A NEW SPECIES OF CENTRAL AMERICAN Platydema Laporte and Brullé (Coleoptera: Tenebrionidae) Recently Established in Florida

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Abstract
A new species of Platydema Laporte and Brullé, P. woldai from Central America, is described and a diagnosis is provided. This species is apparently established in southern Florida.

Examination of Tenebrionidae from Florida resulted in the discovery of an unfamiliar Platydema Laporte and Brullé, (Diaperinae). The combination of characters was such that the species did not key out to any known North American species, as reviewed by Triplehorn (1965). Suspecting that the record may represent a recent introduction to Florida from some other region, a search for comparable specimens in the U.S. National Museum resulted in conspecific material from several Central American localities (southern Mexico to Panama) and U.S. ports in Florida. Similarly, a search of The Ohio State Insect Collection also turned up a large series collected at light in Panama. Since the species is undescribed, and recognition is useful because of the high frequency of interception at U.S. ports, we make a name available for this taxon as follows.

Platydema woldai Triplehorn and Philips, new species
Figs. 1–5

Figs. 1, 2. *Platydema woldai*. 1) dorsal habitus, scale bar = 1.0 mm; 2) head and anterior part of pronotum, scale bar = 0.1 mm.
Figs. 3-5. *Platydena woldai*. 3–4 Male genitalia: 3) dorsal aspect; 4) lateral aspect; 5) right elytron showing the typical maculation pattern.
Paratypes: Panama. same locality as holotype except various dates in 1974 and 1975 (all 10-III to 24-VIII) and some with UV light indicated (65); At Miami, 16-V-66, E. R. Bartley, 66-13331 (1). El Salvador. Los Chorros, nr. Santa Tecla, 29-VI-1966, Flint & Ortiz (1); At Miami, 22-IX-67, E. B. Lee, w. orchid plnt., 67-23677 (1). Guatemala. 11-VIII-64, E. Y. Okasako, Orchid plants, Miami 29921, 64-19729 (1); 30-IX-64, Stegmaier & Rowan, orchid plants, Miami 31203,64-25296 (1); 20-I-65, J. C. Buff, with orchid plants, Miami 32945, 65-2484 (1); at Miami, 31-V-66, J. C. Buff, with orchid plants, 66-14904 (1); Los Amates, Kellerman (1). Honduras. Francisco Morazon, Zamorano, 2 Oct. 1993, R. Turnbow (1); as previous except 4 Oct. 1993 (2); as previous except 6 June 1993 (3); Francisco Morazon, 6.2 km W San Juancito, mv + bl, 1 June 1993, R. Turnbow (4); El Paraiso, vin. Yuscaran, mv + bl, 25 May 1993, R. Turnbow (1). Mexico. Chiapas, El Aguacero, mv + bl, 22 June 1990, R. Turnbow (1); Morelos, Santa Rosa, 3.2 mi. N. Zacatepec, 3100', IV.7.1966, McFadden, Whitehead collectors (3); Sinaloa, Mazatlan, north Sands Motel, mango grove, August 18, 1962, H. E. Evans Exp., George E. Ball collector (2).


Paratypes are deposited in ABSC—Archbold Biological Station, Lake Placid, Florida; BMNH—The Natural History Museum, London; FSCA—Florida State Collection of Arthropods, Gainesville, Florida; MNHN—Muséum National d’Histoire Naturelle, Paris; NMNH—Smithsonian Institution, Washington; OSUC—Ohio State University Collection, Columbus, and collections of the authors. Label data are given verbatim, with commas inserted for clarity; numbers in parentheses following each record refer to the number of specimens bearing those data.

Description. Holotype. Length 3.8 mm, width 2.1 mm. Body elongate oval, moderately convex (Fig. 1), reddish brown, glossy in luster. Head with clypeal margin evenly rounded (Fig. 2), joining the genae smoothly in an arc from eye to eye, fronto-clypeal suture well defined but not deeply incised, clypeus and frons finely and densely punctate, frons somewhat flattened between eyes; eyes moderate in size, reniform, separated ventrally by about 1.5× diameter of one eye, ventral lobe larger than dorsal lobe; mouthparts yellowish brown, terminal segment of maxillary palpus elongate-triangular; antennae uniformly reddish brown. Pronotum twice as long as broad, lateral margins strongly narrowing from base to apex, feebly rounded, widest at base, apical margin broadly and evenly emarginate, apical angles obtusely rounded, basal angles obtusely angulate, lateral marginal bead fine, basal margin strongly bisinuate, surface very minutely and not very densely punctate, microreticulate between punctures. Elytra coarsely punctate-striate, eighth stria curving gradually toward seventh from slightly behind middle, leaving a large humeral interval, intervals almost impunctate, very finely microreticulate, each elytron with two poorly defined but conspicuous maculae (Fig. 5), one subtriangular or irregularly oval in basal one-third extending from third to sixth interval, another C-shaped macula from second interval to lateral margin and apex at apical one-third. Ventral surface light reddish brown, the legs and epipleura yellowish, propleura smooth, impunctate; prosternum minutely granulate, prosternal process smooth and prominent; mesosternum strongly V-shaped anteriorly, with sides raised and reflexed; metasternum and abdominal ventrites finely, shallowly and not very densely punctate. Aedeagus as in figures 3 and 4, basal portion (in dorsal view) nearly parallel-sided throughout, apex smoothly emarginate, in lateral view apex extending beneath lateral
lobes for over one half lobe length, base with a broad notch; fused lateral lobes moderately elongate-triangular.

**Variation.** The yellowish maculation at basal $\frac{1}{3}$ is variable in size and is sometimes reduced to a small patch on the fourth interval. Specimens rarely are lacking this mark. The apical maculation varies in intensity but the anterior portion of the "C" is always apparent after close examination. Several specimens from Honduras and southern Mexico are distinctly darker but have similar elytral maculations. The size is quite constant although there is some variation in the type series (length 3.1–4.0 mm; width 1.7–2.2 mm).

**Diagnosis.** The luster of the dorsum of *P. woldai* is, when compared to other North American *Platydema*, somewhere between glossy and entirely dull and lusterless. This species will key to *P. micans* Zimmerman if one chooses "dorsal surface glossy . . ." in Couplet 5 of Triplehorn's (1965) key. Both are about the same size and share the character of having a wide humeral interval on the elytron, but *P. woldai* is more brownish than black dorsally, less polished, less convex, and the elytra bear variable pale yellow-brown maculae, one at apical $\frac{1}{4}$, and another one (sometimes absent) at middle of basal $\frac{1}{3}$ of disc (Fig. 5). Male genitalia of *P. woldai* are relatively simple (Figs. 3 and 4) when compared to the aberrant structures of *P. micans* (Triplehorn 1965). If one chooses the key alternative of dorsal surface entirely dull and lusterless, the determination will be *P. ellipticum* (Fabricius), the only other maculate (non-unicolorous) species known in the U.S. However, the generally larger *P. ellipticum* is all coal-black except for the bright reddish chevron mark of the elytra (illustrated by White 1983), while *P. woldai* is faintly four-spotted dorsally, with the coloration described above, and the venter and appendages pale brown to yellow.

**Etymology.** The name honors Dr. Henk Wolda, who collected most of the type series in Panama and has contributed large numbers of insects to several institutions.

**Discussion.** Little is known of its biology except for what can be derived from label data; many specimens have been taken at artificial lights. Other species of *Platydema* have been collected from logs and fungi (Triplehorn 1965, 1994) and the related *P. micans* lives in leaf litter (Steiner 1995). The precise historic distribution of *P. woldai* is unknown, but several collections of specimens with imported plants demonstrate that this beetle is prone to introduction. The numerous records from southern Florida indicate it has recently become established in the United States.

**Acknowledgments**

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**Literature Cited**

Steiner, W. E. 1995. Structures, behavior, and diversity of the pupae of Tenebrionidae (Coleoptera) [pp. 503–539]. In: Pakaluk, J., and S. A. Slipinski (edi-
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From David Furth. The Society has pledged up to $125, award recipients will receive a one year subscription to the The Coleopterists Bulletin. The objectives of the Youth Incentive Award are to: provide encouragement and assistance to young beetle enthusiasts; provide opportunities to develop important life skills (i.e., leadership, cooperation, communication, planning and conducting a scientific study, and managing funds).

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Additional details and application forms for The Coleopterists Society Youth Incentive Award Program can be obtained from: Dr. David G. Furth; Department of Entomology; Smithsonian Institution, MRC165; Washington, DC 20560 (phone: 202-357-3146, FAX: 202-786-2894, email: furthd@nmnh.si.edu). Also check The Coleopterists Society WebPage: http://www.auburn.edu/beetles/index.html

Applications for this year must be submitted by 15 November 1998.

From Don Bright and Arthur V. Evans. Society members attending the Las Vegas meetings and traveling through the Los Angeles area are invited to stop by and visit the beetle collection at the Natural History Museum of Los Angeles County. Interested parties should make an appointment through Brian Harris of the Entomology Section at (213) 763-3364.