species *Cephalolycus major* Pic, 1926, being forced to leave the monotypic *Cephalolycus* Pic, 1926 *incertae sedis* due to the lack of sufficient information in the original description. During the process of returning long-outstanding loans on behalf of a retired colleague as part of a donation of a large collection of cantharoids, we discovered a syntype of *C. major*, the type species (by monotypy) of *Cephalolycus*, from the Pic Collection of the Muséum National d'Histoire Naturelle, Paris (MNHN). As we return this loaned specimen, we take this opportunity to redescribe it.

As was typical of Maurice Pic (1866–1957), he did not assign the specimen to a family in his description, nor did he mark the specimen as a type. However, a label (Fig. 8) in Pic's handwriting makes it reasonably sure that this is the specimen cited in the original publication. Since Pic did not indicate specifically that there was a single specimen, under ICZN (1999) Recommendation 73F we consider this specimen a syntype, and herein designate it a lectotype in accordance with ICZN (1999) Art. 74.7. This designation is done to stabilize the status of the name, which has been subject to nomenclatural confusion (Bocáková 2003, 2005). The lectotype, deposited in the Pic Collection at the MNHN, bears the label shown in Fig. 8 and our lectotype label. The male specimen is in poor condition, missing the left pro- and meso-legs, left antenna, right antennomeres 9–11, the distal end of the genitalia, as well as all tarsi.

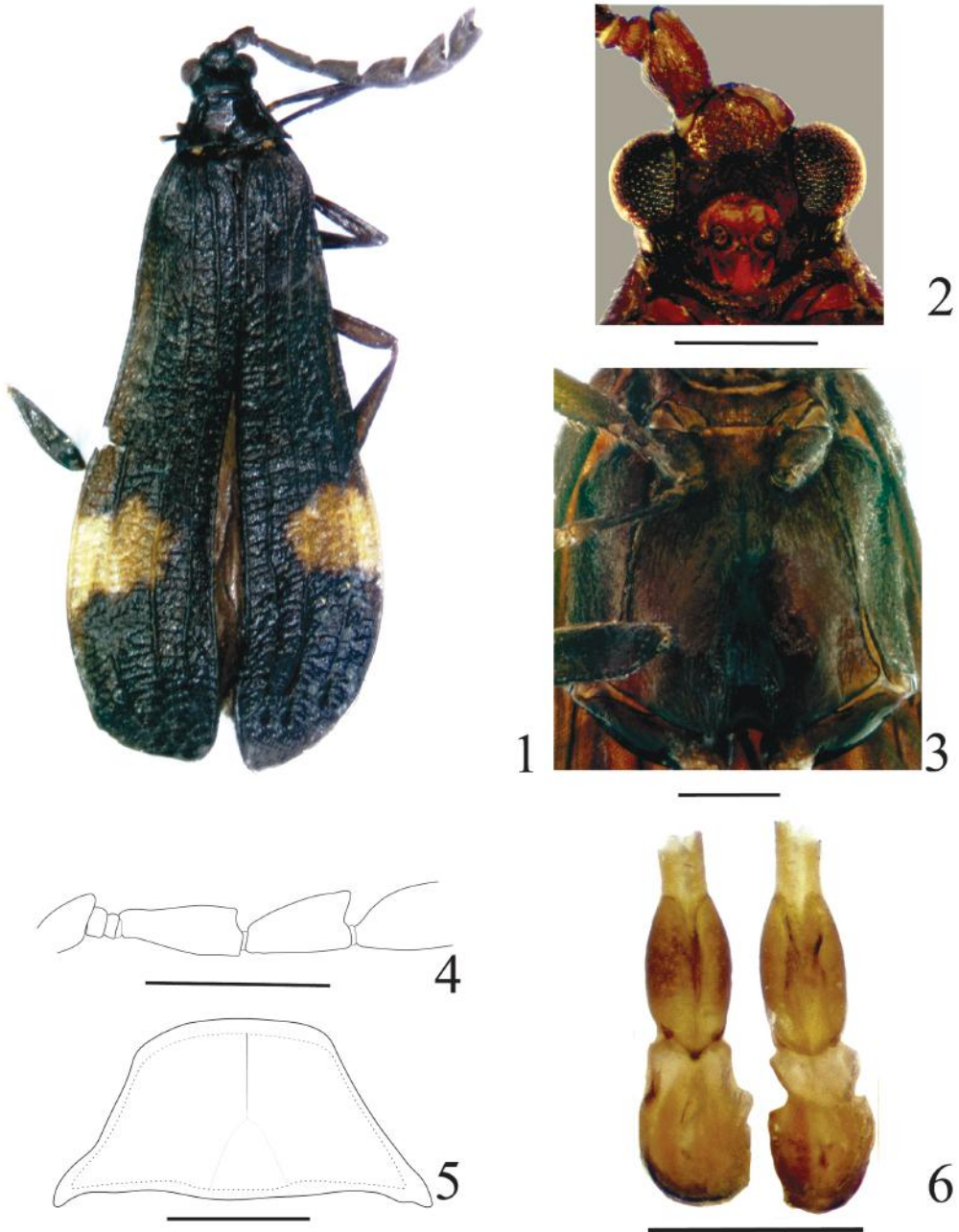
Kleine (1933) placed *Cephalolycus* in the Calopterini in his catalog, and for 80 years it has remained there as a mystery. Bocák and Bocáková (1990) mentioned the genus as belonging in the Calopterini in their key to the subfamilies and tribes, but did not see it. Miller (1991) saw Pic's type and did not include *Cephalolycus* in the Leptolycini,

but did not mention it by name. Using only the description, and in the absence of the type, Bocáková (2003, 2005) could only suggest that the genus might be a Calopterini, but could not confirm that nor place the genus within her phylogeny. Therefore, the genus was placed *incertae sedis*.

Review of the Tribal Placement
of *Cephalolycus*

When Pic (1926) described *Cephalolycus*, he commented that the new taxon was close to *Callanganum* Pic, 1922 (now a junior synonym of *Ceratopriomorphus* Pic, 1922 in the Calopterini [Bocáková 2003]). However, *Cephalolycus* differs from *Ceratopriomorphus* by the three-segmented maxillary palps (four in *Ceratopriomorphus*), larger size (11 mm vs 4.5–5.0 mm for *Ceratopriomorphus*), elytra distinctly expanded in the posterior third (parallel-sided and flat in *Ceratopriomorphus*), and presence of three elytral costae (four in *Ceratopriomorphus*) (Bocáková 2003; Barancikova *et al.* 2010).

Cephalolycus shares common features of both Calopterini and Leptolycini. With the Calopterini, it shares the longitudinal carinae on the pronotum, in combination with the lack of transverse carinae (Fig. 5), while the elytra have 3–4 primary costae and reticulate cells (Fig. 1) (Bocáková 2003). Leptolycini features include the reduced mouthparts, with barely visible mandibles (Fig. 2), but this character also appears in some Calopterini (Ferreira 2015). Many, but not all, Leptolycini have pronotal stemata (Miller 1991), and these are not present in *Cephalolycus*. However, one of the best characters to distinguish Leptolycini from Calopterini is the shape of the tarsomeres. The Calopterini have the plantar pads of tarsomere 4 expanded laterally, while the Leptolycini have them narrow. The single known specimen of *Cephalolycus* lacks tarsi, making this deciding



Figs. 1–6. *Cephalolycus major*, lectotype. 1) Habitus, dorsal view; 2) Head, ventral view; 3) Meso- and meta-ventrites; 4) Basal antennal segments; 5) Pronotum; 6) Male genitalia, dorsal and ventral views. Scale bar = 0.5 mm.

factor unavailable until more specimens are found. The specimen, at 9 mm in length, is larger than any known *Leptolycini*, which attain a maximum length of 7.4 mm (Miller 1991).

The redescription and illustration of this species may aid discovery of existing specimens within collections or the field, and more information on distribution, biology, taxonomy, and morphology

of this group can be assembled. But until more complete morphological specimens are available, *Cephalolycus* must remain *incertae sedis* in the Calopterini.

Below, synonymical tables for *Cephalolycus* and *C. major* are provided, and the species is redescribed and illustrated. The description for the monotypic genus is redundant at this point, and not separately given.

Cephalolycus Pic, 1926

Cephalolycus Pic 1926: 30; Kleine 1933: 34; Blackwelder 1945: 348; Bocák and Bocáková 1990: 636; Bocáková 2003: 232, 2005: 435. Type species (by monotypy): *Cephalolycus major* Pic, 1926.

Cephalolycus major Pic, 1926

(Figs. 1–6)

Cephalolycus major Pic 1926: 30; Kleine 1933: 34; Blackwelder 1945: 348; Bocák and Bocáková 1990: 636; Bocáková 2003: 232. **Lectotype** male (herein designated), deposited in MNHN.

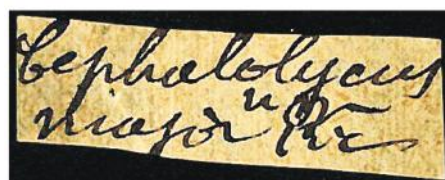
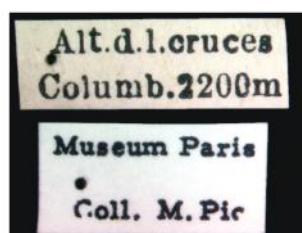
Diagnosis. *Cephalolycus* can be separated from other Calopterini and Leptolycini by the tiny, three-segmented maxillary palps (Fig. 2), serrate antennae (Fig. 1), antennomeres II and III minute (Figs. 2, 4), pronotum with weak longitudinal carina in anterior portion of pronotum, bifurcated posteriorly (Fig. 5), elytra 11X longer than pronotal length, expanded in apical third and posteriorly dehiscent (Fig. 1), median lobe of the aedeagus at least one-third longer than the dorsobasally fused parameres (Fig. 6).

Redescription. General coloration dark black-brown (possibly faded), except for 2 yellow, lateral spots just before widest point of elytra. Body densely setose. Head longer than wide, small, not covered by pronotum, prognathous (Fig. 2). Eyes rounded, coarsely granulate; interocular distance approximately 2X eye width. Mouthparts strongly reduced, maxillary palp 3-segmented, palpomere I enlarged, II and III decreasing in length; labial palp very small, apparently 2-segmented; mandibles short, triangular; labrum free, elongate. Antennae inserted in a gibbous prominence; strongly serrate; antennomere I subconical, II and III minute, III approximately half length of II; IV about 4X longer than II and III together; IV–VII gradually decreasing in length; antennomeres IX–XI unknown (Fig. 4). Pronotum trapezoidal; margins prominent; anterior angles acute; weak longitudinal carina in anterior portion of pronotum, bifurcated posteriorly (Fig. 5). Hypomeron concave. Scutellum triangular, posterior margins rounded. Anterior spiracles elongate, protruding. Prosternum V-shaped;

posterior margin rounded, reaching hypomeron; mesoventrite trapezoidal, posteriorly reaching anterior margin of metaventrite, connected to mesanepisternum by additional segment, mesepimeron more densely pubescent than surrounding sclerites. Metaventrite convex, posterior angles divergent and acute. Metadiscrimen complete, weak anteriorly, metanepisternum elongate (Fig. 3). Elytra 11X longer than pronotum, expanded in apical 1/3, posteriorly broadened, each elytron with 3 distinct costae; strongly reticulate (Fig. 1). Protrichant slender, densely pubescent. Legs slender, elongate; trochanters tubular, about 1/3 length of femur; femora and tibiae clavate. Pro- and mesocoxae moderately obliquely oval, metacoxae transverse. Male genitalia symmetrical; median lobe at least 1/3 longer [apex damaged] than parameres; parameres dorsobasally fused, apices rounded; phallobase as long as parameres, no suture visible (Fig. 6). Length 9.0 mm; width (across humeri) 2.0 mm.

Type Material. Lectotype, male: Alt.d.l. cruces/ Columb. 2200m; Museum Paris/ Coll. M. Pic; *Cephalolycus major* Pic n sp (in Pic's handwriting) (MNHN) (Figs. 7, 8).

Type Locality. We expect that the label indicates "Alto de Las Cruces," of which there are several place names in Colombia. The "Diccionario Geográfico de Colombia" (IGAC 2016) shows five places with this name when searching "Las Cruces", and no alternatives are offered. Three are in Boyacá Department, one each in Maripí Municipality (southeast of the municipal capital



Figs. 7–8. *Cephalolycus major*, lectotype. 7) Locality and collection labels. 8) Label on type, in Maurice Pic's handwriting.

or “cabecera,” it lacks a specific elevation, but Maripí is at 1,300 m), a telegraph/radio station southeast of the “cabecera” in Paya municipality (located at 1,500 m), and northeast of the “cabecera” of Jenesano Municipality (lacks a specific elevation, but Jenesano is at 2,100 m). The fourth is southeast of the “cabecera” of Cerrito Municipality in Santander Department, with no specified elevation, but the town of Cerrito is approximately 2,500 m in elevation. The last is a mountain ridge (“Cuchilla”) in the Cordillera Central, in the Municipality of Guarne, Antioquia Department, that reaches 2,250 m. The first and second seem too low, but all three others are in the range of 2,200 m as given on the label. However, none of these localities are known to have been visited by collectors in the late 19th and early 20th centuries (Fernando Fernandez, *in litt.*). Perhaps more likely the locality is an unidentified locality in the Sierra Nevada de Santa Marta, Magdalena Department, which was the source of most material described from Colombia during that period (Fernando Fernandez, *in litt.*).

Distribution. Colombia.

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