

*DISCOCORIS DOMINICANUS*, A NEW SPECIES  
OF PALM BUG FROM DOMINICAN AMBER  
(HETEROPTERA: THAUMASTOCORIDAE)

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ABSTRACT

*Discocoris dominicanus* is described as a new species from amber from the Dominican Republic. It is related to, and differentiated from the extant species *Discocoris fernandenzi* from Venezuela. Figures of dorsal and ventral views and the amber cabochon are included. The relationships to *Paleodoris*, the only other thaumastocorid known from Dominican amber, is discussed.

Key Words: Heteroptera, Thaumastocoridae, *Discocoris*, amber fossil, Dominican Republic

RESUMEN

*Discocoris dominicanus* es descrito como una nueva especie en ámbar de la República Dominicana. Esta relacionado y diferenciado de la especie existente *Discocoris fernandenzi* de Venezuela. Ilustraciones de vista dorsal, ventral, y el cabochón de ámbar están incluidas. Las relaciones a *Paleodoris*, el único otro miembro de Thaumastocoridae procedente de ámbar Dominicano, es discutido.

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The genus *Discocoris* has been previously known to include four extant species, all confined in distribution to South America. All of the species whose biology is known feed on various species of palms as does the related *Xylastodoris luteolus* Barber which is known from Cuba and southern Florida.

Recently Poinar & Santiago-Blay (1997) have described the first known fossil thaumastocorid, interestingly also found, as is the present species, in Dominican amber. These authors recognized their species as a new genus and species, *Paleodoris lattini*, and related it most closely to *Xylastodoris luteolus* Barber.

Poinar & Santiago-Blay (ibid) reviewed the pertinent literature on the family which will not be repeated here other than bring attention to the recent paper by Cassis, Schuh & Brailovsky (1999) where 6 genera and 19 species are recognized in the family. These authors include an important discussion of host plant relationships for species from both hemispheres. Poinar & Santiago-Blay (ibid) speculated that *Paleodoris* and *Xylastodoris* represent the "most primitive" members of the family, that the distribution is Gondwana-like and that the family may have been derived from a "group of plant bugs similar to, or belonging to, the Progonocemicidae Handlirsch (Permian and Mesozoic)".

The specimen of *Paleocoris lattini* is believed to have originated "from the northern mountain ranges in the Dominican Republic. . . from mines in the El Mame forma-

tion" (Upper Eocene) and the amber is believed to possibly be between 20 and 40 million years old.

The present specimen is from eastern deposits in Yanigua in the area of El Valle. Dr. Robert E. Woodruff has kindly indicated to us that these deposits are probably younger than those from the Santiago region and are probably Miocene dating from 20-30 million years ago. He notes that material from the El Valle area has a different composition than that from the Santiago area and that some authors, in fact, believe that all Dominican amber is actually Miocene, but that the El Valle material is relatively recent even within this restricted time period. Anderson (1999) has recently described a species of Veliidae (*Micovelgia polhemi*) also from the El Valle area which he locates in the eastern part of the Dominican Republic. He states that the exact age of the Dominican amber deposits is still not known but cites studies that agree with Dr. Woodruff's comments and suggest a range from 15-30 million years.

*Discocoris dominicanus* described below, although also taken in Dominican amber is not closely related to *Paleodoris*, but rather appears to be a typical species of *Discocoris*. It keys to *D. fernandezi* Slater & Brailovsky in Slater & Brailovsky (1983).

*Discocoris* differs from *Paleodoris* in having the juga (= mandibular plates) barely exceeding and not convergent beyond the apex of the tylus (= clypeus) (a feature that Cassis, Schuh and Brailovsky (1999) believed to be diagnostic for the Australian genus *Onymocoris* Drake & Slater), in having the ocelli located on a line near the posterior margin of the compound eyes, rather than far behind the eyes as they are in *Paleodoris*. The lateral pronotal margins are relatively straight in this Dominican amber species of *Discocoris* but are very strongly arcuate in *Paleodoris*. Other differences are the more strongly obovate and less flattened body of *Discocoris*. The labium is somewhat obscured in *Discocoris dominicanus*, but appears to reach, or nearly reach, the metacoxae. In any event the first labial segment reaches the base of the head whereas in *Paleodoris* the apex of the labium "barely reaches the fore coxae".

We agree with Poinar and Santiago-Blay (1997) in placing their amber specimen as a distinct genus more closely related to *Xylastodoris* than to *Discocoris*.

All measurements are given in millimeters.

*Discocoris dominicanus* Slater & Baranowski, **New Species**

Figs. 1, 2, 3

Broadly ovate. Head broad, non-declivent. Juga strongly arcuate, slightly exceeding tylus but not convergent before it. Tylus slightly tapering anteriorly. An acute, thick, inwardly curving spine present at anterior angle of each eye, extending only to near middle of first antennal segment. Ocelli located on a line near posterior margin of compound eyes. Head, pronotum, scutellum and corium with conspicuous coarse, closely placed punctures, those on head and pronotum closer to one another than intervening spaces. Clothed above with short upright setiferous hairs. Length head 0.50, width 0.52, interocular space 0.28. Anterior margin of pronotum straight mesally, laterally with antero-lateral angles produced forward as a broad curving lobe almost to level of middle of compound eye. Lateral pronotal margins broadly explanate with lateral edge straight for most of length with a few minute teeth present. Posterior pronotal margin deeply concave with humeral angles broadly rounded, not strongly elevated. Length pronotum at midline 0.30, maximum length 0.50, width across humeral angles 1.00. Scutellum lacking a median elevation. Length scutellum 0.42, width 0.40. Clavus with three rows of punctures. Length claval commissure 0.28. Hemelytra broadly arcuate and moderately convex. Length hemelytron 1.48. Hemelytra considerably exceeding apex of abdomen. Femora incrassate, dark brown, contrasting with pale coloration of tibiae and tarsi. Antennae slender, filiform, fourth

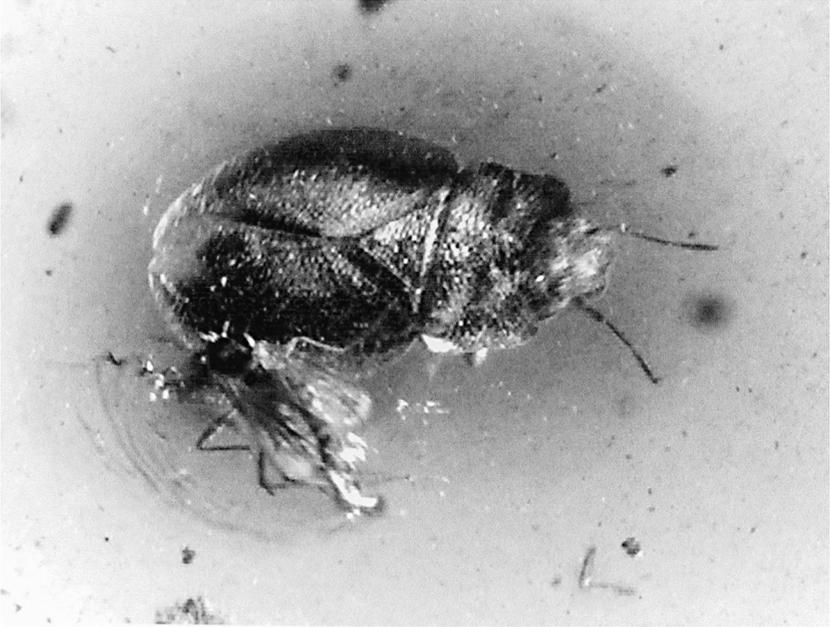


Fig. 1. *Discocoris dominicanus* Slater & Baranowski, new species. Dorsal view.

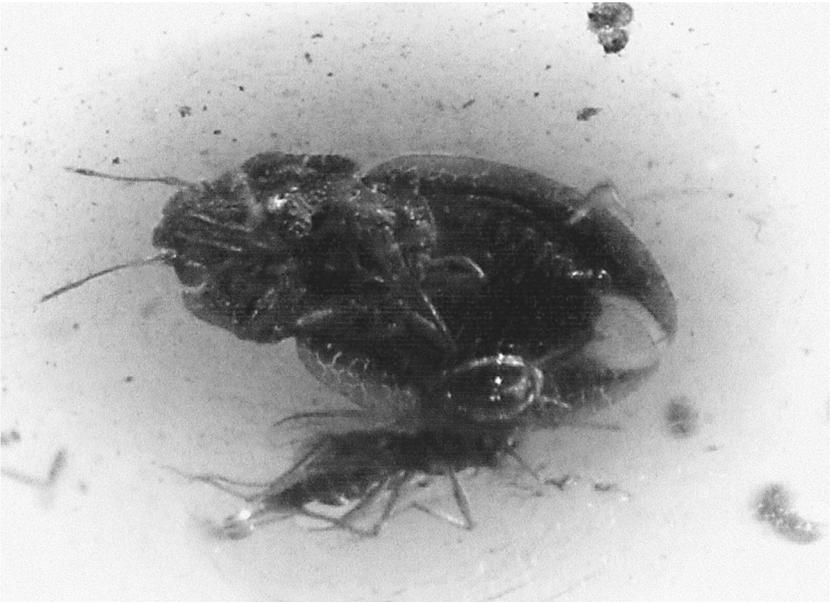


Fig. 2. *Discocoris dominicanus* Slater & Baranowski, new species. Ventral view.

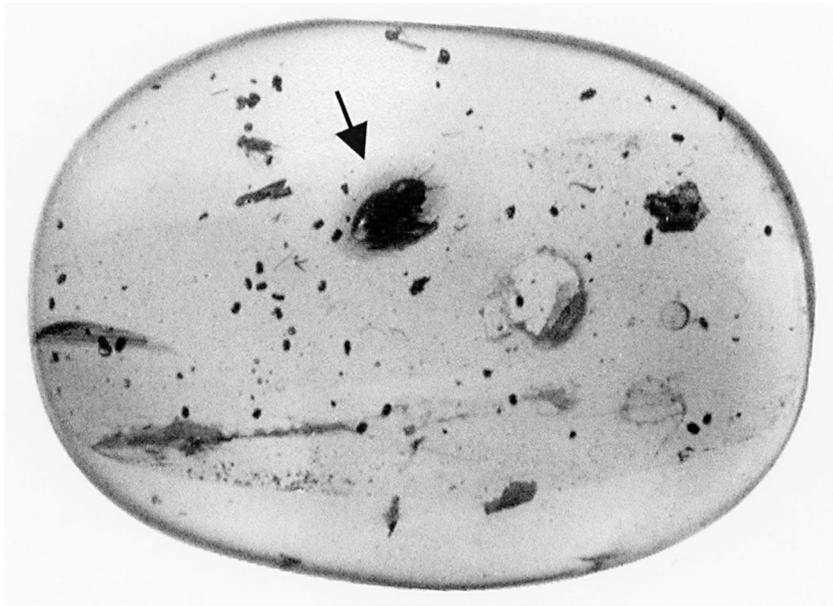


Fig. 3. Amber cabochon containing *Discocoris dominicanus* Slater & Baranowski, new species.

segment infuscated on apical half. Length antennal segments I 0.04, II 0.12, III 0.16, IV 0.22. Total body length 2.20.

Holotype: Dominican Republic: Yanigua, in the area of El Valle. This specimen will be in the junior author's possession until a depository is selected by Mr. Jake Brodzinsky, owner of the specimen.

This species keys to *D. fernandezi* in Slater & Brailovsky (1983), but is a smaller species, clothed above with conspicuous upright setae. In contrast to *D. fernandezi* the jugs exceed the apex of the tylus, the head is relatively narrow and the pronotum much shorter. It is however definitely most closely related to *D. fernandezi* agreeing in the size of the spine laterally on the head, the large coarse punctures, the jugs and tylus extending anteriorly nearly the same distance, the forward extension of the antero-lateral pronotal angles and the general shape of the lateral pronotal margins.

Etymology: Named for its occurrence in the Dominican Republic on the island of Hispaniola.

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