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New taxa in *Bebelis* Thomson and *Potiatuca* Galileo & Martins (Coleoptera, Cerambycidae, Lamiinae)

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ABSTRACT

New taxa in Bebelis Thomson and Potiatuca Galileo & Martins (Coleoptera, Cerambycidae, Lamiinae). New taxa described: Bebelis leo sp. nov. Potiatuca carioca sp. nov. and P. serrana sp. nov. from Brazil, Rio de Janeiro.

Keywords: Apomecynini; Neotropical; Taxonomy.

INTRODUCTION

The worldwide distributed Apomecynini Mulsant, 1839 are represented in the Western Hemisphere (Monné & Bezark, 2009) by 38 genera and 299 species. The genus *Bebelis* Thomson, 1864, has 28 species in the neotropical region, 9 of which with occurrence in the Atlantic Forest. Galileo & Martins (2006) summarized the background of the tribe and described three species of *Bebelis* from Brazil, *B. compta* and *B. concisa* from Rio Grande do Sul, and *B. tagua* from Amazonas.

The species of Apomecynini are very interesting because the adults of the genera *Parmenonta* Thomson, 1868, *Phrynidius* Lacordaire, 1869 and *Potiatuca* Galileo & Martins, 2006 are brachypterous or wingless, the elytra are frequently fused along the suture, and the metasternum is shortened.

The type specimens are deposited in the Museu Nacional, Universidade Federal do Rio de Janeiro, Rio de Janeiro, Brazil (MNRJ).

RESULTS AND DISCUSSION

Bebelis leo sp. nov. (Fig. 3)

Etymology: The species has been named after Mr. Leo Nascimento, Coordinator of Research of the Parque Nacional do Itatiaia, who kindly provided logistical support during our research.

Male: Integument dark brown. Body with predominance of clear brown pubescence. The dark brown pubescence covering a longitudinal line of parallel sides each side of the pronotum, an oblique fascia in the dorsal surface of the basal third of the elytra and an external longitudinal fascia from humeri to near the apex. The white pubescence covers a narrow dorsal line, near the sides of the pronotum, prolonged posteriorly on the basal half of the elytra and a fasciae on the sides of the prothorax prolonged backwards by the epipleura, almost attaining the apex of the elytra.

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Sides of each ventrite with a grayish pubescent patch. Antennae, legs and ventral surface covered with brown pubescence. Antennae reaching the apical fourth of the elytra; segments 3-11 with sparse erect setae in the ventral face, more dense on the basal segments. Prothorax with almost parallel sides; pronotum with sparse punctures on the whole surface, covered by the dense pubescence. Elytra with apices obliquely truncated, outer angles projected in a stout spine; surface with sparse punctures in the basal third. Abdomen with the last urotergite and urosternite rounded at apex.

Measurements (mm), male: Total length, 8,5; prothorax length, 1,8; prothorax width, 1,4; elytral length, 6,0; humeral width, 1,8.

Type-material: Holotype male, BRAZIL, Rio de Janeiro: Parque Nacional do Itatiaia (1200 m), 22-25. XII.2006, M.L. Monné, J.R. Mermudes & M.A. Monné col. (MNRJ).

Discussion: In *Bebelis leo* sp. nov., the outer angles of the elytra are projected in a stout spine, as in *B. a. acuta* Pascoe, 1875, *B. inaequalis* (Fisher, 1947), *B. lignea* (Bates, 1866) *B. lignosa* Thomson, 1864 and *B. prolongata* (Fisher, 1947), but none of those species presents the nitid fasciae of dark brown and white pubescence in prothorax and elytra. *Bebelis picta* Pascoe, 1875 also occurs in the Atlantic Forest and has clear cut fasciae of dark brown and white pubescence, but the apex of the elytra are transversely truncated, without stout spine in the outer angle.

Potiatuca Galileo & Martins, 2006

Potiatuca Galileo & Martins, 2006: 12.

Type-species: Potiatuca ingridae Galileo & Martins, 2006 (monotypy and original designation).

Potiatuca ingridae was described from Maquiné (Estação Experimental FEPAGRO), Rio Grande do Sul, here we add two new species from Rio de Janeiro State. It was not possible to determine the sex of the specimens of the two new species of *Potiatuca* without dissection.

Potiatuca carioca sp. nov. (Figs. 1, 2)

Etymology: The epithet *carioca* refers to the inhabitants of Rio de Janeiro.

Integument dark brown. Body covered with yellowish and blackish erect setae. Head coarsely and sparsely punctuate, covered with yellowish pubescence. Mentum transverse. Apical segment of the maxillary and labial palps acuminate. Antennae reaching apex of elytra, with a few long yellowish and blackish hairs, more dense in the basal segments. Pronotum and sides of prothorax with coarse, dense punctures; a minute patch of yellowish pubescence in the middle of the pronotum, near the anterior margin, and a few minute patches in the apical third. Prosternum finely and densely punctate; intercoxal process as broad as 1/5 of coxal cavity. Intercoxal process of mesosternum at most 1/3 as broad as coxal cavity. Base of elytra a little wider as posterior margin of prothorax and with two slightly elevated gibbosities with granules on the top. Elytral surface irregular, with an antemedian transversal fascia of yellowish pubescence and short, yellowish and blackish erect setae, punctation dense, coarse and deep; apices conjointly rounded. Legs with sparse yellowish setae. Fifth urosternite rounded at apex.

Measurements (mm): Total length, 3,8; prothorax length, 1,0; prothorax width, 1,3; elytral length, 2,4; humeral width, 1,5; maximum elytral width, 1,7.

Type-material: Holotype, BRAZIL, Rio de Janeiro: Rio de Janeiro (Jacarepaguá, Represa Rio Grande), III.1961, F.M. Oliveira col. Paratype, same data as holotype (both in MNRJ).

Discussion: See under Potiatuca serrana sp. nov.

Potiatuca serrana sp. nov. (Fig. 4, 5)

Etymology: Serrana refers to the localization of the type locality in Rio de Janeiro State.

Integument brown-orangish, shining. Body densely covered with yellowish and blackish erect setae. Integument dark brown in the head, apical third of the segments III-VIII of the antennae, prothorax and in the elytra, the external margin and a transverse median fasciae. Head coarsely and densely punctate, without appressed pubescence. Mentum transverse. Apical segment of the maxillary and labial palps acuminate. Antennae reaching middle of elytra, densely covered with yellowish long hairs. Pronotum and sides of prothorax with coarse, dense punctures, and a minute patch of yellow pubescence in the middle of the pronotum. Intercoxal process of prosternum and mesosternum at most 1/3 as broad as coxal cav-



FIGURES 1-5: Potiatuca carioca sp. nov., holotype, length 3,8 mm, 1. dorsal view, 2. lateral view; 3. Bebelis leo sp. nov., male holotype, length 8,5 mm; Potiatuca serrana sp. nov., length 5,4 mm, 4. dorsal view, 5. lateral view.

ity. Base of elytra a little narrow as posterior margin of prothorax and with two glabrous gibbosities, without granules on the top. Elytral surface densely and deeply punctate, a long setae from each point; apices conjointly rounded. Legs with sparse yellowish setae. Fifth urosternite rounded at apex.

Measurements (mm): Total length, 5,2-5,4; prothorax length, 1,5-1,5; prothorax width, 1,6-1,6; elytral length, 3,1-3,3; humeral width, 1,4-1,4; maximum elytral width, 2,2-2,2.

Type material: Holotype, BRAZIL, Rio de Janeiro: Nova Friburgo, IV.1969, S.A. Fragoso col. Paratype, same data as holotype. Both in MNRJ.

Discussion: Potiatuca carioca sp. nov. and *P. serrana* sp. nov. differs from *P. ingridae* Galileo & Martins, 2006, mainly by the different pattern of coloration and by the presence of a little gibbosity in the base of the elytra, not present in *P. ingridae*. In the prothorax and elytra of *P. serrana* sp. nov. lacks appressed pubescence, except a minute yellowish patch in the center of the pronotum; in *P. carioca* sp. nov. the appressed pubescence covers partially the prothorax and elytra. Also the centro-basal gibbosity of the elytra is glabrous and without granules in *P. serrana* sp. nov. and with a few setae and granules in *P. carioca* sp. nov.

RESUMO

Novos táxons em Bebelis Thomson e Potiatuca Galileo & Martins (Coleoptera, Cerambycidae, Lamiinae). Novos táxons descritos: Bebelis leo sp. nov., Potiatuca carioca sp. nov. e P. serrana sp. nov., do Brasil, Rio de Janeiro.

Palavras-chave: Apomecynini; Neotropical; Taxonomia.

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REFERENCES

- GALILEO, M.H.M. & MARTINS, U.R. 2006. Novos táxons de Apomecynini (Coleoptera, Cerambycidae, Lamiinae). Papéis Avulsos de Zoologia, 46(2):11-19.
- MONNÉ, M.A. & BEZARK, L. 2009. Checklist of the Cerambycidae, or longhorned beetles (Coleoptera) of the Western Hemisphere. Available at: <htp://plant.cdfa.ca.gov/byciddb/documents> Access date: 03/Mar./2009.

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