

## Cerambycidae (Coleoptera) types of the Fernando de Zayas collection, Havana, Cuba

EUGENIO H. NEARNS, MARC A. BRANHAM & SETH M. BYBEE

*Department of Entomology and Nematology, University of Florida, Gainesville, FL, 32611 USA.*

*E-mail: gnearns@ufl.edu*

### Abstract

Habitus photographs of the cerambycid types (Coleoptera: Cerambycidae) of the Fernando de Zayas Collection, Havana, Cuba, are presented. Color photographs are available on the Internet. Lectotypes are herein designated for two taxa, *Plectromerus pinicola* Zayas and *Phidola superba* Zayas (= *Eupogonius superbus* (Zayas)).

### Resumen

Se presentan fotografías de los tipos de cerambícidos (Coleoptera: Cerambycidae) de la colección de Fernando de Zayas, La Habana, Cuba. Las fotografías a color están disponibles en el Internet. Se designan lectotipos para dos taxa, *Plectromerus pinicola* Zayas y *Phidola superba* Zayas (= *Eupogonius superbus* (Zayas)).

**Key words:** Greater Antilles, Caribbean, holotype, lectotype, neotype

### Introduction

The late Fernando de Zayas (1912–1983) was an avid collector of insects and a member of the Cuban Academy of Science. Zayas published several works on cerambycids (1956, 1957, 1975) and his 1975 revision continues to be the most important work on the Cuban cerambycid fauna. His collection, located at the Zayas house in Havana, is housed in 500 Paris Museum-style, glass-topped boxes and is considered one of Cuba's great natural history treasures. The authors recently provided checklists of the lampyrid and cerambycid holdings (Branham, 2006; Nearns, 2006). The cerambycid holdings are the most complete representation of the Cuban fauna known and include 46 holotypes, two syntype series and a neotype (Nearns, 2006).

With the exception of *Leptostylus heticus* and *Lethes indignus*, Zayas provided black and white habitus illustrations with his new species descriptions, however they lack the detail necessary for taxonomic revisionary work. Unfortunately, the Zayas collection and types have been unavailable for study since his death. These two facts provided the motivation for this work and it is hoped that this contribution will aid in the resolution of several taxonomic questions. In addition to the photographs presented herein, color photographs of the Zayas type specimens are available on the Internet ([www.cerambycids.com/zayas/](http://www.cerambycids.com/zayas/)).

### Materials and methods

The type photographs presented herein were taken during a visit to the Fernando de Zayas Collection in February 2006. Photographs were taken with a Nikon Coolpix 995 digital camera mounted to a 20 X stereo microscope via an Optem eyepiece adapter as well as a handheld Nikon D70 digital SLR fitted with a 106mm macro lens. The classification and synonyms used in this paper follow Monné & Hovore (2005). Several of Zayas' types have become junior synonyms—in these cases, the original Zayas designation is listed followed by the current designation (preceded by = symbol).

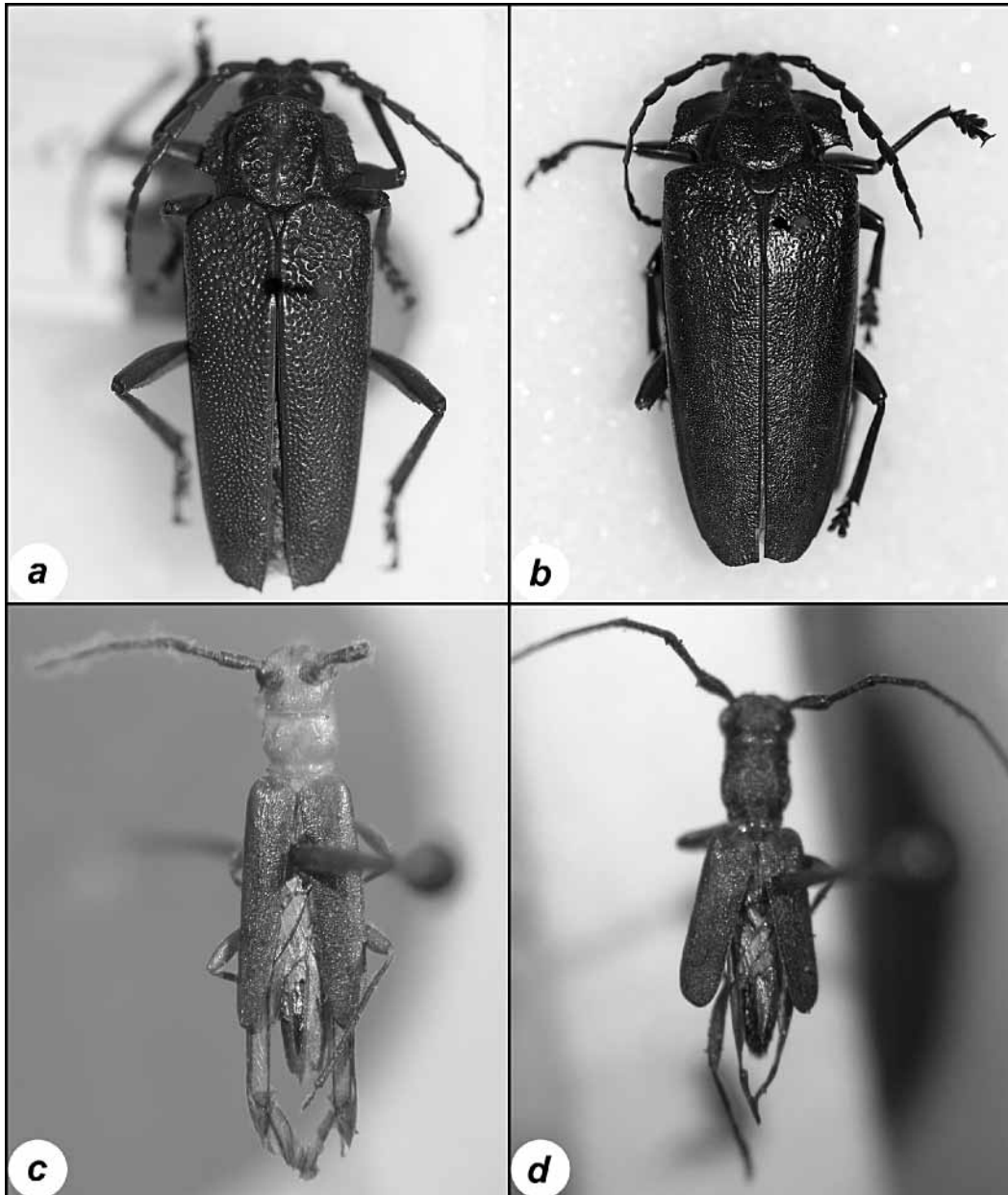
### Discussion

For more information regarding localities, measurements, and genders of the types illustrated herein, the reader is advised to consult Zayas' original species descriptions (1956, 1957, 1975).

Nearns (2006) listed two syntype series from the Zayas collection. The first is *Plectromerus pinicola* Zayas, described from four specimens collected by Dr. R. Hochmut, ex. pine branches, Malas Aguas, Pinar del Rio, March 19, 1969. However, none of the specimens have a type label affixed. As part of the senior author's revision of the Curiini and to ensure the name's proper and consistent application, a male specimen is herein designated as the lectotype of *Plectromerus pinicola* Zayas, which remains deposited in the Zayas collection (Fig. 5d). The second syntype series is *Phidola superba* Zayas (= *Eupogonius superbus* (Zayas)), described from three specimens Zayas collected at Cupeyal, Yateras, Oriente, June 1964, on the stalk of an herbaceous plant. Since none of these specimens have a type label affixed, the lectotype of *Phidola superba* Zayas (= *Eupogonius superbus* (Zayas)) is herein designated in order to ensure the name's proper and consistent application and remains deposited in the Zayas collection (Fig. 9d).

In Zayas' revision of the Prioninae of Cuba, a female specimen was designated as the neotype for *Cubaecola hoploderoides* Lameere (Fig. 13a, b). Zayas stated that he was unable to locate the original type specimen in two European collections (1957:164). In his

1975 revision of the cerambycids, the neotype is referred to as a male but this appears to be an error (1975:26).



**FIGURE 1.** a, *Derancistrus castaneus* Zayas (= *Elateropsis scabrosus* Gahan), holotype; b, *Prosternodes cubanus* Zayas, holotype; c, *Methia taina* Zayas, holotype; d, *Tessaropa luctuosa* Zayas, holotype.

## PRIONINAE

## Callipogonini

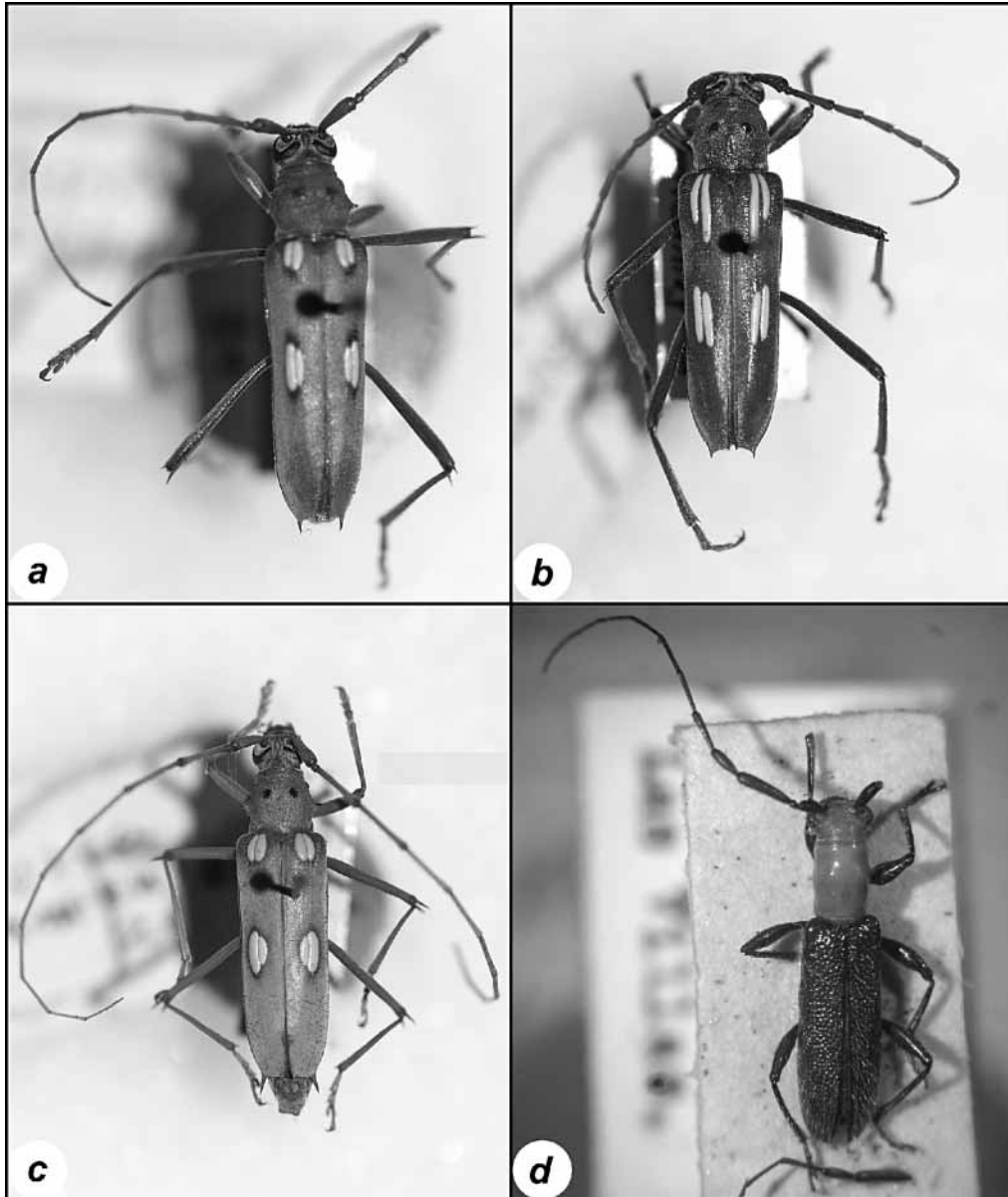
*Cubaecola hoploderoides* Lameere, 1912:164 (Fig. 13a,b)

## Solenopterini

*Derancistrus castaneus* Zayas, 1975:40 (Fig. 1a)

= *Elateropsis scabrosus* Gahan, 1890:29

*Prosternodes cubanus* Zayas, 1975:29 (Fig. 1b)



**FIGURE 2.** a, *Eburia confusa* Zayas, holotype; b, *Eburia pellacia* Zayas, holotype; c, *Eburia pinarensis* Zayas, holotype; d, *Trinoplion bicolor* Zayas, holotype.

CERAMBYCINAE

Methiini

*Methia taina* Zayas, 1975:53 (Fig. 1c)

*Tessaropa luctuosa* Zayas, 1975:54 (Fig. 1d)

Eburiini

*Eburia confusa* Zayas, 1975:61 (Fig. 2a)

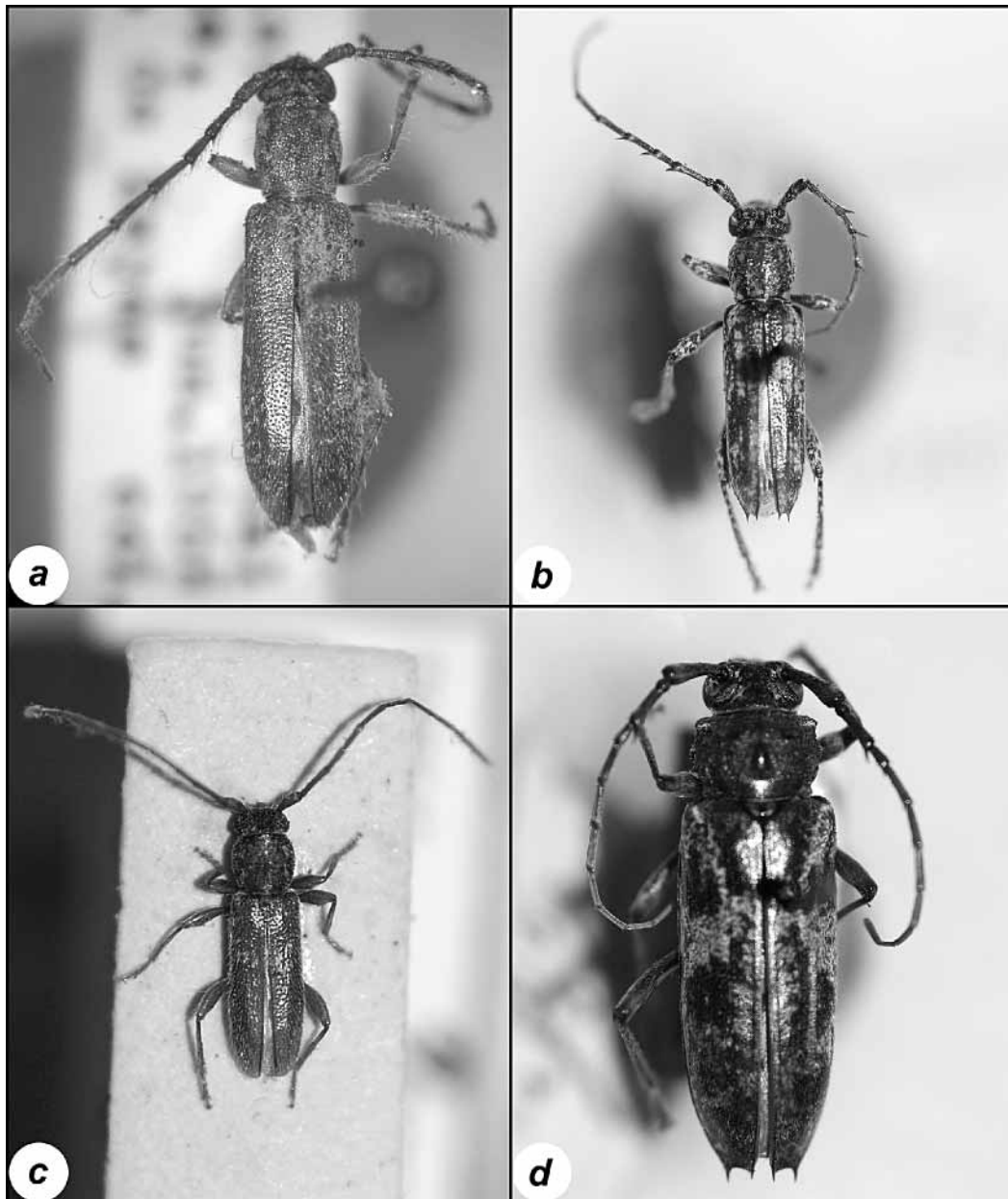


FIGURE 3. a, *Elaphidion angustatum* Zayas, holotype; b, *Elaphidion cristalensis* Zayas, holotype; c, *Elaphidion depressum* Zayas, holotype; d, *Elaphidion difflatus* Zayas, holotype.

*Eburia pellacia* Zayas, 1975:69 (Fig. 2b)

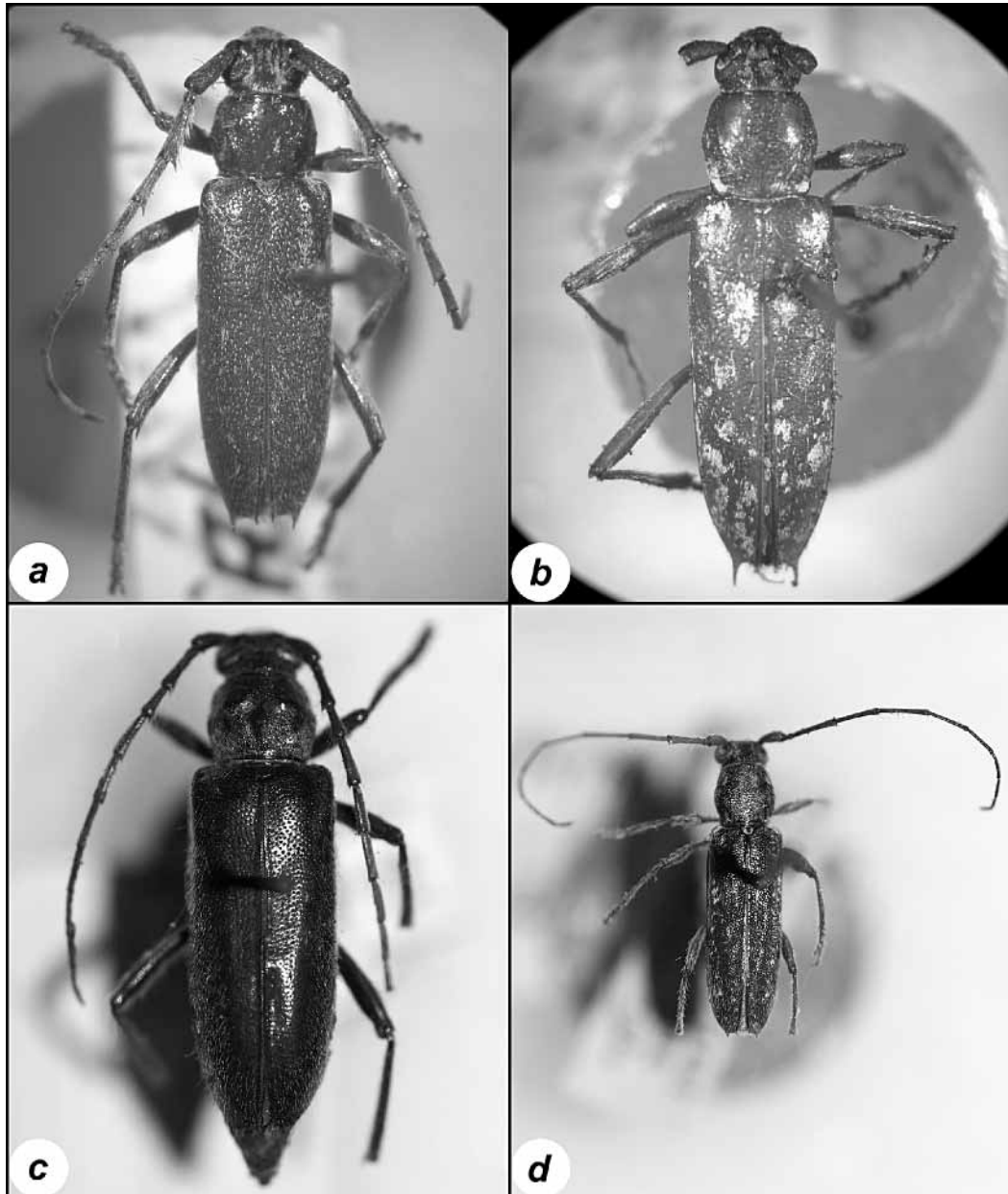
*Eburia pinarensis* Zayas, 1975:69 (Fig. 2c)

Elaphidionini

*Elaphidion angustatum* Zayas, 1975:79 (Fig. 3a)

*Elaphidion cristalensis* Zayas, 1975:82 (Fig. 3b)

*Elaphidion depressum* Zayas, 1975:83 (Fig. 3c)



**FIGURE 4.** a, *Elaphidion jibacoense* Zayas, holotype; b, *Elaphidion niveonotatum* Zayas, holotype; c, *Elaphidion pauropilosum* Zayas, holotype; d, *Elaphidion uncinatum* Zayas, holotype.

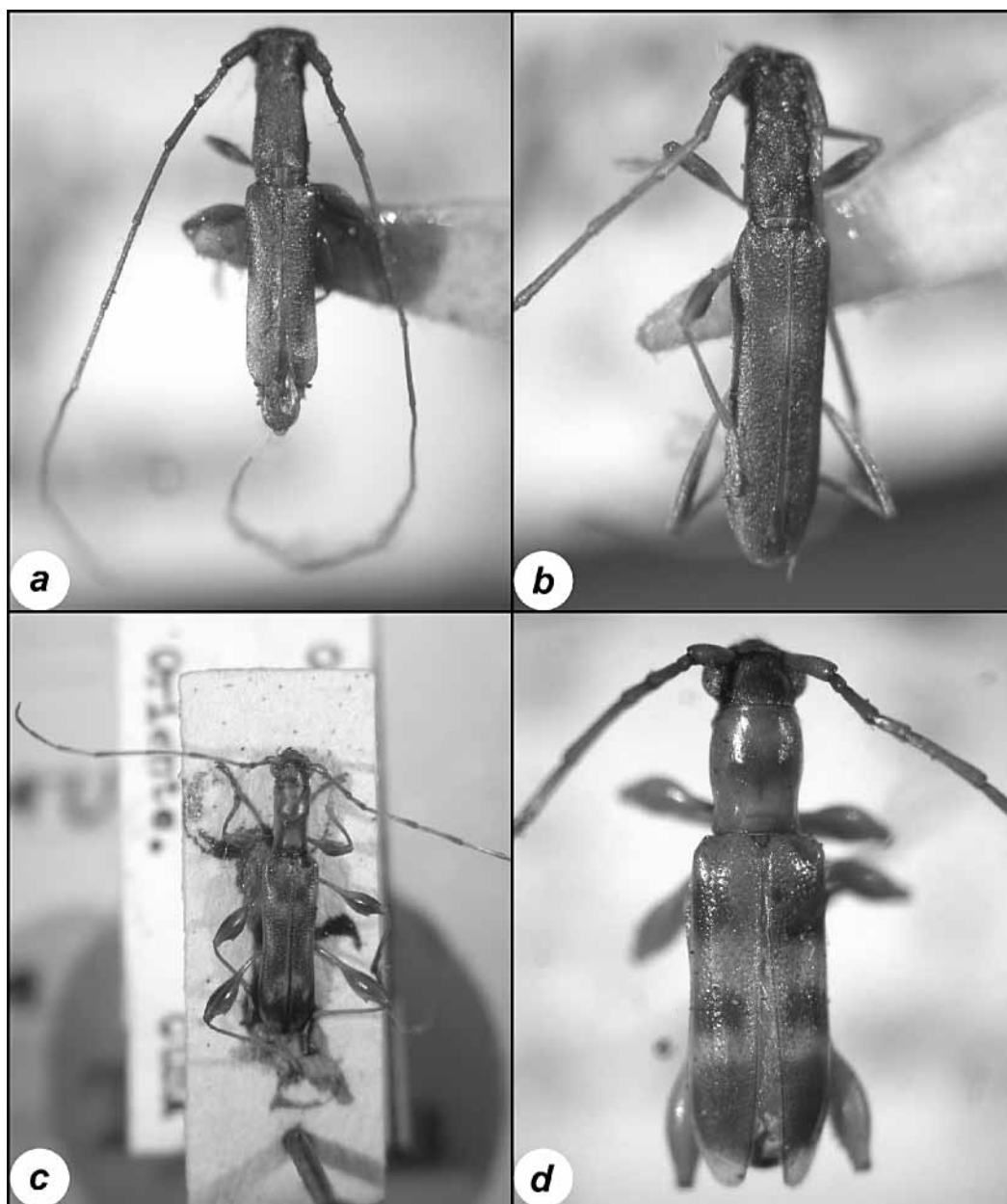
*Elaphidion difflatus* Zayas, 1975:84 (Fig. 3d)

*Elaphidion jibacoense* Zayas, 1975:92 (Fig. 4a)

*Elaphidion niveonotatum* Zayas, 1975:96 (Fig. 4b)

*Elaphidion pauropilosum* Zayas, 1975:98 (Fig. 4c)

*Elaphidion uncinatum* Zayas, 1975:105 (Fig. 4d)



**FIGURE 5.** a, *Merostenus decoratus* Zayas (= *Caribbomerus decoratus* (Zayas)), holotype; b, *Merostenus exiguus* Zayas (= *Caribbomerus exiguus* (Zayas)), holotype; c, *Plectromerus exis* Zayas, holotype; d, *Plectromerus pinicola* Zayas, male, lectotype.

## Ibidionini

*Trinoplon bicolor* Zayas, 1975:116 (Fig. 2d)

## Callidiopini

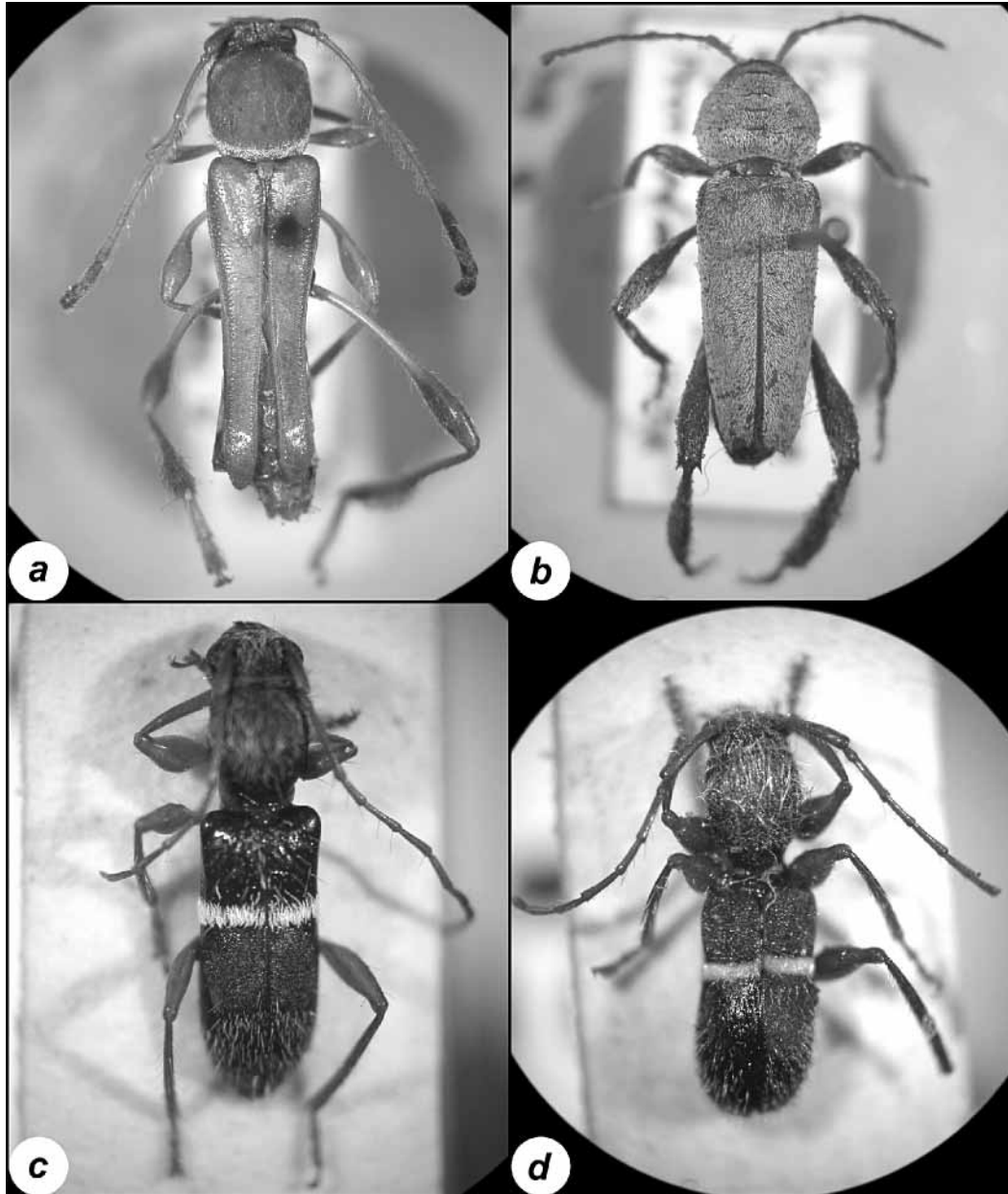
*Merostenus decoratus* Zayas, 1975:121 (Fig. 5a)= *Caribbomerus decoratus* (Zayas)*Merostenus exiguus* Zayas, 1975:122 (Fig. 5b)

FIGURE 6. a, *Odontocera josemartii* Zayas, holotype; b, *Neoclytus jibacoense* Zayas, holotype; c, *Tilloclytus elongatus* Zayas, holotype; d, *Tilloclytus pilosus* Zayas, holotype.



= *Caribbomerus exiguus* (Zayas)

Curiini

*Plectromerus exis* Zayas, 1975:123 (Fig. 5c)

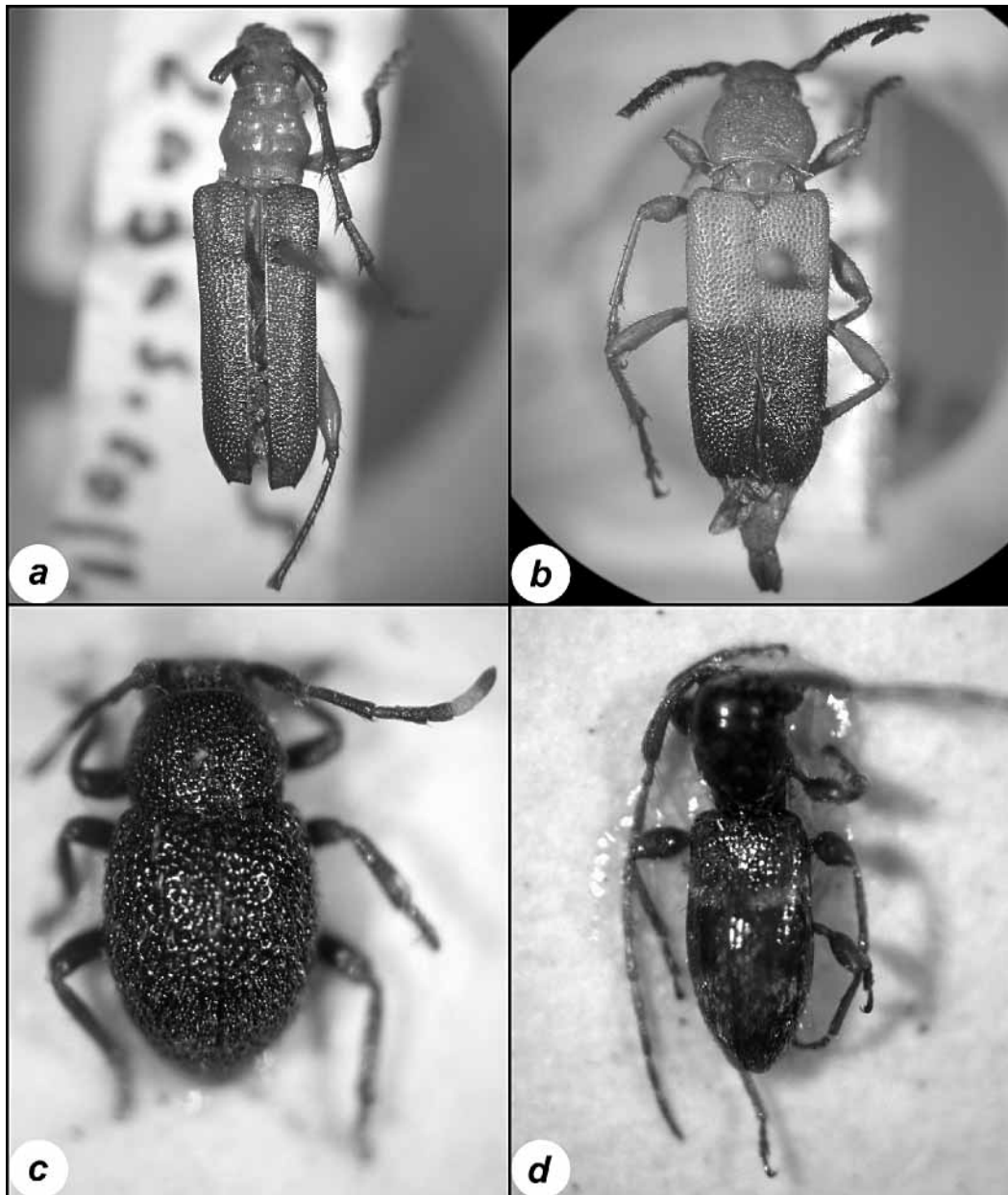
*Plectromerus pinicola* Zayas, 1975:125 (Fig. 5d)

Rhinotragini

*Odontocera josemartii* Zayas, 1956:112 (Fig. 6a)

ZOOTAXA

1270



**FIGURE 7.** a, *Rhopalophora baracoana* Zayas, holotype; b, *Trichrous brevicornis* Zayas, holotype; c, *Cupeyalia subterranea* Zayas, holotype; d, *Cyrtinus humilis* Zayas, holotype.

## Clytini

*Neoclytus jibacoense* Zayas, 1975:137 (Fig. 6b)

## Anaglyptini

*Tilloclytus elongatus* Zayas, 1975:143 (Fig. 6c)

*Tilloclytus pilosus* Zayas, 1975:144 (Fig. 6d)

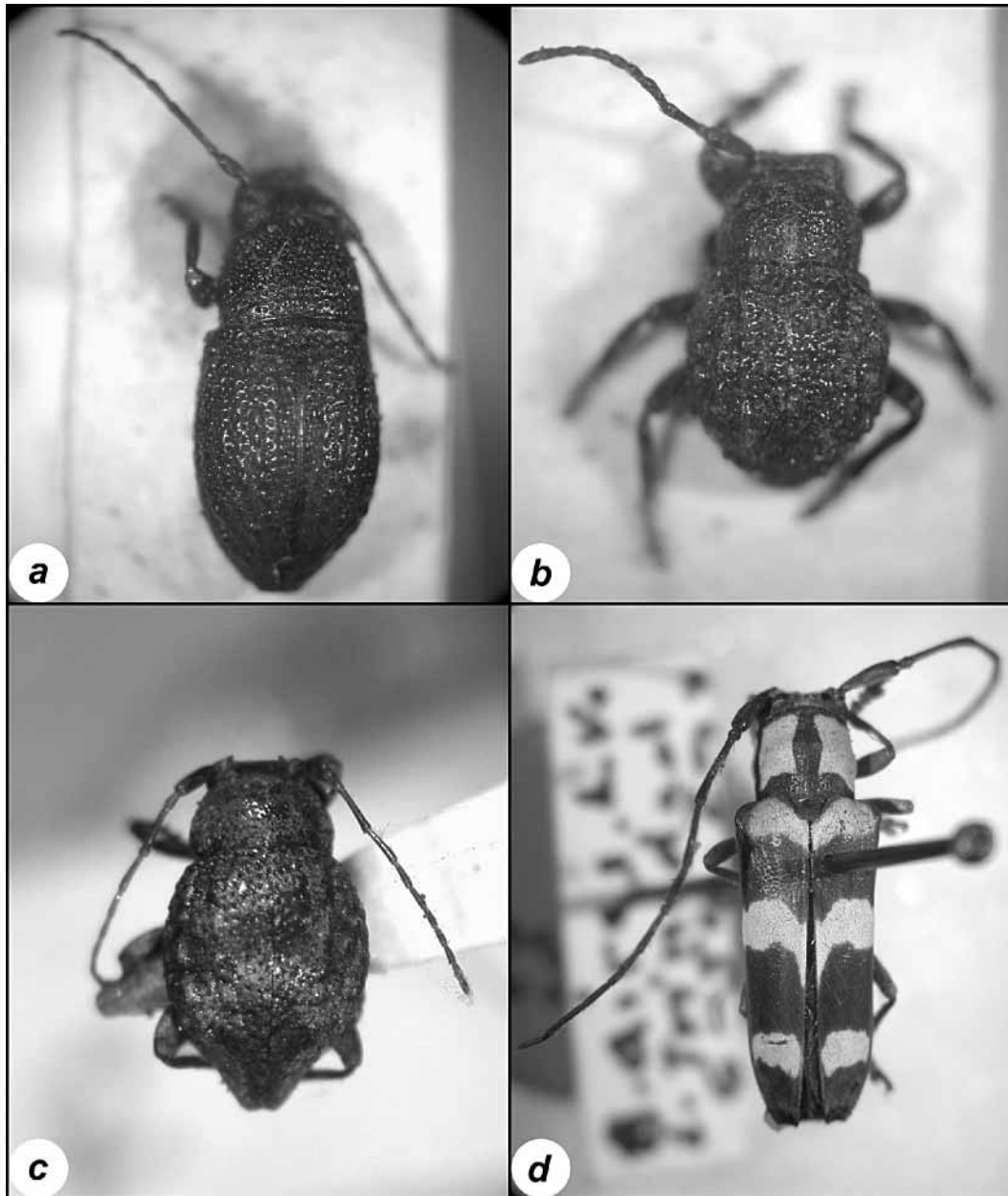


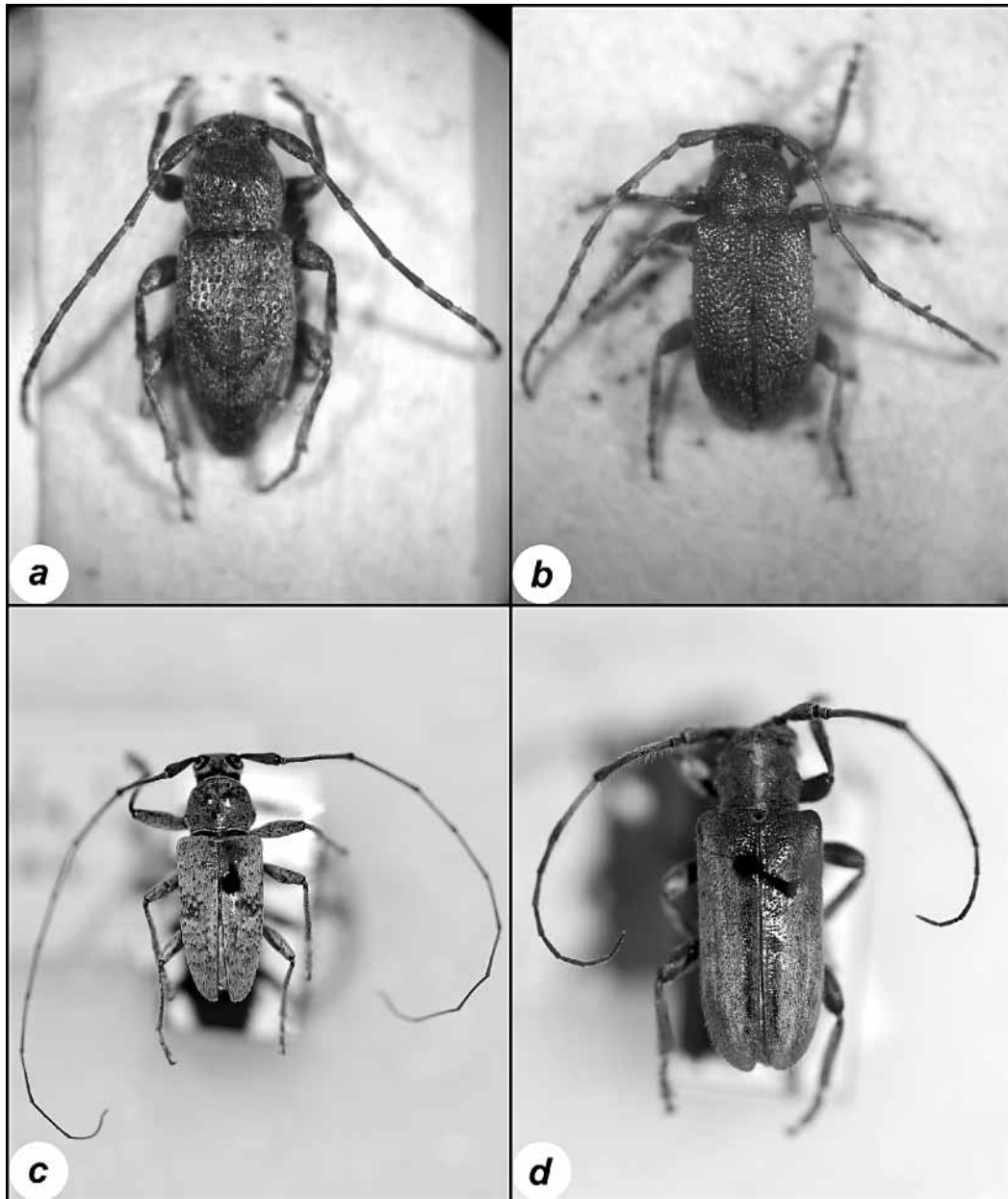
FIGURE 8. a, *Maiis fisheri* Zayas, holotype; b, *Nanilla terrestris* Zayas, holotype; c, *Nanilla globosa* Zayas, holotype; d, *Eossostruthra alayoi* Zayas (= *Oedudes alayoi* (Zayas)), holotype.

Rhopalophorini

*Rhopalophora baracoana* Zayas, 1975:162 (Fig. 7a)

Heteropsini

*Trichrous brevicornis* Zayas, 1975:148 (Fig. 7b)



**FIGURE 9.** a, *Acrepidopterum acutum* Zayas, holotype; b, *Zaplous baracutey* Zayas, holotype; c, *Estola dilloni* Zayas, holotype; d, *Phidola superba* Zayas (= *Eupogonius superbus* (Zayas)), lectotype.

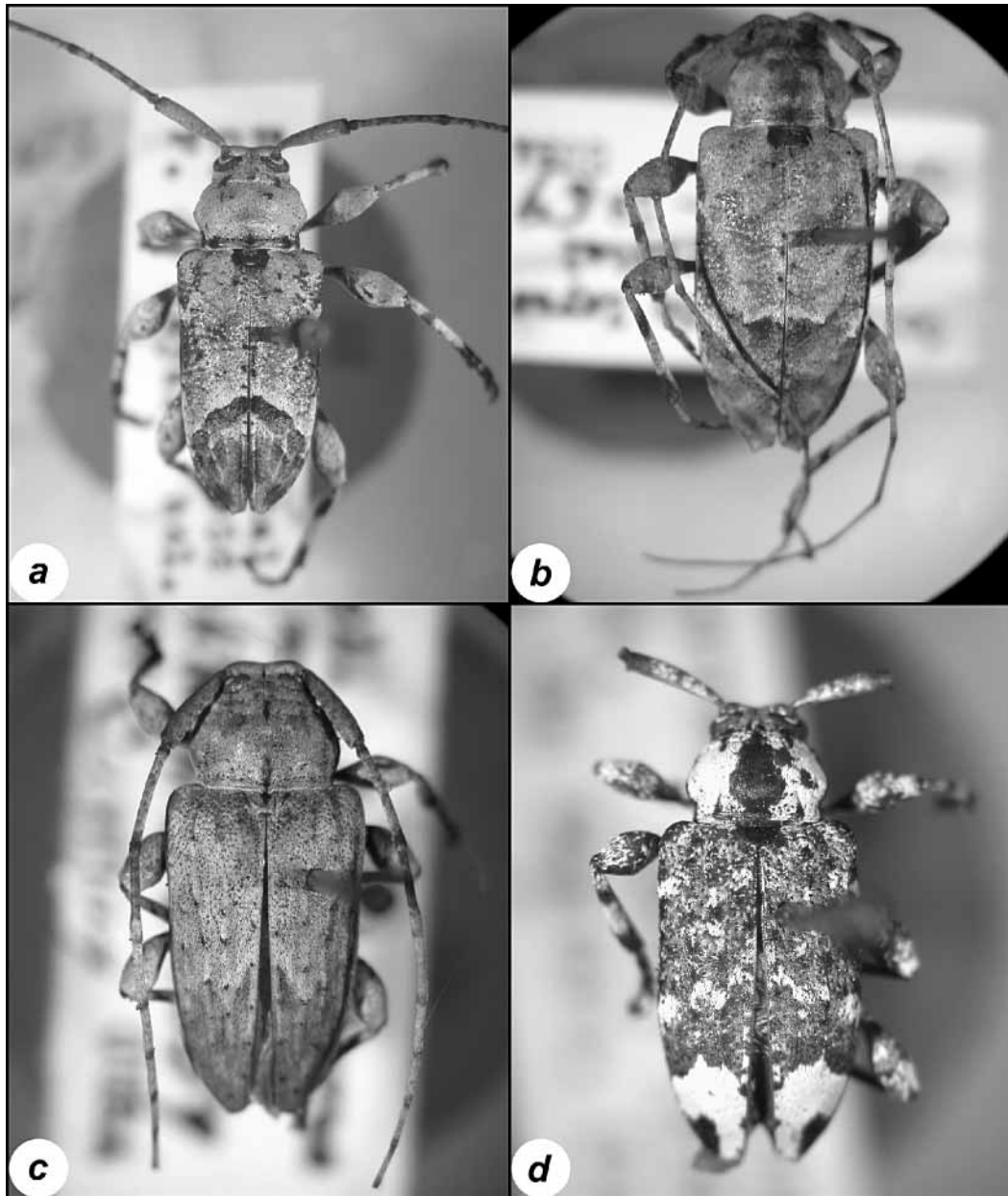
## LAMIINAE

## Parmenini

*Cupeyalia subterranea* Zayas, 1975:168 (Fig. 7c)

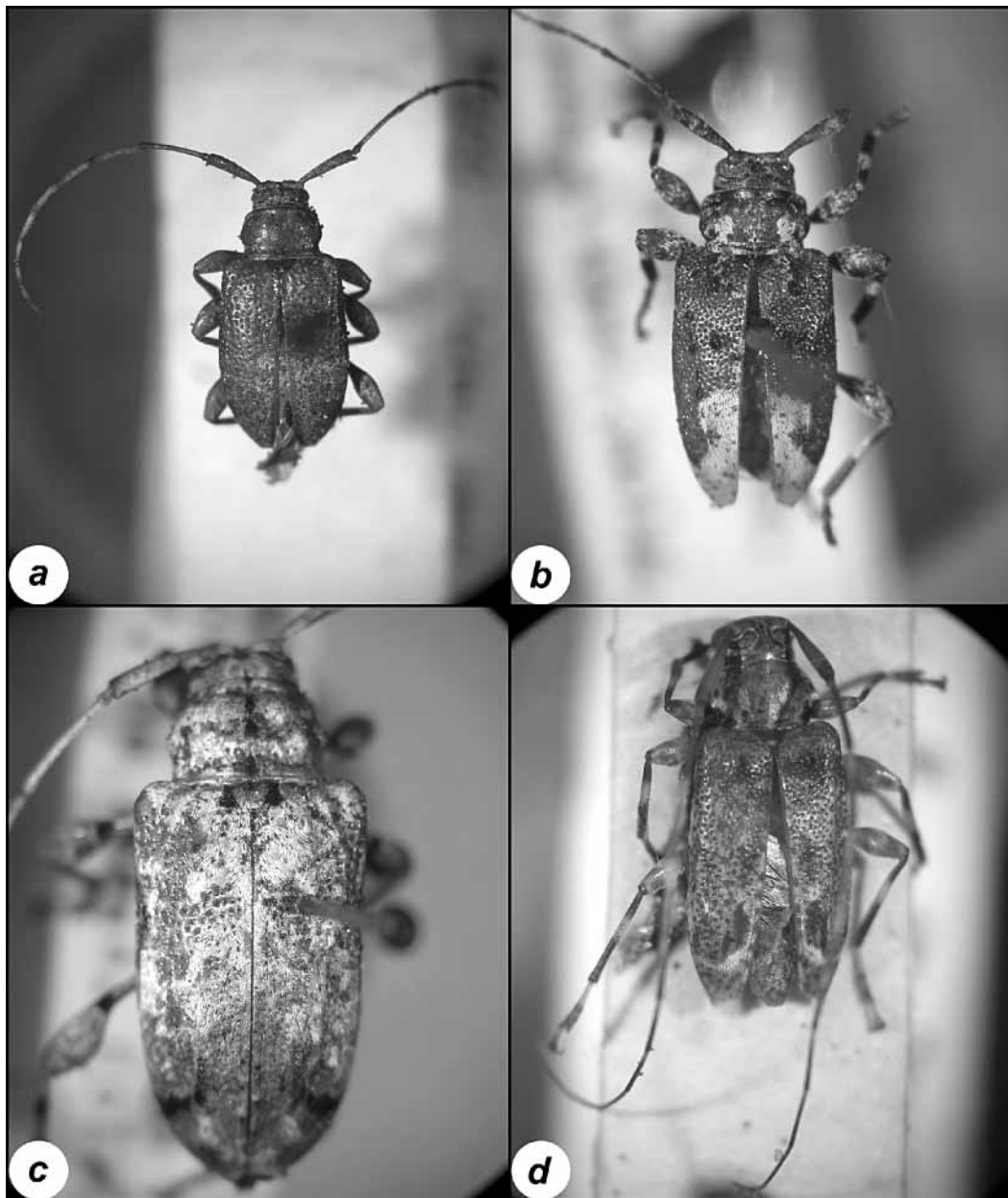
*Maisi fisheri* Zayas, 1975:169 (Fig. 8a)

*Nanilla globosa* Zayas, 1975:171 (Fig. 8c)



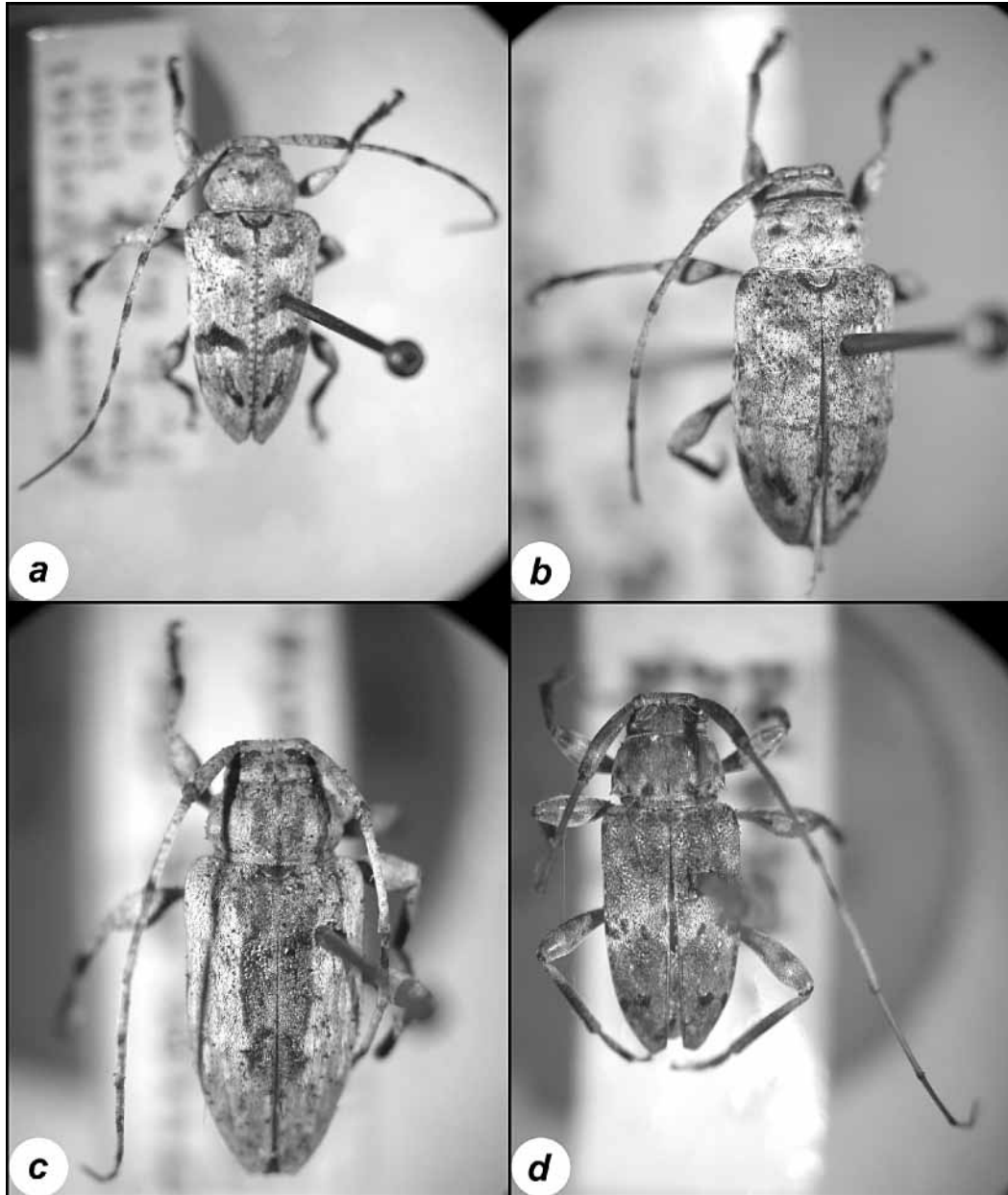
**FIGURE 10.** a, *Leptostylus albagniri* Zayas, holotype; b, *Leptostylus castaneovirescens* Zayas, holotype; c, *Leptostylus heticus* Zayas, holotype; d, *Leptostylus illitus* Zayas, holotype.

*Nanilla terrestris* Zayas, 1975:172 (Fig. 8b)  
Apomecynini  
*Acrepidopterum acutum* Zayas, 1975:187 (Fig. 9a)  
Pogonocherini  
*Zaplous baracutey* Zayas, 1975:212 (Fig. 9b)



**FIGURE 11.** a, *Leptostylus latifasciatus* Zayas, holotype; b, *Leptostylus nigritus* Zayas, holotype; c, *Leptostylus pseudocalcarius* Zayas, holotype; d, *Sternidius pantherinus* Zayas (= *Liopinus pantherinus* (Zayas)), holotype.

## Desmiphorini

*Estola dilloni* Zayas, 1975:205 (Fig. 9c)*Phidola superba* Zayas, 1975:196 (Fig. 9d)= *Eupogonius superbus* (Zayas)

**FIGURE 12.** a, *Lethes humeralis* Zayas, holotype; b, *Lethes indignus* Zayas, holotype; c, *Lethes israeli* Zayas (= *Styloleptus biustus biustus* (LeConte)), holotype; d, *Urgleptes nigronotatus* Zayas (= *Styloleptus nigronotatus* (Zayas)), holotype.

Acanthocinini

*Leptostylus albagniri* Zayas, 1975:231 (Fig. 10a)

*Leptostylus castaneovirescens* Zayas, 1975:239 (Fig. 10b)

*Leptostylus heticus* Zayas, 1975:243 (Fig. 10c)

*Leptostylus illitus* Zayas, 1975:244 (Fig. 10d)

*Leptostylus latifasciatus* Zayas, 1975:246 (Fig. 11a)

*Leptostylus nigrinus* Zayas, 1975:248 (Fig. 11b)

*Leptostylus pseudocalcarius* Zayas, 1975:249 (Fig. 11c)

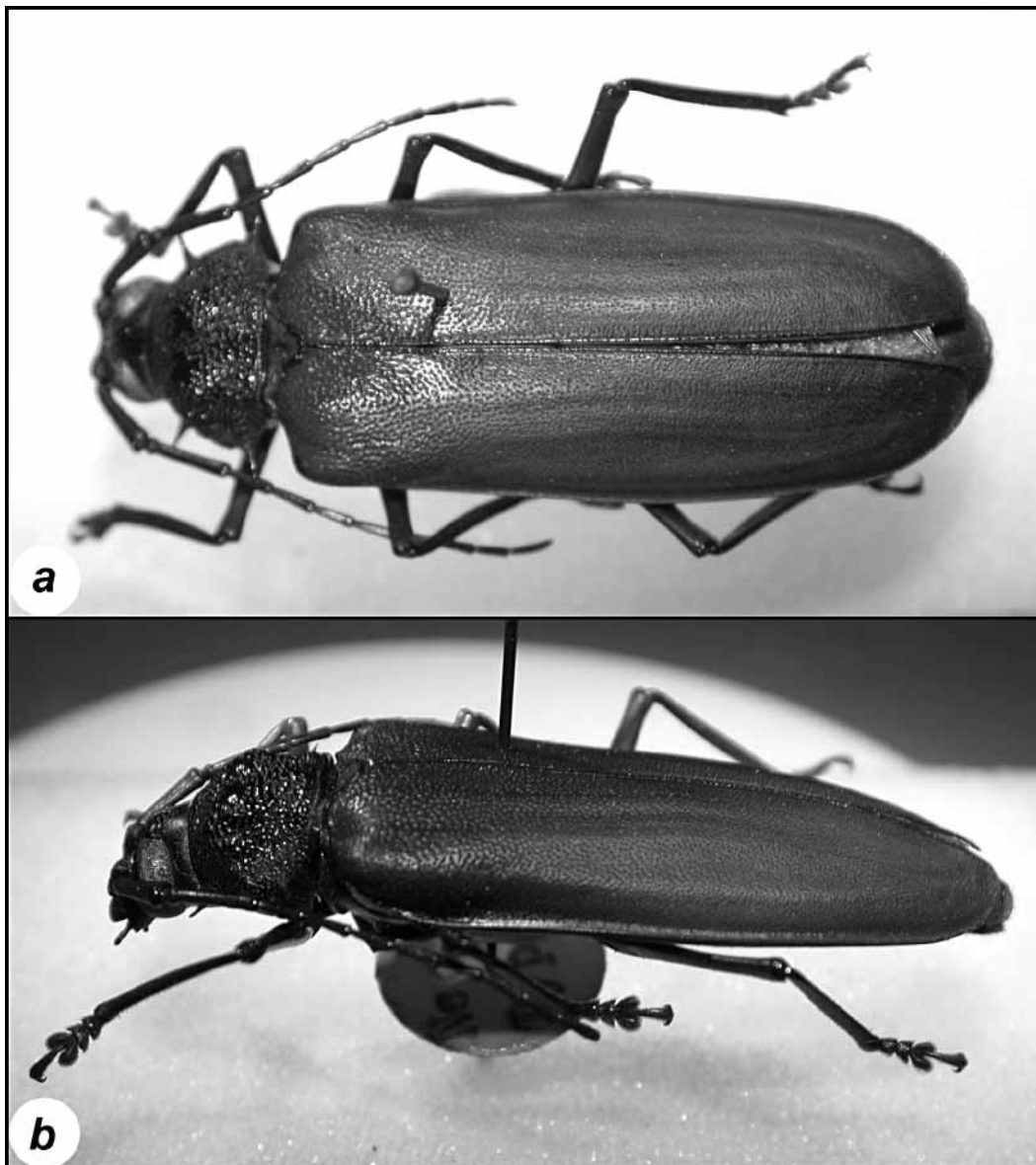


FIGURE 13. a–b, *Cubaecola hoploderoides* Lameere, female, neotype designated by Zayas, 1957:164. a. dorsal habitus; b. lateral view.

- Lethes humeralis* Zayas, 1975:255 (Fig. 12a)  
*Lethes indignus* Zayas, 1975:256 (Fig. 12b)  
*Lethes israeli* Zayas 1975:257 (Fig. 12c)  
 = *Styloleptus biustus biustus* (LeConte, 1852:169)  
*Sternidius pantherinus* Zayas, 1975:264 (Fig. 11d)  
 = *Liopinus pantherinus* (Zayas)  
*Urgleptes nigronotatus* Zayas 1975:261 (Fig. 12d)  
 = *Styloleptus nigronotatus* (Zayas)  
*Urgleptes zorrillai* Zayas, 1975:259 (not illustrated)  
 = *Styloleptus zorrillai* (Zayas)
- Cyrtinini  
*Cyrtinus humilis* Zayas, 1975:284 (Fig. 7d)
- Hemilophini  
*Essostruthra alayoi* Zayas, 1956:111 (Fig. 8d)  
 = *Oedudes alayoi* (Zayas)

### Acknowledgments

We are grateful to the Zayas family for allowing us to study their collection. We also thank Steven Lingafelter (Systematic Entomology Laboratory, PSI, ARS, USDA), Ann Ray (University of Illinois at Urbana-Champaign), and Frank Hovore for critical suggestions to improve an early version of this manuscript.

### Literature cited

- Branham M.A. (2006) The fireflies of the Fernando de Zayas collection, Havana, Cuba with notes on their taxonomic status. *Coleopterists Bulletin*, 60(1), 49–51.
- Gahan, C.J. (1890) Notes on some West Indian longicorn Coleoptera, with descriptions of new genera and species. *Annals and Magazine of Natural History*, (6)6, 23–24.
- Lameere, A.A. (1912) Révision des prionides (Vingt-et-unième mémoire Anacolines). *Mémoires de la Société Entomologique de Belgique*, 21, 1–188.
- LeConte, J.L. (1852) An attempt to classify the longicorn Coleoptera of the part of America, north of Mexico. *Journal of the Academy of Natural Sciences of Philadelphia*, (2)2, 139–178.
- Monné, M.A. & Hovore, F.T. (2005) Checklist of the Cerambycidae, or longhorned wood-boring beetles (Coleoptera), of the Western Hemisphere. BioQuip Products, Rancho Dominguez, 392 pp.
- Nearns, E.H. (2006) A checklist of the cerambycid (Coleoptera: Cerambycidae) holdings of the Fernando de Zayas Collection, Havana, Cuba. *Coleopterists Bulletin*, 60(1), 53–57.
- Peck, S.B. (2005) A Checklist of the Beetles of Cuba with Data on Distributions and Bionomics (Insecta: Coleoptera). *Arthropods of Florida and Neighboring Land*. Vol. 18. Florida Department of Agriculture and Consumer Services, Gainesville, FL. 241 pp.
- Zayas, F. de. (1956) El género *Essostruthra* Thoms., adición de una especie nueva. *Memorias de la*



- Sociedad Cubana de Historia Natural*, 23, 105–114.
- Zayas, F. de. (1957) Revisión de los longicórnios Priónidos de Cuba. *Memorias de la Sociedad Cubana de Historia Natural*, 23, 149–181.
- Zayas, F. de. (1975) Revisión de la familia Cerambycidae (Coleoptera, Phytophagoidea). Academia de Ciencias de Cuba, Instituto de Zoología, La Habana, 443 pp.