



New species of Cerambycidae from Panama, with new distribution records (Coleoptera: Cerambycidae)

LARRY G. BEZARK¹, WILLIAM H. TYSON² & NATHAN M. SCHIFF³

¹521 46th Street, Sacramento, California, 95819, USA. E-mail: LarryBezark@netscape.com

²43315 Ranger Circle Drive, Coarsegold, CA 93614, USA. E-mail: billtyson@sti.net

³USDA-Forest Service Southern Research Station, Center for Bottomland Hardwoods Research, P.O. Box 227, Stoneville, MS 38776, USA. E-mail: nschiff@fs.fed.us

Abstract

Two new species of Cerambycidae, *Tessaropa elizabeth* Bezark, sp. nov. (subfamily Cerambycinae, tribe Methiini) and *Anelaphus cordiforme* Tyson, sp. nov. (subfamily Cerambycinae, tribe Elaphidiini), are described from the western part of the Darien, Panama. Nine new country records for Panama are reported for the following species: *Adetus linsleyi* Martins & Galileo, *Estola strandiella* Breuning, *Nubosoplatus inbio* Swift, *Paranisopodus heterotarsus* Monné & Martins, *Pempteurys sericans* Bates, *Rosalba costaricensis* (Melzer), *Tomopterus brevicornis* Giesbert, *Psapharochrus nigricans* (Lameere), and *Oedudes bifasciata* (Bates).

Key words: new distribution record, Neotropical, taxonomy

Introduction

The genus *Tessaropa* was described by Haldeman (1847) to include the species *Molorchus tenuipes* which he described in 1845 (Haldeman, 1847). *Tessaropa* is characterized by the completely divided eyes, obsolete second antennal segment (antennae appear to be 10 segmented), and the imbricate abdomen. There are currently eight species assigned to this genus (Monne & Bezark, 2009): one is known from the United States, one from Cuba, one from the Dominican Republic and the remaining five from South America. The first known species of *Tessaropa* from Central America is described below.

The genus *Anelaphus* was proposed by Linsley (1936) to include species originally described as *Elaphidion*. This diagnosis was continued in his review of the family (Linsley, 1963). All nine species of *Peranoplium* were synonymized into *Anelaphus* by Lingafelter (1998). The genus is found from SE Canada south into Northern South America. There are currently 64 species recognized in the genus (Monne & Bezark, 2009). Specimens are found mainly at lights and some are girdlers while others breed in dead wood (*Anelaphus debilis* (LeConte) was reared by the second author from mesquite limbs that were several years old. The wood was collected in Texas and adults re-oviposited in the same limbs).

The authors visited Panama in February and May of 2012, and collected at a location in the western Darien. The area was quite dry, no rain having fallen since late December 2011. Cerambycid collecting consisted of beating vegetation and collecting at mercury vapor lights at night. A few species were also found in malaise trap samples from the site. Over 40 species of cerambycids were collected during a three-day period including eight of the new country records listed below (one additional new country record was from a specimen collected in May, 2012). Seven of the new records expand distributions for species previously known from Central America, and two expand distributions for species previously known from South America.

Materials and Methods

The collection acronyms used in this paper are as follows: CASC, California Academy of Sciences, San Francisco, California, USA; LGBC, Larry G. Bezark Collection, Sacramento, California, USA; MZSP, Museu de Zoologia, Universidade de São Paulo, São Paulo, Brazil; WHTC, William H. Tyson Collection, Coarsegold, California, USA.

Tessaropa elizabeth Bezark, sp. nov.

(Figs 1–3)

Type material. Holotype: PANAMA: Darien: Female. Cerro Chucanti, 15 km W of Torti, 13–16 February, 2012. N 08° 47' 21.4" & W 078° 27' 05.5"- 875m, L.G. Bezark, collector, white lights (CASC). **Paratype: PANAMA: Darien.** Male. (same location and dates), William Tyson, collector, white lights (WHTC).



FIGURES 1–3. *Tessaropa elizabeth* sp. nov., holotype female: 1, dorsal; 2, lateral, 3 ventral.

Etymology. This species is named for the daughter of the first author, Elizabeth Anne Bezark, who has been known to collect a cerambycid or two on occasion. The species name is a noun in apposition.

Diagnosis. *Tessaropa elizabeth* sp. nov. differs from the other species in the genus primarily by the orange pronotum with the dark central longitudinal stripe, and the orange tips on the 11th antennal segments.

Description. Female (Figs 1–3). Form elongate, slender, elytra short, rounded apically. Eyes completely divided. Integument black; the following orange: sides of pronotum except for dark central longitudinal stripe,

apical fifth of terminal antennal segment (11th segment), and abdominal segments except for last tergite. Head shining, as wide as base of pronotum, densely punctate on front and antennal tubercles, those punctures larger than dorsal punctures, with dense short hairs, including on eyes. Antennae with tubercles separated at base, extending beyond tip of flight wings by one segment, extending beyond tip of abdomen by three segments; scape heavily, coarsely punctured, remaining segments finely punctured; third segment with abundant hairs internally, longer than on other segments. Pronotum wider than long, widest at middle, shining, base constricted, with dense reddish hairs laterally, black hairs along dark longitudinal stripe; dark hairs longer and more sparse on prosternum. Scutellum black, shining, rounded at apex. Abdomen with apex of last tergite truncate, last ventrite broadly, sharply, deeply emarginate apically, forming a v-shape, with a row of short brown, translucent teeth and abundant, internally curved, yellow hairs along the entire apical margin. Elytra black, shining, extending just beyond apex of first abdominal segment, with two barely evident, shining costae beginning behind the humeri and extending to about three-fourths the length, with abundant, short, golden recumbent hairs arranged laterally. Legs black, shining, pro and meso-femora clavate, metafemora elongate, all femora with a series of thin, narrow grooves, exhibiting a lined appearance (grooves oriented transversely from top to bottom), first tarsal segment about as long as following segments.

Dimensions in mm (female). Total length from front of head to tip of antennae 10.3, length from head to tip of flight wings 9.4; prothorax: length, 1.1; width at middle (widest part), 1.3; elytral length, 2.8; width at base 1.5. Male length 9mm.

Male: Differs from the female as follows: Antennae thinner, approximately 1.5 times the length of the body. Underside mostly black with a paler area in the middle of the basal two sternites. Abdomen broadly emarginate truncate at apex with outer edges rounded. Vitta of pronotum darkest at apex and base becoming noticeably paler from the middle to the apical 3/4ths.

***Anelaphus cordiforme* Tyson, sp. nov.**

(Figs 4–5)

Type Material: Holotype: PANAMA: Darien: Male. Cerro Chucanti, 15 km W. of Torti. 13–16 February, 2012 collected at mercury vapor light. W. H. Tyson (CASC); **Paratypes: PANAMA: Darien:** Female, same location and dates (WHTC); male, same data, collected by L. G. Bezark (LGBC).

Etymology. The species name *cordiforme* refers to the heart-shaped denuded area on the distal one third of the elytra.

Diagnosis. Two other species from Mexico are similar but differ as follows: *A. yucatecus* Chemsak and Noguera is found in central Mexico and the denuded areas on the elytra are more oval, not cordiform, and are separated by pubescence. Also, the pronotum is sparsely covered with pubescence. *A. albopilis* Chemsak and Noguera is also similar but the denuded areas of the elytra are not heart-shaped and are separated from each other by a noticeable area of pubescence. The pronotum is sparsely to moderately marked with pubescence without any defined pattern.

Description. Male (Fig 4). Integument reddish brown to brown. Legs slightly lighter in color. Antennae as long as or slightly longer than the body with small spines on segments 4–7 and some long hairs on the underside. Head with eyes widely separated. Pronotum rugose and covered with decumbent pubescence of a light grey-white color. A faint pattern exists on the pronotum around the small polished callus. Scutellum heavily clothed with whitish pubescence. Elytra heavily punctured. Humeri clothed with pubescence appearing as a small spot. The pattern of the elytra gives the impression of a denuded area shaped like a heart with only a faint line of pubescence along the elytral suture separating the two areas. White pubescence surrounds the denuded areas becoming denser as it approaches the denuded area. Apices emarginate-truncate without denticles. Underside is lightly clothed with pubescence and some flying hairs.

Female (Fig 5). Similar to the male but with the last sternite rounded, not emarginate and less densely pubescent on the pronotum. Specimen is damaged and is missing bits of both antennae. The antennae probably do not reach the apex of the elytra.

Dimensions (in mm), male: total length from front of head to elytral apex 14; prothorax: length 2.5, width at middle 3.0; length of elytra 10.5, width at base 3.5; female 13.



FIGURES 4–5. *Anelaphus cordiforme* sp. nov. holotype male 4, paratype female 5.

New Distribution Records

Cerambycinae

Anaglyptini

Pempteurys sericans Bates, 1885. Panama (Darién), **new country record**. Material examined—Panama, Darién: Cerro Chucanti, 15 km W of Torti, 13–16 February, 2012. N 08° 47' 21.4" & W 078° 27' 05.5"—875m (LGBC). This species was previously recorded from Costa Rica and Guatemala (Monné & Bezark, 2009).

Pteroplatini

Nubosoplatus inbio Swift, 2008. Panama (Darién), **new country record**. Material examined—Panama, Darién: Cerro Chucanti, 15 km W of Torti, 13–16 February, 2012. N 08° 47' 21.4" & W 078° 27' 05.5"—875m (LGBC). This species was previously recorded from Costa Rica (Monné & Bezark, 2009).

Rhinotragini

Tomopterus brevicornis Giesbert, 1996. Panama (Darién), **new country record**. Material examined—Panama, Darién: Cerro Chucanti, 15 km W of Torti, 13–16 February, 2012. N 08° 47' 21.4" & W 078° 27' 05.5"—875m, N. M. Schiff, collector, malaise trap (LGBC). This species was previously recorded from southern Mexico (Chiapas), and Costa Rica (Monné & Bezark, 2009).

Lamiinae

Acanthocinini

Paranisopodus heterotarsus Monné & Martins, 1976. Panama (Chiriquí), **new country record**. Material

examined—Panama, Chiriqui: Mt. Totumas, 21 February, 2012. N 08° 53' 03.3" & W 082° 41' 04.7"—2,070m (LGBC). This species was previously recorded from Costa Rica (Monné & Bezark, 2009).

Acanthoderini

Psapharochrus nigricans (Lameere), 1885. Panama (Veraguas) **new country record**. Material examined - Panama, Veraguas: 5m w of Santiago, elevation 280', 27 May, 2012, William Tyson, collector, at hotel lights. This species was previously recorded from northern South America, including Bolivia (La Paz and Santa Cruz) (Monné & Bezark, 2009).

Apomecynini

Adetus linsleyi Martins & Galileo, 2003. Panama (Darién), **new country record**. Material examined—Panama, Darién: Cerro Chucanti, 15 km W of Torti, 13–16 February, 2012. N 08° 47' 21.4" & W 078° 27' 05.5"—875m (LGBC). Determined by U. R. Martins. This species was previously recorded from Western Ecuador (Monné & Bezark, 2009).

Rosalba costaricensis (Melzer), 1934. Panama (Darién), **new country record**. Material examined—Panama, Darién: Cerro Chucanti, 15 km W of Torti, 13–16 February, 2012. N 08° 47' 21.4" & W 078° 27' 05.5"—875m (LGBC). This species was previously recorded from Costa Rica (Monné & Bezark, 2009).

Desmiphorini

Estola strandiella Breuning, 1942. Panama (Darién), **new country record**. Material examined—Panama, Darién: Cerro Chucanti, 15 km W of Torti, 13–16 February, 2012. N 08° 47' 21.4" & W 078° 27' 05.5"—875m (MZSP). Determined by U. R. Martins. This species was previously recorded from Costa Rica (Monné & Bezark, 2009). Image in: A photographic catalog of the cerambycidae of the world (<http://plant.cdfa.ca.gov/byciddb/default.asp>) (Bezark, 2012).

Hemilophini

Oedudes bifasciata (Bates), 1869. Panama (Chiriqui), **new country record**. Material examined—Panama, Chiriqui: Rio Candela, 1830m. 19 February, 2011, N. M. Schiff collector (LGBC). Panama, Chiriqui, Reserva Fortuna, Continental Divide Trail, 25–26 May, 1993, F. Andrews & A. J. Gilbert, collectors (LGBC). This species was previously recorded from Nicaragua and Costa Rica (Monné & Bezark, 2009).

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