A New Species of Buprestidae (Coleoptera) from Dominican Amber

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Abstract

The first species of Buprestidae from Dominican amber is described as Chrysobothris amberestris, new species. A short discussion of fossil buprestids is presented.

Examples and specimens of the beetle family Buprestidae from amber deposits were recently reviewed by Bellamy (1995). Subsequent to that paper, I received an invitation to study a buprestid from Dominican amber from David Grimaldi, Department of Entomology, American Museum of Natural History, New York (AMNH).

Discussion

The following description will obviously lack some detail due to the specimen being imbedded in amber. The unique nature of this specimen and relatively thin layer of amber surrounding some areas made it inadvisable to attempt a better view or perspective by sectioning or otherwise removing more of the amber enclosure (Grimaldi 1993).

Chrysobothris amberestris, new species

Fig. 1

Description. Small, 12.8 mm long, 5.5 mm wide; elongate ovoid, flattened above and below; short, semi-erect setae visible on frontovertex; large eyes strongly converging dorsally; antennae typical of Chrysobothris Eschscholtz with scape elongate, robust, pedicle shorter, narrower; antennomeres: 3 slender, elongate; 4–10 trapezoidally serrate; 11 oblong; pronotum about 2X wider than long, anterior margin evenly, shallowly concave; posterior margin strongly biarcuate; lateral margin irregular, bisinuate; posterolateral angles subobtuse; disk appears more or less evenly transverse. Elytra wider opposite humeri than pronotal width; disk depressed basally on either side between humerus and scutellum; disk otherwise uniform although an indication of longitudinal carinae present; lateral margins subparallel from past opposite humeri to about posterior ½, thereafter moderately converging to separately acuminate apices; margin entire, not serrulate. Ventral surface largely obscured under folded legs and trapped air bubbles and dirt particles. Legs with femora stoutly fusiform, tarsomeres lack anterolateral projections of Actenodes.


Remarks. The lack of any apical emargination to the fifth visible abdominal sternum suggests that the holotype is a female.

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Although many fossil buprestids are known from many parts of the world and geologic deposits (e.g., Hornschemeyer and Wedmann 1994; Weidlich 1987a, b; Wedmann and Hornschemeyer 1994), I have found records for only four species of fossil Chrysobothris Eschscholtz, C. coloradensis Wickham (1914:441), C. gahani Cockerell (1911:72), C. haydeni Scudder (1876:80), and C. suppressa Wickham (1914:440). All four of these species are known from the Miocene Florissant shale deposits of Colorado and were last discussed by Wickham (1920). Dominican amber is older than the Colorado deposits (Grimaldi 1995).

Most species of extant Chrysobothris are found on the foliage, stems or trunks of their respective host plants, both conifers and angiosperms, often on the dead or decadent portions or on slash. They are active during warmer parts of the day and quick to fly to avoid predators or collectors or to disperse to locate food or mates. This can explain why this fossil species was probably trapped in the sap of the plant it may have been associated with.

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Literature Cited


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