





# Two new species of *Plectromerus* Haldeman (Coleoptera: Cerambycidae) from the West Indies

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#### **Abstract**

Two new species of Curiini (Coleoptera: Cerambycidae: Cerambycinae), *Plectromerus lingafelteri* from the Dominican Republic and *Plectromerus ramosi* from Puerto Rico and the Virgin Islands are described. Features distinguishing the new species from their congeners are presented. *Plectromerus distinctus* (Cameron), previously synonymized with *P. serratus* (Cameron), is restored as a valid species.

### Resumen

Dos nuevas especies de Curiini (Coleoptera: Cerambycidae: Cerambycinae), *Plectromerus lingafelteri* de la República Dominicana y *Plectromerus ramosi* de Puerto Rico y las Islas Vírgenes se describen. Se incluyen características para diferenciar estas especies de otros miembros del género. *Plectromerus distinctus* (Cameron), previamente sinonimizada con *P. serratus* (Cameron), se reconoce como especie válida.

**Key words:** Caribbean, West Indies, Dominican Republic, Puerto Rico, Virgin Islands, Cerambycidae, Cerambycinae, Curiini, *Plectromerus*, new species

#### Introduction

Increased interest in the rich diversity of the Caribbean region has generated in-depth studies of its cerambycid fauna (Lingafelter & Micheli 2004, Micheli 2003, Micheli & Micheli 2004, Vitali & Rezbanyai-Reser 2003, Zayas 1975). Recent extensive collecting in the Dominican Republic, Puerto Rico, and the Virgin Islands has resulted in the discovery of new species, with estimated faunal counts of 131, 71, and 45 longhorned beetle species,

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respectively, for the three areas. Continued surveys of varied habitats within the region are necessary for any future analyses of biodiversity and biogeography of West Indian Cerambycidae.

The genus *Plectromerus* Haldeman (1847) was first treated by LeConte (1873), LeConte & Horn (1883), and Leng (1885). There has been some confusion about the generic attributes of this genus and Pentomacrus White (Linsley 1963, Micheli 1983), but no thorough revisionary work has been done. Cameron (1910) described two species in Pentomacrus and provided a key for species of this genus only. Cazier & Lacey (1952) commented on the taxonomic problem clouding these two genera and included the species assigned to both within a single key. Subsequently, Giesbert (1985) stated that the supposed differences were not sufficient to justify two genera and synonymized *Pentomacrus* with Plectromerus. Vitali & Rezbanyai-Reser (2003) provided a key for all species of Plectromerus, which later was modified by Vitali (2004) to include a new fossil species and to subdivide the genus into two groups, *Plectromerus* and *Pentomacrus*. The resolution of generic issues within the Curiini is beyond the scope of this paper, and therefore we retain the generic concept of Plectromerus of Giesbert (1985) and include within this genus 15 species distributed in the Caribbean, southeastern USA, and southeastern Mexico (Monné & Hovore 2003, Monné 2005). A key to the species of *Plectromerus* will be provided at a later time by the junior author in his on-going revision and phylogenetic analysis of the tribe Curiini.

### **Materials**

Specimens from various collections were examined. The following acronyms are used throughout the paper:

BMNH—The Natural History Museum, London, United Kingdom

CMNH—Carnegie Museum of Natural History, Pittsburgh, Pennsylvania, USA

DHPC—Daniel Heffern Private Collection, Houston, Texas, USA

ENPC—Eugenio Nearns Private Collection, Gainesville, Florida, USA

FSCA—Florida State Collection of Arthropods, Gainesville, Florida, USA

JAMC—Julio and Charyn Micheli Private Collection, Ponce, Puerto Rico, USA

JEWC—James E. Wappes Private Collection, Bulverde, Texas, USA

RFMC—Roy F. Morris Private Collection, Lakeland, Florida, USA

RTPC—Robert H. Turnbow, Jr. Private Collection, Ft. Rucker, Alabama, USA

USNM—National Museum of Natural History, Smithsonian Institution, Washington, DC, USA

WIBF—West Indian Beetle Fauna Project, Michael A. Ivie, Bozeman, Montana, USA

## Genus Plectromerus Haldeman, 1847



# Plectromerus distinctus (Cameron), restored status from synonymy

*Pentomacrus distinctus* Cameron, 1910: 136. Type locality: Haiti, Port-au-Prince. *Plectromerus distinctus*: Vitali & Rezbanyai-Reser, 2003: 3.

**Discussion.** Vitali & Rezbanyai-Reser (2003) synomymized *Plectromerus distinctus* (Cameron) with *P. serratus* (Cameron). The type specimens (BMNH) of both species (Figs. 1a–b) were examined carefully and differences between them suggested two species instead of one. The two species are very similar but can be distinguished by the following: *P. distinctus* has long, suberect hairs on the elytra and granulose punctures on the pronotum (Fig. 1c), whereas *P. serratus* lacks the hairs and granules and has microsculpturing on the pronotum (Fig. 1d).

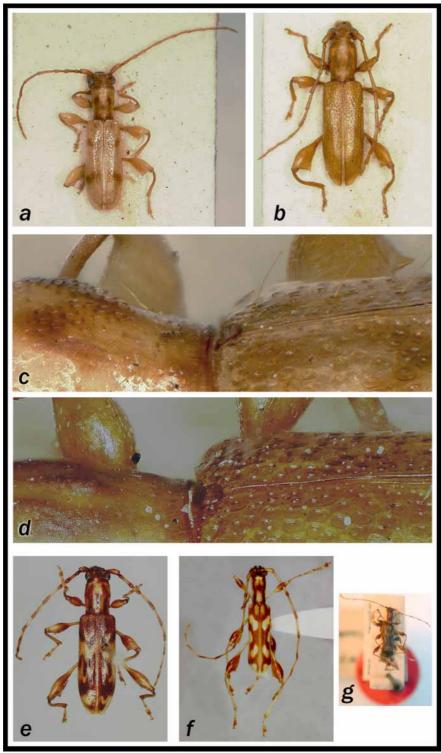
# *Plectromerus lingafelteri* Micheli & Nearns, new species Figs. 2a-c, 3a

**Description.** MALE. Length 5.5–7.2 mm, width 1.2–1.7 mm (measured across humeri). Small, narrow, subcylindrical. Head, antennae, and pronotum ferrugineus, with some areas of pronotum, clavate portion of femora, apex of tibiae, and underside usually much darker; scape underneath, palpi, base of distal four antennomeres, femoral pedicle, and tarsi testaceus; each elytron with a dark macula just beneath humerus, this sometimes reaching basal third, humeral angle pale; dorsum with three major macular regions (Fig. 2a) as follows: (1) basal third dark with posterior margin irregular, obliquely reaching suture, with another dark, oblique, narrow, irregular macula just beneath separated by a pale irregular fascia, and not reaching suture; (2) an irregular, median dark macula not reaching suture, partially interrupted by a narrow, pale longitudinal area, and bordered posteriorly by an oblique, pale fascia; and (3) apical third ferrugineus, anterior margin obliquely reaching suture. Head with front nearly flat, transverse, with a median, shallow line from between eyes to just beyond vertex, slightly concave between antennal tubercles, which are somewhat raised and widely separated. Surface feebly shining, microsculptured, with some fine wrinkles and irregular, shallow punctation. Pubescence short, pale, recumbent, sparse to moderately dense with a few scattered long, suberect hairs. Eyes prominent, transverse, subreniform. Antennae 11-segmented, slightly longer than body, impunctate; third antennomere subequal to scape, almost twice as long as fourth, fifth antennomere 1.3 longer than third, 2.6 longer than fourth, sixth to tenth becoming progressively shorter, eighth subequal to third, eleventh slightly longer than tenth, subequal to ninth; basal antennomeres subcylindrical, from fifth slightly flattened, apices of antennomeres 5–10 produced externally, more pronounced on antennomeres 7–10. Antennomeres feebly shining, clothed with fine, short, recumbent, pale pubescence with slightly longer,

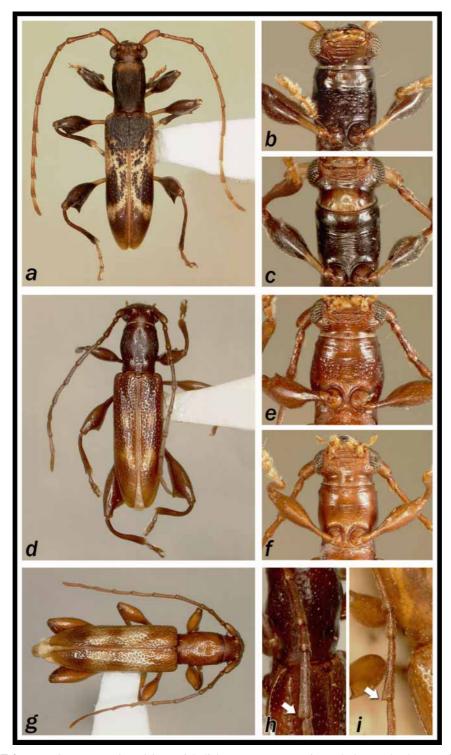


suberect hairs intermixed and antennomeres 2-6 ciliate beneath with coarse, moderately long, suberect, pale hairs. *Pronotum* subcylindrical, about 1.5–1.6 times as long as wide, widest at middle, slightly broader at base than apex, sides feebly inflated, broadly arcuately constricted at basal fifth, and a slight inflation just before apex; basal margin slightly arcuate, apical margin nearly straight; disk convex, slightly depressed posteriorly, sometimes with three feeble tumescences, one centrally on disk and two anterior to this one, one on each side (these are barely discernible in some specimens). Surface opaque, microsculptured, with fine, sparse punctures, each of these with a fine, short, pale hair; punctation much coarser and deeper laterally (as large as on base of elytra) and shining. Pubescence slightly denser towards margins; each side of pronotum with two long, suberect setae, one anterolateral, the other one discal at basal third. Scutellum small, rounded, almost as long as broad, shining, impunctate, with sparse, short pale pubescence. Elytra about 2.6 to 3 times as long as width at humeri, 2.5 to 3 times as long as pronotal length, about 1.5 broader basally than pronotom at widest (at middle); sides nearly parallel, very slightly sinuate around middle, evenly rounded to apex which is rounded; epipleural margin moderately sinuate. Disk slightly concave medially, subsuturally; base of each elytron slightly raised. Surface shining, except basal macula which is matte; punctation moderately dense, coarse, shallow at basal third, punctures becoming finer towards apex and sides, almost obsolete at apical third; each puncture with a short, fine pale hair (some appear to have fallen off). *Underside* with prosternum shining, slightly rugose, apical fourth impunctate and one irregular patch of coarse, deep punctures in front of each coxa (Fig. 2b); with sparse, short, fine, pale hairs; narrowest area of prosternal process between coxae about 0.17 to 0.2 as wide as coxal cavity, and about 0.3 the width of apex of process which is subtriangular with rounded corners. Mesosternum shining, impunctate, very sparsely clothed with short, fine, pale hairs. Mesepisternum with denser pubescence than mesosternum. Metasternum shining, sparsely and finely punctate, with short, pale, moderately dense pubescence, much sparser on centroposterior area, much denser at postero-lateral angles, and with very few longer, pale hairs intermixed. Metepisternum clothed with moderately dense pubescence, denser posteriorly. Abdomen shining, clothed with sparse, short, pale pubescence, and with a few longer, suberect pale hairs; fifth sternite broadly subtruncate, slightly longer than preceding sternite. Legs with femora pedunculate-clavate, meso- and metafemora arcuate, shining, impunctate, clothed with sparsely to moderately densely, recumbent, short, pale pubescence; underside of each femoral club with a broad triangular tooth with posterior edge smooth, not serrate; tibiae slightly arcuate, sinuate though not strongly; clothed with moderately dense, fine, recumbent, pale pubescence, becoming longer and coarser apically. Genitalia see Fig. 3a.

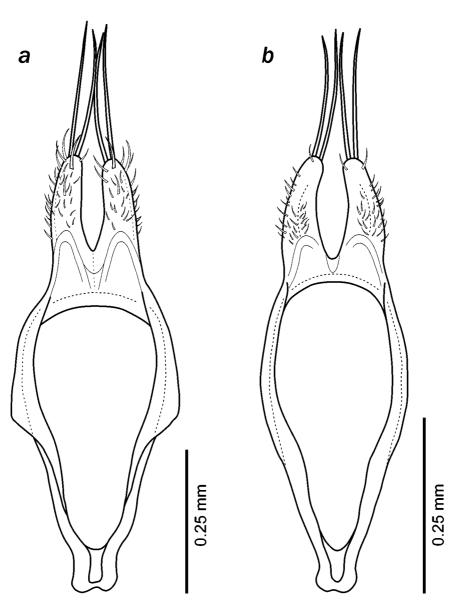
FEMALE. Length 5.5–8.3 mm; width 1.2–1.9 mm (measured across humeri). Very similar to male except pronotal sides lacking coarse punctures and prosternum impunctate (Fig. 2c). Abdomen with terminal sternite evenly, broadly rounded.



**FIGURE 1.** a, *Plectromerus distinctus* (Cameron), holotype; b, *Plectromerus serratus* (Cameron), holotype; c, *Plectromerus distinctus* (Cameron), view of pronotum and base of elytron; d, *Plectromerus serratus* (Cameron), view of pronotum and base of elytron; e, *Plectromerus dentipes* (Olivier); f, *Plectromerus exis* Zayas; g, *Plectromerus exis* Zayas, holotype.



**FIGURE 2.** a–c, *Plectromerus lingafelteri* Micheli & Nearns, new species: a, holotype; b, closeup of prosternum, male; c, closeup of prosternum, female; d–h *Plectromerus ramosi* Micheli & Nearns, new species: d, holotype; e, closeup of prosternum, male; f, closeup of prosternum, female; g, lighter phenotype; h, closeup of fifth antennomere; i, *Plectromerus serratus* (Cameron), closeup of fifth antennomere of holotype.



**FIGURE 3.** Tegmen and parameres, ventral view: a, *Plectromerus lingafelteri* Micheli & Nearns, new species; b, *Plectromerus ramosi* Micheli & Nearns, new species.

**Etymology.** This species is dedicated to Steven Lingafelter, who collected most of the type material and made the trip to the Dominican Republic by the senior author possible, and whose friendship, guidance, and companionship are truly appreciated.

**Types.** Holotype, male, DOMINICAN REPUBLIC, Pico Duarte Trail, 3300 ft., Los Tablones, beating, 19°08.222'N, 70°27.736'W, 29 June 2004, S. Lingafelter (USNM). Allotype, female, DOMINICAN REPUBLIC, Pedernales Prov., PN Sierra Baoruco, Las Abejas, 18°09.011'N, 71°37.342'W, 1150 meters, 11 July 2004, blacklight, C. J. Micheli,

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coll. (USNM). Paratypes, 14 (all from the Dominican Republic): 1 male, same data as holotype, except day coll. (USNM); 2 males, Pico Duarte Trail, Ciénaga to Los Tablones, beating, 19°08.222'N, 70°27.736'W, 29 June 2004, C. J. Micheli (JAMC); 1 male and 1 female, Pedernales Prov., PN Sierra Baoruco, Las Abejas, 1150 m, 18°09.011'N, 71°37.342'W, ex. dead log w/ white fungus, 11 July 2004, S. Lingafelter (USNM); 2 males and 1 female, Pico Duarte Trail, 3300 ft., Los Tablones, blacklighting, 19°08.222'N, 70°27.736'W, 17 July 2004, S. W. Lingafelter (USNM); 1 male, Pedernales Prov., 25.5 km N. Cabo Rojo, 12-21-V-1992, coll. M. C. Thomas (FSCA); 1 female, Azua, East side of crest, Sierra Martín García, 7 km WNW Barrero, 18-21 N, 70-58W, 860m, 25-26 July 1992, C. Young, R. Davidson, S. Thompson, J. Rawlins, cloud forest adjacent to disturbed forest (CMNH); 2 males, Prov. Hato Mayor, Par. Nac. Los Haitises, 01-02 Apr 1992, bosque humido, W. Sabana dl Mar, M. Ivie, D. Sikes, Lanier (WIBF); 1 male, Barahona, 4.5 km. S Barahona, 22 May 1992, R. Turnbow (RTPC); 1 male, Pedernales, 25.5 km. N Cabo Rojo, 21 May 1992, R. Turnbow (RTPC).

**Discussion.** The intensity and breadth of maculations seem to be variable among specimens. Some specimens are mostly ferrugineus without any very dark areas but with the described light elytral pattern.

This species can be distinguished from the presently known congeners by the combination of the following characters: the opaque, microsculptured, finely punctate pronotum, the smooth metafemoral tooth, and the elytral maculation. At first glance, *P. lingafelteri* resembles *Plectromerus dentipes* (Olivier) (Fig. 1e) but this species has a shiny pronotum, the metafemoral tooth is serrate, and the elytral apex is moderately subtruncate (rounded in *P. lingafelteri*). Another species with a rather intricate elytral pattern is *P. exis* Zayas (Fig. 1f–g), but *P. lingafelteri* can be easily recognized by the shape and length of the pronotum, the length of the third antennomere, and the elytral punctation. In *P. exis*, the pronotum has a distinct tubercle in the center and the length is about 1.8 times the width (1.5 to 1.6 in *P. lingafelteri*), the third antennomere is distinctly longer than the scape (subequal in *P. lingafelteri*), and the elytral dark areas are opaque and microsculptured (not so in *P. lingafelteri*).

# *Plectromerus ramosi* Micheli & Nearns, new species Figs. 2d-h, 3b

**Description.** MALE. Length 4.3–6.5 mm, width 1.0–1.6 mm (measured across humeri). Small, narrow, subcylindrical. Integument ferrugineus, varying from light to dark, with two testaceus maculae (sometimes transverse fasciae) on each elytron, one at basal third, small, and oblong, and another just behind middle, this one oblique. *Head* with front nearly flat, transverse, with a median, shallow line from between eyes and antennal tubercles, slightly concave between antennal tubercles, which are slightly raised and widely separated. Surface moderately shining, with fine wrinkles, coarsely, rugosely, densely,



confluently punctate, punctures shallower beyond vertex. Head with a fine, short pale seta in each puncture and a few scattered long, pale, suberect hairs. Eyes prominent, transverse, subreniform. Antennae 11-segmented, slightly longer than body, third antennomere subequal to scape, about 1.3 to 1.8 longer than fourth, fifth antennomere about 1.4 longer than third, varying from slightly less than twice to three times the length of fourth, sixth subequal to seventh, eighth to tenth becoming progressively shorter, eleventh slightly longer than tenth; basal antennomeres subcylindrical, from antennomere 5 slightly flattened, with apices of antennomeres 5–10 produced externally (fifth only very slightly), more pronounced on antennomeres 7–10. Antennomeres feebly shining, scape moderately coarsely, moderately densely, shallowly punctate; clothed with fine, short, recumbent, pale pubescence with slightly longer, suberect hairs intermixed, sparser on basal segments, becoming denser on distal ones, antennomeres 2–6 ciliate beneath with coarse, moderately long, suberect, pale hairs. Pronotum about 1.3 longer than broad, widest at middle, slightly broader at base than apex, sides arcuately inflated, with a broad constriction at basal fifth, and a slight inflation just before apex; basal and apical margins slightly arcuate; disk slightly flattened medially, sometimes with three broad, rounded raised areas, one medial and two anterior to middle, one on each side. Surface moderately shining, often with fine wrinkles, sparse to moderately densely, shallowly, moderately coarse punctation on disk, laterally alutaceus with deeper punctures. Pronotum mostly glabrous except each side with two long, suberect setae, one anterolateral, the other one discal at basal third. Scutellum small, rounded, shining, impunctate. Elytra about 2.7 to 3 times as long as width at humeri, about 2.6 to 3 times as long as pronotal length, about 1.2 to 1.4 times broader basally than pronotom at widest (at middle); sides slightly sinuate, evenly rounded to apex which is rounded; epipleural margin sinuate. Disk slightly concave medially, subsuturally, creating a faint costa on each elytron. Surface shining; punctation moderately dense, coarse, punctures becoming finer towards apex and sides, almost obsolete at apical third; glabrous except for a few very fine, inconspicuous short hairs in punctures near apex. Underside with prosternum shining, rugose; apical fourth impunctate and one irregular patch of coarse punctures in front of each coxa (Fig. 2e); with very sparse, short, inconspicuous, pale hairs; narrowest area of prosternal process between coxae about 0.25 to 0.3 as wide as coxal cavity, and about 0.25 to 0.5 the width of apex of process which is subtriangular with rounded corners. Mesosternum shining; moderately finely to moderately coarsely punctate; with few short, inconspicuous pale hairs. Mesepisternum sparsely punctate; sparsely clothed with fine, short, pale hairs. Mesepimeron with denser pubescence. Metasternum shining; moderately finely to moderately coarsely, sparsely punctate; punctures with a fine, short, pale hair. Metepisternum moderately densely clothed with short, recumbent, pale pubescence, which is denser posteriorly. Abdomen shining; finely, shallowly punctate; abdomen with a few long, suberect pale hairs and punctures with a short, fine, pale hair; fifth sternite broadly rounded, slightly longer than preceding sternite. Legs with femora pedunculate-clavate, meso- and metafemora arcuate, shining, finely,

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shallowly punctate, clothed with sparsely to moderately densely, recumbent, short, pale pubescence; underside of each femoral club with a broad triangular tooth with posterior edge strongly serrate; tibiae slightly arcuate, sinuate; clothed with sparse to moderately dense, fine, recumbent, pale pubescence, becoming longer and coarser apically. *Genitalia* see Fig. 3b.

FEMALE. Length 5.0–7.2 mm; width 1.2–1.7 mm (measured across humeri). Very similar to male. Antennae about as long as body. Lateral punctures on pronotum not distinctly deep and prosternum only finely punctate, lacking patches of coarse punctation (Fig. 2f). Narrowest area of prosternal process between coxae about 0.25 to 0.4 as wide as coxal cavity, and about 0.3 to 0.6 the width of apex of process.

**Etymology.** This species is named in memory of Dr. José A. Ramos for his invaluable contributions and his lifelong dedication to the study of insects in Puerto Rico, and for unconditional access to specimens from his remarkable personal collection, one of the largest on the Island.

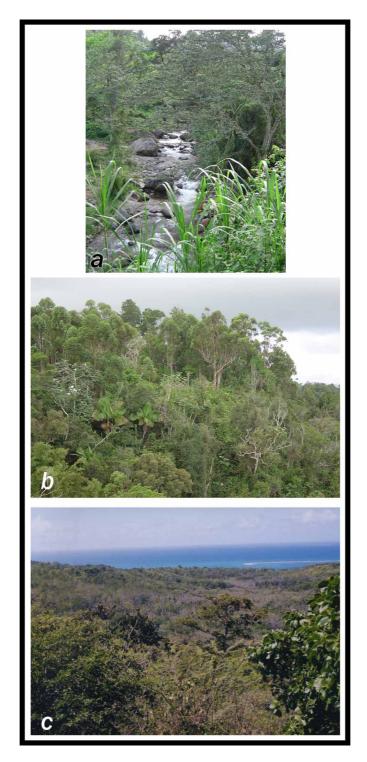
Types. Holotype, male, PUERTO RICO, Maricao, Rd. 120, Km. 13.8, 26-IV-1980, J. & N. Micheli, coll., beating foliage (USNM). Allotype, female, PUERTO RICO, Maricao, Rd. 120, Km. 15.9, ex twigs Eugenia nr. ligustrina, coll. 17-X-1981, emerged XII-81, J. Micheli, coll. (USNM). Paratypes, 56: 1 female, same data as holotype (JAMC); 1 male, PUERTO RICO, Maricao, Rd. 120, Km. 13.8, 3-V-1980, J. Micheli, coll., beating dead foliage (JAMC); 1 male, same data as previous except, 10-V-1980 (JAMC); 3 males, PUERTO RICO, Maricao, Rd. 120, Km. 15.9, ex twigs Eugenia nr. ligustrina, coll. 17-X-1981, emerged XI-81, J. Micheli, coll. (JAMC, ENPC); 14 males and 2 females, same data as previous except, emerged XII-81 (JAMC, USNM, ENPC; 2 dissected); 1 male and 1 female, same data as previous except, emerged II-82 (JAMC); 4 males and 4 females, same data as previous except, emerged III-82 (JAMC, ENPC; 1 dissected); 1 male, PUERTO RICO, Maricao, Rd. 120, Km. 15.9, 18-X-1981, beating foliage, J. Micheli, coll. (JAMC); 1 male, PUERTO RICO, Maricao For., Water Filtration Plant, 18°09'N, 66°59'W, 17 June 2002, Turpenia paniculata, Steven W. Lingafelter (USNM); 1 female, PUERTO RICO, Maricao, Bosque Estatal de Maricao, 3.3 km SW Maricao, 18-09-39N, 67-00-05W, forest, 550 m, 10-11 June 1996, J. Rawlins, C. Young, R. Davidson, W. Zanol, S. Thompson, M. Klingler (CMNH); 1 female, PUERTO RICO, Hwy 120, km. 16.2, Hdgts. Maricao St. For. 8-8-1999, C. W. O'brien (DHPC); 1 female, PUERTO RICO, Hwy. 120, K10H2, Maricao For. Res., July 26, 1979, L.B. O'Brien (JEWC); 1 male, PUERTO RICO, Guánica Forest, 6-IV-2001, ex dead log, Charyn J. Micheli, coll. (JAMC); 1 female, PUERTO RICO, Guánica Forest, Ballena trail, beating, 17°58'49"N, 66°51'74"W, 16 June 2002, Steven W. Lingafelter (USNM); 1 male, PUERTO RICO, Guánica Forest, Ballena trail, UV light, Spec ID:4228, Nearns & Lingafelter, 27-VII-2004 (ENPC); 1 male, PUERTO RICO, Ponce, Rd. 132, Km. 20, 26-VI-1972, J. Micheli, coll., at lights (JAMC); 2 males, PUERTO RICO, Ponce dry forest at Holiday Inn, 17°58'N, 66°38'W, 20 June 2002, beating, Steven W. Lingafelter (USNM, ENPC; 1 dissected); 1



male, PUERTO RICO, Ponce dry forest behind Holiday Inn, 17°58'N, 66°38'W, 1 July 2002, *Thouinia portoricensis*, Steven W. Lingafelter (USNM); 2 males and 2 females, PUERTO RICO, Guanica, Bosque Estatal de Guanica, 3.6 km E Guanica, 17-58-11N, 66-52-28W, thornscrub, 100 m, 12 June 1996, J. Rawlins, R. Davidson, C. Young, M. Klingler, W. Zanol, S. Thompson (CMNH); 1 female, 17°56'50"N, 066°51'48"W, PUERTO RICO, Guanica, Bosque Estatal de Guanica, just W. Punta Ballena on Rt. 333, 9.VIII.1999, P. W. Kovarik, collector, beating (WIBF); 1 female, PUERTO RICO, Humacao Dist., Casa Cabuy, Hwy.191 nr. Florida, 31-VII–2-VIII-1999, J. E. Eger, MV & UV lights (RFMC); 1 female, VIRGIN ISLANDS, St. John, Lameshur Bay – VIERS, 09 March 1984, at UV light, W. B. Muchmore colr. (WIBF); 1 female, VIRGIN ISLANDS, St. John, Est. Caneel Bay, Lind Point, December 1992, J. Comisky colr. (WIBF); 1 male and 1 female, VIRGIN ISLANDS, St. John, Lameshure Bay, VIERS, 21-28 July 1994, M. S. Becker colr, ultraviolet light (WIBF); 2 males, BRITISH VIRGIN ISLANDS, Guana Island, Sugarloaf trail, 100-800 ft., 09 OCT 1994, M. A. & L. L. Ivie (WIBF).

**Discussion.** Throughout the series there is some variation in color and slight variation in the shape of pronotal margins, pronotal texture, punctation on pronotum and mesosternum, and proportion and shape of the prosternal process. Specimens collected in the wet forest of Maricao are quite dark and the pale maculae on the elytra tend to be rather compact (Fig. 2d). Those from the drier areas of Guánica and Ponce (in Puerto Rico) and the Virgin Islands are lighter colored with the pale areas on the elytra more like fasciae (Fig. 2g). Except for color, other variation is slight and there is much overlap. To further investigate the possibility of two distinct species, dissections of male genitalia of several specimens from each phenotype were made by the junior author. Detailed study of the tegmen including the parameres (lateral lobes) and phallobase (basal piece) revealed no consistent morphological characters (Fig. 3b). Since we can find no significant differences between specimens from "wet" and "dry" areas, only a single species will be proposed.

This species can be confused with *Plectromerus serratus* (Cameron) but can be distinguished by the punctation of the pronotum: in *P. serratus*, the pronotum is impunctate and dull, whereas *P. ramosi* has a shiny pronotum and distinct punctation. Also, the fifth antennomere in *P. serratus* (Fig. 2i) is distinctly pronounced externally at apex whereas in *P. ramosi* (Fig. 2h) it is only slightly expanded. Some small, light specimens of *P. ramosi* are similar to *P. distinctus* (Cameron) but the latter species has long, suberect hairs on the elytra and granulose punctures on the pronotum, both lacking in *P. ramosi*. From other congeners, *P. ramosi* can be distinguished by the following combination of characters: the shape and punctation of pronotum (widest at middle, shallow, moderately coarse punctures), the punctation and macular pattern of elytra, the glabrous pronotum and elytra, and the serrate metafemoral tooth.



**FIGURE 4.** a, habitat of *Plectromerus lingafelteri* Micheli & Nearns, new species, Los Tablones region of Pico Duarte Trail, Dominican Republic; b-c, habitats of *Plectromerus ramosi* Micheli & Nearns, new species: b, Maricao Forest, Puerto Rico; c, Guánica Dry Forest, Puerto Rico.

# Acknowledgments



We are grateful to Julio Micheli and Steven Lingafelter for sharing their expertise with us, reviewing the manuscript and providing valuable suggestions, and for collecting the bulk of the study material. Marc Branham, Alexander Konstantinov, and three anonymous reviewers also provided helpful comments. We appreciate specimen loans from Bob Androw and John Rawlings (CMNH), Michael Ivie (WIBF), Michael Thomas and Paul Skelley (FSCA), Sharon Shute (BMNH), James Wappes, Roy Morris, Robert Turnbow, and Daniel Heffern. Many thanks to Kelvin Guerrero and Daniel Perez-Gelabert for their immense help in the Dominican Republic regarding logistics and permits, as well as for their companionship. Marilyn Colón from the Department of Natural and Environmental Resources in Puerto Rico facilitated the acquisition of collecting permits there. This project was partially funded by a National Science Foundation Graduate Research Fellowship awarded to the senior author, the University of Maryland, the USDA, and the University of Florida. We also thank the Zayas family in Cuba for permitting the junior author access to their collection.

This paper is the University of Florida, Agricultural Experimental Station Journal Series No. R-11020.

#### **Literature Cited**

- Cameron, M. (1910) Description of two new species of the longicorn genus *Pentomacrus*. *Entomologist's Monthly Magazine*, 46, 135–136.
- Cazier, M.A. & Lacey, L. (1952) The Cerambycidae of the Bahama Islands, British West Indies. *American Museum Novitates*, 1588, 1–55.
- Giesbert, E.F. (1985) Two new species of Cerambycinae from Quintana Roo, Mexico. *Coleopterists Bulletin*, 39, 80–85.
- Haldeman, S.S. (1847) Material towards a history of the Coleoptera Longicornia of the United States. *Transactions of the American Philosophical Society*, 10, 27–66.
- LeConte, J.L. (1873) New species of North American Coleoptera. Prepared for the Smithsonian Institution. Part II. *Smithsonian Miscellaneous Collections*, 11(264), 169–238; (265), 279–348.
- LeConte, J.L. & Horn, G.H. (1883) Classification of the Coleoptera of North America. Prepared for the Smithsonian Institution. *Smithsonian Miscellaneous Collections*, 26(507), xxxvii + 1–567.
- Leng, C.W. (1885) Synopses of Cerambycidae. Entomologica Americana, 7, 130–136.
- Lingafelter, S.W. & Micheli, C.J. (2004) New species of Cerambycidae from Puerto Rico with records and notes for other species. *Journal of the New York Entomological Society*, 112, 37–55.
- Linsley, E.G. (1963) The Cerambycidae of North America. Part IV. Taxonomy and classification of the subfamily Cerambycinae, tribes Elaphidionini through Rhinotragini. *University of California Publications in Entomology*, 21, 1–165.
- Micheli, J. (1983) *Curiosa dominicana*, a new genus and species of Curiini from Dominican Republic. *Coleopterists Bulletin*, 37, 261–266.
- Micheli, J.A. (2003) New longhorn beetles from Puerto Rico (West Indies) (Coleoptera: Ceramby-



- cidae). Coleopterists Bulletin, 57(2), 191-204.
- Micheli, J.A. & Micheli, C.J. (2004) Five new Puerto Rican longhorn beetles and other notes on West Indian Acanthocinini (Coleoptera: Cerambycidae: Lamiinae). *Journal of the New York Entomological Society*, 112, 18–36.
- Monné, M.A. (2005) Catalogue of the Cerambycidae (Coleoptera) of the Neotropical Region. Part I. Subfamily Cerambycinae. *Zootaxa*, 946, 1–765.
- Monné, M.A. & Hovore, F.T. (2003) Electronic Checklist of the Cerambycidae and Disteniidae of the Western Hemisphere. Available from: http://www.hovore.com (Accessed 20 May 2005).
- Vitali, F. (2004) *Plectromerus tertiarius* new fossil species from Hispaniola (Coleoptera, Cerambycidae, Curiini). *Lambillionea*, 104, 453–458.
- Vitali, F. & Rezbanyai-Reser, L. (2003) Beiträge zur Insektenfauna von Jamaika, Westindien (Karabik) 5. Bockkäfer II. *Les cahiers Magellanes*, 27, 1–27.
- Zayas, F. de. (1975) *Revisión de la familia Cerambycidae*. Academia de Ciencias de Cuba, Instituto de Zoología, La Habana, Cuba, 443 pp.