

## A new species of *Chrysobothris* (Coleoptera: Buprestidae) from Oaxaca, Mexico

Richard L. WESTCOTT

Plant Division, Oregon Department of Agriculture, 635 Capital St. NE, Salem, Oregon 97301 USA;  
e-mail: [rwestcott@oda.state.or.us](mailto:rwestcott@oda.state.or.us)

**Abstract.** *Chrysobothris svatabilyi* sp. nov. is described and figured from a single specimen collected in Oaxaca, southern Mexico.

**Key words.** Coleoptera, Buprestidae, *Chrysobothris*, taxonomy, Mexico

### Introduction

This is the 104<sup>th</sup> species of *Chrysobothris* Eschscholtz, 1829 described from Mexico, in which country that is the third largest genus of Buprestidae (WESTCOTT 2014). Unfortunately, the species is known from but a single specimen. However, and rather than continuing to wait until others are found, the likelihood of which seems remote, its distinctiveness warrants description now to make its existence known so that others may search for additional specimens. With the description herein, Oaxaca becomes tied with its neighboring state of Veracruz for having the most species of this genus (22) recorded in Mexico. More Mexican species remain to be described, and much more collecting is needed – hopefully soon, because the hands of humans are rendering habitat unsuitable each day.

### Taxonomy

#### *Chrysobothris svatabilyi* sp. nov.

(Figs 1–2)

**Type locality.** Mexico, Oaxaca, 7–8 mi E of Mitla, 6200 ft. (ca. 1890 m a.s.l.).

**Type material.** HOLOTYPE: ♂, “MEXICO, Oaxaca / 7-8 mi. E Mitla / 6200’, Jul 3-9, ’94 / E. Giesbert, coll. [printed] // HOLOTYPE, *Chrysobothris / svatabilyi* / R. L. WESTCOTT [red card, handwritten]”. The holotype will be deposited in the Essig Museum of Entomology, University of California, Berkeley, USA.

**Description.** Holotype male (Fig. 1): Length 7.54 mm, as measured from front of head to tips of elytra; width 2.93 mm, as measured at widest point (just beyond middle) of elytra, shallowly convex, dorsal surface black with faint purplish reflections, dull green in basal pits and foveae of elytra; ventral surface, including coxae, bright metallic green narrowly margined

with copper on middle, purplish black laterally; abdominal laterosternites and tergum green; front of head dull brassy green, black above, antennae black with slight green and copper reflections; legs black with weak green and copper reflections, except strong reflections on posterior surface of pro-, meso- and metafemora very narrowly copper at base, pro- and mesotrochanteri green, protarsi with green reflections, meso- and metatarsi with green or blue-green reflections. Vestiture long and white, longer on head and ventral surface.

Head with frons evenly flattened, coarsely and shallowly reticulate-punctate, densely clothed with long procurved setae, with a shallow median depression above; vertex more deeply and discretely punctate, punctures smaller, with a fine median carina, setae sparse; clypeus with front margin broadly, deeply, triangularly emarginate; antennae with antennomeres V–XI quadrate.

Pronotum evenly convex, with irregular, rather poorly-developed smooth callosities sublaterally in front of middle, punctures of disk discrete, rather fine and densely placed, not evident on sides which are sculptured with a jumble of intersecting and crossing short ridges, setae less dense than on front of head, procurved, subrecumbent; sides subparallel, shallowly converging to apex and base, steeply sloping to straight, very well defined lateral margins that do not quite reach apical angles and are not visible from above; apical angles bluntly triangular, weakly produced; basal angles quadrate; front margin broadly shallowly lobed at middle; hind margin strongly bisinuate, subtruncate in front of equilaterally triangular scutellum which is smooth and minutely microsculptured.

Elytra constricted basally, widest and about parallel from behind humeri to just beyond middle, then strongly tapering to apex; lateral margins finely serrate on about apical half, obscurely serrulate on apices; surface finely densely punctate, setae about like on pronotum but differ by being recurved. Each elytron with a deep median basal pit, an irregularly rounded discal fovea at apical third and a transverse discal fovea just behind middle, with four distinct costae as follows: first strongly elevated, extending unbroken from basal 1/4 to apex; second and third not as well developed, interrupted, especially by foveae, and with connecting raised lines; fourth extending from behind umbone to where it connects with first near apex.

Pygidium moderately, densely punctate, apical margin truncate.

Underside: setae subrecumbent to recumbent, not curved, much more dense laterally on abdomen; prosternum with front margin truncate along middle, without a mentonnière but with a short parallel “pre-margin”, coarsely densely punctate, except transversely striate-punctate anteriorly, setal density not distinctly greater than remainder of thoracic sternites. Abdomen rather finely sparsely punctate on middle, punctation laterally obscured by the dense recumbent setae, shallowly depressed on middle (green portion), more notably so on ventrites I and II; lateral callosities weak on ventrites I–III, indistinct on ventrite IV, absent on ventrite V, lateral margins of which are entire and not serrate, the apex broadly shallowly emarginate across its entire width. Anterior femur with large tooth distinctly, bluntly denticulate on outer margin. Anterior tibia arcuate and distinctly wider on apical half, otherwise unmodified; middle tibia slightly arcuate apically, slightly dilated internally at apex; hind tibia straight, unmodified.

Aedeagus as in Fig. 2, median lobe curved upward apically, lateral margins when viewed from below appear serrulate behind extruded apical portion.



Figs 1–2. 1 – Dorsal habitus of *Chrysobothris svatabilyi* sp. nov., male holotype. 2 – same, aedeagus.

**Comparison and discussion.** Although it differs from any species known to me, *C. svatabilyi* sp. nov. does appear related to *C. fiskei* Fisher, 1942, which is known in Mexico only in the north, yet the two are abundantly distinct. However, *C. svatabilyi* would key easily to the latter in FISHER (1942) – albeit that key is to species that occur in the USA and Canada – if the dorsal surface of the elytra were not clothed with long setae. Also, the elytra of *C. svatabilyi* are more coarsely punctate and distinctly more tapered apically. The genitalia, while clearly distinguishable, do exhibit a similarity. Oaks, *Quercus* spp. are known hosts for *C. fiskei* and the related *C. bimarginicollis* Schaeffer, 1905 (MACRAE & BASHAM 2013). I have been at or near the type locality, and oak occurs there. This may provide a clue – certainly it is better than nothing – to finding *C. svatabilyi*, although it failed for me.

**Etymology.** I describe this new species to honor Svatopluk Bílý, friend and colleague in the study of Buprestidae, a most prolific author or coauthor of approximately 200 publications, the vast majority of them relating to the biology and taxonomy of that family.

**Distribution.** Mexico (Oaxaca).

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