Apsectus brunneus sp. nov., a new dermestid beetle from Chile (Coleoptera: Dermestidae: Trinodinae)

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Taxonomy, new species, Coleoptera, Dermestidae, Trinodinae, Apsectus, Chile

Abstract. Apsectus brunneus sp. nov. from Chile is described, illustrated and compared with related species belonging to the genus Apsectus LeConte, 1854. The genus Apsectus LeConte, 1854 is newly recorded from Chile. Key to Neotropical species and checklist of all the known species of the genus Apsectus are provided.

INTRODUCTION

The family Dermestidae (Coleoptera) contains about 1400 species and subspecies worldwide, classified in six subfamilies (Háva 2007). The subfamily Trinodinae includes four tribes, ten genera and 48 species (Háva 2003, 2004). In the present article, a new species belonging to the genus *Apsectus* LeConte, 1854 is described. The genus contains eight known species distributed in Nearctic and Neotropical regions (Háva 2003, 2004, 2012, Kadej 2012). The Nearctic species were revised by Beal (1959).

MATERIAL AND METHODS

The specimens of the presently described species are provided with red, printed labels with the text as follows: "HOLOTYPE (or ALLOTYPE or PARATYPE, respectively) *Apsectus brunneus* sp. nov. J. Háva & J. Solervicens det. 2012".

Holotype and allotype specimens are deposited in Museo Nacional de Historia Natural de Santiago, Chile (MNHN), paratype in the collection of Jiří Háva, Private Entomological Laboratory and Collection, Prague-west, Czech Republic (JHAC).

RESULTS

Subfamily Trinodinae Tribe Trinodini

Apsectus brunneus sp. nov.

(Figs 1-4)

Type material. Holotype (\circlearrowleft): Chile, Región Metropolitana, Provincia Cordillera, Reserva Nacional Rio Clarillo, 19/1-28/2/97, J. Solervicens leg., (MNHN). Allotype (\circlearrowleft): the same data as holotype but 28/2-27/3/97, (MNHN). Paratype (1 \circlearrowleft): the same data as holotype but 4/12/2007 and 8/1/2008, ex light trap (JHAC).

Description. Male. Body elongate-oval, honey-brown (Fig. 1), length 1.75-1.95 mm, width 0.95-1.00 mm. Dorsal and ventral pubescence with long erect, light brown setae. Head with median ocellus, frontal region deflexed apically; antenna (Fig. 2) with 11 segments, flagellum with basal segments filiform, antennal club of three segments, 9 and 10 transverse, 11 a little longer than 9 and 10 together (female) or approximately four times 9 and 10 together (male). Pronotum trapezoidal, convex, lateral carina interrupted at anterior fourth, disc with a sublateral carina extending from base, slightly diverging from and shorter than the lateral carina; hypomeron wide, slightly concave; prosternum with prosternal process very short; narrow antennal sulcus between prosternum and hypomeron; procoxae oval, not prominent, contiguous; mesoventrite with posterior part flat, slightly advanced at middle; metacoxal plate not extended to sides of body; metacoxae well separated; hind femur with ventral groove for partial reception of the tibia; hind tarsi with first segment approximately as long as second one. Abdomen with five free visible ventrites. First visible abdominal ventrite without diverging lines. Male genitalia as in Fig. 4.

Female. Body length 2.10 mm, width 1.35 mm. Externally similar to the male, differing only by the antennal club shape (Fig. 3).

Differential diagnosis. The new species belongs to the genus *Apsectus* LeConte, 1854, but differs from other known species including *Apsectus centralis* Sharp, 1902 (Costa Rica, Guatemala, Panama) by the shape of antennae and male genitalia and elongate-oval honey brown body.

KEY TO NEOTROPICAL SPECIES WITHOUT MEXICO

Etymology. Named according to brown colour of body.

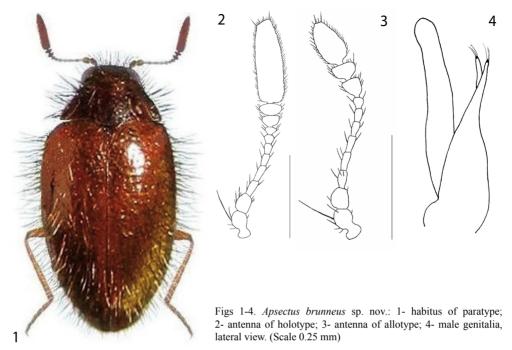




Fig. 5. Type locality. Chile, Región Metropolitana, Provincia Cordillera, Reserva Nacional Rio Clarillo.

Bionomics. The species habitat corresponds to the preandean evergreen sclerophyll shrublands of the mediterranean zone of central Chile. Two specimens were collected in pitfall traps in the *Quillaja saponaria-Lithrea caustica* and *Puya violacea-Colliguaja odorifera* associations respectively. The third specimen, collected in a light trap, was obtained from the *Cryptocarya alba-Lithrea caustica* association.

KNOWN SPECIES BELONGING TO THE GENUS APSECTUS

Genus Apsectus LeConte, 1854

Type species: Syncalypta hispida Melsheimer, 1844

Apsectus araneorum Beal, 1959

Distribution: U.S.A: Arizona, Utah

Apsectus brunneus sp. nov.

Distribution: Chile *Apsectus centralis* Sharp, 1902

Distribution: Costa Rica; Guatemala; Panama

Apsectus dichromus Beal, 1959

Distribution: Panama

Apsectus hispidus (Melsheimer, 1844)

Distribution: U.S.A: Florida

Apsectus hystrix Sharp, 1902

Distribution: Mexico

Apsectus kaliki Háva, 2012

Distribution: French Guyana

Apsectus mexicanus (Reitter, 1881)

Distribution: Mexico

Apsectus minutus Sharp, 1902

Distribution: Mexico

Apsectus obscurus Sharp, 1902

Distribution: Mexico

REFERENCES

- BEAL R. S. 1959: Notes on the biology and systematics of the Dermestid beetle genus *Aspectus* with descriptions of two new species. *Annals of the Entomological Society of America* 52: 132-137.
- HAVA J. 2003. World Catalogue of the Dermestidae (Coleoptera). Studie a Zprávy Oblastního Muzea Praha-východ v Brandýse nad Labem a Staré Boleslavi Supplementum 1: 1-196.
- HAVA J. 2004. World keys to the genera and subgenera of Dermestidae (Coleoptera), with descriptions, nomenclature and distributional records. *Acta Musei Nationalis Pragae, Series B, Natural History* 60: 149-164.
- HÁVA J. 2007. Dermestidae. Pp. 57, 299-320. In: LÖBL I. & SMETANA A. (eds.): Catalogue of Palaearctic Coleoptera. Volume 4. Elateroidea, Derodontoidea, Bostrichoidea, Lymexyloidea, Cleroidea and Cucujoidea. Stenstrup: Apollo Books, 935 pp.
- HAVA J. 2012: Contribution to the genus *Apsectus* LeConte from Mexico and Neotropical region (Coleoptera: Dermestidae: Trinodinae). *Vestnik Zoologii* 46: 561-564.
- KADEJ M. 2012: Detailed description of morphology of the last instar larva and pupa of *Apsectus hystrix* Sharp, 1902 (Dermestidae: Trinodinae: Trinodini). *Entomological News* 122: 125-134.

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