

Discolomopsis dominicana, a new genus and species
of Endomychidae (Coleoptera) from Dominican amber

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Abstract. *Discolomopsis*, a new genus of Endomychidae (Coleoptera: Cucujoidea), is described and illustrated based on a fossil endomychid embedded in amber resin from the Dominican Republic. *Discolomopsis dominicana* sp. nov. is designated as the type species for the genus.

Key Words. Entomology, taxonomy, new genus, new species, Cucujoidea, fossil Endomychidae

Introduction

Strohecker (1953) listed six species in three subfamilies of Endomychidae that have been described from amber. All were embedded in Baltic amber and shared at least one morphological synapomorphy linking them to the extant fauna, making it possible to assign them to recognizable subfamilies. The majority of fossil endomychids have been placed in extant genera in the subfamily Lycoperdininae (formerly Eumorphinae).

Dominican amber forms as the result of hardening of the resin of *Hymenaea protera* Poinar (Leguminosae: Caesalpinioideae), a tree found in the West Indies. Inclusions in Dominican amber are well known to be much better preserved and not suffer the problems with compression typical of inclusions in other New World ambers (Grimaldi and Engel, 2005). The exact age of this amber is unknown, but it has been estimated that most Dominican amber dates back to the mid-Miocene, approximately 15-20 million years ago (Iturralde-Vicent and MacPhee, 1996).

Discolomopsis Shockley, new genus

Figs 1-3

Description. Antennae, body, and legs dark reddish brown. **Head:** Slightly deflexed; moderately punctate; surface between punctures smooth; fronto-clypeal suture distinct; clypeus transverse, emarginate medially along anterior margin; labrum rectangular, anterior margin weakly rounded. **Thorax:** Trans-

verse and covered with long yellowish setae; lateral margins widely flattened and slightly reflexed; widest at middle; lateral sulci reduced to punctiform foveae; basal sulcus lacking; scutellum relatively large, strongly transverse, lacking conspicuous punctures and vestiture. **Elytron:** Shape convex, subglobose, vestiture long and yellowish in color; lateral margins widely explanate; disc regularly and moderately punctate; humeri elevated. **Legs:** Procoxa and mesocoxae rounded; metacoxa transverse; tarsomeres simple, 3-segmented, bearing small tuft of setae ventrally, narrowly extended underneath; pretarsus appendiculate. **Abdomen:** Sterna apparently connate.

Etymology. Derived from the combination of the terms "Discolom-" + the Greek suffix "-opsis", meaning "similar in appearance". The generic name is based on the overall similarity of this genus to members of the family Discolomatidae, most notably the broad, flattened lateral margins of the pronotum and elytra.

Type Species. *Discolomopsis dominicana*, new species.

Remarks. This genus shares features with taxa from several different subfamilies of Endomychidae but is unique in its combination of these features. In body size and shape and overall vestiture, *Discolomopsis* is consistent with genera in the subfamily Anamorphinae and is therefore referred to that subfamily. However, its morphology is distinct from any

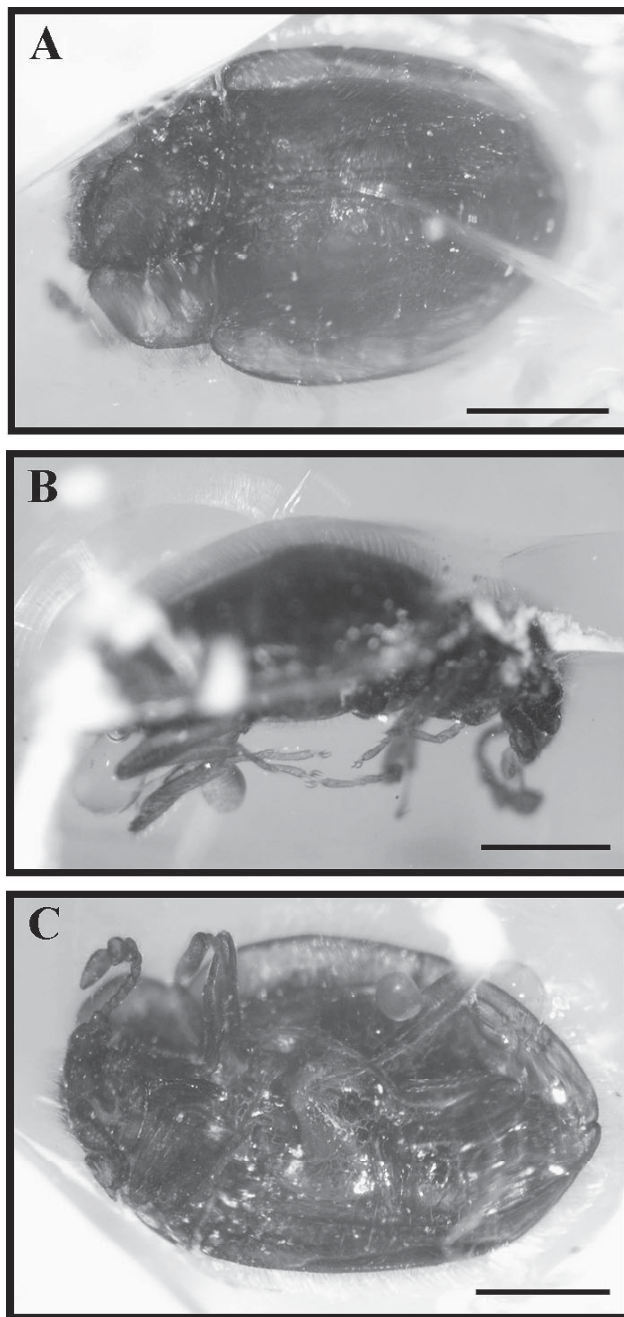


Figure 1. Holotype of *Discolomopsis dominicana* embedded in amber. A) Dorsal view; B) Lateral view; C) Oblique ventral view. Scale bars = 0.7 mm.

extant genera. The deeply emarginated and lobed clypeus, presence of long yellowish setae on all body segments, and the wide flattened margins on the pronotum and elytra combine to readily distinguish *Discolomopsis* from all other Endomychidae.

Discolomopsis dominicana Shockley,
new species
Figs. 1-3

Description. Holotype (female). Body broadly oval, moderately convex; length 2.6 mm; width 1.9 mm. Dorsum shining, dark reddish-brown with long recurved setae; antennae, palpi, and legs reddish-brown. **Head:** Slightly deflexed; with sparse vestiture of short setae; moderately punctate; surface between punctures smooth; eyes large and rather coarsely faceted; fronto-clypeal suture distinct; frons finely punctate; clypeus transverse and emarginate-lobate apically; labrum transverse, anterior margin weakly rounded; maxillary palpi long and slender, 4-segmented, terminal palpomere as long as preceding 3 antennomeres combined; antenna 11-segmented and densely setose, basal segment apically expanded, antennomeres II-VII beadlike, club 3-segmented. **Thorax:** Transverse and covered with long yellowish setae; pronotal disc strongly convex; lateral margins widely flattened and slightly reflexed; widest at middle; anterior angles strongly produced; posterior angles right-angled; lateral sulci reduced to punctiform foveae; basal sulcus lacking; scutellum relatively large, strongly transverse, lacking conspicuous punctures and vestiture. **Elytron:** Broadly rounded, convex; vestiture long and yellowish in color; lateral margins widely explanate, widest at 1/3 of length from base; medial margin with submarginal stria extending entire length; disc regularly and moderately punctate; humeri elevated. **Legs:** Procoxa and mesocoxa rounded; metacoxa transverse; tarsi 3-segmented, tarsomeres simple, bearing small tuft of setae ventrally, narrowly extended underneath; pretarsus appendiculate, bearing a conspicuous tooth basally.

Material Examined. Holotype (female) from the Dominican Republic, embedded in amber, age Miocene; no excavation information was provided with the specimen, but the age of the amber was provided and suggests its origin to most likely be the younger deposits in the Bayaguana area of the southeast part of the island; holotype deposited in the Florida State Collection of Arthropods (FSCA).

Etymology. So named because the holotype is embedded in Dominican amber.

Remarks. The holotype is most likely female based on the absence of modifications, ridges, or spines on the legs, common features of males from similar anamorphine taxa. Genitalia are internal and ob-

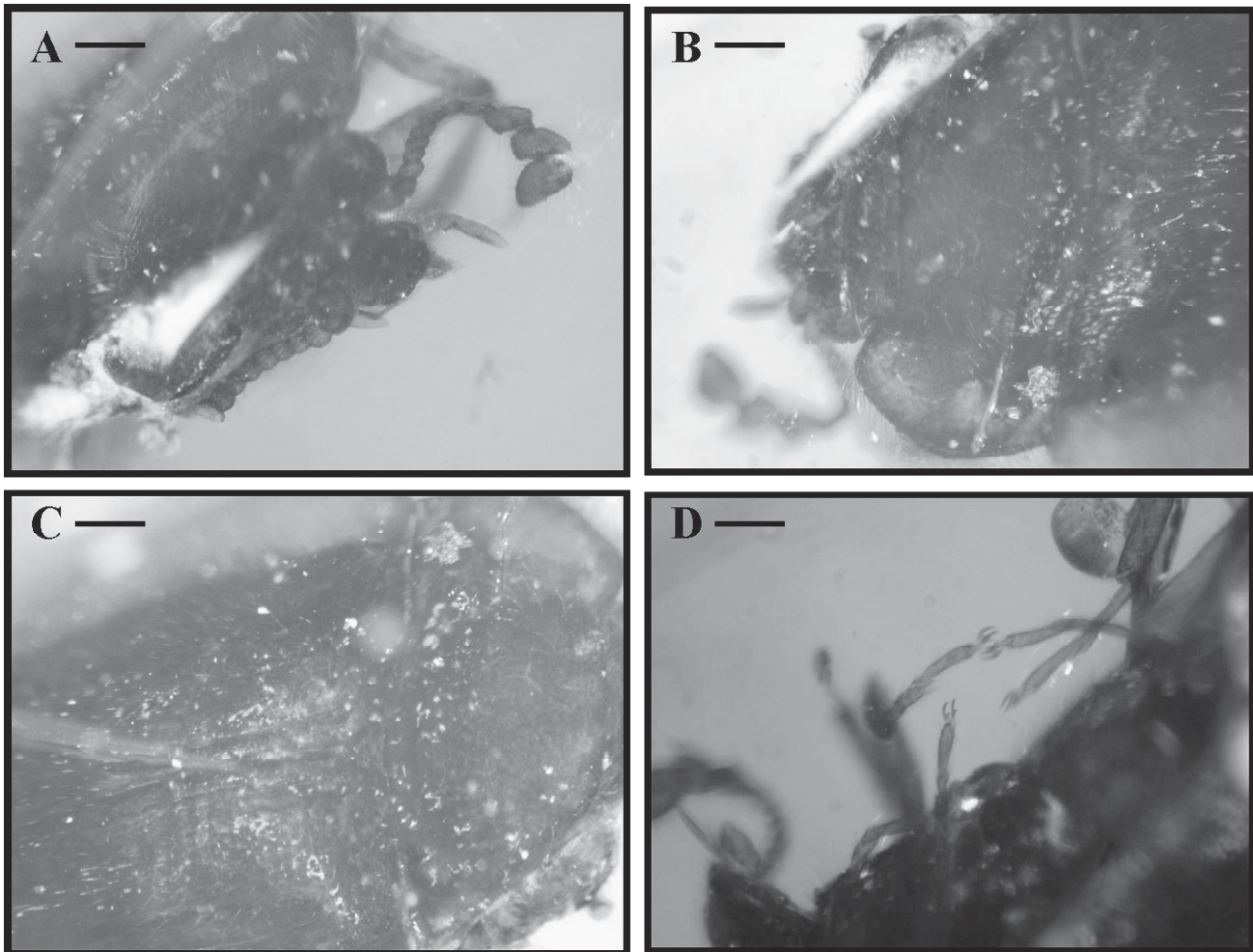


Figure 2. Holotype of *Discolomopsis dominicana* embedded in amber. A) Dorso-anterior view of the head; B) Dorsal view of head and pronotum; C) Dorsal view of medial elytral suture; D) Lateral view of the tarsi with claws. Scale bars = 0.3 mm.

scured in this specimen and are generally impossible to differentiate in specimens embedded in amber. The position of the holotype within the amber is such that the specimen is partially transected anterolaterally by one of the outer facets of the stone. Additional polishing to remove some of the surrounding amber was avoided because of the specimen's close proximity to the surface of the amber and its position along a fractural plane.

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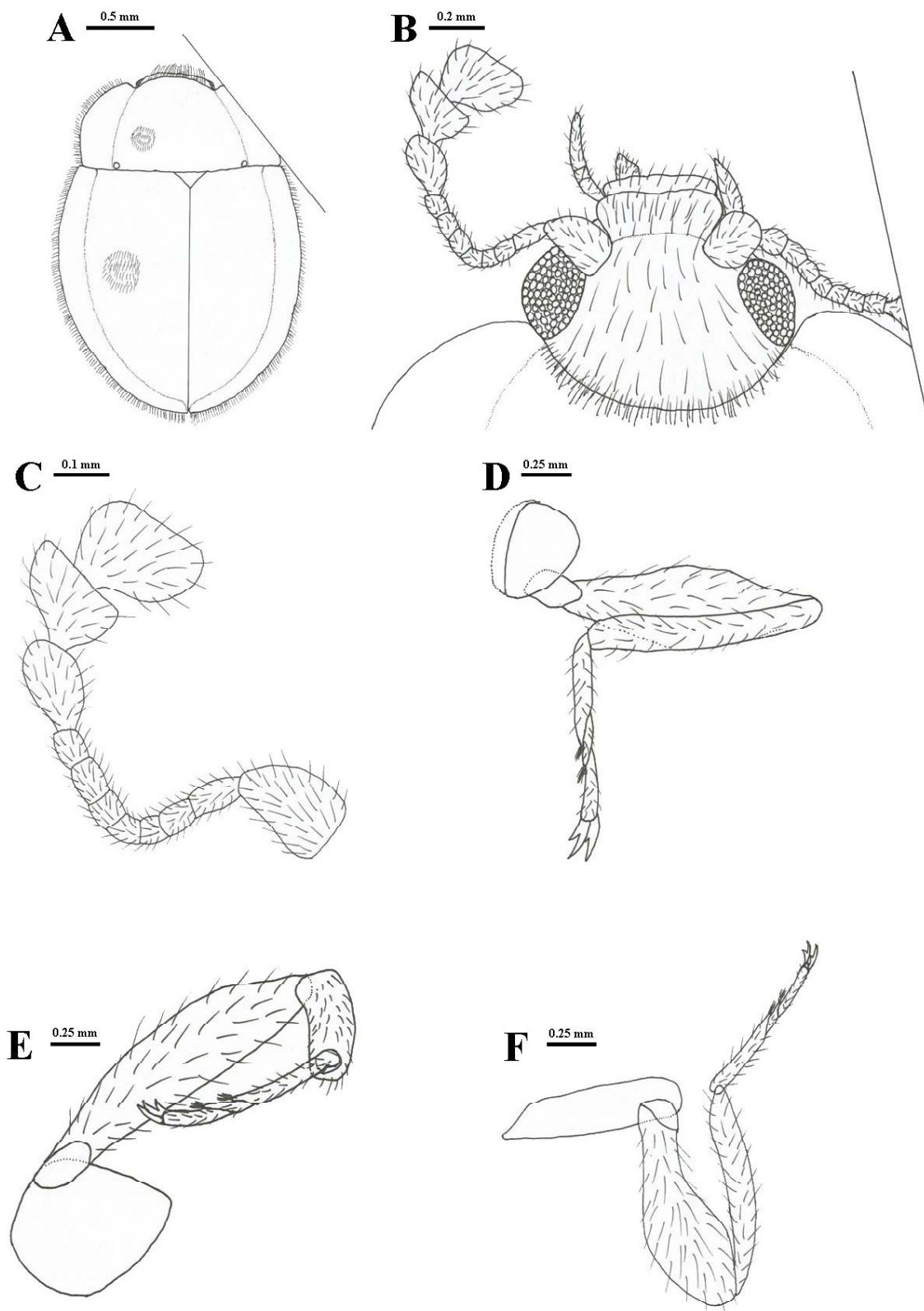


Figure 3. Line drawings of *Discolomopsis dominicana*. A) Dorsal habitus; B) Dorsal view of head; C) Close-up of left antenna; D) Ventral view of left prothoracic leg; E) Ventral view of left mesothoracic leg; F) Ventral view of right metathoracic leg. Line in A-B marks the outer facet of the amber, which transects a portion of the fossil.