

Reinstatement of *Solenoptera michelii* (Chemsak, 1979) (Coleoptera: Cerambycidae: Prioninae: Solenopterini) as a valid species

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Abstract

Solenoptera michelii (Chemsak) (Coleoptera: Cerambycidae: Prioninae) is resurrected from synonymy under *S. thomae* (Linnaeus). Characters and figures are presented to show differences between the two species.

Resumen

Solenoptera michelii (Chemsak) (Coleoptera: Cerambycidae: Prioninae) es rescatada de sinonimia bajo *S. thomae* (Linnaeus). Se presentan caracteres y figuras demostrando las diferencias entre las especies.

Key words: Taxonomy, Coleoptera, Cerambycidae, Prioninae, Solenopterini, Puerto Rico

Introduction

The diurnal prionines of the tribe Solenopterini are widely distributed in the West Indies. Three species are found in Puerto Rico: *Solenoptera bilineata* (Fabricius), *S. thomae* (Linnaeus), and *S. michelii* (Chemsak), although the validity of the last species has been questioned. Galileo and Martins (1993) synonymized *S. michelii* (Chemsak, 1979) with *S. thomae* (Linnaeus).

The senior author has collected and studied Puerto Rican Cerambycidae for over 30 years. About 200 specimens of Puerto Rican *Solenoptera* have been collected and, at present, there are more than 150 specimens in the authors' collection which have been

thoroughly examined for this study. A series of photos of the holotype of *S. thomae* (Figs. 1a–b), and the holotype and a long series of paratypes of *S. michelii* have also been examined. Based upon these specimens, it is our conclusion that the synonymy of *S. michelii* with *S. thomae* was not warranted. In this paper, we are returning it to its former status as a valid species.

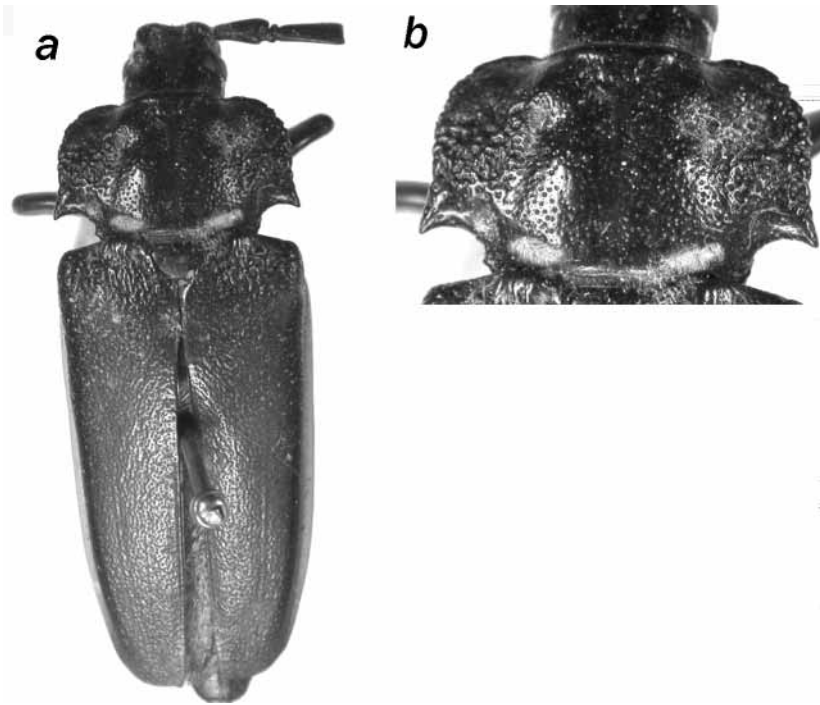


FIGURE 1. *Solenoptera thomae* (Linnaeus), holotype, female. a, dorsal habitus; b, closeup of pronotum.

Reinstatement of *Solenoptera michelii*

Solenopterini present sexual dimorphism. In the Puerto Rican species of *Solenoptera*, this is most notable in the pronota of males, which present good characters for differentiating species. Pronota of females may be more difficult to differentiate.

Within the species of Puerto Rican *Solenoptera*, we have observed variation in size, color, punctuation and density (or lack) of pubescence. However, there are some characters which remain constant and appear significant for differentiating *S. thomae* from *S. michelii*. These are the shape of the elytra, shape of pronotum and shape of metatibiae*. A list showing the differences between the two species follows:

Solenoptera thomae (Linnaeus)

(A) Elytra depressed-convex (Fig. 2b), with a moderate carina along margin of lateral declivity (Fig. 2a) (males and females).

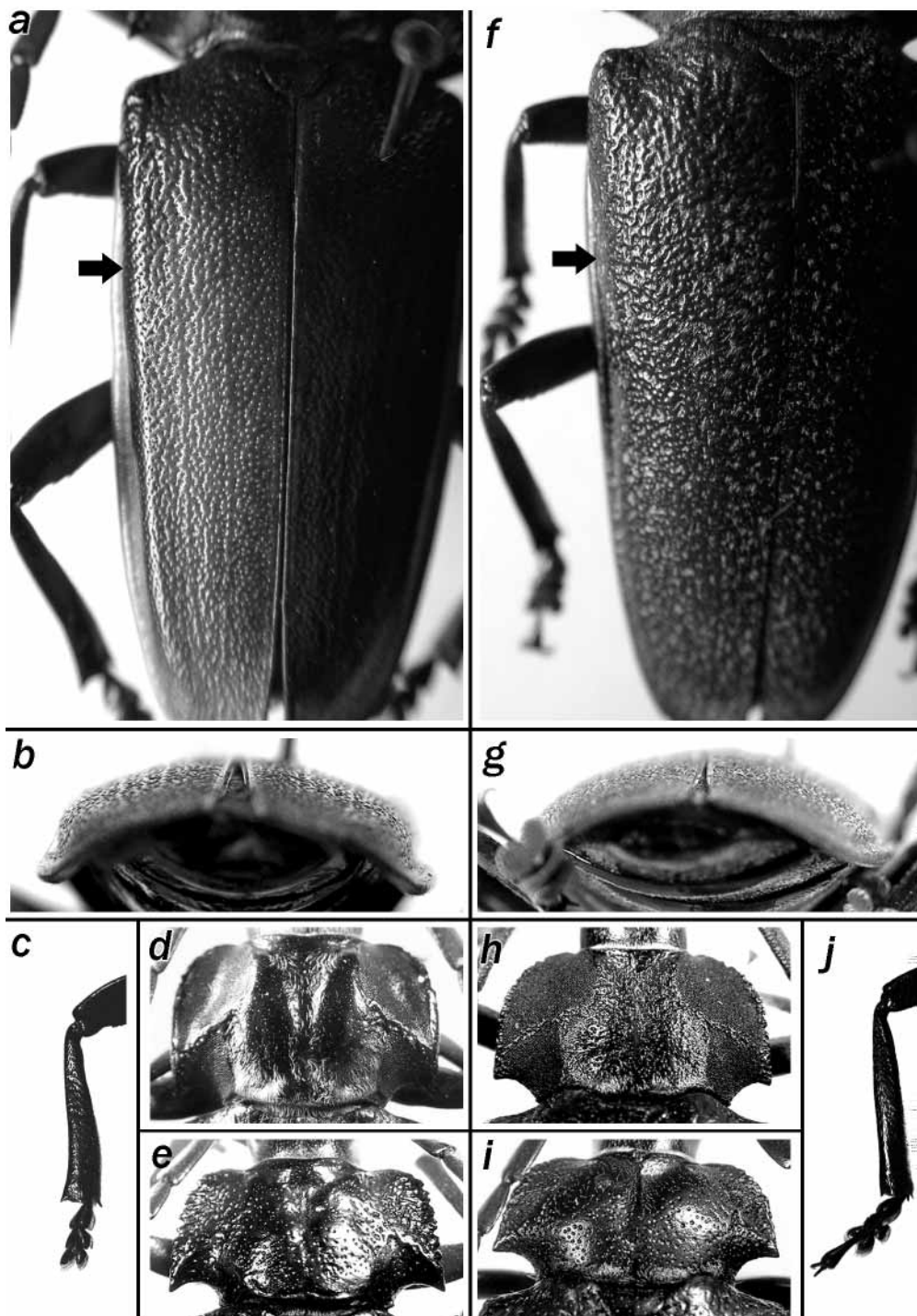


FIGURE 2. a–e, *Solenoptera thomae* (Linnaeus): a, dorsal view of elytra; b, posterior view of elytra; c, metatibia; d, detail of male pronotum; e, detail of female pronotum; f–j, *Solenoptera michelii* (Chemsak): f, dorsal view of elytra; g, posterior view of elytra; h, detail of male pronotum; i, detail of female pronotum; j, metatibia.

(B) Pronotum of males with apicolateral area deeply concave along an oblique line; disk with a deep wedge-shape depression frontally, gibbose on each side posteriorly (Fig. 2d).

(C) Pronotal disk of females with a deep wedge-shape depression frontally; gibbose on each side posteriorly (Fig. 2e).

(D) Metatibiae sinuate and expanded apically* (Fig. 2c).

Solenoptera michelii (Chemsak), restored status

(A) Elytra convex (Fig. 2g), without carina along margin of lateral declivity (Fig. 2f), (males and females).

(B) Pronotum of males with apicolateral area feebly, evenly concave; disk with a shallow wedge-shape depression frontally, even posteriorly (Fig. 2h).

(C) Pronotal disk of females with a shallow wedge-shape depression frontally; posteriorly surface even, feebly elevated (Fig. 2i).

(D) Metatibiae almost straight, feebly or not expanded apically* (Fig. 2j).

* Note: Metatibiae of females and those of unusually small specimens (either sex), show poor development in curvature and apical expansion, and so are less reliable for differentiation.

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