

## **New *Eurycoleus* species from Panama (Coleoptera: Carabidae: Lebiini)**

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**Taxonomy, new species, Carabidae, Lebiini, Pericalina, *Eurycoleus*, Panama, Neotropical Region**

**Abstract.** *Eurycoleus panamensis* sp. n. is described from Colón province, Panama. The new species is compared with morphologically most similar congeners and keyed.

### INTRODUCTION

The genus *Eurycoleus* includes 8 species, and is distributed in Middle and South America (from Mexico to northern Argentina). It was established by Chaudoir (1848) for *Coptodera fasciatopunctata* Reiche, 1842. Few new species were described or transferred to this genus over following 120 years. First modern revision of the genus was given by Reichardt (1972). He recognized six valid species in two species-groups, redescribed and keyed them. Later he described (Reichardt, 1976) next new species. The genus was recently revised by Shpeley & Ball (2000). The authors brought all available taxonomical, faunistical and bionomical data. The purpose of this paper is to describe the new species from Panama's Colón Province.

### MATERIAL AND METHODS

This paper is based on study of a single type specimen of the new species described below and few representatives of related species.

Measurements were made with a MBS-10 stereoscopic microscope, at magnifications of 8x and 16x. Measurements of body parts and corresponding abbreviations used in the text are as follows:

- EL elytral length - length of left elytron measured along sutura from basal border to apex;
- EW elytral width - maximal width of both elytra combined;
- HL length of head - measured from apex of clypeus to neck constriction;
- HW width of head - maximal width of head (including eyes);
- PL pronotal length - length of pronotum measured along mid-line;
- PW pronotal width - maximal width of pronotum;
- TL total length - measured from the apex of left mandible (mandibles opened) to the apex of left elytron.

Type specimen of newly described species is provided with red printed label: “*Eurycoleus panamensis* sp. nov., HOLOTYPE, det. O. Hovorka, 2008”, and is deposited in the author’s collection.

## DESCRIPTION

### *Eurycoleus panamensis* sp. n.

(Figs 1-2)

**Type material.** Holotype (♀) labelled: “Panama, Colon prov., Sherman Forest Reserve, 79°58’W, 9°17’N, 130 m a.s.l., lgt. Čížek & Hauck, 6.6.-10.7. 2002”.

**Description.** Habitus (Fig. 1) - the new species is of average length for the member of the genus (TL 10.0 mm), whole body surface is yellow, each elytron with eight black spots. Terebral margin + apex of each mandible, palpomeres, antennomeres, tarsomeres, tibiae and extreme apices of femora brown to black, only apical part of terminal palpomere, basal part of scapus, whole lateral parts of antennomeres V-XI (+ apical lateral part of antennomere IV) and terminal tarsomere yellow-red to yellow-brown.

Head markedly transverse (HL/HW 0.58), eyes huge, bulged. Both dorsal and ventral surface of head with isodiametric to slightly transverse reticulation and microscopic punctation. Antennae slightly flattened and widened from apical portion of antennomere IV.

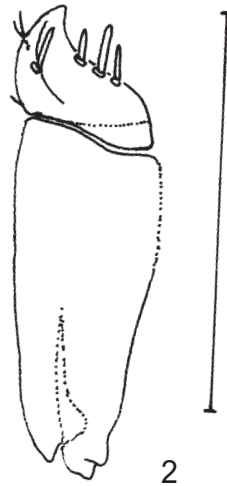
Pronotum strongly transverse (PL/PW 0.52), about one quarter wider than head (PW/HW 1.26). Lateral pronotal margins convex. Anterior pronotal angles widely rounded. Disc of pronotum with slightly transverse reticulation and very fine punctures. Pronotal base and wide lateral explanate area punctured. Prosternite and proepipleuron more shiny, with microsculpture present, but slight.

Elytra 1.21 times longer than wide, widest point near midlength. Striae indistinct, formed by row of punctures, which are only slightly larger than dense and irregular elytral punctures covering whole elytral surface. Third elytral interval with 3 setigerous pores, anterior one near 3<sup>rd</sup> stria, others near 2<sup>nd</sup> stria. Elytral microsculpture slightly transverse. Lateral elytral margin deplanate. Series umbilicata formed by 14 pores, not continuous, but divided in two groups, in the middle largely interrupted. Elytral spots as on Fig. 1.

Female genitalia typical for subtribe Pericalina, *Eurycoleus* genus-group (Fig. 2; see also Ball & Shpeley, 1983), but stylomere II with 4 ensiform setae (one dorsomedial and three dorsolateral ensiform setae). Ventral surface with two apicoventral nematoid setae and one trichoid seta present.

Male genitalia - unknown.

**Differential diagnosis.** The new species belongs to the *tredecimpunctatus* species group. As in many other groups of the tribe Lebiini, the species are morphologically very similar and the most useful character for separation of the species is the color pattern. *Eurycoleus panamensis* sp. n. differs from its congeners by the following combination of characters: each elytron with less than 10 black spots, pronotum concolorous, femora bicolored (testaceous with black apices), elytral spots forming unique pattern - 3 sutural spots, 4 discal spots (1



Figs 1-2. *Eurycoleus panamensis* sp. n.: 1- habitus, female holotype; 2- stylomeres I and II, medial aspect. Scale bar 0.5 mm.

humeral, 2 disco-medial and 1 disco-preapical) and 1 marginal spot, which is postero-lateral and not as sharply delimited as other spots. The nearest species seems to be, by its color pattern, *E. tredecimpunctatus* Chaudoir, 1869. Main differences are the absence of disco-preapical spot and transverse shape of humeral spot in *E. tredecimpunctatus*.

In the key to species given by Shpeley & Ball (2000), *E. panamensis* sp. n. falls in couplet 7-7'. To include the new species in the key, the new couplet (7<sub>a</sub>-7<sub>a</sub>') must be added as follows:

- 7<sub>a</sub> (6') Elytron with large, round, disco-preapical spot present; humeral spot not narrowly transverse. Geographical range: Panama, Canal Zone ..... *E. panamensis* sp. n.  
 7<sub>a</sub>' Elytron without disco-preapical spot; humeral spot (if present) narrow, transverse ..... 7  
 7 (7<sub>a</sub>') Elytron (Fig. 54G) with ..... (original thesis 7 from Shpeley & Ball (2000: p. 137))

**Distribution.** The new species is known from the type specimen only, collected at the locality in Provincia of Colón in Panamá, on the Caribbean side of the Panama Canal, south of the Chagres River. The new species was collected at this locality together with *Eurycoleus macularius* (Chevrolat, 1835).

**Name derivation.** The specific name is derived from the name of the country of origin (Panama).

**ACKNOWLEDGMENTS.** I am obliged to J. Kindl (Praha) for the taking of digital photograph of the type specimen.

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