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Stewart B. Peck
Research Associate
Canadian Museum of Nature
PO Box 3443, Station D
Ottawa, ON K1P 6P4, Canada

Joyce Cook
13078 Land O'Nod Road
North Augusta, ON K0G 1R0, Canada

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Stewart B. Peck

Research Associate
Canadian Museum of Nature
PO Box 3443, Station D
Ottawa, ON K1P 6P4, Canada
stewart_peck@carleton.ca

Joyce Cook

13078 Land O'Nod Road
North Augusta, ON K0G 1R0, Canada
joyce_cook@carleton.ca

Abstract. The fauna of the small carrion beetles and round fungus beetles (Leiodidae) of the oceanic islands of the West Indies is reviewed with 11 genera and 81 species recorded. Keys to adults of all genera and species, descriptions, and figures are provided to aid in identification. All species are endemic to the islands of the West Indies. Most species are endemic to a single island, but some species in the Lesser Antilles occur on more than one island. It is certain that more species remain to be discovered, especially on larger and less explored islands.

Two **new genera** are described: *Parvocyrtusa* (type species *Parvocyrtusa hispaniolensis*), and *Pseudolionothus* (type species *Pseudolionothus insularis*). The genus *Pseudoagathidium* Angelini is reported from the New World for the first time with one species.

The higher taxa and 61 **new species** and their island distributions are as follows: Cholevinae, Eucatopini, *Eucatops* Portevin (first West Indian record): *E. annulus*, Hispaniola. Ptomaphagini, *Proptomaphagus* Szymczakowski (four species, no new taxa), Greater Antilles and Bahamas (new genus record). Anemadini, *Dissochaetus* Reitter (five species, one new species): *D. santalucia*, St. Lucia. Leiodinae, Agathidiini, *Agathidium* Panzer (first West Indian record): *A. minutum*, Hispaniola. *Pseudoagathidium* Angelini (first New World record): *P. ignotum*, St. Vincent. Leiodini, *Isoplastus* Horn (first West Indian record): *I. hispaniolensis*, Hispaniola. *Zeadolopus* Broun (five known species, 28 new species): *Z. acinaces*, Hispaniola; *Z. angulatus*, St. Vincent; *Z. antiguensis*, Antigua, Saba, Montserrat; *Z. atratus*, Cuba; *Z. bahamensis*, Bahamas Islands (Andros Island); *Z. caborojo*, Hispaniola; *Z. carinatus*, Jamaica; *Z. caymanensis*, Cayman Islands (Grand Cayman); *Z. cubensis*, Cuba; *Z. dominica*, Dominica; *Z. exiguus*, Hispaniola; *Z. flavidus*, Cuba; *Z. hatomayor*, Hispaniola; *Z. hispaniolensis*, Hispaniola; *Z. iviei*, Hispaniola; *Z. jarabacoa*, Hispaniola; *Z. lavega*, Hispaniola; *Z. longipes*, Hispaniola; *Z. lucidus*, Cuba; *Z. miniusculus*, Hispaniola; *Z. nanus*, Hispaniola; *Z. nesioties*, St. Lucia and Martinique; *Z. oviedoensis*, Hispaniola; *Z. parvantilliensis*, Montserrat, Guadeloupe, Dominica, Martinique, St. Lucia, St. Vincent, Grenada; *Z. paulus*, Hispaniola; *Z. pedernales*, Hispaniola; *Z. pusillus*, Cuba. *Parvocyrtusa* (new genus, one new species): *P. hispaniolensis*, Hispaniola. *Pseudolionothus* (new genus, two new species): *P. andersoni*, Cuba; *P. insularis*, Hispaniola. Scotocryptini, *Aglyptinus* Cockerell (five known species, 19 new species): *A. angulatus*, Hispaniola; *A. bahamensis*, Bahamas Islands (Andros Island); *A. biserratus*, Cuba; *A. capitaneus*, Cuba; *A. dominica*, Dominica; *A. fortipunctatus*, Cuba; *A. grandis*, Hispaniola; *A. grenadensis*, Grenada; *A. hemipterus*, Jamaica; *A. hispaniolensis*, Hispaniola; *A. longipalpus*, Hispaniola; *A. luciae*, St. Lucia; *A. maculatus*, Jamaica; *A. martiniquensis*, Martinique; *A. minutus*, Cuba; *A. parvoculus*, Jamaica; *A. parvus*, St. Lucia; *A. sinuatus*, Cuba; *A. vincentii*, St. Vincent. *Creagrophorus* Matthews (one known species, seven new species): *C. bicolor*, Martinique; *C. cubensis*, Cuba; *C. dominica*, Dominica; *C. hispaniolensis*, Hispaniola; *C. microdentatus*, Hispaniola; *C. santalucia*, St. Lucia; *C. unidentatus*, St. Vincent and Grenada.

Key words. Cholevinae, Leiodinae, *Eucatops*, *Proptomaphagus*, *Dissochaetus*, *Agathidium*, *Pseudoagathidium*, *Isoplastus*, *Zeadolopus*, *Parvocyrtusa*, *Pseudolionothus*, *Aglyptinus*, *Creagrophorus*

Introduction

The insects of the islands of the West Indies have long been of interest to entomologists. Some taxa, such as butterflies (Smith et al. 1994) and a few families of Heteroptera and Coleoptera (e. g., Liebherr

1988, Skelley 2009) are rather well known, but most other insect groups are still incompletely studied. This contribution is a review of known and new species of beetles in the family Leiodidae of the oceanic islands of the West Indies. These beetles are commonly called small carrion beetles (Cholevinae) and round fungus beetles (Leiodinae) because both adults and larvae feed on these materials. A few species of these small-sized beetles have been described over the years, and extensive recent field-work has yielded a great amount of unstudied material, including many new species, which are reported upon here.

In general, the majority of the species of this family can easily be distinguished by the character of the eighth antennal segment being smaller than the adjacent seventh and ninth segments. These beetles are usually inhabitants of seasonal and humid forests and are generally scavengers in forest litter. Some species can be found in other habitats such as caves and animal nests and burrows. Adult specimens are usually collected by the use of carrion baited pitfall traps, sifting forest litter and extracting the beetles, and with the use of flight intercept traps. Leiodidae are only infrequently taken at light traps. Species found at higher elevations sometimes have reduced flight wings and smaller eyes. Most species in the West Indies are limited to a single island, which reflects a period of isolation long enough for speciation to have occurred after colonization.

As considered here, the West Indies includes all islands of the Bahamas and the Greater and Lesser Antilles (Fig. 1), south to and including Grenada. Trinidad and Tobago as well as Aruba, Tortuga, and Margarita are not considered because they are on the continental shelf of South America and should be discussed in any compilation of the South American or Venezuelan fauna (Peck et al. 1998). Other islands along the north coast of Venezuela (such as Curaçao, Bonaire, Islas de Aves, Los Roques, Orchilla, and Blanquilla) are not on the continental shelf of South America and can be considered as oceanic islands. But no Leiodidae are known from them.

The purpose of this paper is to summarize knowledge of the beetle family Leiodidae in the West Indies. This paper summarizes past taxonomic work, and adds new species and new data on previously known species.

Materials

This study is based on the examination of over 2000 specimens from the West Indies, many of which were collected by the first author. Michael A. Ivie has also conducted extensive field-work throughout the West Indies and contributed abundant specimens. Various collectors have deposited West Indian material with FSCA. Few other collections have many West Indian specimens. Specimens were borrowed from the following collections and curators of the time. Other collection acronyms and most collection addresses are given in full in Arnett et al. (1993).

CMNC	Canadian Museum of Nature Collection of Insects, Gatineau, PQ, Canada (R. S. Anderson, F. Genier)
CMNH	Carnegie Museum of Natural History, Pittsburgh, PA (R. L. Davidson)
EMEC	Essig Museum of Entomology, University of California, Berkeley, CA (C. Barr)
FSCA	Florida State Collection of Arthropods, Gainesville, FL (M. C. Thomas, P. Skelley)
INHS	Illinois Natural History Survey, Champaign-Urbana, IL (M. W. Sanderson)
MCZC	Museum of Comparative Zoology, Harvard University, Cambridge, MA (P. J. Darlington, Jr., J. F. Lawrence, A. F. Newton, Jr., P. D. Perkins)
SBPC	Stewart B. Peck Collection, Ottawa, ON, Canada (to be placed soon in CMNC, and with some in FSCA, MCZC (Museum Comparative Zoology, Harvard University) and FMNH (Field Museum Natural History, Chicago))
USNM	United States National Museum of Natural History, Washington, DC (D. Furth)
WIBF	West Indies Beetle Fauna Project, Montana State University, Bozeman, Montana, (M. A. Ivie). Holotypes to be placed in USNM.

Methods

Most of the specimens seen during this study were taken by the use of carrion baited pitfall traps, by sifting and extracting the insects from forest litter with Berlese-Tullgren funnels or Winkler extractors,

and by the use of flight intercept traps (FITs) in forests (Peck and Davies 1980). A few specimens have been taken by other methods including light traps and in habitats such as caves.

For all specimens we report new label data as they appear on the specimen labels. We have not edited or altered these data for uniformity, but have quoted it to aid in recognition of type and other specimens seen by us. Other specimen data may be abbreviated or supplemented with province names or other notes. We usually have limited paratype series to about 50 specimens. A map (Fig. 1) shows the locations of the principal islands.

To confirm identifications it is necessary to examine the aedeagus of male specimens. Male specimens were dissected after being relaxed and removed from points or a card. Relaxing was by immersion for one day in a commercial household ammonia-based window cleaning solution. The specimen was then dissected in 70% ethyl alcohol. The aedeagus was examined, dehydrated in anhydrous ethyl alcohol and placed in euparal mounting medium on a small acetate-plastic microslide. External characters were examined with a stereomicroscope from 10X to 200X magnification. Structures for illustration were photographed with a digital camera mounted on a stereomicroscope. Aedeagus details were observed with a compound microscope and then added to outline illustrations made from the digital photographs. Illustrations of the aedeagus include features of the armature of the inverted internal sac. Measurements of total body length includes head, pronotum and elytra.

The taxonomic system and arrangement used here follows Newton (1998). The terminology used in this paper follows in general that used in Peck and Cook (2011, 2013a, 2013b). We have used the criteria of priority and alphabetical order to arrange the species-level taxa in this paper. The number of new species in the new material suggests that additional new species remain to be discovered, especially on the larger or poorly or un-sampled islands. Diagnoses are presented for adults of all species, and diagnostic descriptions are presented for new species based on all available material. Larvae are not included.

Results and discussion

A total of 81 species in two subfamilies, six tribes, and 11 genera are now recognized as present in the West Indies. All species are endemic (limited) to islands of the West Indies. All species on the Greater Antilles and most species on the Lesser Antilles are limited to a single island.

The genera *Eucatops* Portevin (Eucatopini), *Agathidium* Panzer (Agathidiini), and *Isoplastus* Horn (Leiodini) are reported from the West Indies for the first time.

The new genera *Parvocyrtusa* and *Pseudolionothus* (both Leiodinae, Leiodini) are both endemic to the Greater Antilles (Hispaniola and Cuba). Peck and Perez-Gelabert (2012) reported that 205 beetle genera are endemic to one or more islands of the West Indies, making this region a center of genus-level evolution. The addition of these two new genera adds to the uniqueness of the West Indian fauna.

The genus *Pseudoagathidium* Angelini (Agathidiini) is reported for the first time outside of the Afrotropical and Oriental regions.

All but the new genera and *Pseudoagathidium* are known from the continental lands of North, Central, and/or South America. The faunas of Central and South America are still very poorly known for their leiodid faunas so it is premature to attempt a phylogenetic or zoogeographic analysis of the West Indian fauna. However, it is expected that the general pattern will be that the faunas of the Greater Antilles have been derived from ancestors originating in Central America, and those of the Lesser Antilles from ancestors from South America, as is known for the land vertebrate faunas of the West Indies (Darlington 1957). There are only two apparent examples of a close relationship of the West Indian fauna with that of the southeastern United States: that of *Zeadolopus bifoveolatus* Daffner of south Florida and *Z. lucidus* n. sp. of Cuba and of *Zeadolopus egenus* (LeConte) of Florida and other states and *Z. bahamensis* n. sp. of the Bahamas (Andros Island).

The numbers of species known per island, in alphabetical order are: Antigua, 1; Bahamas (Andros Island), 2; Cayman Islands (Grand Cayman), 1; Cuba, 15; Dominica, 4; Grenada, 4; Guadeloupe, 3; Hispaniola, 26; Jamaica, 11; Martinique, 4; Mona, 1; Montserrat, 2; Puerto Rico, 4; Saba, 1; St. Kitts, 1; St. Lucia, 5; St. Vincent, 7; Virgin Islands, 2. Generally, the larger and older islands of the Greater Antilles (Cuba, Hispaniola, Jamaica, Puerto Rico) have more species. The small and younger islands, especially in the Lesser Antilles, have fewer species. Because it is believed that the fauna is still incompletely known it seems that any other generalizations would be premature. It is of note that of the 26

species reported from Hispaniola only two species have been collected on the western (heavily deforested Haitian) side of the island.

Zeadolopus is the most speciose genus in the West Indies, with 32 species, followed by *Aglyptinus* with 24 species and *Creagrophorus* with 8 species. The remaining eight genera have six or fewer species apiece. *Zeadolopus* has 14 species on Hispaniola, 4 in Cuba, and 4 in Jamaica, as well as others elsewhere. This large number of *Zeadolopus* on Hispaniola is noteworthy, but not exceptional because other swarms of congeneric beetle species are known on Hispaniola. Examples are 48 species of *Phyllophaga* Harris (Scarabaeidae, Melolonthinae), 28 species of *Platynus* Bonelli (Carabidae, Platynini) and 19 species of *Tytthonyx* LeConte (Cantharidae; Tytthonyxini) (Perez-Gelabert 2008). These data show that Hispaniola has been a prolific center of species evolution. At least part of the reason for this is that Hispaniola is a composite of three separate tectonic crustal pieces that have coalesced to form one island (Donnelly 1988). The island is also topographically complex with several major and separate east-west trending mountain ranges: the northern Cordillera Septentrional, the central Cordillera Central, and the Sierra de Neiba and Sierra de Baoruco in the south as well as other lesser ranges.

Systematics

Family Leiodidae

Key to subfamilies, tribes, and genera of Leiodidae of the West Indies

(Adapted in part from Peck et al. 1998)

1. Head with distinct occipital carina or crest. Cholevinae 2
- Head without occipital carina or crest. Leiodinae 4
- 2(1). Mesocoxal cavities contiguous. Anemadini *Dissochaetus* Reitter
- Mesocoxal cavities narrowly separated by prolonged mesosternal process 3
- 3(2). Head with strongly elevated occipital crest; maxillary palpomere 4 shorter than 3, conical; prosternum horizontal before coxae. Ptomaphagini ... *Proptomaphagus* Szymczakowski
- Head with occipital crest weak or absent medially; maxillary palpomere 4 much longer than 3; prosternum flared ventrad to form precoxal cowling. Eucatopini *Eucatops* Portevin
- 4(1). Labrum deeply emarginate apically; tarsal formula 5-5-4, not sexually dimorphic. Leiodini .. 5
- Labrum shallowly or not emarginate apically; tarsal formula 5-4-4 or less, or sexually dimorphic (5-5-4 in male, less in female) 8
- 5(4). Antenna of 11 antennomeres with interrupted 5-antennomere club; antennomere 8 small and disc-shaped *Pseudolionothus* Peck and Cook
- Antenna of 10 antennomeres with 3 or 4-antennomere club; antennomere 8 normal, rounded ..
..... 6
- 6(5). Mesotibiae broad; metatibiae slender, without strong spines on external margin
..... *Parvocyrtusa* Peck and Cook
- Meso and metatibiae usually broad, shovel-like; metatibiae with strong spines on external margin
..... 7
- 7(6). Antennal club of 3 antennomeres *Isoplastus* Horn
- Antennal club of 4 antennomeres *Zeadolopus* Broun
- 8(4). Tarsal formula 3-3-3; first ventrite with transverse carina. Scotocryptini 10
- All tarsi 4- or 5-segmented; first ventrite without transverse carina. Agathidiini 9

- 9(8). Tarsal formula 4-4-4 in both sexes; parameres absent *Pseudoagathidium* Angelini
 — Tarsal formula 5-5-4 in males, 5-4-4 in females; parameres present *Agathidium* Panzer
- 10(8). Mesotibia wider than metatibia; apical labial palpomere with large taeniaform seta
 *Creagrophorus* Matthews
 — Mesotibia not wider than metatibia; apical labial palpomere without taeniaform seta
 *Aglyptinus* Cockerell

Subfamily Cholevinae, the small carrion beetles

Tribe Eucatopini

Eucatops Portevin 1903

Eucatops Portevin 1903. Type species *Eucatops curvipes* Portevin 1903, designation by Jeannel 1922: 39.

Distribution. Neotropical (Mexico to northern Argentina, and Hispaniola).

Biology. Scavenger in forest soil and litter.

Eucatops (Eucatops) annulus Peck and Cook, new species

Figure 2

Diagnostic description. Total length 2.5 mm; greatest width 1.4–1.5 mm. Reddish brown to dark reddish brown, shining; antennae and mouthparts paler. Antennomeres II and III subequal in length; club shorter than 6 basal antennomeres combined; width of antennomere VIII nearly twice length; apical antennomere shorter than antennomeres IX + X. Eye reduced to semicircle containing about 15 facets. Elytra fused at suture; with densely punctate, transverse striae. Without functional flight wings. Spermatheca (Fig. 2) ring-shaped. Male unknown.

Type material. Holotype, female, with the following label data: “DOM.REP.: Santiago Prov./ PN A. Bermudez, 9km SW/ Cienaga, Redondo, 2000m/ 24.VII.95, shrub litter/ S. & J. Peck, 95-49” (SBPC). Paratypes (2 females) with the following label data: same data as holotype (1, SBPC); DOM. REP.: Prov. Santiago, Par. Nac. Armando Bermudez, 19°02’N 70°57’W, 2485m, 08APR1992, M.A. Ivie, pine stump w/ slime molds (1, WIBF).

Distribution. Known only from Hispaniola.

Remarks. Without male specimens we cannot place this species in relationship to the other 30 known species in the subgenus occurring in Central and South America (Salgado 2010).

Etymology. The epithet *annulus* (Latin, ring) refers to the shape of the spermatheca of this species.

Tribe Ptomaphagini

Proptomaphagus Szymczakowski 1969

Proptomaphagus Szymczakowski 1969. Type species: *Proptomaphagus apodemus* Szymczakowski, by original designation.

Distribution. Mexico, Greater Antilles, and Bahamas (Andros Island, undescribed).

Biology. Scavenger in litter in moist caves, forests and soil.

Remarks. It is of note that *Proptomaphagus* is the only New World representative of the subtribe Ptomaphagini, otherwise known from two genera in the Oriental region (Szymczakowski 1969).

The two species known from Mexico are considered to be derived flightless and small-eyed litter species. No other Mexican-Central American species are known. These Mexican species are interpreted as relictual species compared to the winged and large-eyed species of the Greater Antilles. It could be proposed that the West Indian species originated on former land masses of Central America and were moved as parts of the Caribbean tectonic plate which were to become the islands of the Greater Antilles (a vicariant origin), but it seems more likely to us that flight was the dispersal mechanism for reaching the West Indies, as we think is the case for all the West Indian leiodids.

The presence of *Proptomaphagus* on the Bahamas (Andros) is based upon two unidentifiable female specimens with the following label data: Bahamas, Andros Island, Forfar Field Station, nr. Stafford Ck., 22-27.VII.2006, M.C.Thomas, T.R. Smith, uv trap in coastal coppice (FSCA).

Key to species of male *Proptomaphagus* of the West Indies

1. Paired apices of median lobe (Fig. 5) straight in dorsal view. Cuba . *P. darlingtoni* (Jeannel)
- Paired apices of median lobe (Fig. 3, 7, 10) inwardly curved in dorsal view 2
- 2(1). Parameres (Fig. 4) narrow in lateral view. Cuba *P. apodemus* Szymczakowski
- Parameres (Fig. 8, 11) broad in lateral view 3
- 3(2). Parameres (Fig. 8) straight in lateral view. Hispaniola *P. hispaniolensis* Peck
- Parameres (Fig. 11) curved in lateral view. Puerto Rico *P. puertoricensis* Peck

Proptomaphagus apodemus Szymczakowski 1969

Figures 3, 4

Proptomaphagus apodemus Szymczakowski 1969: 88; Decu 1973: 367; Peck 1970: 242; Peck et al. 1998: 159; Peck 1999: 609. Holotype in ZMPA (Institut Zoologique de l'Académie Polonaise des Sciences, Warsaw, Poland); not seen. Type locality: Cueva Humboldt, Punta Caguanes, Las Villas, Cuba.

Diagnosis. Total length 1.4–1.9 mm. Reddish brown; antennal base and tip of antennomere XI yellowish; pubescence golden yellow, short and dense, recumbent. Antennae compact, short. Eyes somewhat reduced. Pronotum wider than long, lateral margins almost straight; posterior angles about right, very slightly drawn out; with moderately dense, transverse strigae. Elytra weakly tapering posteriorly; apex of each elytron broadly truncate, very slightly concave; with oblique strigae. Fully winged. Mesosternal carina rather low and angular in side view. Metasternum with median groove over its whole length. Aedeagus (Fig. 3, 4) thick, symmetrical, nearly straight; with paired, inwardly curved apical projections (Fig. 3). Parameres (Fig. 4) fused to median lobe, narrow, not reaching apex of median lobe; each bearing two apical setae and two others widely spaced before apex.

Distribution. Known only from Cuba; widely distributed. Previously known localities, from Szymczakowski (1969), Peck et al. (1998), Peck (1999), are: Cuba. Camagüey Province. Cueva del Agua (de los lagos). Cueva del Indio. Cueva de la Lechuza. Ciudad de La Habana Province. Cueva de la Virgen. Habana Province. Cueva del Cura. Isla de Juventud Province. Cueva del Abono. Las Villas Province, Punta Caguanes, Humboldt Cave. Granma Province. Cueva del Fustete. Cueva del Hoyito. Guantanamo Province. Cueva de Jajana. Cueva de La Patana. Matanzas Province. Cueva de Bellamar. Pinar del Rio Province. Cueva del Abono. Cueva de Pio Domingo. Cueva de la Vela. Minas de Matahambre, Cueva Perfecto. Sancti Spiritus Province. Cueva de las Columnas. Cueva Grande de Caguanes. Cueva Humboldt.

Cueva del Túnel. Santiago de Cuba Province. Cueva de la Cantera. Cueva de los Majaes. Cueva Atabex. Santiago de Cuba, Tomas Roig Botanical Garden. Siboney, Atabex Cave.

New records. Cuba. Cienfuegos: Mayari, 2 km E, 21.96651 – 80.11497, 842m, 18.V.2013, R. Anderson, 2013-017, hardwood forest litter (3, SBPC); Cienfuegos: Mayari, 1 km E, 21.97114 – 80.12172, 866m. 18.V.2013, R. Anderson, 2013-018, karst forest litter (3, SBPC); Cienfuegos: P.N. Pico San Juan, road, 21.98812 - 80.14632, 1086m, R. Anderson, 2013-022, elfin forest litter (3, SBPC); Cienfuegos: P.N. Pico San Juan, road, 21.98542 - 80.14873, 1026m, 19.V.2013, R. Anderson, 2013-023, hardwood forest litter (1, SBPC); Cienfuegos: P.N. Pico San Juan, road, 21.98812 - 80.14632, 1086m, 19.V.2013, R. Anderson, 2013-024, elfin forest litter (1, SBPC); Santiago de Cuba: Parque Nacional Gran Piedra, 20.01154 - 75.67310, 550m, 23.V.2013, R. Anderson, 2013-031, mixed hardwood litter (2, SBPC).

Remarks. The species is an inhabitant of both cave and forest habitats (Peck 1983: 257; 1999: 609). It is fully winged and able to fly, and shows no morphological adaptation for caves. It is found in caves in areas with light sprinklings of moist guano of both frugivorous and insectivorous bats. Larvae: Decu 1973.

Proptomaphagus darlingtoni (Jeannel) 1936

Figures 5, 6

Proptomaphagus darlingtoni (Jeannel) 1936: 78; Peck 1970: 241 (ex *Ptomaphagus*); 1999: 608. Holotype male (described as female) in MCZC, seen. Type locality: Soledad, Cienfuegos, Cuba.

Diagnosis. Total length 1.5–1.9 mm. This species is very similar to *P. apodemus*. It differs in the shape of the paired apical projections of the median lobe (Fig. 5, 6). In *P. darlingtoni* they are short and straight, while in *P. apodemus* (Fig. 3, 4) they are longer and inwardly curved.

Distribution. Known only from Cuba. Previously known localities, from Jeannel (1936), Peck (1970, 1999) are: Cuba. Cienfuegos Province. Soledad, [the former] Harvard Biological Station. Santiago de Cuba Province. Gran Piedra National Park, 1100 m elevation. Segundo Chorrito, km 8 on entrance road to Gran Piedra, 600 m.

New records. None.

Remarks. Biology: an inhabitant of upland and lowland forests.

Proptomaphagus hispaniolensis Peck 1983

Figures 7–9

Proptomaphagus hispaniolensis Peck 1983: 255; 1999: 610. Holotype, male, in FSCA, seen. Type locality: cave at mouth of Río Chavon, La Romana, Dominican Republic.

Diagnosis. Total length 1.5–2.1 mm. Reddish brown; mouthparts and basal 2–3 antennomeres paler; pubescence yellow, dense, recumbent. Antennae compact, short. Eyes variable, large to variably reduced. Pronotum wider than long, lateral margins weakly rounded; posterior angles nearly right, very slightly drawn out; with moderately dense, transverse strigae. Elytra weakly tapering; apices variable, often truncate in both sexes, but drawn out in some females; with oblique strigae. Fully winged. Mesosternal carina low, uniformly rounded. Metasternum with median groove over its whole length. Aedeagus (Fig. 7–9) uniformly stout and thick, narrowing to apex, with prominent, subequal, inwardly curved lateral projections at tip; apex downturned with two lateral swellings, each bearing two setae. There is variability in size and shape of lateral projections and sclerites of the inverted internal sac. Parameres (Fig. 8)

moderately broad, fused to median lobe, not reaching apex of lateral projections, each bearing 2 apical setae and 3 others widely spaced before apex.

Distribution. Known only from Hispaniola in both the Dominican Republic and Haiti. Previously known localities, from Peck (1983, 1999), are: Dominican Republic. Barahona Province, 7 km NW Paraiso. Independencia Province. 10 km NW La Descubierta, Sabana Real. 5.5 km NNW Angel Feliz. Sierra Neiba. La Romana Province. Cave at mouth of Rio Chavon. La Vega Province. Constanza. 10 km NE Jarabacoa, Hotel Montaña. La Cienega, Parque Nacional A. Bermudez. 2 km SW La Cienega. Pedernales Province. Los Arroyos. 9.5 km N Cabo Rojo. 23.5 km N Cabo Rojo. 26 km N Cabo Rojo. 28 km N Cabo Rojo. 11.4 km W Oviedo. San Cristobal Province. Borbon, Cuevas Pomier Natural Preserve, Cave 1, Cave 2, Cave 3, Cave 4, Cave 5. Haiti. Department du Sud. Grotte Counoubois, near Camp Perrin. Grotte “Ca-August”, between Cayes and Jacmel.

New records. Dominican Republic. Pedernales Province. ca. 35 km NW Cabo Rojo, Las Abejas, pitfall trap, 26.VIII–9.IX.1988, M.A. Ivie, T.K. Phillips, K.A. Johnson (4, WIBF); 13.5 km N. Cabo Rojo, 140m, 21.VIII–10.IX.1988, flight intercept trap, M.A. Ivie, T.K. Phillips, K.A. Johnson (1, WIBF); 24 km N Cabo Rojo, 610m, 20–25.VIII.1988, wet forest, flight intercept trap, M.A. Ivie, T.K. Phillips, K.A. Johnson (1, WIBF); 35 km N Cabo Rojo, 1250m, Las Abejas, 26.VIII. 1988, dung baited pitfall, M. Ivie, Phillips & Johnson (22, WIBF; 12, SBPC; 4, MCZC; 4, FMNH); 24 km N Cabo Rojo, 612 m, 18°06'N, 71°38'W, 11.VII.1993, D.S. Sikes & R.P. Rosenfeld, carrion trap (3, WIBF); 26 km N Cabo Rojo, 825m, 21.VIII–9.IX.1992, D. Sikes & P. Ward, flight intercept trap (1, WIBF); ca. 35 km N Cabo Rojo, 1250m, Las Abejas, 23.VIII.1988, forest litter, M.A. Ivie, T.K. Phillips, K.A. Johnson (1, WIBF); ca 35 km N Cabo Rojo, 1250m, Las Abejas, 26.VIII.1988, mix. leaf litter, M.A. Ivie, T.K. Phillips, K.A. Johnson (1, WIBF); ca. 35 km NW Cabo Rojo, 1370m, El Aceitillar, 26.VIII–9.IX.1988, pine for., flight intercept trap, M.A. Ivie, T.K. Phillips, K.A. Johnson (6, WIBF); Las Abejas, 1225m, 18°09'03"N, 71°37'48"W, 28.VII-3.VIII.1999, G.O. Dominici, F.I.T. (10, WIBF); ca. 35 km N Cabo Rojo, 1250m, Las Abejas, 26.VIII-9.IX.1988, flight intercept trap, M.A. Ivie, T.K. Phillips, K.A. Johnson (4, WIBF); Las Abejas, 1225m, 18°09.032'N, 71°37.475'W, 22.VII–9.VIII.1999, M.A. Ivie, *et al.*, Malaise (1, WIBF); P.N. Sierra de Baoruco, 1240m, 18°09.023'N, 71°37.387'W, Las Abejas, 22.VIII.1999, light, M.A. Ivie & K.A. Guerrero (2, WIBF). Santiago Province. P.N. Armando Bermudez, Los Tablones, 1290m, M.A. & R.O. Ivie, flight intercept trap, on Rio Izquierda, 19°03'N, 70°50'W, 9.IV–7.VII.1992 (17, WIBF); P.N. Armando Bermudez, Los Tablones, 9.IV–7.VII.1992, 19°03'N, 70°54'W, 1275m, M.A. Ivie, fl. int. tr. (1, WIBF). San Cristobal Province. Cave nr. Borbon (El Pomier), 7 km NNW San Cristobal, 180m, 18.VIII.1988, M.A. Ivie, T.K. Phillips, K.A. Johnson (1, WIBF); 4 km NW Villa Altagracia, 300m, 12.IV-6.VII.1992, M.A. & R.O. Ivie, flight intercept trap (1, WIBF). La Vega Province. P.N. Armando Bermudez, Los Tablones, 1245m, 19°03'N, 70°53'W, 7.VII-25.VIII.1992, M.A. Ivie & D.S. Sikes, flight intercept trap (2, WIBF); Barahona Province. nr. Filipinas, Larimar Mine, 26.VI–7.VII.1992, Woodruff & Skelley, flight trap (26, FSCA).

Remarks. The species is a widespread cave and forest inhabitant. The large eyes and fully functional flight wings indicate that the species is not cave modified. The species has been caught in a variety of forest types ranging from arid thorn forest to tropical evergreen forest to dense cloud forest, from 10 m to 1750 m altitude, as well as in caves. The type series was taken in a black light trap near bat guano in a cave.

Proptomaphagus puertoricensis Peck 1970

Figures 10, 11

Proptomaphagus puertoricensis Peck 1970: 239; 1978: 244. Holotype male in MCZC, seen. Type locality: Cerro Dona Juana, Toro Negro Forest, Puerto Rico.

Diagnosis. Total length 1.5–2.0 mm. Reddish brown; mouthparts, basal 2–3 antennomeres and tip of antennomere XI paler; pubescence yellow, dense, recumbent. Antennae compact, short. Eyes large. Pronotum wider than long, lateral margins weakly rounded; posterior angles nearly right, slightly drawn

out; with moderately dense, transverse strigae. Sides of elytra weakly curved; apices truncate and weakly concave to rounded and convex; with oblique strigae. Fully winged. Mesosternal carina low. Metasternum with median groove over its whole length. Aedeagus (Fig. 10, 11) stout, tubular, curved dorsoventrally, with prominent, subequal, inwardly curved lateral projections at tip. Parameres (Fig. 11) broad, curved dorsoventrally, not reaching apex of lateral projections, each bearing two apical setae.

Distribution. Known only from Puerto Rico. Previously known localities, from Peck (1970) are: Puerto Rico. Torro Negro Forest, Cerro Dona Juana. Barrio Mora, near Isabela, Cueva de los Alfaros. Bayaney, near Arecibo, Empalme Cave. Corozal, Cueva de Corozal. Aguas Buenas, Aguas Buenas Cave. Luquillo Experimental forest. El Yunque vicinity.

New records. Puerto Rico: El Verde Research Sta., ridge tops in forest, 2-30.IX.1996, E. Nazario, pitfall (1, WIBF).

Remarks. The species is widespread in caves and forests, from near sea level to about 1000 m elevation.

Tribe Anemadini

Dissochaetus Reitter 1885

Dissochaetus Reitter 1885. Type species: *Dissochaetus hetschkoi* Reitter (designated by Jeannel 1922: 41; Hatch 1928: 163).

Distribution. Nearctic and Neotropical.

Biology. Scavenger in moist forest litter and soil.

Key to species of male *Dissochaetus* of the West Indies

1. Parameres inwardly curved apically (Fig. 12, 18, 23); apex of median lobe of aedeagus drawn out, narrow at apex **2**
- Parameres straight or weakly sinuate, not inwardly curved apically (Fig. 15, 20, 21); median lobe of aedeagus not drawn out apically **4**
- 2(1). Sternite lobes of male genital segment (Fig. 17) strongly outwardly curved. Jamaica ***D. jamaicensis* Peck**
- Sternite lobes of male genital segment otherwise **3**
- 3(2). Sternite lobes of male genital segment (Fig. 14) narrow and straight, not setose. Cuba ***D. cubensis* Peck**
- Sternite lobes of male genital segment (Fig. 24) angled inward and bearing setae medially. St. Lucia ***D. sanctalucia* Peck and Cook, n.sp.**
- 4(1). Apices of sternite lobes of male genital segment (Fig. 19) rounded. Puerto Rico ***D. portoricensis* Hatch**
- Apices of sternite lobes of male genital segment (Fig. 16, 22) acute **5**
- 5(4). Apical one-half of median lobe of aedeagus (Fig. 15) broadly triangular. Grenada ***D. grenadensis* Jeannel**
- Apical one-half of median lobe of aedeagus (Fig. 21) narrowly triangular. St. Vincent ***D. smithi* Jeannel**

***Dissochaetus cubensis* Peck 1999**

Figures 12–14

Dissochaetus cubensis Peck 1999: 606. Holotype male in CMNC, seen. Type locality: Gran Piedra, Santiago de Cuba Province, Cuba.

Diagnosis. Total length 2.0–2.5 mm. Dark brown; mouthparts, antennomeres I, II and XI and legs paler; elytra pruinose; pubescence reddish yellow. Head finely, densely punctate. Antennae when laid back reaching slightly beyond base of pronotum. Antennomeres VII–X wider than long. Eyes large. Pronotum granulate, transverse, widest at basal one-third; sides rounded, posterior angles obtuse. Elytral sides evenly rounded, apices separately evenly rounded. Fully winged. Large metatibial spur longer than first metatarsal segment. Male first protarsomere about as wide as protibial apex. Median lobe of aedeagus (Fig. 12) elongate, drawn out apically, bearing a pair of short setae laterally before apex. Parameres (Fig. 12) extending beyond apex of median lobe, inwardly curved apically; each paramere bearing two apical setae. Inverted internal sac (Fig. 13) with two pairs of large sclerites. Male genital segment (Fig. 14) longer than wide; sternite lobes with long, straight and thin midline projection; pleurites trilobed, longer lobes bearing long setae.

Distribution. Known only from Cuba. Previously known localities, records in Peck (1999) are: Cuba. Santiago de Cuba Province. Gran Piedra National Park, 1100 m. elevation.

New records. None.

Remarks. Occurring in upper elevation forest.

***Dissochaetus grenadensis* Jeannel 1936**

Figures 15, 16

Dissochaetus grenadensis Jeannel 1936: 154. Holotype male in BMNH, not seen. Type locality: St. John's River, Grenada Island.

Diagnosis. Total length 1.9–2.5 mm. Dark brown; mouthparts, antennae and legs paler; pubescence reddish yellow. Head finely, densely punctate. Antennae when laid back reaching beyond base of pronotum. Antennomeres VI–X wider than long. Eyes large. Pronotum granulate, transverse, widest at basal one-third; sides rounded, posterior angles roundly obtuse. Elytral sides evenly rounded, apices separately evenly rounded. Fully winged. Large metatibial spur longer than first metatarsal segment. Male first protarsomere about as wide as protibial apex. Median lobe of aedeagus (Fig. 15) evenly triangular in apical one-half, with three pairs of short lateral setae before apex. Parameres (Fig. 15) weakly sinuate, extending beyond apex of median lobe, each bearing two apical setae. Inverted internal sac (Fig. 15) with two pairs of elongate sclerotized structures. Male genital segment (Fig. 16) longer than wide; sternite lobes with short, broad, triangular projections bearing long setae; pleurite lobes not divided, each bearing long setae.

Distribution. Known only from Grenada. Previously known localities (from Jeannel 1936). Grenada (Island). St. John's River and Grand Etang, collected by H. H. Smith.

New records. Grenada. Grand Etang Forest Reserve. N12°04.846', W61°42.333', 9–28.VIII.2010, 360m, for. malaise, S. Peck, 10-60 (1, SBPC); N12°04.846', W61°42.333', 9-28.VIII.2010, 360m, rain for. FIT, S. Peck, 10-61 (6, SBPC); N12°04.162', W61°42.162', 10–28.VIII.2010, 400m, rain for. malaise, S. Peck, 10-62 (2, SBPC); N12°04.162', W61°42.162', 10–28.VIII.2010, 400m, rain for. FIT, S. Peck, 10-63 (13, SBPC); N12°04.162', W61°42.162', 15–18.VIII.2010, 400m, rain for. carrion tp., S. Peck, 10-70 (18, SBPC); N12°04.846', W61°42.333', 15–18.VIII.2010, 360m, rain for. carrion tp., S. Peck, 10-71 (13, SBPC; 3, MCZC; 3, FSCA; 3, FMNH).

***Dissochaetus jamaicensis* Peck 1972**

Figures 17, 18

Dissochaetus jamaicensis Peck 1972: 50; 1978: 244. Holotype male in MCZC, seen. Type locality: Hardwar Gap, St. Andrew Parish, Jamaica.

Diagnosis. Total length 2.3–2.8 mm. Dark brown; mouthparts, basal antennomeres, apex of antennomere XI, legs and elytral bases paler; pubescence reddish yellow. Head finely, densely punctate. Antennae when laid back reaching basal one-fifth of elytra; antennomeres VII, IX, and X slightly wider than long. Eyes large. Pronotum granulate, transverse, widest at basal one-third; sides rounded, posterior angles obtuse. Elytral sides evenly rounded, apices separately evenly rounded. Fully winged. Large metatibial spur longer than first metatarsal segment. Male first protarsomere wider than protibial apex. Median lobe of aedeagus (Fig. 18) elongate, drawn out apically. Parameres (Fig. 18) extend beyond apex of median lobe, inwardly curved apically; each paramere bearing two apical setae. Inverted internal sac (Fig. 18) with several pairs of sclerites. Male genital segment (Fig. 17) longer than wide; sternite lobes narrow, curved outward; pleurites bilobed, lobes bearing long setae.

Distribution. Known only from Jamaica. Previously known localities, from Peck (1972, 1978) are: Jamaica. Portland Parish. 1 mi W Ecclesdown. St. Andrew Parish. Greenwich, near Newcastle. Hardwar Gap. Hermitage Dam. New Castle. St. Ann Parish. 3 mi N Ewarton. St. Thomas Parish. Portland Gap at 5500 feet [1675m], and 4500 feet [1372m]. Whitfield Hall. Corn Puss Gap, 4 mi N Bath.

New records. Jamaica, Trelawny, Win[d]sor Caves, 24.III–02.IV.1991, T.K. Phillips, FIT (1, WIBF).

Remarks. The species has been taken in baited traps in forests from 457 to 1675 m elevation, and in leaf litter and at guano in an abandoned mine.

***Dissochaetus portoricensis* Hatch 1933**

Figures 19, 20

Dissochaetus portoricensis Hatch 1933: 199; Jeannel 1936: 154; Peck 1970: 237. Holotype female in USNM, seen. Type locality: El Yunque, Puerto Rico.

Diagnosis. Total length 2.1–2.8 mm. Dark brown; mouthparts, apex of antennomere XI, and tarsi paler. Pubescence reddish yellow. Head finely, densely punctate. Antennae when laid back reaching base of pronotum; antennomeres VI–X transverse. Eyes large. Pronotum granulate, transverse, widest at basal two-fifths; sides rounded, posterior angles obtuse. Elytral sides evenly rounded, apices separately evenly rounded. Fully winged. Large metatibial spur about as long as first metatarsal segment. Male first protarsomere about as wide as protibial apex. Median lobe of aedeagus (Fig. 20) elongate, evenly narrowing to rounded apex. Parameres (Fig. 20) narrow, nearly straight, reaching beyond apex of median lobe; each paramere bearing two apical setae. Inverted internal sac (Fig. 20) with pair of distinctive diagonal sclerites. Male genital segment (Fig. 19) longer than wide; apices of sternite lobes narrow, short and rounded.

Distribution. Known only from Puerto Rico. Previously known localities, from Hatch (1933), Peck (1970, 1978) are: Puerto Rico. Luquillo Experimental Forest, including El Yunque. Toro Negro Forest, Cerro Dona Juana. 15 mi S. San Juan, Aguas Buenas, Aguas Buenas caves.

New records. None.

Remarks. The species is known from baited pit traps in forests from 600 to around 1000 m elevation. We have seen more specimens from lower elevations.

***Dissochaetus smithi* Jeannel 1936**

Figures 21, 22

Dissochaetus smithi Jeannel 1936: 154. Holotype male in BMNH, not seen. Type locality: St. Vincent (West Indies).

Diagnosis. Total length 2.1–2.6 mm. Dark brown; mouthparts, antennomeres I–IV and apex of XI, and tarsi paler. Apical one-half of elytra with slight pruinosity. Pubescence reddish yellow. Head finely, densely punctate. Antennae reach beyond base of pronotum. Antennomeres VI–X wider than long. Eyes large. Pronotum granulate, transverse, widest at basal one-third; sides rounded, posterior angles obtuse. Elytral sides weakly rounded, apices separately evenly rounded. Fully winged. Large metatibial spur longer than first metatarsal segment. Male first protarsal segment narrower than protibial apex. Median lobe of aedeagus (Fig. 21) elongate, narrowly triangular in apical one-half. Parameres (Fig. 21) straight, extending beyond apex of median lobe, each bearing two apical setae. Inverted internal sac (Fig. 21) with two pairs of sclerotized structures. Male genital segment (Fig. 22) longer than wide; sternal lobes with short triangular projections bearing several setae; pleurite lobes not divided, each bearing setae.

Distribution. Known only from St. Vincent. Previously known localities (from Jeannel 1936) are: St. Vincent (no additional details), collected by H. H. Smith.

New records. St. Vincent. Hermitage Forest, E. of Spring Village, N13°14.86' W61°12.77', 15–27.VIII.2006, forest edge FIT, 348m, S. & J. Peck, 06-102B (3, SBPC); Hermitage Forest, E. of Spring Village, N13°14.86' W61°12.77', 18–23.VIII.2006, forest carrion traps, 350m, S. & J. Peck, 06-108 (12, SBPC); Vermont Nature Trails, E. of Layout, N13°13' W61°13', 19–24.VIII.2006, carrion bait traps, 360m, S. & J. Peck, 06-112 (7, SBPC).

***Dissochaetus sanctalucia* Peck and Cook, new species**

Figures 23, 24

Diagnostic description. Total length 2.0–2.5 mm. Reddish brown; vertex of head and apical two-thirds of elytra darker. Elytra pruinose. Pubescence reddish yellow. Head finely, densely punctate. Antennae when laid back reaching beyond base of pronotum. Antennomeres VI–X wider than long. Eyes large. Pronotum granulate, transverse, widest at basal one-third; sides rounded, posterior angles obtuse. Elytral sides rounded, apices separately evenly rounded. Fully winged. Large metatibial spur longer than first metatarsal segment. Male first protarsal segment at least as wide as protibial apex. Median lobe of aedeagus (Fig. 23) broad, apex drawn out and bearing a pair of lateral setae. Parameres (Fig. 23) elongate, curved inward apically, with membranous apices, each bearing two apical setae. Inverted internal sac (Fig. 23) with paired sclerotized structures. Male genital segment (Fig. 24) longer than wide; sternite lobes prolonged apically and each bearing several setae medially and apically; pleurite lobes not divided, bearing several setae apically.

Type material. Holotype, male, with the following label data: “LESSER ANTILLES: St. Lucia/ Mon Repos, 6.5 km W Fox Grove Inn/ 12–16.VII.2007, submontane forest/ carrion traps, N13°52.5' W60°56.4'/ 300m, S. & J. Peck, 07-59” (SBPC). Paratypes (61) have the following label data: same data as holotype (19, SBPC); same data except: 16-21.VII.2007, dung traps, 07-69 (9, SBPC); same data as holotype except: 10–28.VII.2007, malaises, 07-53A (3, SBPC); same data except: FITs, 07-53B (11, SBPC; 3, FSCA; 3, MCZC; 3, FMNH); ST. LUCIA, N. of Pass, 340m, Barre d’Isle Res., 13.93682°N, 60.95936°W, 29APR2009, on dead manicou, I.A. Foley colr. (9, WIBF); ST. LUCIA, Piton Troumasse trap site, 793m, 13.8535°N, 61.0098°W, 01–17JUNE2009, uv light, R.C. Winton & C.A. Maier (1, WIBF).

Distribution. Known only from St. Lucia.

Etymology. The epithet *sanctalucia* refers to the Lesser Antilles island of Saint Lucia where this species occurs.

Subfamily Leiodinae, the round fungus beetles

Tribe Agathidiini

Agathidium Panzer 1797

Agathidium Panzer 1797. Type species: *Tetratoma globosa* Herbst 1792 (= *Silpha seminulum* Linnaeus 1758, by monotypy).

Distribution. Holarctic, Oriental, New Guinea, Mexico, Guatemala.

Biology. Adults and larvae feed on slime molds (Wheeler and Miller 2005)

Agathidium minutum Peck and Cook, new species

Figures 28, 29

Diagnostic description. Total length 1.1 mm. Body strongly contractile, shining, without evident microsculpture, with scattered minute punctures bearing pale setae. Dark brown with pale venter and appendages, not iridescent. Head broad, postocular tempora not prominent, clypeus not protruding. Eyes reduced to about half normal size; with about 20-25 poorly defined facets. Antennomere XI as long as IX and X combined. Pronotum broad, emarginate anteriorly, rounded laterally and posteriorly; lateral margin almost evenly rounded in lateral view. Elytra broad, lateral margins rounded in dorsal view; striae absent. Flight wings present. Mesosternum on about same plane as metasternum. Tarsi 5-5-4 in male. Legs slender, male metafemur unmodified; anterior tarsomeres not widened. Median lobe of aedeagus (Fig. 28, 29) broad with narrow, arrow-shaped apex; operculum with paired rami. Parameres short, thin, not setose. Female unknown.

Type material. Known only from the holotype, male, with the following label data: "DOM. REP: Prov. HatoMayor/ Par. Nac. Los Haitises/ W. of Sabana de la Mar/ Bosque Humido, 01-02APR/ 1992, litter, M. A. Ivie" (WIBF).

Distribution. Known only from Hispaniola.

Remarks. The very small size of the species and the very contracted condition of the single specimen do not allow full visibility of some characters. We think it noteworthy but inexplicable that only one specimen has been collected. The collector is certain that there is no label error involved (M. A. Ivie, personal communication).

Etymology. The epithet *minutum*, Latin adjective, small, refers to the extremely small size of the only known specimen of this species.

Pseudoagathidium Angelini 1993

Pseudoagathidium Angelini 1993: 29. Type species: *Agathidium burgeoni* Portevin 1937 (orig. des.).

Distribution. Afrotropical (South Africa), Oriental (Angelini 2010) and Neotropics (St. Vincent).

Biology. Biology unknown, probably feeding on soft fungi in moist habitats.

***Pseudoagathidium ignotum* Peck and Cook, new species**

Figures 25–27

Diagnostic description. Total length 2.5–2.6 mm; body strongly contractile, shining, with scattered very minute punctures and scattered erect, pale setae; reddish brown, head darker, not iridescent. Head broad; postocular tempora short, not prominent, defined by supraocular carinae; clypeus not protruding; labrum with fringe of pale setae; mandibles with erect pale setae. Eyes prominent. Antennae of 11 antennomeres with 3-antennomere club; antennomere XI as long as IX and X combined. Pronotum broad, deeply emarginate anteriorly, evenly rounded laterally and posteriorly. Elytra broad, lateral margins rounded in dorsal view. Flight wings present. Mesosternum on about same plane as metasternum. Metasternum in both sexes with projecting broad median process with acute apex. Tarsi 4-4-4 in both sexes. Male pro- and mesobasitarsomeres with spatulate setae ventrally. Prolegs slender in both sexes. Metafemur unmodified in both sexes. Median lobe of aedeagus (Fig. 25, 26) elongate, parallel-sided in ventral view, with rounded, strongly up-turned apex; in lateral view, thickest near middle, evenly flattening to apex; operculum elongate-oval with rounded apex; inverted internal sac with elongate flagellum. Parameres absent. Spermatheca (Fig. 27) bulbous with narrow, curved neck.

Type material. Holotype, male, with the following label data: “WEST INDIES: St. Vincent/ Hermitage Forest, E of Spring/ Village, N13°14.86' W61°12.77'/ 16–27.VIII.2006, tree base forest/ litter/ 348m, S. & J. Peck, 06-106” (SBPC). Paratypes (3 males, 1 female) have the following label data: same data as holotype (2, SBPC); same data as holotype except: 21.VIII.2006, uv trap, 350m, 06-116 (2, SBPC).

Distribution. Known only from St. Vincent.

Remarks. This is the first reported occurrence of *Pseudoagathidium* outside the Afrotropical and Oriental regions. Because of the very poorly researched fauna of Agathidiini in Central and especially South America we do not think it profitable to speculate on the biogeographic meaning of this first New World record of *Pseudoagathidium*. It might have been an introduction through colonial-era commerce but this seems unlikely to us.

Etymology. The epithet *ignotum*, Latin adjective (unknown, strange), refers to the unexpected occurrence of this species in the West Indies.

Tribe Leiodini***Isoplastus* Horn 1880**

Isoplastus Horn 1880. Type species: *Isoplastus fossor* Horn, by monotypy.

Distribution. Eastern Nearctic, Mexico, and West Indies.

Biology. Poorly known, probably feeding on soft fungi in moist habitats.

***Isoplastus hispaniolensis* Peck and Cook, new species**

Figure 30

Diagnostic description. Body strongly convex; total length = 1.5–2.6 mm; greatest width = 1.1–1.9 mm. Yellowish brown to dark reddish brown, shining. Head moderately finely, densely punctate. Antenna with 10 antennomeres, antennal club robust, of 3 antennomeres; antennomere VII thin, about one-half as wide as VIII; apical antennomere distinctly narrower than IX. Pronotum finely, sparsely punctate; sides rounded, posterior angles roundly obtuse, base broadly rounded and sinuate laterally. Elytral striae punctures coarse, closely spaced; interstriae punctures minute, scattered. Metasternum moderately densely,

coarsely punctate. Meso- and metatibiae broad and spinose. Abdominal sternites lack transverse rows of punctures. Aedeagus (Fig. 30) broad, curved and flattened dorsoventrally; acute tips of paired apical appendages inwardly curved. Parameres thin and broad, extending beyond apex of median lobe; each paramere with two apical setae. Males are distinguished by long, dense setae ventrally on pro- and mesotarsi, and by a tooth-like process at apex of posterior margin of metafemur.

Type material. Holotype, male, with the following label data: “DOM.REP; LaVega Prov./ 10km NE Jarabacoa / Hotel Montana, forest / 18.VII–4.VIII.95, 550m / FIT, S. + J. Peck, 95-30” (SBPC). Paratypes (70) with the following label data: same data as holotype (9, SBPC); same data as holotype except: Racquet Club, 20.VII–4.VIII.95, mixed for., 95-37 (10, SBPC); same data except: Racquet Club Rd., 30.VII.95, forest litter, 95-50 (1, SBPC); DOM.REP; LaVega Prov., PN. A. Bermudez, Cienaga, 19.VII–2.VIII.95, 1020m, trop. evgrn. for., FIT, S. + J. Peck, 95-34 (11, SBPC); same data except: 1000m, 95-32 (7, SBPC; 3, FMNH); same data except: 1010m, 95-33 (10, SBPC; 3, MCZC); same data except: 1100m, 95-36 (10, SBPC; 3, FSCA); DOMIN.REP: Prov. LaVega, 12km NE Jarabacoa, 550m, 01–07SEP1988, pine forest, flight intercept trap, M. Ivie, Phillips & Johnson (2, WIBF); DOM.REP: Prov. HatoMayor, Par. Nac. Los Haitises, W. of Sabana de la Mar, Bosque humido, 16APR–01JUL1992, M.A. Ivie, fit (1, WIBF).

Distribution. Known only from Hispaniola .

Etymology. The epithet *hispaniolensis* refers to the West Indian island of Hispaniola on which this species occurs.

***Zeadolopus* Broun 1903**

Zeadolopus Broun 1903. Type species: *Zeadolopus spinipes* Broun, by monotypy. Note: revised by Daffner 1983.

=*Apheloplastus* Brown 1937: 173. Type species: *Cyrtusa egena* LeConte 1853 (orig. des.). Newton 1983: 174 syn.

Distribution. Worldwide, except Afrotropical.

Biology. Poorly known, probably feeding on soft fungi in seasonal and moist forest habitats.

Key to species of male *Zeadolopus* of the West Indies

- | | | |
|-------|--|--|
| 1. | Occurs in the Bahamas or Greater Antilles (including the Virgin Islands) | 2 |
| — | Occurs in the Lesser Antilles | 27 |
| 2(1). | Occurs in Bahamas; small, total length 1.2–1.3 mm; inverted internal sac of aedeagus (Fig. 37) with unique “A”-shaped configuration of sclerites | <i>Z. bahamensis</i> Peck and Cook, n.sp. |
| — | Does not occur in Bahamas; aedeagus without “A” shaped configuration of sclerites in inverted internal sac | 3 |
| 3(2). | Occurs on Cuba | 4 |
| — | Occurs elsewhere in the Greater Antilles | 8 |
| 4(3). | Larger, usually more than 2 mm in length; dark reddish brown to black | 5 |
| — | Smaller, usually less than 2 mm in length; yellow to yellowish brown | 6 |
| 5(4). | Posterior margin of meso- and metafemur concave, not expanded; median tube of aedeagus (Fig. 39) subtended apically by paired shorter rods that are recurved basally | <i>Z. atratus</i> Peck and Cook, n.sp. |

- Posterior margin of metafemur expanded, forming broad median toothlike process; ; aedeagus (Fig. 40) without conspicuous paired terminal rods lateral to median tube at apex ***Z. cubensis* Peck and Cook, n.sp.**
- 6(4). Median lobe of aedeagus (Fig. 41) constricted before apex; inverted internal sac medially with pair of sclerites bearing short spines ***Z. flavidus* Peck and Cook, n.sp.**
- Median lobe of aedeagus with apex evenly rounded; inverted internal sac without spines **7**
- 7(6). Paired apices of median lobe of aedeagus (Fig. 42) appearing truncate in dorsal view; inverted internal sac medially with 2 pairs of small sclerites ***Z. lucidus* Peck and Cook, n.sp.**
- Paired apices of median lobe of aedeagus (Fig. 43) acute in dorsal view; inverted internal sac medially with 2 consecutive structures, each broadened at base ***Z. pusillus* Peck and Cook, n.sp.**
- 8(3). Occurs on Cayman Islands; inverted internal sac (Fig. 38) medially with 2 consecutive structures with broadened bases, and with cluster of setae apically ***Z. caymanensis* Peck and Cook, n.sp.**
- Occurs elsewhere in the Greater Antilles; aedeagus without 2 consecutive medial structures with broadened bases and cluster of setae apically in inverted internal sac **9**
- 9(8). Occurs on Jamaica **10**
- Occurs elsewhere in the Greater Antilles **13**
- 10(9). Small, length less than 1.0 mm; eyes reduced, flight wings reduced; parameres distinctly shorter than median lobe of aedeagus (Fig. 47) ***Z. microps* (Peck)**
- Usually larger, length 1.0 mm or more; eyes large, flight wings fully developed; parameres not distinctly shorter than median lobe of aedeagus **11**
- 11(10). Vertical face of mesosternum triangular ventrally, narrowing dorsally to form median carina that is continuous with median carina of horizontal face of mesosternum; inverted internal sac of aedeagus (Fig. 45) with median urn-shaped structure containing 2 pairs of small sclerites ***Z. carinatus* Peck and Cook, n.sp.**
- Vertical face of mesosternum broad, smooth, not carinate; inverted internal sac of aedeagus without median urn-shaped structure containing 2 pairs of small sclerites **12**
- 12(11). Smaller species, total length 0.9–1.4 mm; uniformly yellowish to light reddish brown; paired apices of aedeagus (Fig. 46) broad; inverted internal sac with pair of elongate rodlike structures separated medially ***Z. jamaicensis* (Peck)**
- Larger species, total length 1.7–1.9 mm; reddish brown, pronotum darker, head nearly black; paired apices of aedeagus (Fig. 44) narrow, down-turned, appearing truncate in dorsal view; inverted internal sac with median rodlike structure subtended near base by pair of short, narrow sclerites ***Z. bicolor* (Peck)**
- 13(9). Occurs on Hispaniola; internal sac of aedeagus without median rodlike structure and pair of thin sclerites converging and widening apically **14**
- Occurs on the the islands of Puerto Rico, Mona, St. Croix, and in the Virgin Islands; inverted internal sac of aedeagus (Fig. 62) with median rodlike structure and pair of thin sclerites converging and widening apically, with lateral processes ***Z. puertoricensis* (Peck)**
- 14(13). Larger, total length usually greater than 2.0 mm; vertical face of mesosternum broad, convex, not carinate **15**
- Smaller, total length 1.0–2.0 mm; vertical face of mesosternum usually concave, lateral margins of concavity forming carinae that converge at base; if vertical face of mesosternum convex, total length less than 1.5 mm **20**

- 15(14). Body moderately convex; metatibia elongate, parallel-sided; metatarsomere 1 at least as long as 2–4 combined **16**
 — Body strongly convex; metatibia broad at apex; metatarsomere 1 shorter than 2–4 combined ...
 **17**
- 16(15). Metatarsomere 2 bearing strong spine that is longer than metatarsomere 3; parameres of aedeagus (Fig. 58) broad, inwardly curved apically; inverted internal sac with pair of rodlike structures **Z. longipes Peck and Cook, n.sp.**
 — Metatarsomere 2 unmodified; parameres of aedeagus (Fig. 52) slender, straight; inverted internal sac with pair of slender rodlike structures that are joined in apical half and surrounded by cone-shaped structure medially **Z. hispaniolensis Peck and Cook, n.sp.**
- 17(15). Mesotibia with elongate, curved spine at inner apical margin **Z. acinaces Peck and Cook, n.sp.**
 — Mesotibia lacking elongate, curved spine at inner apical margin **18**
- 18(17). Metafemur without toothlike process at apex of posterior margin; aedeagus (Fig. 53) broad, truncate apically **Z. iviei Peck and Cook, n.sp.**
 — Metafemur with toothlike process at apex of posterior margin; aedeagus not broad and apically truncate **19**
- 19(18). Body with moderate to strong reticulate microsculpture; median lobe of aedeagus (Fig. 49) with paired apices down-turned; inverted internal sac with elongate median structure and apical inverted “V”-shaped sclerite **Z. caborajo Peck and Cook, n.sp.**
 — Body shining, elytra with faint reticulate microsculpture; median lobe of aedeagus (Fig. 61) with paired apices inwardly curved, apically acute; inverted internal sac with single elongate structure medially **Z. pedernales Peck and Cook, n.sp.**
- 20(14). Vertical face of mesosternum concave; lateral margins of concavity forming carinae that converge at base; total length 1.2–2.0 mm **21**
 — Vertical face of mesosternum convex, smooth; total length 1.0–1.3 mm **25**
- 21(20). Paired apices of median lobe of aedeagus (Fig. 54) each with small dorsal appendage; inverted internal sac with small, narrow sclerites forming an inverted “V” with 2 crossbars **Z. jarabacoa Peck and Cook, n.sp.**
 — Paired apices of median lobe of aedeagus without appendages; inverted internal sac without small, narrow sclerites forming an inverted “V” with 2 crossbars **22**
- 22(21). Paired rodlike structure of inverted internal sac of aedeagus (Fig. 59) separate throughout length, subtended by pair of shorter sclerites apically **Z. oviedoensis Peck and Cook, n.sp.**
 — Rodlike structures of inverted internal sac of aedeagus separate only at base **23**
- 23(22). Paired apices of median lobe of aedeagus (Fig. 55) slender, apices acute **Z. lavega Peck and Cook, n.sp.**
 — Paired apices of median lobe of aedeagus appearing blunt in dorsal view **24**
- 24(23). Parameres of aedeagus (Fig. 51) short, sinuate before base **Z. hatomayor Peck and Cook, n.sp.**
 — Parameres of aedeagus (Fig. 60) elongate, nearly straight ... **Z. paulus Peck and Cook, n.sp.**
- 25(20). Inverted internal sac of aedeagus (Fig. 56) with setose urn-shaped sclerite **Z. minisculus Peck and Cook, n.sp.**
 — Inverted internal sac of aedeagus without setose urn-shaped sclerite **26**

- 26(25). Parameres of aedeagus (Fig. 57) slender; inverted internal sac with pair of elongate rodlike structures joined in apical half **Z. nanus Peck and Cook, n.sp.**
 — Parameres of aedeagus (Fig. 50) robust; inverted internal sac with distinct separation of median rodlike structures before base **Z. exiguus Peck and Cook, n.sp.**
- 27(1). Vertical face of mesosternum concave with lateral carinae; parameres of aedeagus (Fig. 63) with broad apices bearing elongate setae; Antigua, Montserrat, Saba, St. Kitts **Z. antiguensis Peck and Cook, n.sp.**
 — Vertical face of mesosternum convex or flat, not carinate; paramere apices with short setae **28**
- 28(27). Median lobe of aedeagus (Fig. 67) short; parameres short; paired apices of median lobe each with toothlike lateral process; Grenada, St. Vincent, St. Lucia **Z. conicatarsus (Champion)**
 — Median lobe of aedeagus elongate; parameres extend at least to apex of median lobe; paired apices lack lateral processes **29**
- 29(28). Median lobe of aedeagus (Fig. 69) elongate, cylindrical, strongly angulate dorsoventrally; St. Vincent **Z. angulatus Peck and Cook, n.sp.**
 — Median lobe of aedeagus broad, more or less flattened, weakly curved dorsoventrally **30**
- 30(29). Parameres of aedeagus (Fig. 65) expanded apically; inverted internal sac with median cluster of short, broad setae; Dominica **Z. dominica Peck and Cook, n.sp.**
 — Parameres of aedeagus narrow apically; inverted internal sac without cluster of short, broad setae **31**
- 31(30). Inverted internal sac of aedeagus (Fig. 66) with 2 consecutive median tubular structures; anteriorly, small median sclerite with lateral and basal extensions; St. Lucia and Martinique **Z. nesiotetes Peck and Cook, n.sp.**
 — Inverted internal sac of aedeagus (Fig. 64) with distinct rodlike structure in basal half; small sclerites at middle; widespread in Lesser Antilles **Z. parvantilliensis Peck and Cook, n.sp.**

***Zeadolopus bicolor* (Peck) 1978**

Figure 44

Zeadolopus bicolor (Peck) 1978: 253; Newton 1983: 174(ex *Apheloplastus*). Type female in CNCI, seen. Type locality: Goshen, St. Ann Parish, Jamaica.

Diagnosis. Body strongly convex. Length 1.7–1.9 mm; greatest width 1.1–1.2 mm. Reddish brown, pronotum darker, head nearly black; shining, with faint reticulate microsculpture. Head moderately coarsely, densely punctate. Antennal club robust. Eyes large. Pronotum finely, sparsely punctate, sides rounded, posterior angles roundly obtuse. Elytral striae weakly impressed; strial punctures coarse, separated by about 1 diameter; interstriae minutely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, smooth, not medially carinate. Metasternum coarsely, densely punctate laterally; punctures smaller, irregularly spaced medially. Mesofemur with posterior margin weakly expanded in both sexes. Metafemur of male with toothlike process at apex of posterior margin; apex of posterior margin roundly expanded in female. Mesotibia broad and spinose in both sexes; metatibia less strongly spinose in female. Male with more dense setae ventrally on pro- and mesotarsi. Aedeagus (Fig. 44) elongate, broad; paired apices down-turned, appearing truncate in dorsal view. Parameres moderately slender, reaching apex of median lobe, each bearing 2 apical setae. Inverted internal sac with median rodlike structure, subtended near base by pair of short, narrow sclerites. Spermatheca unknown.

Distribution. Known only from Jamaica. Previously known localities, from Peck (1978). Jamaica, St. Ann Parish, Goshen, 1500 feet [458m], 25.XII.73, S. & J. Peck, litter Berlese 257.

New records. Jamaica. Ocho Rios, Fern Gully, FIT, 19.II–1.III.84, D. Lindeman (1, SBPC).

***Zeadolopus conicatarsis* (Champion) 1925**

Figure 67

Zeadolopus conicatarsis (Champion) 1925: 9; Švec 1997: 216 (ex *Cyrtusa*). Holotype male in BMNH, not seen. Type locality: Grenada.

Diagnosis. Body strongly convex. Length 1.2–1.3 mm; greatest width 0.9–1.0 mm. Reddish brown, shining, microsculpture absent. Head punctures variable in size and density. Antennal club robust. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles rounded. Elytral striae weakly impressed; striae punctures large and closely spaced; interstriae minutely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum flat, not medially carinate. Metasternum coarsely, irregularly punctate laterally; medial punctures smaller. Male mesofemur with toothlike median and apical expansions of posterior margin. Male metafemur with acute toothlike expansion of apex of posterior margin. Mesotibia broad and spinose in both sexes; metatibia narrower, spinose. Male with sparse pale setae ventrally on pro- and mesotarsi. Median lobe of aedeagus (Fig. 67) short and broad, with paired apices each bearing a toothlike lateral process. Parameres narrow, short, not reaching apex of median lobe, each bearing 2 apical setae. Inverted internal sac with elongate median tubelike structure. Spermatheca of two connected oblong structures.

Distribution. Known only from the islands of Grenada, St. Vincent, St. Lucia. Previously known only from “Grenada” with no additional locality data.

New records. Grenada. Grand Etang Forest Reserve, N12°04.162' W61°42.162', 10–28.VIII.10, 400 m, rain forest FIT, S. Peck, 10-63 (15, SBPC); Grand Etang Forest Reserve, N12°04.846' W61°42.333', 9–28.VIII.10, 360 m, rain forest FIT, S. Peck, 10-61 1, SBPC). St. Vincent. Hermitage Forest E of Spring Village, N13°14.86' W61°12.77', 15–27.VIII.06, forest FIT, 348 m, S. & J. Peck, 06-102B (1, SBPC); same data except 16–27.VIII.06, 06-103B (5, SBPC); same locality, 15–27.VIII.06, forest edge malaise, 340 m, 06-104A (1, SBPC); same locality, 23-27.VIII.06, forest edge FIT, 340 m, 06-104B (1, SBPC). ST. LUCIA. Bordelais trap site, 13.9689°N 60.8859°W, 25–29.VI.2009, FIT, M.L. Gimmel & E.A. Ivie (4, WIBF).

***Zeadolopus jamaicensis* (Peck) 1978**

Figure 46

Zeadolopus jamaicensis (Peck) 1978: 250; Newton 1983: 174 (ex *Apheloplastus*). Type male in CNCI, seen. Type locality: Windsor, Trelawny Parish, Jamaica.

Diagnosis. Body strongly convex. Length 0.9–1.4 mm; greatest width 0.7–0.9 mm. Uniformly yellowish to light reddish brown, shining, without microsculpture. Head finely, moderately sparsely punctate. Antennal club moderately robust. Eyes large. Pronotum minutely, sparsely punctate, sides rounded, posterior angles rounded. Elytral striae weakly or not impressed; striae punctures larger apically, absent basally; interstriae with minute, scattered punctures. Flight wings fully developed. Vertical face of mesosternum broad, smooth, not carinate. Metasternum coarsely, densely punctate laterally, punctures smaller medially. Male mesofemur with posterior margin expanded to form small toothlike processes medially and apically, with serrations between the processes in larger specimens; female with a broad process at apex of posterior margin. Male metafemur with posterior margin expanded to form large apical toothlike process; in female, rounded, shallow lobe. Meso- and metatibiae broad and spinose in both sexes. Male with more dense setae on meso- and metatarsi. Aedeagus (Fig. 46) elongate, broad, with

paired apices inwardly curved. Parameres moderately slender, reaching near apex of median lobe, each bearing 2 apical setae. Inverted internal sac with pair of elongate rodlike structures separated medially. Spermatheca of 2 connected spheres.

Distribution. Known only from Jamaica. Previously known localities, from Peck (1978). Jamaica. Trelawny Parish. Windsor, 500 feet [152m]. 5 mi N Alberttown. Portland Parish, 0.5 mi NE Ecclesdown. St. Andrew Parish. Hardwar Gap. Morces Gap, 1375 m. St. Ann Parish. 1 mi S Claremont.

New records. Jamaica. Ocho Rios, Fern Gully, FIT, 19.II–1.III.84, D. Lindeman (25, SBPC).

Remarks. The species is known only from forest litter, from about 150 m to 1375m elevation.

***Zeadolopus microps* (Peck) 1978**

Figure 47

Zeadolopus microps (Peck) 1978: 252; Newton 1983 : 174 (ex *Apheloplastus*). Type male in CNCI, seen. Type locality: Morces Gap, St. Andrew Parish, Jamaica.

Diagnosis. Body strongly convex. Length 0.9 mm; greatest width 0.7 mm. Uniformly medium brown in color, shining, with faint reticulate microsculpture. Head finely, sparsely punctate. Antennal club moderately robust, strongly setose. Eye reduced, about twice as long as wide. Pronotum minutely, sparsely punctate; sides roundly angled at middle; posterior angles broadly, roundly obtuse. Elytra with minute, scattered setose punctures; striae absent. Flight wings reduced to tiny paddle-shaped rudiments (Peck 1977). Metasternum without coarse punctures. Male meso- and metafemur with posterior margin expanded, broadly rounded at apex, lacking tooth-like processes. Meso- and metatibia broad and spinose. Median lobe of aedeagus (Fig. 47) elongate, narrow, with paired apices inwardly curved. Parameres slender, short, not reaching apex of median lobe, each bearing 2 apical setae. Inverted internal sac with elongate median rodlike structure. Female unknown.

Distribution. Known only from Jamaica. Previously known localities, from Peck (1978). Jamaica. St. Andrew Parish. Morces Gap, 5000 ft. [1525m].

New records. None.

Remarks. The species is known only from leaf litter, at 1525m elevation.

***Zeadolopus puertoricensis* (Peck) 1978**

Figure 62

Zeadolopus puertoricensis (Peck) 1978: 252; Newton 1983 : 174(ex *Apheloplastus*). Type male in CNCI, seen. Type locality: Forest at Aguas Buenas, Puerto Rico.

Diagnosis. Body strongly convex. Length 1.0–1.5 mm; greatest width 0.6–1.1 mm. Uniformly light reddish brown, shining, without microsculpture. Head finely, sparsely punctate. Antennal club moderately slender. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles rounded. Elytral striae weakly to not impressed; strial punctures larger posteriorly, strial rows not reaching base; interstriae minutely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, not carinate. Metasternum coarsely, densely punctate laterally; punctures smaller medially. Posterior margin of male mesofemur expanded, forming small median and larger apical toothlike processes; female with smaller apical process. Posterior margin of male metafemur expanded apically to form large toothlike process; rounded expansion in female. Meso- and metatibia broad and spinose in both sexes. Male with more dense setae on pro- and mesotarsi. Median lobe of aedeagus (Fig. 62) elongate, broad, with

inwardly curved paired apices. Parameres slender, extending to or slightly beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac with median rod-like structure and anterior pair of shorter sclerites converging and widening apically, with lateral processes. Spermatheca of 2 connected spheres.

Distribution. Known only from the islands of Puerto Rico, Mona Island, and the Virgin Islands (Buck, Guana, St. Croix, St. Johns, St. Thomas, Tortola). Previously known localities, from Peck (1978). Puerto Rico. 15 mi S. San Juan, Aguas Buenas, forest at Aguas Buenas caves.

New records. Puerto Rico. San German Reserva For. Maricao, km 162 on Rt 120, 8.VIII.1999, P.W. Kovarik, leaf litter Berlese (1, WIBF); Mona Island, Mona Island Reserve, Cerezos Depression Forest, 18.0882797N 67.89995448W, 16.VI.2004, pitfall tp. E. Melendez-Ackerman (1, SBPC). Virgin Islands. St. John, Est. Caneel Bay, Caneel Hill, 240 ft. [73m], 17.XII-2.I.1992, VIBFP colrs., FIT #6 (4, WIBF); St. John, Est. Lameshur Bay, Reef Bay Trail, 5 ft. [1.5m], 3.I.1993-6.VII.1994, FIT #11 (4, WIBF); St. John Est. Hope, 980 ft. [299m], 3.I.93-6.VII.94, VIBFP colrs., FIT #10 (8, WIBF); St. John, Est. Hope, Bordeaux Mt., FIT #10, 27.VII-14.X.1994, 980 ft. [299m], M.A. & L.L. Ivie (1, WIBF); St. John, Hawknest Trail, 28.II.1984, W.B. Muchmore, grass under shrubs (1, WIBF); St. John Est. Carolina, 250', NW Coral Bay, litter among rocks, W.B. Muchmore (1, WIBF); Tortola, Mt. Sage Nat. Pk., N. side Mt. Sage, 1550 steps, 13.XI-10.XII.1992, T.R. Hughes, FIT #3 (6, WIBF); Guana Is., Quail Dove Ghut, 25.II-25.III.1993, 400 ft. [120m], Lio Wei Peng, FIT #5 (2, WIBF); Guana Is., Quail Dove Ghut, 13.XI-25.XII.1992, 600 ft. [183m], Lio Wei Peng, FIT #13 (2, WIBF); Guana Is., lwr Quail Dove Ghut, 18°20'N 64°34'W, 1-7.VII.1993, R.R. Snelling (1, WIBF); St. Thomas, Est. Nazareth, 40 ft. [12m], 1.I.1993-6.VII.1994; VIBFP colrs., FIT #9 (15, WIBF); St. Thomas, Est. Enighed, Magen's Bay Arboretum, night, 1.I.93, VIBFP colrs. (1, WIBF); St. Croix, Estate North Star, 18.XII-6.I.1993, 60 ft. [18m], FIT #7, J. Keularts (5, WIBF); same data except 18.VI-19.VII.1993 (6, WIBF); same data except 15.XI-18.XII.1992 (9, WIBF); same data except 19.VII-23.VIII.1993 (1, WIBF); same data except 10-15.XI.1992 (2, WIBF); same data except 23.II-23.III.1993 (1, WIBF); same data except 20.IV-19.V.1993 (1, WIBF); St. Croix, Est. North Hall, Creque Gut, 100 ft. [30m], 18.VII-23.VIII.1993, J. Keularts, FIT #8 (3, WIBF); same data except 19.V-18.VI.1993 (2, WIBF); same data except 18.XII-6.I.1993 (1, WIBF); same data except 23.II-17.III.1993 (1, WIBF); St. Croix, Est. Fountain, 350 ft. [107m], 6.I-23.II.1993, J. Keularts, FIT #15 (1, WIBF); same data except 19.V-18.VI (1, WIBF); St. Croix, Est. North Star, 19.X.1993, J.F. Keularts (1, WIBF); St. Croix, Est. River, 8.II.1995, J. Keularts, FIT (1, WIBF); Buck Is., Buck Is. Reef N. M., V-VI.1993, FIT #14, 140 ft. [43m], Z. Hillis (5, WIBF); same data except 1-31.III.1993 (10, WIBF); same data except 5.VIII-1.IX.1993 (1, WIBF); same data except IX-10.X.1993 (1, WIBF); Buck Is., Buck Is. Reef N. M., 8-29.I.1993, FIT #15, 340 ft. [104m], Z. Hillis (16, WIBF); same data except VII-VIII.1993 (4, WIBF); same data except 8.XI.1994-19.I.1995 (10, WIBF).

Remarks. The Virgin Islands (except St. Croix) are all on the same marine bank as Puerto Rico, and all the islands were connected as dry land during times of Pleistocene glacial low sea levels. In contrast, Mona Island (west of Puerto Rico) and St. Croix (southeast of Puerto Rico) are on their own marine banks and have not been connected by dry land with Puerto Rico. This suggests dispersal by flight across the water gaps to Mona and St. Croix.

***Zeadolopus acinaces* Peck and Cook, new species**

Figure 48

Diagnostic description. Body strongly convex. Length 2.6-2.8 mm; greatest width 1.9-2.0 mm. Dark reddish brown, shining, with faint reticulate microsculpture on elytra. Head punctation moderately fine and dense. Antenna unicolorous dark reddish brown, club moderately robust; club segments 2 and 3 equal, wider than terminal (4th) segment. Eyes large. Pronotum finely, moderately sparsely punctate; sides rounded, posterior angles rounded. Elytral striae not impressed, striae punctures large and closely spaced; only 5th line of punctures reaching elytral base; interstriae minutely, sparsely punctate with a few scattered large punctures; epipleuron not punctate. Flight wings fully developed. Vertical face of mesosternum broad, not medially carinate. Metasternum coarsely, densely punctate with median impunctate

area. Femora and tibiae not sexually dimorphic; male pro- and mesotarsi more densely setose ventrally. Mesofemur unmodified; mesotibia broad and strongly spinose, with an elongate, curved spine at inner apical margin. Metafemur slightly produced at apex of posterior margin; metatibia broad, spinose. First metatarsomere longer than second. First visible abdominal segment with about 3 irregular rows of non-foveate punctures. Median lobe of aedeagus (Fig. 48) elongate, broad, with paired apices inwardly curved. Parameres slender, straight, extending to apex of median lobe, each bearing two apical setae, one apical and one sub-apical. Inverted internal sac with pair of rodlike structures joined apically. Spermatheca of two connected spheres.

Type material. Holotype, male, with the following label data: “DOM. REP: Prov. Pedernales/ Las Abejas, 1225m/ 18°09'03”N, 71°37'48”W/ 28JUL–03AUG1999/ G.O.Dominici, F.I.T.” (WIBF). Paratypes (3) with same data as holotype (1, WIBF; 2, SBPC).

Distribution. Known only from Hispaniola.

Etymology. The epithet *acinaces* (Latin, scimitar) refers to the long, curved mesotibial spine in both sexes of this species.

***Zeadolopus angulatus* Peck and Cook, new species**

Figures 68, 69

Diagnostic description. Body strongly convex. Length 1.8–1.9 mm; greatest width 1.3–1.5 mm. Reddish brown, shining, microsculpture absent. Head punctures of moderate size and density. Antennae unicolorous dark reddish brown, club robust. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles broadly obtuse. Elytral striae weakly impressed; strial punctures large and closely spaced; interstriae minutely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum flat, not medially carinate. Metasternum coarsely, densely punctate laterally; finely, sparsely punctate medially. In both sexes, mesofemur with lobed expansion of apex of posterior margin. Metafemur robust, with a toothlike expansion of apex of posterior margin in male, lobed in female. Mesotibia in both sexes broad and spinose; metatibia more slender and spinose. Male with dense pale setae ventrally on pro- and mesotarsi. Median lobe of aedeagus (Fig. 68, 69) elongate, cylindrical, strongly angulate dorsoventrally in lateral view; paired apices elongate, parallel. Parameres slender in dorsal view, broad in lateral view, reaching apex of median lobe, each bearing two apical setae. Inverted internal sac with elongate median tubelike structure and apical triangular sclerite with two posterior projections. Spermatheca of 2 connected spheres.

Type material. Holotype, male, with the following label data: “WEST INDIES: St. Vincent/ Hermitage Forest, E of Spring/ Village, N31°14.86' W61°12.77'/ 23–27.VIII.06, forest edge FIT/ 340 m, S. & J. Peck, 06-104B” (SBPC). Paratypes (7) have the following label data: same data as holotype except: 16–27.VIII.06, forest FIT trap, 348 m, 06-103B (3, SBPC); same data as holotype except: 15–27.VIII.06, forest edge FIT trap, 348 m, 06-102B (2, SBPC); St. Vincent, Vermont Nature Trails, 7 km E Buccament, N13°13' W61°13', 11–20.VI.07, rainforest FIT, 370 m, S. & J. Peck, 07-18 (2, SBPC).

Distribution. Known only from St. Vincent.

Etymology. The epithet *angulatus* (Latin, with angles) refers to the strongly angled aedeagus characteristic of this species.

***Zeadolopus antiguensis* Peck and Cook, new species**

Figure 63

Diagnostic description. Body strongly convex. Length 1.6–2.0 mm; greatest width 1.1–1.4 mm. Brown to nearly black, shining, faint reticulate microsculpture on elytra. Head moderately finely, evenly punc-

tate. Antennal club robust. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles obtuse. Elytral striae weakly impressed; strial punctures large and closely spaced; interstriae finely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum with median concavity subtended by lateral ridges. Metasternum coarsely, densely punctate laterally; punctures smaller medially. Mesofemur unmodified in both sexes. Male metafemur with acute, curved toothlike expansion of apex of posterior margin. Meso- and metatibiae broad and spinose in both sexes. Male with dense pale setae ventrally on pro- and mesotarsi. Median lobe of aedeagus (Fig. 63) broad, with inwardly curved paired apices. Parameres moderately slender in dorsal view, extending beyond apex of median lobe, with expanded apices each bearing 2 elongate setae. Inverted internal sac with median pair of curved sclerites. Spermatheca of 2 connected oblong structures.

Type material. Holotype, male, with the following label data: “ANTIQUA [ANTIGUA]: CHRISTION [CHRISTIAN]/ VALLEY/ Malaise Trap 8M, 11.XI.1991/ FAO insect survey” (FSCA). Paratypes (66) have the following label data: same data as holotype except: BL trap, 16.X.1991 (1, FSCA); same data as holotype except: BL trap, 11–18.XI.1991 (1, FSCA); Antigua, Christian Valley Ag. Stn., 2–9.IX.1991, malaise trap, FAO insect survey (2, FSCA); same data except: R.E. Woodruff (1, FSCA); same data except: 17–23.IX.1991, R.E. Woodruff (1, FSCA); Antigua, Christian Valley, 25.X–11.XI.1991, FAO insect survey blacklight trap (7, FSCA; 4, SBPC); same data except: 26.VIII.1991 (2, FSCA); Saba, Neth. Antl., 690m, Bud’s Mtn., Mt. Scenery. Trails, 17.63276°N, 63.23979°W, 14.III–1.IV.2008, FIT, D.S. Sikes, J.A. Slowick, J.F. Johnson (12, WIBF); same data except: 643m, FIT4, 1–25.V.2008, Sikes, Ivie (9, WIBF); same data except: 687–700m, 1.IV–1.V.2008, Malaise, D.S. Sikes, et al (8, WIBF; 8, SBPC); Saba, Neth. Antl., 525 m, Ecolodge on Mt. Scenery, 17.62879°N 63.23785°W, 1.IV–1.V.2008, D. Sikes, J. Slowik, FIT w/pitfall (3, WIBF); Saba, Neth. Ant.: Scout’s Place Hotel, 402 m, 17.62773°N 63.23122°W, ±16.1m pool, 12–15.III.2008, D.S. Sikes (1, WIBF); Montserrat, Fogerty Ghaut, fogging canopy, 16°46.24’N 62°12.53’W, 1224 ft. [373m], 6.XII.2002, J. Daley, L. Aymer (1, WIBF); Montserrat, Cassava Ghaut, Beattie House, 16°45.91’N 62°12.95’W, 5–16.II.2002, 632 ft. [193m], A. Krakower, u. v. light (1, WIBF); Montserrat, Woodlands, Cassava Ghaut, Beattie House, 30.III–6.IV.2002, uv light, M.A. Ivie (1, WIBF); same data except: 1–29.VI.2003, K.A. Marske, FIT (1, WIBF); St. Kitts: Otleys Plantation, 28.X–5.XI.1991, Earl Thomas, malaise trap (2, FSCA).

Distribution. Known from the islands of Antigua, Saba, St. Kitts and Montserrat.

Etymology. The epithet *antiguensis* (Antigua + the Latin suffix *-ensis*, locality) refers to the type locality of this species on the Lesser Antilles island of Antigua.

***Zeadolopus atratus* Peck and Cook, new species**

Figure 39

Diagnostic description. Body strongly convex. Length 1.6–2.3 mm; greatest width 1.1–1.6 mm. Dark reddish brown to black, appendages dark reddish brown; shining, with faint reticulate microsculpture. Head with moderately fine, irregularly spaced punctation. Antennal club robust. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles roundly obtuse. Elytral striae weakly impressed; strial punctures coarse, dense; interstriae minutely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, convex, not medially carinate. Metasternum finely, irregularly punctate medially; coarsely, densely punctate laterally. In both sexes, posterior margins of meso- and metafemur concave, not expanded; mesotibia evenly widened from base to apex, strongly spinose; metatibia narrower, strongly spinose. Pale setae of ventral face of pro- and mesotarsi more conspicuous in males. Median lobe of aedeagus (Fig. 39) broad, parallel-sided, curved dorsoventrally; paired apices with acute tips inwardly curved. Parameres moderately slender, reaching apex of median lobe, each bearing 2 apical setae. Inverted internal sac with median tube subtended apically by paired shorter rods that are recurved basally. Spermatheca of two connected spheres.

Type material. Holotype, male, with the following label data: “CUBA: Santiago Prov./ Gran Piedra, Isabelica/ 7–17.XII.95, 1100m/ elfin forest FITs/ S. Peck, 95-84” (SBPC). Paratypes (20) have the following label data: same data as holotype (19, SBPC); same data as holotype except: Met. Radar, 6–17.XII.95, 95-76 (1, SBPC).

Distribution. Known only from Cuba.

Remarks. Because of the geographic proximity of south Florida and Cuba, it might be expected that the species of the two areas might be closely related. However, comparison of *Z. atratus* n. sp. of Cuba with the species of *Zeadolopus* of south Florida (Peck and Cook 2013b) showed no close affinity.

Etymology. The epithet *atratus* (Latin, dressed in black) refers to the dark coloration of this species.

***Zeadolopus bahamensis* Peck and Cook, new species**

Figure 37

Diagnostic description. Body strongly convex. Length 1.2–1.3 mm; greatest width 0.8–0.9 mm. Reddish brown, shining, elytra with faint reticulate microsculpture. Head finely, sparsely punctate. Antennal club moderately robust. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles rounded. Elytral striae weakly impressed; striae punctures coarse and dense; interstriae minutely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, convex, not medially carinate. Metasternum coarsely, densely punctate laterally; finely punctate medially. Male with toothlike process at apex of posterior margin of metafemur; metafemur unmodified in female. In both sexes, mesotibia broad and spinose, metatibia narrower and spinose. Male with dense setae on ventral surface of pro- and mesotarsus. Median lobe of aedeagus (Fig. 37) short, broad; paired apices inwardly curved at apex. Parameres slender, weakly curved, extending beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac of aedeagus with elongate, median flagellum-like structure; in apical half, an A-shaped sclerotized structure. Spermatheca of two connected spheres.

Type material. Holotype male, with the following label data: “BAHAMAS: Andros Island/ Forfar Field Sta., Stafford/ Creek, 4-VI-2001, / M.C. Thomas, blacklight/ trap in coastal coppice” (FSCA). Paratypes (2) have the following label data: same data as holotype (1, FSCA); with same data except: 7-VI-2001, coll. B.K. Dozier (1, FSCA).

Distribution. Known only from Andros Island in the Bahamas Islands.

Remarks. Because of the geographic proximity of south Florida and Andros of the Bahamas, it might be expected that the species of the two areas might be closely related. Comparison of *Z. bahamensis* n. sp. of Andros with the species *Zeadolopus egenus* (LeConte), known from Florida and other nearby states (Peck and Cook 2013b), showed similarity in structure of the aedeagus. This is the only example of any affinity of the leiodid fauna of the Bahamas and Florida.

Etymology. The epithet *bahamensis* (Bahama + the Latin suffix *-ensis*, locality) refers to the only known locality for this species in the Bahamas.

***Zeadolopus caborojo* Peck and Cook, new species**

Figure 49

Diagnostic description. Body strongly convex. Length 1.9–2.6 mm; greatest width 1.4–2.0 mm. Dark reddish brown with moderate to strong reticulate microsculpture on head, pronotum and elytra. Head punctation moderately coarse and dense. Antennal club darker than funicle, moderately robust. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles rounded. Elytral striae not

impressed, striae punctures moderately large and closely spaced; interstriae minutely, sparsely punctate with a few scattered large punctures. Flight wings fully developed. Vertical face of mesosternum broad, concave, not medially carinate. Metasternum with coarse punctures laterally, finer punctures medially. Male protarsi with dense setae ventrally. Male mesofemur weakly produced at anterior third and apex of posterior margin. Male metafemur with toothlike process at apex of posterior margin. Mesotibia and metatibia broad and strongly spinose. Median lobe of aedeagus (Fig. 49) elongate, broad, with paired apices inwardly curved and down-turned. Parameres slender, weakly curved, reaching about to apex of median lobe, each bearing 2 apical setae. Inverted internal sac with elongate, median rodlike structure and apical inverted V-shaped sclerite. Female unknown.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: Pedernales/ 28 kmN CaboRojo, 760m/ evergreen dry forest/ 29.XI-3.XII.91, intercept/ trap, Masner & Peck, 91-349” (SBPC). Paratypes (3) have the following label data: same data as holotype (1, SBPC); same data as holotype except: 565m, intercept, 91-347 (1, SBPC); Dominican Republic: Pedernales, 26 km N Cabo Rojo, 18-06N, 71-38W. 730 m. 20 July 1990, C.W. Young, J.E. Rawlins, S. Thompson (1, CMNH).

Distribution. Known only from Hispaniola.

Etymology. The epithet *caborojo*, Latin noun in apposition, refers to the type locality of this species.

***Zeadolopus carinatus* Peck and Cook, new species**

Figure 45

Diagnostic description. Body strongly convex. Length 1.2–1.7 mm; greatest width 0.9–1.3 mm. Reddish brown, pronotum darker, head nearly black; shining, without microsculpture. Head finely, moderately densely punctate. Antennal club robust. Eyes large. Pronotum finely punctate, punctures more dense laterally; sides rounded, posterior angles roundly obtuse. Elytral striae weakly impressed; striae punctures smaller medially, increasing in size laterally; interstriae minutely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum triangular ventrally, narrowing dorsally to form median carina that is continuous with median carina of horizontal face of mesosternum. Metasternum coarsely, irregularly punctate laterally; punctures fine and sparse medially. Posterior margin of meso- and metafemur of both sexes weakly expanded before apex. In both sexes, mesotibia broad and spinose; metatibia narrower, not strongly spinose. Male with more dense setae ventrally on pro- and mesotarsi. Median lobe of aedeagus (Fig. 45) elongate, broad, narrowed apically; paired apices inwardly curved. Parameres slender, elongate, extending beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac with median urn-shaped structure, constricted and forked basally, containing 2 pairs of small sclerites. Spermatheca of 2 connected speres.

Type material. Holotype, male, with the following label data: “JAMAICA: Ocho Rios/ Fern Gully FIT/ 19.II-1.III.84/ D. Lindeman” (SBPC). Paratypes (16) with same data as holotype (SBPC).

Distribution. Known only from Jamaica.

Etymology. The epithet *carinatus* (Latin, having a carina) refers to the median carina dorsally on the vertical face of the mesosternum of this species.

***Zeadolopus caymanensis* Peck and Cook, new species**

Figure 38

Diagnostic description. Body strongly convex. Length 1.2–1.5 mm; greatest width 0.9–1.2 mm. Yellowish to yellowish brown, shining, faint reticulate microsculpture on elytra. Head finely, sparsely punctate. Antennal club robust. Eyes large. Pronotum minutely, sparsely punctate; sides rounded, posterior

angles rounded. Elytral striae not impressed; strial punctures large, closely spaced; interstriae minutely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, convex, not medially carinate. Metasternum coarsely, densely punctate laterally; punctures smaller and evenly spaced medially. Mesofemur with posterior margin evenly expanded in both sexes. Male metafemur with acute, curved, toothlike expansion of apex of posterior margin. Meso- and metatibiae broad and spinose in both sexes. Male with dense pale setae ventrally on pro- and mesotarsi. Median lobe of aedeagus (Fig. 38) broad, with inwardly curved paired apices. Parameres slender, reaching slightly beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac with anterior long setae, pair of short sclerites angled basad, and 2 long median sclerotized structures aligned consecutively. Spermatheca of 2 connected structures of unequal size, one spherical, the other larger and more elongate.

Type material. Holotype, male, with the following label data: “CAYMAN: Grand/ Cayman, Mastic Trail S/ FIT, 20–29 May 2009/ R. Turnbow” (FSCA). Paratypes (12) with same data as holotype (6, FSCA; 6, SBPC).

Distribution. Known only from Grand Cayman Island of the Cayman Islands group.

Etymology. The epithet *caymanensis* (Cayman + the Latin suffix *-ensis*, locality) refers to the type locality of this species on Grand Cayman Island.

***Zeadolopus cubensis* Peck and Cook, new species**

Figure 40

Diagnostic description. Body strongly convex. Length 2.0–2.6 mm; greatest width 1.7–2.0 mm. Dark reddish brown, pronotum darker, head dark reddish brown to black; shining, with faint reticulate microsculpture. Head with moderately coarse, dense punctation. Antennal club robust. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles roundly obtuse. Elytral striae weakly impressed; strial punctures coarse, dense; interstriae minutely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, convex, not medially carinate. Metasternum irregularly, coarsely punctate medially; densely, coarsely punctate laterally. Posterior margin of mesofemur of both sexes expanded, forming a broad median tooth in males. Males with curved toothlike expansion of apex of posterior margin of metafemur; posterior margin broadly expanded in females. In both sexes, mesotibia evenly expanded from base to apex and strongly spinose; metatibia narrower, strongly spinose. Both sexes with pale setae ventrally on pro- and mesotarsi; setae more dense in males. Median lobe of aedeagus (Fig. 40) elongate, parallel-sided, curved dorsoventrally; paired apices narrow, weakly inwardly curved. Parameres slender, elongate, extending beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac with median sclerotized tube. Spermatheca oblong with median constriction.

Type material. Holotype, male, with the following label data: “CUBA: Santiago Prov./ Gran Piedra, Isabelica/ 7–17.XII.95, 1100m/ elfin forest FITs/ S. Peck, 95–84” (SBPC). Paratypes (5) have the following label data: with same data as holotype (3, SBPC); CUBA: Cienfuegos / Mayari, 1 km E / 21.97114 – 80.12172, 866m / 18.V.2013, R. Anderson / 2013-018, karst forest litter (1, SBPC); CUBA: Cienfuegos / Rio Cabagan / 21.93123 – 80.08461, 651m / 20.V.2013, gallery forest litter (1, SBPC).

Distribution. Known only from Cuba.

Remarks. Because of the geographic proximity of south Florida and Cuba, it might be expected that the species of the two areas might be closely related. However, comparison of *Z. cubensis* n. sp. of Cuba with the species of *Zeadolopus* of south Florida (Peck and Cook 2013b) showed no close affinity.

Etymology. The epithet *cubensis* (Cuba + the Latin suffix *-ensis*, locality) refers to the occurrence of this species on Cuba.

***Zeadolopus dominica* Peck and Cook, new species**

Figure 65

Diagnostic description. Body strongly convex. Length 1.2–1.6 mm; greatest width 0.9–1.1 mm. Reddish brown, shining, without microsculpture. Head punctation moderately fine, irregularly spaced. Antennal club moderately robust. Eyes large. Pronotum minutely, sparsely punctate; sides rounded, posterior angles rounded. Elytral striae weakly impressed; strial punctures large and closely spaced; interstitial punctures minute, sparse. Flight wings fully developed. Vertical face of mesosternum broad, convex, not medially carinate. Metasternum coarsely, densely punctate laterally; punctures smaller medially. In both sexes, mesofemur with posterior margin broadly expanded. Male metafemur with toothlike expansion at apex of posterior margin. In both sexes, mesotibia broad and spinose; metatibia narrower, spinose. Male pro- and mesotarsi bearing dense pale setae ventrally. Median lobe of aedeagus (Fig. 65) short and broad; paired apices evenly inwardly curved. Parameres broad, sinuate, extending beyond apex of median lobe, with expanded apices bearing 2 setae. Inverted internal sac at middle with short rod-like sclerite forked basally; cluster of broad setae in apical third. Spermatheca curved, tubular, with constriction at apical third.

Type material. Holotype, male, with the following label data: “WEST INDIES: DOMINICA/Springfield Estate, 31.V–16.VI.04/ N15°20.841' W62°22.000', 550 m/ ridgetop forest above Mt Joy, FIT/ S. & J. Peck, 04-90” (SBPC). Paratypes (31) have the following label data: same data as holotype (3, SBPC); same data as holotype except: 400 m, Mt Joy House, wet montane forest, 04-89 (10, SBPC); West Indies, Dominica, Middleham Falls trail, Cochrane, N15°20.922' W61°20.747', 650 m, forest FITs, 31.V–11.VI.04, S. & J. Peck, 04-93 (17, SBPC); West Indies, Dominica, Syndicate Estate trail, E. of Dublanc, N15°31.202' W61°25.015', 560 m, montane rainforest FIT, 2–13.VI.04, S. & J. Peck, 04-98 (1, SBPC).

Distribution. Known only from Dominica.

Etymology. The epithet *dominica*, Latin noun in apposition, refers to the occurrence of this species on the Lesser Antilles island of Dominica.

***Zeadolopus exiguus* Peck and Cook, new species**

Figure 50

Diagnostic description. Body strongly convex. Length 1.0–1.3 mm; greatest width 0.7–0.9 mm. Yellowish brown to reddish brown, shining, without microsculpture. Head finely, sparsely punctate. Antennal club moderately robust. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles obtuse. Elytral striae weakly impressed; strial punctures large, closely spaced; interstriae finely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, convex, not medially carinate. Metasternum with coarse, irregularly spaced punctures laterally; punctures smaller medially. Male mesofemur weakly produced near base of posterior margin; mesofemur unmodified in female. Male metafemur with toothlike process at apex of posterior margin; metafemur unmodified in female. In both sexes, meso- and metatibia broad and spinose. Male with more dense setae ventrally on pro- and mesotarsi. Median lobe of aedeagus (Fig. 50) elongate, broad, with inwardly curved, paired apices. Parameres moderately slender, weakly curved, extending beyond apex of median lobe, each bearing two apical setae. Inverted internal sac with elongate rod-like structure. Spermatheca tubular, weakly curved, weakly constricted at middle.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: Pedernales/ 28 kmN Cabo Rojo, 760m/ evergreen dry forest/ 29.XI–3.XII.91, intercept/ trap, Masner & Peck, 91-349” (SBPC). Paratypes (15) have the following label data: same data as holotype except: 26 kmN Cabo Rojo, 565 m, 91-347 (8, SBPC); DOM. REP., Pedernales, 4kmW Oviedo, 10 m, arid thorn forest, 28.XI–4.XII.91, intercept traps, Masner & Peck, 91-344 (1, SBPC); DOM. REP., Prov. Pedernales, 24 km N. Cabo Rojo, 610 m., 20.VIII–9.IX.1988, flight intercept trap, M.A. Ivie, T.K. Philips & K.A. Johnson (3, WIBF); DOM.

REP, Prov. Pedernales, ca. 35 km N. Cabo Rojo, 1250m, Las Abejas, 26.VIII–9.IX.1988, flight intercept trap, M. Ivie, Philips & Johnson (2, WIBF); DOM. REP., Barahona, 7 kmNW Paraiso, rainforest remnant, 27.XI–4.XII.91, intercept tp, Masner & Peck, 91-341 (1, SBPC).

Distribution. Known only from Hispaniola.

Etymology. The epithet *exiguus* (Latin, small) refers to the small size of this species.

***Zeadolopus flavidus* Peck and Cook, new species**

Figure 41

Diagnostic description. Body strongly convex. Length 1.6–1.8 mm; greatest width 1.2–1.4 mm. Yellow to yellowish brown; somewhat shining, with reticulate microsculpture. Head finely, sparsely punctate. Antennal club moderately slender. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles roundly obtuse. Elytral striae weakly impressed, striae 5–8 not reaching anterior margin; strial punctures closely spaced, moderately coarse; interstriae minutely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, convex, not medially carinate. Metasternum moderately finely, irregularly punctate medially; coarsely, densely punctate laterally. Mesofemur with posterior margin expanded in both sexes, with a median toothlike expansion; additionally, in the male, a toothlike expansion at apex. Metafemur of both sexes with toothlike expansion at apex of posterior margin. Meso- and metatibiae of both sexes broad, flat and strongly spinose. Both sexes with inconspicuous pale setae ventrally on pro- and mesotarsi. Median lobe of aedeagus (Fig. 41) constricted near middle and before apex, curved dorsoventrally; paired apices inwardly curved. Parameres slender with widened apices, reaching slightly beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac with median tube sclerotized in basal half; medially a pair of sclerites bearing short spines. Spermatheca of 2 connected spheres.

Type material. Holotype, male, with the following label data: “CUBA: Santiago Prov./ Santiago, Jardin Botanico/ 5–17.XII.95, 5m/ disturb for. FITs/ S. Peck, 95-74” (SBPC). Paratypes (5) with the following data: same data as holotype (2, SBPC); same data except: 50m, scrub for., 95-72 (2, SBPC); CUBA, Santiago Prov., Gran Piedra, Segundo Chorrito, 7–17.XII.95, 600m, km 8, forest stream FIT, S. Peck, 95-83 (1, SBPC).

Distribution. Known only from Cuba.

Remarks. Because of the geographic proximity of south Florida and Cuba, it might be expected that the species of the two areas might be closely related. However, comparison of *Z. flavidus* n. sp. of Cuba with the species of *Zeadolopus* of south Florida (Peck and Cook 2013b) showed no close affinity.

Etymology. The epithet *flavidus* (Latin, yellowish) refers to the color of this species.

***Zeadolopus hatomayor* Peck and Cook, new species**

Figure 51

Diagnostic description. Body strongly convex. Length 1.3–2.0 mm; greatest width 0.9–1.5 mm. Dark reddish brown with paler venter and appendages; shining, without microsculpture. Head punctation moderately coarse and dense. Antennal club moderately robust. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles roundly obtuse. Elytral striae not impressed; strial punctures coarse, fairly closely spaced; interstriae finely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, concave; lateral margins of concavity forming carinae that converge at base. Metasternum coarsely, densely punctate. Mesofemur broadly produced at apex of posterior margin in both sexes. Metafemur of male with toothlike expansion at apex of posterior margin; very weakly pro-

duced in female. In both sexes, meso- and metatibiae broad and spinose. Male with more dense setae ventrally on pro- and mesotarsi. Median lobe of aedeagus (Fig. 51) elongate, broad; paired apices inwardly curved, appearing blunt in dorsal view. Parameres moderately robust, with basal sinuation, reaching apex of median lobe, each bearing 2 apical setae. Inverted internal sac with elongate rod-like structure divided basally. Spermatheca of 2 connected spheres.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: Prov. HatoMayor/ Par. Nac. Los Haitises/ W. of Sabana de la Mar/ 01–16APR1992, 10m, M.A./ Ivie, flight intercept trap” (WIBF). Paratypes (22) have the following label data: same data as holotype (3, WIBF); same data except: 01–02APR1992 (1, WIBF); same data except: Bosque humido, 16APR–1JUL1992 [elevation omitted] (8, WIBF; 8, SBPC); same locality as holotype, 02JULY1992–16JULY1993, D. Sikes & R. Rosenfield, flight intercept trap (1, WIBF); same data except: 18–21JULY1993 (1, WIBF).

Distribution. Known only from Hispaniola.

Etymology. The epithet *hatomayor* (Latin noun in apposition) refers to the Dominican Republic Province of Hato Mayor where this species occurs.

***Zeadolopus hispaniolensis* Peck and Cook, new species**

Figure 52

Diagnostic description. Body moderately convex. Length 1.6–2.7 mm; greatest width 1.2–2.1 mm. Dark reddish brown to black, moderately shining, with reticulate microsculpture. Head punctation moderately coarse, dense. Antennal club and funicle paler, club not robust in shape. Eyes large. Pronotum minutely, sparsely punctate; sides rounded, posterior angles rounded. Elytral striae not impressed, striae punctures large and closely spaced; interstriae finely punctate, punctures dense anteriorly. Flight wings fully developed. Vertical face of mesosternum broad, smooth, not medially carinate. Metasternum with moderately large, dense punctures laterally, finely punctate medially. Femora and tibiae not sexually dimorphic. Mesofemur unmodified; mesotibia slightly widened to apex, strongly spinose on outer margin. Metafemur unmodified, posterior margin weakly concave; metatibia weakly widened to apex, outer margin weakly spinose. Male pro- and mesotarsi slightly more densely setose ventrally. Metatarsomere 1 about as long as metatarsomeres 2–4 combined. Median lobe of aedeagus (Fig. 52) elongate, broad, with paired apices inwardly curved. Parameres slender, straight, extending beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac with a pair of slender rod-like structures that are joined in apical half and surrounded by a cone-shaped structure medially. Spermatheca of 2 connected spheres.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: LaVega Prov./ PN. A. Bermudez, Cienaga/ 19.VII–2.VIII.95, 1100m/ trop.evgrn. for., FIT/ S. + J. Peck, 95-36” (SBPC). Paratypes (20) have the following label data: same data as holotype (4, SBPC); same data except: 1010m, 95-33 (6, SBPC); same data except: 1000m, 95-32 (1, SBPC); same data except: 1020m, 95-34 (2, SBPC); DOMINICAN REPUBLIC, Pedernales, 23.5 km N. Cabo Rojo, 18-06N, 71-38W, 540 m, 13–19 July 1990, L. Masner, J. Rawlins, C. Young, deciduous forest, intercept trap (4, CMNH); same data except: 26 km N. Cabo Rojo, 13–20 July 1990, wet deciduous forest (2, CMNH); REP. DOM., Pedernales Prov., Sierra Baoruco, 31 km N. Cabo Rojo, 2500', XII-29-1986, Doyen & Santiago, broad leaf mesophyll association, ex flight trap (1, EMEC).

Distribution. Known only from Hispaniola.

Etymology. The epithet *hispaniolensis* (Hispaniola + the Latin suffix *-ensis*, locality) refers to the occurrence of this species on Hispaniola.

***Zeadolopus iviei* Peck and Cook, new species**

Figure 53

Diagnostic description. Body strongly convex. Length 1.7–2.2 mm; greatest width 1.2–1.6 mm. Dark reddish brown, shining, without microsculpture. Head moderately finely, sparsely punctate. Antennomeres VII–IX darker than funicle and antennomere X; club moderately slender. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles rounded. Elytral striae not impressed, strial punctures moderately large and moderately spaced; interstriae minutely, sparsely punctate with a few scattered large punctures. Flight wings fully developed. Vertical face of mesosternum broad, flat, not medially carinate. Metasternum coarsely punctate laterally, with fine scattered punctures medially. Sexual dimorphism not noted in legs except male pro- and mesotarsi are more densely setose ventrally. Mesofemur with or without a broad toothlike process at apex of posterior margin; mesotibia broad and strongly spinose. Metafemur unmodified; metatibia narrower than mesotibia, weakly spinose. First metatarsomere longer than second. Median lobe of aedeagus (Fig. 53) short, broad, with truncate apex; paired apices inwardly curved. Parameres slender, weakly curved, reaching about to apex of median lobe, each bearing two apical setae. Inverted internal sac with elongate rod-like structure. Spermatheca of two connected spheres.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: Pr. San Cristobal/ 4kmNW Villa Altagracia/ 300m, 12APR–06JULY1992/ M.A. & R.O. Ivie colr/ flight intercept trap” (WIBF). Paratypes (7) have the following label data: same data as holotype (3, WIBF; 3, SBPC); same data except: 06JULY–24AUG1992, M.A. Ivie & D.S. Sikes (1, WIBF).

Distribution. Known only from the type locality on Hispaniola.

Etymology. The epithet *iviei* is in recognition of the contributions of Dr. Michael A. Ivie, Montana State University, who provided many of the specimens of West Indian Leiodidae for this study.

***Zeadolopus jarabacoa* Peck and Cook, new species**

Figure 54

Diagnostic description. Body strongly convex. Length 1.2–1.4 mm; greatest width 0.8–1.0 mm. Yellowish brown to dark reddish brown, shining, with reticulate microsculpture. Head finely, sparsely punctate. Antennae pale, club robust. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles rounded. Elytral striae weakly impressed; strial punctures coarse and dense; interstriae finely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, concave; lateral margins of concavity forming carinae joining median carina of horizontal face of mesosternum. Metasternum coarsely, densely punctate throughout. Male with toothlike process at apex of posterior margin of metafemur; metafemur unmodified in female. In both sexes, mesotibia broad and spinose, metatibia moderately broad and spinose. Male usually with more dense setae on ventral surface of pro- and mesotarsi. Median lobe of aedeagus (Fig. 54) elongate, broad; paired apices inwardly curved at apex, with dorsal lobe. Parameres slender, straight, extending slightly beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac of aedeagus with elongate median flagellum-like structure; before apex, inverted “V”-shaped structure with two crossbars. Spermatheca of 2 connected spheres.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: LaVega Prov./ 10km NE Jarabacoa/ Hotel Montana, forest/ 18.VII–4.VIII.95, 550m/ FIT, S.+J. Peck, 95-30” (SBPC). Paratypes (13) have the following label data: same data as holotype (6, SBPC); same data as holotype except: Racquet Club, 20.VII–4.VIII.95, mixed for., 95-37 (5, SBPC); DOM. REP.: LaVega Prov., PN. A. Bermudez, Cienaga, 19.VII–2.VIII.95, 1000m, trop. evgrn. for., FIT, S.+J. Peck, 95-32 (1, SBPC). DOMINICAN REP.: Punta Cana, rural, 11–19NOV2005, L. Masner, Malaise trap (1, WIBF).

Distribution. Known only from Hispaniola.

Etymology. The epithet *jarabacoa* (Latin noun in apposition) refers to the type locality of this species.

***Zeadolopus lavega* Peck and Cook, new species.**

Figure 55

Diagnostic description. Body strongly convex. Length 1.3–1.6 mm; greatest width 0.8–1.2 mm. Yellow to yellowish brown; shining, with reticulate microsculpture on pronotum and elytra. Head punctation moderately coarse and dense. Antennal club robust, apical antennomere nearly as wide as antennomere IX. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles roundly obtuse. Elytral striae weakly impressed; strial punctures coarse and closely spaced; interstriae minutely, sparsely punctate with a few scattered larger punctures. Flight wings fully developed. Vertical face of mesosternum broad, concave; lateral margins of concavity forming carinae that converge at base. Metasternum coarsely, densely punctate laterally; moderately finely, less densely punctate medially. Mesofemur with posterior margin broadly expanded in both sexes. Metafemur broadly expanded at apex of posterior margin in female; with curved, toothlike expansion in male. In both sexes, meso- and metatibiae broad and spinose. Male with more dense setae ventrally on pro- and mesotarsi. Median lobe of aedeagus (Fig. 55) elongate, broad, with paired apices inwardly curved. Parameres moderately slender, straight, extending to apex of median lobe, each bearing two apical setae. Inverted internal sac with connected pair of elongate structures evenly narrowing to apex. Spermatheca of 2 connected spheres.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: LaVega Prov./ 10km NE Jarabacoa/ Racquet Club, 550m, FIT/ 20.VII–4.VIII.95, mixed/ for., S.+J. Peck, 95-37” (SBPC). Paratypes (15) have the following label data: same data as holotype (7, SBPC); same data as holotype except: Hotel Montana, 18.VII–4.VIII.95, forest, 95-30 (7, SBPC); DOMIN. REP.: Prov. LaVega, nr. Buena Vista, Hotel La Montana, 10APR1992, at light, M.A. Ivie, D.S. Sikes & W. Lanier (1, WIBF).

Distribution. Known only from Hispaniola.

Etymology. The epithet *lavega* (Latin noun in apposition) refers the occurrence of this species in the Dominican Republic Province of LaVega.

***Zeadolopus longipes* Peck and Cook, new species**

Figure 58

Diagnostic description. Body moderately convex. Length 2.4–3.4 mm; greatest width 1.6–2.4 mm. Dark reddish brown, weakly shining, with dense reticulate microsculpture. Head punctation moderately fine and dense. Antennal club darker than funicle, elongate. Eyes large. Pronotum minutely, sparsely punctate; sides moderately rounded, posterior angles distinct, obtuse. Elytral striae weakly impressed, strial punctures large and closely spaced; interstriae minutely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad and convex, not medially carinate. Metasternum coarsely, shallowly punctate laterally, with smaller punctures medially. Femora and tibiae not sexually dimorphic; male pro- and mesotarsi slightly more densely setose ventrally. Mesofemur with 2 toothlike processes on apical half of posterior margin; mesotibia broad, strongly spinose on outer margin. Metafemur slender, posterior margin weakly concave; metatibia elongate, slender, with several smaller spines on outer margin. First metatarsomere elongate, at least as long as metatarsomeres 2–4 combined. Metatarsomere 2, in both sexes, bearing strong spine that is longer than metatarsomere 3. Median lobe of aedeagus (Fig. 58) elongate, broad, with paired apices down-turned. Parameres broad, inwardly curved and truncate apically, each bearing 2 apical setae. Inverted internal sac with pair of parallel rod-like structures. Spermatheca of two connected spheres.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: LaVega Prov./ PN. A.Bermudez, Cienaga/ 19.VII–2.VIII.95, 1020m/ trop. evgrn. for., FIT/ S.+J. Peck, 95-34” (SBPC). Paratypes (50) have the following label data: same data as holotype (16, SBPC); same data as

holotype except: 1010m, 95-33 (10, SBPC); same data as holotype except: 1000m, 95-32 (16, SBPC); same data as holotype except: 1100m, 95-36 (8, SBPC).

Distribution. Known only from Hispaniola.

Etymology. The epithet *longipes* (Latin, *longi-*, long; *pes*, foot) refers to the long first metatarsomeres of this species.

***Zeadolopus lucidus* Peck and Cook, new species**

Figure 42

Diagnostic description. Body strongly convex. Length 1.7–2.0 mm; greatest width 1.1–1.4 mm. Yellow, shining, microsculpture absent. Head finely, sparsely punctate. Antennal club moderately robust. Pronotum minutely, sparsely punctate; sides rounded, posterior angles broadly obtuse. Elytral striae weakly impressed; strial punctures dense, moderately coarse; interstriae finely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, convex, not carinate. Metasternum finely, irregularly punctate medially; coarsely, irregularly punctate laterally. Mesofemur in both sexes with posterior margin evenly expanded, without toothlike expansions. Metafemur of male with toothlike expansion at apex of posterior margin. In both sexes, mesotibia evenly widened from base to apex, strongly spinose; metatibia narrower, with apex on outer side drawn out to length of first tarsomere, strongly spinose. Male with conspicuous pale setae ventrally on pro- and mesotarsi. Median lobe of aedeagus (Fig. 42) constricted at middle and rounded apically, curved dorsoventrally; paired apices inwardly curved. Parameres curved, extending slightly beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac with short median sclerotized structure. Spermatheca with sphere attached to oblong piece.

Type material. Holotype, male, with the following label data: “CUBA: Santiago Prov./ Santiago, Jardin Botanico/ 5–17.XII.95, 50m/ scrub for. FITs/ S. Peck, 95-72” (SBPC). Paratypes (4) with same label data as holotype (SBPC).

Distribution. Known only from Cuba.

Remarks. Comparison of *Z. lucidus* of Cuba with the species of *Zeadolopus bifoveolatus* Daffner, known only from south Florida (Peck and Cook 2013b), showed similarity in structure of the aedeagus. This is the only example of a possible sister species affinity of the leiodid fauna of Cuba and south Florida.

Etymology. The epithet *lucidus* (Latin, shining) refers to the shining integument of this species.

***Zeadolopus minisculus* Peck and Cook, new species**

Figure 56

Diagnostic description. Body strongly convex. Length 1.0–1.2 mm; greatest width 0.8 mm. Light yellowish red to brown, shining, with faint irregular lines of microsculpture on pronotum and elytra. Head punctation moderately coarse and dense. Antenna of color of body to slightly paler, club slender. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles obtuse. Elytral striae weakly impressed in apical three-fourths; strial punctures moderately coarse and dense; interstriae minutely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum convex, smooth; median carina of horizontal face extends slightly onto base of vertical face. Metasternum coarsely, densely punctate laterally, with dense pale setae medially. Male metafemur with strong, curved toothlike process at apex of posterior margin. Meso- and metatibiae broad and spinose in both sexes. Male pro- and mesotarsi slightly broader and more strongly setose ventrally than in female. Median lobe of aedeagus (Fig. 56) elongate, broad, with paired apices inwardly curved at apex. Parameres slender, weakly sinuate in basal

half, extending slightly beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac with short, urn-shaped, setose sclerite. Spermatheca of 2 connected spheres.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: Barahona/ 7 kmNW Paraiso, 200m/ rainforest remnant/ 27.XI–4.XII.91, intercept/ tp, Masner & Peck, 91-341” (SBPC). Paratypes (9) with the following label data: same data as holotype (2, SBPC); DOM.REP.: Pedernales, 28kmN Cabo Rojo, 760m, evergreen dry forest, 29.XI–3.XII.91, intercept trap, Masner & Peck, 91-349 (2, SBPC); REP.DOM.: Pedernales Prov., Sierra Baoruco, 31kmN Cabo Rojo, 2500', XII-29-1986, Doyen & Santiago, broad leaf mesophyll association, ex flight trap (5, EMEC).

Distribution. Known only from Hispaniola.

Etymology. The epithet *minisculus* (Latin, minute) refers to the very small size of this species.

***Zeadolopus nanus* Peck and Cook, new species**

Figure 57

Diagnostic description. Body strongly convex. Length 1.0–1.1 mm; greatest width 0.7 mm. Yellow to light brown, shining, with faint reticulate microsculpture. Head finely, moderately sparsely punctate. Antennal club moderately robust. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles rounded. Elytral striae weakly impressed; striae punctures large, closely spaced; interstriae finely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, convex, not medially carinate. Metasternum coarsely, densely punctate laterally; punctures smaller medially. Mesofemur unmodified in both sexes. Male metafemur with toothlike process at apex of posterior margin; metafemur unmodified in female. In both sexes, meso- and metatibiae broad and spinose. Male with more dense setae ventrally on pro- and mesotarsi. Median lobe of aedeagus (Fig. 57) elongate, broad, with inwardly curved, paired apices. Parameres slender, straight or weakly curved, reaching beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac with elongate rod-like structure divided in basal half. Spermatheca of two connected spheres.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: San Cristobal/ Prov. Borbon, Cuevas/ Pomier, trop. decid. for./ 200m, leaf litter, 28.VII./ 95, S.+J. Peck, 95-48” (SBPC). Paratypes (6) have the following label data: same data as holotype except: FIT, 13–28.VII.95, 95-23 (4, SBPC); same data except: 28.VII–5.VIII.95 (2, SBPC).

Distribution. Known only from Hispaniola.

Etymology. The epithet *nanus* (Latin, little) refers to the small size of this species.

***Zeadolopus nesiotetes* Peck and Cook, new species**

Figure 66

Diagnostic description. Body strongly convex. Length 1.3–1.6 mm; greatest width 0.9–1.2 mm. Reddish brown, shining, microsculpture absent. Head punctation moderately fine, moderately dense. Antennal club moderately robust. Eye large. Pronotum finely, sparsely punctate; sides rounded, posterior angles roundly obtuse. Elytral striae weakly impressed; striae punctures large and closely spaced; interstitial punctures minute, sparse. Flight wings fully developed. Vertical face of mesosternum convex, not medially carinate. Metasternum densely punctate; punctures coarse laterally, smaller medially. In both sexes, mesofemur with broad toothlike expansion of apical half of posterior margin. Male metafemur with toothlike expansion at apex of posterior margin. In both sexes, mesotibia broad and spinose; metatibia narrower, spinose. Male pro- and mesotarsi bearing conspicuous pale setae ventrally. Median lobe of aedeagus (Fig. 66) elongate, broad, parallel-sided, dorsoventrally curved with inwardly curved paired

apices. Parameres slender, extending just beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac with two consecutive median tubular structures; anteriorly, small median sclerite with lateral and basal extensions. Spermatheca of 2 connected spheres.

Type material. Holotype, male, with the following label data: “LESSER ANTILLES: St. Lucia/ Mon Repos, 6.5 km W Fox Grove Inn/ 10–28.VII.07, submontane forest FITs/ N13°52.5’ W60°56.4’, 300m/ S.&J. Peck, 07-53B” (SBPC). Paratypes (32) have the following label data: same data as holotype (18, SBPC); same data as holotype except: 16.VII.07, submontane forest litter, 07-70 (3, SBPC); ST. LUCIA: Barre de L’Isle, 13.9341°N, 60.9586°W, 18MAY2009, litter Berlese, A.R. Cline (1, WIBF); ST. LUCIA: Quielles Forest Res., Piton St. Esprit site, 13.84937°N, 60.97956°W, 05–11MAY2009, 571m, FIT, R.C. Winton and I.A. Foley (1, WIBF); same data as previous except: LaPorte Cabin, 272m, 13,84041°N, 60.97408°W, 10–15May2009 (2, WIBF); same data as previous except 04–10May2009 (1, WIBF); ST. LUCIA: Millet Dam, 13.9006°N, 60.9888°W, 07JULY2009, 379’, C. Maier, M. Gimmel, K. Hopp, E.A. Ivie, uv light (1, WIBF); ST. LUCIA: Grand Anse trap site, 38m, 14.0052°N, 60.8973°W, 04JUNE2009, ex passion fruit, R.C. Winton (1, WIBF); MARTINIQUE: 5kmSE LeMarin, Foret Creve Coeur, N14°27.05’, W60°50.91’, 35m, 10-28.VII.2012, dry forest FIT, S. Peck, 12-50 (2, SBPC); MARTINIQUE: 1kmE Diamant, N14°28.7’, W61°00.6’, 7–23.VII.2010, 10m, thorn forest, flight intercept, Peck, 10-51 (2, SBPC).

Distribution. Known only from the islands of St. Lucia and Martinique.

Etymology. The epithet *nesiotes* (Greek, islander) refers to the restricted range of this species on islands of the Lesser Antilles.

***Zeadolopus oviedoensis* Peck and Cook, new species**

Figure 59

Diagnostic description. Body strongly convex. Length 1.7–2.0 mm; greatest width 1.2–1.4 mm. Reddish brown, shining, with reticulate microsculpture. Head moderately finely punctate, punctures separated by 1–2 diameters. Antenna unicolorous, slightly paler than body, club robust. Eyes large. Pronotum minutely, sparsely punctate, sides rounded, posterior angles roundly obtuse. Elytral striae weakly impressed, striae punctures moderately coarse and dense; interstriae minutely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, concave, not medially carinate. Metasternum coarsely, irregularly punctate laterally; finely, sparsely punctate medially. Male with toothlike process at apex of posterior margin of both meso- and metafemur. Meso- and metatibiae broad and spinose in both sexes. Tarsomeres unmodified in both sexes. Median lobe of aedeagus (Fig. 59) elongate, broad, with paired apices inwardly curved at apex. Parameres slender, straight, extending slightly beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac of aedeagus with 2 parallel rod-like structures. Spermatheca of 2 connected parts, one twice diameter of the other.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: Pedernales/ 4 km W Oviedo, 10m/ arid thorn forest/ 28.XI–4.XII.91/ intercept traps/ Masner & Peck, 91-344” (SBPC). Paratypes (7) with same data as holotype (SBPC).

Distribution. Known only from Hispaniola.

Etymology. The epithet *oviedoensis* (Oviedo + the Latin suffix *-ensis*, locality) refers to the type locality of this species near Oviedo in the Dominican Republic.

***Zeadolopus parvantilliensis* Peck and Cook, new species**

Figure 64

Diagnostic description. Body strongly convex. Length 1.2–2.0 mm; greatest width 0.8–1.4 mm. Reddish brown, shining, without microsculpture. Head moderately finely and densely punctate. Antennal club moderately slender. Eyes large. Pronotum minutely, sparsely punctate; sides rounded, posterior angles roundly obtuse. Elytral striae weakly impressed; strial punctures large, closely spaced. Interstriae minutely, sparsely punctate; punctures larger and more dense apically. Flight wings fully developed. Vertical face of mesosternum broad, convex, not medially carinate. Metasternum coarsely, densely punctate laterally; punctures smaller medially. Male mesofemur with posterior margin broadly expanded, less expanded in female. Posterior margin of male metafemur expanded, with toothlike process at apex; posterior margin roundly expanded at apex in female. In both sexes, meso- and metatibiae broad and spinose. Male with more dense setae on pro- and mesotarsi. Median lobe of aedeagus (Fig. 64) elongate, broad, with inwardly curved paired apices. Parameres moderately slender, weakly sinuate, extending beyond apex of median lobe; apices weakly expanded, each bearing 2 apical setae. Inverted internal sac with distinct short, straight, sclerotized structure in basal half; small, slender sclerites at middle. Spermatheca short, tubular, constricted at middle.

Type material. Holotype, male, with the following label data: “WEST INDIES: DOMINICA/Springfield Estate, 31.V–16.VI.04/N15°20.841’ W61°22.000’, 400 m/Mt. Joy House, wet montane forest/ FIT, S. & J. Peck, 04-89” (SBPC). Paratypes (46) have the following label data: same data as holotype (19, SBPC); DOMINICA: Springfield Estate, 30.V–16.VI.04, N15°20.796’ W61°22.142’, mature 2nd forest, 4FITs, 330–360 m, S. & J. Peck, 04-86 (26, SBPC); DOMINICA: Springfield Estate, 29V–16.VI.04, N15°20.796’ W61°22.142’, 375m, forest edge Malaise trap, S. & J. Peck, 04-86B (1, SBPC).

Additional material examined. DOMINICA: Portsmouth, Cabrits Nat. Park, N15°35.146’ W61°28.316’, 30 m, trop. decid. forest FITs, 2–13.VI.04, S. & J. Peck, 04-96 (17, SBPC); DOMINICA: Springfield Estate, 31.V–16.VI.04, N15°20.841’ W61°20.000’, 550m, ridgetop forest above Mt. Joy, FIT, S. & J. Peck, 04-90 (23, SBPC); DOMINICA: Syndicate Estate trail, E. of Dublanc, N15°31.202’ W61°25.015’, 560m, montane rain forest carrion trap, 2–13.VI.04, S. & J. Peck, 04–97 (1, SBPC); DOMINICA: Middleham Falls trail, Cochrane, N15°20.922’, W61°20.747’, 650m, forest FITs, 31.V–11.VI.04, S. & J. Peck, 04-93 (12, SBPC; 3, MCZC; 3, FSCA; 3, FMNH); MARTINIQUE: 1 km E Diamant, N14°28.7’ W61°00.6’, 7–23.VII.2010, 10m, thorn forest, flight intercept, Peck, 10-51 (24, SBPC); MARTINIQUE: 4 km SW LeMarin, Morn Aca, N14°27.8’ W60°53.9’, 260m, 13–28.VII.2012, humid forest hilltop clearing, FIT, S. Peck, 12-55 (2, SBPC); GUADELOUPE: Bas. Ter., Malendure, Petit Trace, Fond Ravine, 3m, streamside forest uv trap, N16°10.44’ W61°46.7’, 21.V.2012, S. Peck, 12-31 (3, SBPC); GUADELOUPE: Bas. Ter., Riviere Sens, Sentier Houelemont, N15°58.93’ W61°42.62’, 80m, humid forest FIT, 19-31.V.2012, S. Peck, 12-29B (5, SBPC); GUADELOUPE: Bas. Ter., Mahault, Riviere Colas, xeric forest, streamside uv traps, N16°11.26’ W61°46.71’, 80m, 15.V.2012, S. Peck, 12-26 (1, SBPC); GUADELOUPE: Bas. Ter., Pigeon, Trace Poirier, N16°08.83’ W61°45.22’, humid forest FIT, 350m, 14–31.V.2012, S. Peck, 12-22 (4, SBPC); same data as previous except: uv trap, 23.V.2012, 12-32 (1, SBPC); GRENADA: Grand Etang Forest Reserve, N12°04.162’ W61°42.162’, 10–28.VIII.10, 400m, rain forest FIT, S. Peck, 10-63 (4, SBPC); same data except: N12°04.846’ W61°42.333’, 15–18.VIII.10, 360m, rain forest carrion trap, 10-71 (1, SBPC); same data except: 9–28.VIII.10, FIT, 10-61 (3, SBPC); same data except: forest Malaise, 10-60 (1, SBPC); ST. VINCENT: Hermitage Forest, E. of Spring Village, N13°14.86’ W61°12.77’, 16–27.VIII.06, forest FIT trap, 348m, S. & J. Peck, 06-103B (2, SBPC); same data as previous except: forest edge malaise, 340m, 06-104A (1, SBPC); same data as previous except: 23–27.VIII.06, forest edge FIT, 06-104B (1, SBPC); same data as previous except: 15–27.VIII.06, 348m, 06-102 (3, SBPC); same data as previous except: 16–27.VIII.06, forest FIT, 360m, 06-105 (1, SBPC); same data as previous except: 15–27.VIII.06, clearing FIT trap, 348m, 06-101B (1, SBPC); ST. VINCENT: Emerald Valley Hotel, Buccament, N13°12.0’ W61°13.8’, 10–20.VI.07, FIT, 20m, S. & J. Peck, 07-14 (2, SBPC); ST. VINCENT: Vermont Nature Trails, 7kmE Buccament, N13°13’ W61°13’, 11–20.VI.07, rainforest FIT, 370m, S. & J. Peck, 07-18 (2, SBPC); ST. LUCIA: Praslin, lowland woodland ravine, 11–28.VII.07, N13°52.9’ W60°53.5’, 50m, intercept traps, S. & J. Peck, 07-56 (2, SBPC); ST. LUCIA: Micoud Dist., Escap Community, 55m, 13.8310°N, 61.8962°W, 23–27JUNE2009, malaise, C.A. Maier & M.L. Gimmel (1, WIBF); ST. LUCIA: Bordelais trap site, 13.9689°N, 60.8859°W, 25–29JUNE2009, FIT, M.L. Gimmel & E.A. Ivie (1, WIBF); same data as previous except: 09–14JULY2009, 185m, Malaise, C.A. Maier & M.L. Gimmel (1, WIBF); ST. LUCIA: Louvette trap site, 13.9689°N, 60.8859°W, 25–

29JUNE2009, FIT, M.L. Gimmel & C.A. Maier (1, WIBF); ST. LUCIA: Grande Anse trap site, 38m, 14.00529°N, 60.89737°W, 08–17MAY2009, Malaise, R.C. Winton & I.A. Foley (2, WIBF); MONTSERRAT: Woodlands, Cassava Ghaut, Beattie House, 01–29JUNE2003, K.A. Marske, FIT (3, WIBF); MONTSERRAT: Gun Hill, 16°45.45'N, 62°12.70'W, 887ft. [270m], 19JUNE–07JULY2002, K.A. Marske (1, WIBF); MONTSERRAT: Cassava Ghaut, 18JUNE2002, K.A. Marske, berlese leaf litter (1, WIBF).

Distribution. Widespread throughout the Lesser Antilles; known from the islands of Montserrat, Guadeloupe, Dominica, Martinique, St. Lucia, St. Vincent and Grenada.

Etymology. The epithet *parvantilliensis* (Latin *parvus*, small; Antilles + the Latin suffix *-ensis*, locality) refers to the Lesser Antilles distribution of this species.

***Zeadolopus paulus* Peck and Cook, new species**

Figure 60

Diagnostic description. Body strongly convex. Length 1.4–1.8 mm; greatest width 1.0–1.3 mm. Yellowish to dark reddish brown, shining, some individuals with reticulate microsculpture. Head punctation moderately coarse and dense. Antennal club moderately robust; apical antennomere nearly as wide as antennomere IX. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles rounded. Elytral striae weakly impressed; strial punctures coarse and closely spaced; interstriae minutely, sparsely punctate with a few scattered larger punctures. Flight wings fully developed. Vertical face of mesosternum broad, concave; lateral margins of concavity forming carinae that converge at base. Metasternum coarsely, densely punctate laterally; moderately finely, densely punctate medially. Mesofemur robust and broadly expanded at apex of posterior margin in both sexes. Metafemur strongly robust; broadly expanded at apex of posterior margin in female; with curved, tooth-like expansion in male. In both sexes, meso- and metatibiae broad and spinose. Male with more dense setae ventrally on pro- and mesotarsi. Median lobe of aedeagus (Fig. 60) elongate, broad, with paired apices inwardly curved. Parameres moderately robust, weakly curved, extending slightly beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac with 2 parallel rod-like structures in basal half that join and narrow in apical half. Spermatheca of two connected spheres.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: Pedernales/28kmN Cabo Rojo, 760m/ evergreen dry forest/ 29.XI–3.XII.91, intercept/ trap, Masner & Peck, 91-349” (SBPC). Paratypes (30) have the following label data: same data as holotype (7, SBPC); DOMINICAN REPUBLIC: Barahona, 7kmNW Paraiso, 200m, rainforest remnant, 27.XI–4.XII.91, intercept tp., Masner & Peck, 91-341 (1, SBPC); DOMINICAN REPUBLIC: Pedernales, 23.5kmN Cabo Rojo, 18-06N, 71-38W, 540m, 13–19 July 1990, L. Masner, J. Rawlins, C. Young, deciduous forest, intercept trap (3, CMNH); same data as previous except: 26kmN Cabo Rojo, 730m, 31 July 1990, J. Rawlins, C.W. Young, S. Thompson (1, CMNH); DOMINICAN REPUBLIC: Barahona, nr. Filipinas, Larimar Mine, 26.VI–7.VII.1992, Woodruff & Skelley, flight trap (6, FSCA); DOMINICAN REPUBLIC: Prov. Pedernales, Las Abejas, 1225m, 18°09'03"N, 71°37'48"W, 28JUL–3AUG1999, G.O. Dominici, FIT (2, WIBF; 2, SBPC); DOMINICAN REPUBLIC: Prov. Pedernales, ca. 35kmN Cabo Rojo, 1250m., Las Abejas, 26AUG–09SEP1988, flight intercept trap, M. Ivie, Philips & Johnson (2, SBPC; 1, WIBF); same data as previous except: 24kmN Cabo Rojo, 610m, 20AUG–9SEP1988 (3, WIBF); same data as previous except: 20–25AUG1988, wet forest (2, WIBF).

Distribution. Known only from Hispaniola.

Etymology. The epithet *paulus* (Latin, little) refers to the small size of this species.

***Zeadolopus pedernales* Peck and Cook, new species**

Figure 61

Diagnostic description. Body strongly convex. Length 1.6–2.8 mm; greatest width 1.2–2.1 mm. Dark reddish brown to nearly black with paler appendages; elytra with faint reticulate microsculpture. Head moderately finely, irregularly punctate. Antenna paler than body, club slender. Eyes large. Pronotum minutely, sparsely punctate; sides rounded, posterior angles roundly obtuse. Elytral striae weakly to not impressed; strial punctures coarse, closely spaced; interstriae minutely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, convex, not medially carinate. Metasternum coarsely, irregularly punctate laterally; moderately finely punctate medially. Male with tooth-like process at apex of posterior margin of metafemur. Female with broad tooth-like process at apex of posterior margin of mesofemur, and similar but smaller process on metafemur. Meso- and metatibiae moderately broad, spinose in both sexes. Male pro- and mesotarsi more densely setose than in female. Median lobe of aedeagus (Fig. 61) elongate, broad, with paired apices inwardly curved at apex. Parameres slender, straight, extending to near apex of median lobe, each bearing 2 apical setae. Inverted internal sac with elongate rod-like structure. Spermatheca tubular, strongly angled medially, widened apically.

Type material. Holotype, male, with the following label data: DOMINICAN REPUBLIC. Prov. Barahona, nr. Filipinas, Larimar Mine, 26.VI–7.VII.1992, R.E. Woodruff, P. Skelley, flight trap (FSCA). Paratypes (23) have the following label data: DOMINICAN REPUBLIC: Prov. Pedernales, 24kmN Cabo Rojo, 610m, 20–25AUG1988, wet forest, flight intercept trap, M. Ivie, Philips & Johnson (1, WIBF). “REPDOM. [DOMINICAN REPUBLIC]: Pedernales/ Prov. Sierra Baoruco/ 31kmN Cabo Rojo/ 2500’, XII-29-1986/ Doyen & Santiago// broad leaf/ mesophyll/ association// ex flight/ trap” (4, EMEC; 4, SBPC). Prov. Barahona, nr. Filipinas, Larimar Mine, 26.VI–7.VII.1992, R.E. Woodruff, P. Skelley, flight trap (10, FSCA; 4, SBPC).

Distribution. Known only from Hispaniola.

Etymology. The epithet *pedernales* (Latin noun in apposition) refers to the type locality of this species in the Dominican Republic province of Pedernales.

***Zeadolopus pusillus* Peck and Cook, new species**

Figure 43

Diagnostic description. Body strongly convex. Length 0.9–1.4 mm; greatest width 0.6–1.0 mm. Yellow to yellowish brown; shining, microsculpture absent. Head moderately finely, irregularly punctate. Antennal club moderately slender. Eyes large. Pronotum finely, sparsely punctate; sides rounded, posterior angles rounded. Elytral striae impressed; strial punctures coarse, closely spaced; interstriae finely, sparsely punctate. Flight wings fully developed. Vertical face of mesosternum broad, not medially carinate. Metasternum finely, sparsely punctate medially; coarsely, densely punctate laterally. Mesofemur with posterior margin expanded in both sexes, often with median and/or apical tooth-like expansion. Metafemur with apical tooth-like expansion in males, and also some females. In both sexes, mesotibia evenly widened to broad apex, strongly spinose; metatibia narrower, strongly spinose. Male with conspicuous pale setae ventrally on pro- and mesotarsi. Median lobe of aedeagus (Fig. 43) constricted at middle and rounded apically, curved dorsoventrally; paired apices inwardly curved. Parameres moderately slender, extending slightly beyond apex of median lobe, each bearing 2 apical setae. Inverted internal sac medially with 2 consecutive structures with broadened bases. Spermatheca with 2 connected oblong pieces.

Type material. Holotype, male, with the following label data: “CUBA: Santiago Prov./ Santiago, Jardin Botanico/ 5–17.XII.95, 50m/ scrub for. FITs/ S. Peck, 95-72” (SBPC). Paratypes (20) have the following label data: same data as holotype (4, SBPC); same data except: 5m, disturbed for., 95-74 (6, SBPC); CUBA: Santiago Prov., Gran Piedra, Met. Radar, 6–17.XII.95, 1100m, elfin for. FIT, S. Peck, 95-76 (3, SBPC); same data as previous except: Isabelica, 7–17.XII.95, 95-84 (1, SBPC); same data as previous

except: 2nd Chorrito, 9.XII.95, 600m, km 8, leaf & stick litter, 95-88 (1, SBPC); CUBA: Santiago Prov., 10km NE Caney, Arroyo Grovert, 300m, leaf & log litter, S. Peck, 95-93 (1, SBPC); CUBA: Guantanamo, El Yunque, Finca Las Delicia, 170m, 20.314-74.573, 31.I.2012, R. Anderson, wet rain forest, 2012-016 (1, SBPC); CUBA: Holguin, Mayari, Pinarit / 20.41548 – 75.82008, 409m / 12.V.2013, R. Anderson / 2013-008, karst forest litter (3, SBPC).

Distribution. Known only from Cuba.

Etymology. The epithet *pusillus* (Latin, very small) refers to the small size of this species.

***Parvocyrtusa* Peck and Cook, new genus**

Type species: *Parvocyrtusa hispaniolensis* Peck and Cook, here designated.

Distribution. Endemic to Hispaniola and Puerto Rico in the Greater Antilles.

Biology. Unknown, probably feeding on soft fungi in moist forested habitats.

Diagnostic description. Body strongly convex. Antenna of 10 antennomeres with 4-antennomere club. Mandibles prominent; right mandible toothed. Ventral side of head with paired antennal grooves. Mesosternum vertical between coxae, vertical surface not longitudinally carinate. Tarsal formula 5-5-4 in both sexes. Mesotibia robust, spinose, conspicuously broader than slender metatibia; metatibia lacking large spines except at apex. Without large punctures on metasternum and/or abdominal sternites. Sternite 3 about as long as 4 + 5. Males are distinguished by weakly expanded pro- and mesotarsi bearing spatulate setae, absence of process on inner apical margin of mesotibia, and unmodified metafemur.

Distribution. Known only from the islands of Hispaniola and Puerto Rico. The Puerto Rican material consists of two females (WIBF) representing an undescribed species.

Etymology. The epithet *Parvocyrtusa* is from the Latin *parvo-*, small; *-cyrtusa*, sharing antennal characters with the genus *Cyrtusa*. Gender: feminine.

***Parvocyrtusa hispaniolensis* Peck and Cook, new species**

Figures 31, 32

Diagnostic description. Total length 1.18–1.42 mm; greatest width = 0.84–0.92 mm. Reddish-brown, shining. Head densely punctate. Antennal club of four antennomeres, moderately robust; antennomere VII distinctly narrower than VIII and IX, antennomere X slightly narrower than VIII and IX. Left mandible edentate, right mandible with triangular tooth at anterior third. Pronotum finely punctate, short and broad; posterior angles obtuse; base broadly rounded, sinuate laterally. Elytral striae complete, clearly demarked by large punctures separated by less than one diameter; interstriae with smaller punctures. Median lobe of aedeagus (Fig. 31, 32) cylindrical, angulate at base; apex narrow and down-turned medially, with a pair of inwardly curved lobed appendages laterally. Parameres slender, reaching apex of median lobe, each bearing two apical setae.

Type material. Holotype, male, with the following label data: “DOM[INICAN REPUBLIC]: LaVega Prov./ P.N. A. Bermudez, Cienaga / 19.VII–2.VIII.95, 1100m / trop.evgrn.for., FIT / S+J Peck, 95-36” (SBPC). Paratypes (66) have the following label data: same data as holotype (11, SBPC); same data as holotype except: 1020m, 95-34 (13, SBPC, 3, MCZC); same data except: 1010m, 95-33 (15, SBPC; 3, FSCA); same data except: 1000m, 95-32 (7, SBPC; 3, FMNH); DOM. REP.: Pedernales / 26 kmN CaboRojo, 565m / evergreen dry forest / 29.XI–3.XII.91, intercept / Masner&Peck, 91-347 (1, SBPC); DOM. REP.: Prov. Pedernales / Las Abejas, 1225m / 18°09'03”N, 71°37'48”W / 28 Jul–03 Aug 1999 / G.O. Dominici,

FI.T. (9, WIBF); DOM. REP.: Prov. Santiago / Par. Nac. A. Bermudez / Los Tablones, 1,290m / M.A. & R.O. Ivie colr / flight intercept trap // on Rio Izquiera / 19°03'N, 70°50'W, / 09APR–07JULY1992 (1, WIBF).

Distribution. Known only from Hispaniola.

Etymology. The epithet *hispaniolensis* refers to Hispaniola where this species occurs.

***Pseudolionothus* Peck and Cook, new genus.**

Type species: *Pseudolionothus insularis* Peck and Cook, here designated.

Distribution. Endemic to the islands of Cuba and Hispaniola in the Greater Antilles.

Biology. Unknown, probably feeding on soft fungi in moist forested habitats.

Diagnostic description. Body convex. Antenna of 11 antennomeres with 5-antennomere club; antennomere VIII reduced, disc-like. Mandibles prominent, both mandibles bearing teeth; left mandible with small tooth in apical half, right mandible with large triangular tooth at middle. Ventral side of head with paired antennal grooves. Mesosternum vertical between the coxae, vertical surface not longitudinally carinate. Tarsal formula 5-5-4 in both sexes. Mesotibia robust, spinose, larger than slender metatibia; metatibia lacking large spines except at apex. Without large punctures on metasternum and/or abdominal sternites. Sternite 3 not longer than following sternites. Males are distinguished by expanded pro- and mesotarsi bearing spatulate setae, absence of process on inner apical margin of mesotibia and by tooth-like expansion near middle of posterior margin of metafemur.

Etymology. The epithet *Pseudolionothus* is from the Greek *pseudo-* (false); *-lionothus*, sharing antennal characters with the genus *Lionothus*. Gender: masculine.

Key to males of *Pseudolionothus* of the West Indies

1. Dorsal margin of median lobe of aedeagus evenly curved in lateral view (Fig. 36); paired apical appendages reach apex of median lobe (Fig. 35); Hispaniola ***P. insularis* Peck and Cook, n.sp.**
- Dorsal margin of median lobe of aedeagus sinuate in lateral view (Fig. 34); paired apical appendages extend well beyond apex of median lobe (Fig. 33); Cuba ***P. andersoni* Peck and Cook, n.sp.**

***Pseudolionothus andersoni* Peck and Cook, n.sp.**

Figures 33, 34

Diagnostic description. Total length = 1.42–1.54 mm; greatest width = 0.94–1.10 mm. Dark reddish brown, shining. Head moderately coarsely, irregularly punctate. Antennal club moderately robust; antennomere VII variable in width, always distinctly narrower than IX and X; antennomere VIII thin, disc-like, about one-half width of IX and X; antennomere XI narrower than IX and X. Left mandible with small tooth on apical half, right mandible with large triangular tooth at middle. Pronotum with moderately fine, irregularly spaced punctures; posterior angles rounded, base broadly rounded. Elytra coarsely punctate, strial rows usually discernible only posteriorly. Median lobe of aedeagus (Fig. 33, 34) broad, gradually flattening toward apex; dorsal margin sinuate in lateral view; paired apical appendages with acute apices, extending well beyond apex of median lobe. Parameres slender, nearly reaching apex of median lobe, each bearing two apical setae.

Type material. Holotype, male, with the following label data: “CUBA: Guantanamo / El Yunque, Finca Las Delicia / 170m, 20.314–74.573, 31.I.2012 / R. Anderson, wet rainforest litter / 2012-016” (SBPC). Paratypes (7) with the following label data: same data as holotype (1, SBPC); CUBA: Holguin, Mayari / P. N. Mensura Piloto / 20.48123 - 75.80952, 716m / 10.V.2013, R. Anderson / 2013-003, dry pluviselva litter (2, SBPC); CUBA: Cienfuegos / Mayari, 1 km E / 21.97114 – 80.12172, 866m / 18.V.2013, R. Anderson / 2013-018, karst forest litter (2, SBPC); CUBA: Cienfuegos / P.N. Pico San Juan, road / 21.98812 – 80.14632, 1086m / 19.V.2013, R. Anderson / 2013-022, elfin forest litter (1, SBPC); CUBA: Cienfuegos / Rio Cabagan / 21.93123-80.08461, 651m / 20.V.2013, R. Anderson / 2013-026, gallery forest litter (1, SBPC).

Distribution. Known only from Cuba.

Etymology. This species, *andersoni*, is named for Dr. Robert Anderson, Canadian Museum of Nature, who collected all of the known specimens.

***Pseudolionothus insularis* Peck and Cook, new species**

Figures 35, 36

Diagnostic description. Total length = 1.56–2.08 mm; greatest width = 1.12–1.60 mm. Yellowish-brown to dark reddish brown, shining. Head with moderately fine, scattered punctures. Antennal club moderately robust; antennomere VII distinctly narrower than IX and X; antennomere VIII reduced to a disc, about one-half width of IX and X; antennomere XI narrower than IX and X. Left mandible with small tooth at apical third, right mandible with large triangular tooth at middle. Pronotum finely punctate; posterior angles rounded, base broadly rounded. Elytral punctation variable; striae punctures larger but usually discernible only posteriorly. Median lobe of aedeagus (Fig. 35, 36) broad, gradually flattening toward apex; evenly, weakly curved dorsoventrally; apex with a pair of inward-facing acute appendages reaching apex of median lobe. Parameres slender, nearly reaching apex of median lobe, each bearing two apical setae.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: LaVega Prov. / PN.A. Bermudez, Cienaga / 19.VII–2.VIII.95, 1010m / trop. evgrn. for. FIT / S. & J. Peck, 95-33” (SBPC). Paratypes (28) have the following label data: same data as holotype (7, SBPC); same data as holotype except: 1000m, 95-32 (1, SBPC); same data except: 1020m, 95-34 (6, SBPC); same data except: 1100m, 95-36 (3, SBPC); DOM. REP.: Santiago Prov. / PN. A. Bermudez, 9kmSW / Cienaga, Redondo, 2000m / 24.VII.95, shrub litter / S. + J. Peck, 95-49 (2, SBPC); DOM. REP.: Prov. Santiago / Par. Nac. A. Bermudez / Los Tablones, 1,290m / M.A. & R.O. Ivie colr / flight intercept trap // on Rio Izquierda / 19°03’N, 70°50’W, / 09APR–07JULY1992 (1, WIBF); DOM. REP.: Prov. Santiago / N. slope Pico del Yaque / 2515m, 08APR–07JULY1992 / M.A. Ivie, P.N.A. Bermud / flight intercept trap (3, WIBF); DOM. REP.: Prov. Santiago / N. side Pico del Yaque / 19°03’N, 70°56’W, 2515m / JULY1992–JULY1993 / flight intercept trap (1, WIBF); DOMIN. REP.: Prov. SanJuan / 19°02’N, 70°56’W, 2545m / Aguita Fria, P.N.A. Berm / 08APR–07JULY1992, M.A. / Ivie, flight inter. trap (3, WIBF); DOMIN. REP.: La Vega / 8kmS Constanza / 02SEP1997, P.W. Kovarik / Berlese cloud for. lit. (1, WIBF).

Distribution. Known only from Hispaniola.

Etymology. The epithet *insularis*, Latin adjective (of islands), refers to the island distribution of this species.

Tribe Scotocryptini

***Aglyptinus* Cockerell 1906**

Aglyptinus Cockerell 1906 (new name for *Aglyptus* LeConte). Type species: *Colenis laevis* LeConte (monotypy).
 =*Aglyptus* LeConte 1866: 369 (preoccupied, not Foerster 1856). Type species: *Colenis laevis* LeConte (monotypy).
 =*Aglyptonotus* Champion 1913: 65 (new name for *Aglyptus* LeConte).

Distribution. Neotropical, eastern Nearctic, England, New Guinea.

Biology. Usually found on soft fungi in moist forests.

Key to species of male *Aglyptinus* of the West Indies

- | | | |
|--------|---|--|
| 1. | Occurs in the Bahamas or Greater Antilles | 2 |
| — | Occurs in the Lesser Antilles | 17 |
| 2(1). | Occurs in Bahamas; pale maculae at elytral apices; aedeagus (Fig. 70) roundly arched dorsoventrally, sinuate before apex | <i>A. bahamensis</i> Peck and Cook, n.sp. |
| — | Occurs in Greater Antilles; elytra usually without pale maculae at elytral apices; aedeagus not roundly arched dorsoventrally and sinuate before apex | 3 |
| 3(2). | Occurs on Cuba | 4 |
| — | Occurs elsewhere in the Greater Antilles | 8 |
| 4(3). | Small, length usually less than 1.5 mm; eyes and wings reduced | 5 |
| — | Larger, length usually greater than 1.5 mm; eyes large, wings fully developed | 6 |
| 5(4). | Eyes and wings strongly reduced; aedeagus (Fig. 78, 79) short and broad, dorsoventrally angulate near base; parameres absent | <i>A. minutus</i> Peck and Cook, n.sp. |
| — | Eyes and wings slightly reduced; aedeagus (Fig. 72, 73) elongate, slender, evenly curved dorsoventrally; parameres present | <i>A. biseriatus</i> Peck and Cook, n.sp. |
| 6(4). | Antennae long, reaching base of pronotum; aedeagus (Fig. 74, 75) strongly arched, apex abruptly narrowed, downturned | <i>A. capitaneus</i> Peck and Cook, n.sp. |
| — | Antennae shorter, not reaching base of pronotum; aedeagus weakly to moderately arched, apex not downturned | 7 |
| 7(6). | Aedeagus (Fig. 80, 81) moderately, evenly arched dorsoventrally; apex rounded in dorsal view; extreme tip of apex upturned, sinuate in lateral view | <i>A. sinuatus</i> Peck and Cook, n.sp. |
| — | Aedeagus (Fig. 76, 77) weakly arched dorsoventrally, depressed before apex; apex acute in dorsal view | <i>A. fortipunctatus</i> Peck and Cook, n.sp. |
| 8(3). | Occurs on Jamaica | 9 |
| — | Occurs elsewhere in the Greater Antilles | 13 |
| 9(8). | Eyes strongly reduced, wings strongly reduced; aedeagus (Fig. 90, 91) evenly arched dorsoventrally, abruptly narrowed apically in dorsal view | <i>A. parvoculus</i> Peck and Cook, n.sp. |
| — | Eyes not strongly reduced, wings at least one-half normal length; aedeagus not evenly arched dorsoventrally and abruptly narrowed apically in dorsal view | 10 |
| 10(9). | Aedeagus (Fig. 84, 85) short and broad, weakly angled dorsoventrally; in dorsal view, widened before apex | <i>A. jamaicensis</i> Peck |
| — | Aedeagus elongate, strongly arched dorsoventrally | 11 |

- 11(10). Yellowish macula at apex of each elytron; aedeagus (Fig. 88, 89) strongly arched dorsoventrally; apex narrowly rounded in dorsal view ***A. maculus* Peck and Cook, n.sp.**
 — Elytra not maculate; aedeagal apex acute in dorsal view **12**
- 12(11). Aedeagus (Fig. 82, 83) moderately arched dorsoventrally, depressed before down-turned apex; apex broad in dorsal view ***A. dimorphicus* Peck**
 — Aedeagus (Fig. 86, 87) strongly arched dorsoventrally, apex upturned; apex narrow in dorsal view ***A. hemipterus* Peck and Cook, n.sp.**
- 13(8). Male metasternum with short median longitudinal carina in posterior half. Occurs on Puerto Rico and the Virgin Islands ***A. puertoricensis* Peck**
 — Male metasternum not carinate. Occurs on Hispaniola **14**
- 14(13). Eyes strongly reduced; wings strongly reduced; maxillary palps elongate, penultimate palpomere broadly expanded; aedeagus (Fig. 98, 99) with parameres absent
 ***A. longipalpus* Peck and Cook**
 — Eyes and wings not reduced; maxillary palps not elongate, penultimate palpomere not broadly expanded; parameres present **15**
- 15(14). Aedeagus (Fig. 94, 95) strongly arched dorsoventrally, angulate at middle, apex not drawn out in lateral view ***A. angulatus* Peck and Cook, n.sp.**
 — Aedeagus roundly arched dorsoventrally, apex drawn out in lateral view **16**
- 16(15). Aedeagal apex in dorsal view (Fig. 97) acute ***A. grandis* Peck and Cook, n.sp.**
 — Aedeagal apex in dorsal view (Fig. 101) broadly rounded
 ***A. hispaniolensis* Peck and Cook, n.sp.**
- 17(1). Occurs on Guadeloupe **18**
 — Occurs elsewhere in the Lesser Antilles **19**
- 18(17). Minute species, total length 1.2 mm; head and pronotum impunctate (after Hlisnikovsky 1964). Aedeagus unknown ***A. guadelupensis* Portevin**
 — Larger species, total length 1.5–2.0 mm; head and pronotum finely, sparsely punctate. Aedeagus (Fig. 102, 103) roundly arched dorsoventrally; apex rounded in dorsal view
 ***A. kaszabi* Hlisnikovsky**
- 19(17). Occurs on Dominica. Aedeagus (Fig. 104, 105) strongly, roundly arched dorsoventrally, with depression before apex; apex truncate in dorsal view ***A. dominica* Peck and Cook, n.sp.**
 — Occurs elsewhere in the Lesser Antilles. Aedeagal apex not truncate **20**
- 20(19). Occurs on Martinique. Aedeagus (Fig. 106, 107) evenly, roundly curved dorsoventrally; flattened and narrowly rounded at apex ***A. martiniquensis* Peck and Cook, n.sp.**
 — Occurs elsewhere in the Lesser Antilles. Aedeagal apices not evenly, roundly curved dorsoventrally; not flattened and narrowly rounded at apex **21**
- 21(20). Occurs on St. Lucia **22**
 — Occurs on St. Vincent or Grenada **23**
- 22(21). Minute, length 1.1–1.2 mm; aedeagus (Fig. 110, 111) short and broad, angulate dorsoventrally at basal third; not constricted before apex ***A. parvus* Peck and Cook, n.sp.**
 — Larger, length more than 1.4 mm; aedeagus (Fig. 108, 109) roundly arched dorsoventrally; in dorsal view, constricted before apex ***A. luciae* Peck and Cook, n.sp.**

- 23(21). Occurs on St. Vincent. Aedeagus (Fig. 114, 115) elongate, slender, moderately curved dorsoventrally, with apical third curved upward **A. *vincentii* Peck and Cook, n.sp.**
— Occurs on Grenada. Aedeagus (Fig. 112, 113) shorter, more strongly, evenly curved dorsoventrally; apical third not curved upward **A. *grenadensis* Peck and Cook, n.sp.**

***Aglyptinus dimorphicus* Peck 1972**

Figures 82, 83

Aglyptinus dimorphicus Peck 1972: 52; 1978: 245. Holotype male in MCZC, seen. Type locality: Windsor Great Cave, Trelawney Parish, Jamaica.

Diagnosis. Length 1.3–1.6 mm; greatest width 0.9–1.2 mm. Shining; color light to dark reddish brown; appendages and elytral epipleura paler in darker specimens. Head, pronotum and elytra minutely, sparsely punctate. Antennae short, length about equal to width of head. Maxillary palps unmodified. Eyes moderately small. Wings dimorphic, either of normal length and apparently functional or reduced to three-fourths length of elytra. Metasternum with scattered fine punctures medially and fine longitudinal lines of microsculpture posterolaterally. Male protarsi and mesotarsi densely setose. Major male metafemur longer, posterior margin concave. Aedeagus (Fig. 82, 83) elongate, slender, angled before middle, depressed before down-turned apex. Parameres thin, straight.

Distribution. The species is known only from Jamaica. Previously known localities, from Peck (1972, 1978). Jamaica. Clarendon Parish. Colonels Ridge. Pedro River, inside and outside Pedro Great Cave. Manchester Parish. Mandeville. Round Hill. Portland Parish. 1 mi W Ecclesdown; 0.5 mi NE Ecclesdown. St. Andrew Parish. Hardwar Gap. Hermitage Dam. Morces Gap. St. Ann Parish. 1 mi S Claremont. Ken Connell Hole (cave). Mt. Diablo, 2.5 mi 3 mi N Ewarton. Mt. Diablo. Brownstown. S of Moneague. Moseley Hall Cave. Thatchfield Great Cave. St. Catherine Parish. St. Claire Cave. Swansea Cave. St. Elizabeth Parish. Peru Cave. Southfield. St. James Parish. Mocho Cave. Brandon Hill Cave, Montego Bay. Maldon School Cave. St. Mary Parish. Goshen. Lucky Hill Farm Cave. Mt. Plenty Cave. Rock Springs Cave, near Pear Tree Grove. St. Thomas Parish. Bath Fountain. Blue Mountain Peak. Corn Puss Gap. Portland Gap. Whitfield Hall. Trelawny Parish. 5 mi N Alberttown. Discovery Bay Marine Lab. Drip Cave. Windsor Great Cave. Windsor.

New records. None.

Remarks. The species has been collected from near sea level to above 7400 feet [2260m] elevation. The species has dimorphic wings; short wings are more frequent in cave and higher elevation forest populations. It has been collected on bat guano in caves and in forests.

***Aglyptinus guadelupensis* Portevin 1942**

Aglyptinus guadelupensis Portevin 1942: 76; Hlisnikovský 1964: 188. Holotype in MNHN, Paris, not seen. Type locality: Trois Rivières, Guadeloupe.

Diagnosis. Small, length 1.2 mm; brick red; head and pronotum not punctate; elytra very densely punctate (Hlisnikovský 1964).

Distribution. Known only from Guadeloupe. Previously known localities from Portevin (1942). Guadeloupe. Trois Rivières.

New records. None.

Remarks. We have seen no specimens of this species.

***Aglyptinus jamaicensis* Peck 1972**

Figures 84, 85

Aglyptinus jamaicensis Peck 1972: 53; 1978: 245. Holotype male in MCZC, seen. Type locality: 2.5 mi S Moneague, St. Ann Parish, Jamaica.

Diagnosis. Length 1.1–1.6 mm; greatest width 0.9–1.3 mm. Shining; color dark reddish brown; appendages and elytral epipleura paler. Head, pronotum and elytra minutely, sparsely punctate. Antenna reaching base of pronotum. Maxillary palps unmodified. Eyes of moderate size. Wings fully developed. Metasternum with fine lines of microsculpture, transverse medially and diagonal laterally. Aedeagus (Fig. 84, 85) short and broad; in lateral view, weakly angled at middle, evenly narrowed to apex; in dorsal view, widened before apex. Parameres angled before apex.

Distribution. Known only from Jamaica. Previously known localities, from Peck (1972, 1977). Jamaica. St. Andrew Parish. Hardwar Gap. St. Ann Parish. 2.5 mi S Moneague. St. Thomas Parish. Corn Puss Gap.

New records. None.

Remarks. The species remains scarce and is known from moist forests in association with fleshy fungi, from 610 to 1220 m elevation.

***Aglyptinus kaszabi* Hlisnikovský 1964**

Figures 102, 103

Aglyptinus kaszabi Hlisnikovský 1964: 195. Holotype in HNHM, Budapest, not seen. Type locality: Guadeloupe, no other label data.

Diagnosis. Length 1.5–2.0 mm; greatest width 1.0–1.4 mm. Shining; reddish brown to black; antennae, pronotal sides, elytral epipleura and often clypeus paler. Head and pronotum finely, sparsely punctate; elytral punctures larger and more dense. Antennae reach base of pronotum. Maxillary palps unmodified. Eyes of moderate size. Wings fully developed. Metasternum medially and laterally with dense lines of microsculpture. Protarsi and mesotarsi of male densely setose. Major male mesofemur broader than metafemur; metafemur elongate, posterior margin weakly concave; metatibia elongate; inner apical spur of metatibia elongate, curved, sinuate apically. Aedeagus (Fig. 102, 103) evenly arched in lateral view; in dorsal view, narrowing to rounded apex. Parameres thin in apical half.

Distribution. This species is known only from Guadeloupe. Previously known localities. Guadeloupe, no other label data.

New records. Guadeloupe. BT: Morne á Louis, 14.V.2012, 16.18496-61.74964, 728 m, wet cloud forest litter, R. Anderson, 2012-107/108 (1, SBPC); BT, Soufrière, 15.V.2012, 16.03448-61.66560, 1053 m, wet *Clusia elfin* forest litter, R. Anderson, 2012-111 (10, SBPC); BT, Soufrière, 15.V.2012, 16.03528-61.66573, 1075 m, wet *Clusia elfin* forest litter, R. Anderson, 2012-112 (4, SBPC); BT, Soufrière, 15.V.2012, 16.03406-61.66786, 992 m, wet cloud forest litter, R. Anderson, 2012-113 (8, SBPC);); BT, Soufrière, 17.V.2012, 16.03406-61.66786, 992 m, wet cloud forest litter, R. Anderson, 2012-117 (10, SBPC);); BT, Soufrière, 17.V.2012, 16.03380-61.67707, 821 m, old coffee forest litter, R. Anderson, 2012-118 (7, SBPC); BT, Soufrière, 17.V.2012, 16.03293-61.67527, 867 m, wet montane forest litter, R. Anderson, 2012-119 (2, SBPC); BT, Sentier Houëlmont, 18.V.2012, 15.98135-61.70947, 105 m, lowland deciduous forest litter, R. Anderson, 2012-121 (1, SBPC); BT, Chutes du Carbet, 19.V.2012, 16.04034-61.62793, 486 m, wet rainforest litter, R. Anderson, 2012-125 (6, SBPC); BT, Trace des Pitons ou Sauts de Bouillante, 21. V.2012, 16.12083-61.74077, 757 m, montane forest litter, R. Anderson, 2012-130 (1, SBPC); BT, Trace des Pitons ou Sauts de Bouillante, 21. V.2012, 16.11735-61.74291, 700 m, montane forest litter, R. Anderson, 2012-131 (3, SBPC); BT, Soufrière,

22.V.2012, 16.03406-61.66786, 992 m, wet cloud forest litter, R. Anderson, 2012-134 (10, SBPC); BT, Matoumba, Trace Victor Hugues, 28.V.2012, 16.05695-61.67458, 892 m, wet cloud forest litter, R. Anderson, 2012-156 (4, SBPC); BT, Matoumba, Trace Victor Hugues, 28.V.2012, 16.05772-61.67113, 1189 m, wet cloud forest litter, R. Anderson, 2012-157 (1, SBPC; 3, MCZC; 3, FMNH; 3, FSCA); BT, Matoumba, Trace Victor Hugues, 28.V.2012, 16.05595-61.67672, 1052 m, montane forest litter, R. Anderson, 2012-158 (10, SBPC); BT, Soufrière, Sentier a la Cisterna, 29.V.2012, 16.03280-61.66730, 968 m, wet cloud forest litter, R. Anderson, 2012-161 (10, SBPC); BT, Soufrière, Sentier Baines Jaunes, 29.V.2012, 16.03473-61.66554, 1060 m, wet cloud forest litter, R. Anderson, 2012-162 (1, SBPC); BT, Soufrière, road to Baines Jaunes, 29.V.2012, 16.03398-61.67529, 850 m, montane forest litter, R. Anderson, 2012-163 (10, SBPC).

***Aglyptinus puertoricensis* Peck 1972**

Figures 92, 93

Aglyptinus puertoricensis Peck 1972: 54; 1978: 244. Holotype male in MCZC, seen. Type locality: Cerro Dona Juana, Toro Negro Forest, Puerto Rico.

Diagnosis. Length 1.3–1.7 mm; greatest width 1.0–1.3 mm. Shining; color dark reddish brown; appendages and elytral epipleura paler. Head finely, sparsely punctate; pronotum minutely, sparsely punctate; elytral punctures larger and more closely spaced than on head or pronotum. Antennae reaching pronotal base. Maxillary palps unmodified. Eyes of moderate size. Wings fully developed. Metasternum densely covered with fine lines of microsculpture; male with short median carina in posterior half. Male protarsi and mesotarsi densely setose. Major male metatibia elongate; inner metatibial spur elongate, curved at apex. Aedeagus (Fig. 92, 93) elongate, narrow, angled dorsoventrally before middle; in dorsal view, constricted at about apical two-fifths. Parameres constricted near middle.

Distribution. Known only from Puerto Rico and the Virgin Islands (St. John, Guana, Tortola, Virgin Gorda). Previously known localities, from Peck (1978). Puerto Rico. Cerro Dona Juana, Toro Negro Forest. Luquillo Experimental Forst. Maricao State Forest. 15 mi S. San Juan, Aguas Buenas, Aguas Buenas caves, in forests and caves. Bayaney, Cueva del Humo of Rio Camuy Cave.

New records. Puerto Rico. San German, Reserva For. Maricao, km. 162 on Rt. 120, 8.VIII.1999, P.W. Kovarik, leaf litter Berlese (9, WIBF); Maricao For. Res., S. side, 535m, 7.3kmN Sabana Grande, 26.IX.1987, M.A. Ivie, ex forest litter (8, WIBF); Municipio Isabella, Bosque Est. Guajataca, 3.VIII.1999, P. Kovarik, Berlese leaf litter (1, WIBF); El Verde Research Sta., ridge tops in forest, 2–30.IX.1996, E. Nazario, pitfall (8, WIBF); same data except: 2–25.XI.1996 (1, WIBF); same data except: 9–23.V.1996 (4, WIBF); same data except: 21–28.X.1996 (7, WIBF); Cayey, Reserva Forestal Carite, 28.VII.1999, P. Kovarik & C. O'Brien, leaf litter (7, WIBF); Caribbean Nat. Forest, Mt. Britton summit, 4–12.VIII.1999, 941m, P. Kovarik, FIT (6, WIBF); Aguas Buenas, nr. Cueva Aguas Buenas, 11.VIII.1999, P.W. Kovarik, leaf litter Berlese (3, WIBF); 2kmS Mameyes (Palmer), Colinas del Yunque, 75m, 22.IX.1987, M.A. Ivie, for. litter (1, WIBF). Virgin Islands. Guana. Quail Dove Ghut, 25.XII–25.I.1993, 400ft, LioWei Peng, FIT#5 (26, WIBF); same data except: 25.I–25.II.1993 (11, WIBF); same data except: 25.II–25.III:1993 (1, WIBF); same data except: 13.XI–25.XII.1992 (4, WIBF); same data except: 24.VII–9.X.1994, M.A. & L.L. Ivie (3, WIBF); same data except: 24–31.X.1992 (3, WIBF); same data except: 31.X–13.XI.1992, M.A. Ivie (3, WIBF); same data except: 24.X.1992, M.A. & L.L. Ivie, leaf litter (4, WIBF). St. John. Est. Hope, 980ft. [298m], 3.I.1993–6.VII.1994, VIBFP colrs., FIT#10 (6, WIBF); Est. Hope, Bordeaux Mt., FIT#10, 27.VII–14.X.1994, 980ft, M.A. & L.L. Ivie (3, WIBF); same data except: 6–27.VII.1994, M. Becker & S. Bucklin (2, WIBF); King Hill, 21.V.1982, W.B. Muchmore, litter under old stump (1, WIBF); Susannaberg, 16.VI.1980, various litter among rocks and roots in woods, W.B. Muchmore (1, WIBF); Lameshur Bay, VIERS, 3.VI.1980, under lg. tamarind, W.B. Muchmore (1, WIBF); Denis Bay, 16.VI.1980, at base of old mill, W.B. Muchmore (1, WIBF); Cinnamon Bay Nature Trail, 6.VI.1980, W.B. Muchmore, ex buttresses of lg. kapok (4, WIBF); Est. Adrian, ruins, 25.II.1984, along walls, W.B. Muchmore (1, WIBF); Est. Caneel Bay, Caneel Hill, 240ft. [73m], 17.XII–2.I.1992, VIBFP colrs., FIT#6 (1, WIBF). Tortola. Mt. Sage Nat. Pk., N. side Mt. Sage, 1550 steps, 25.VII–10.X.1994, FIT#3, VIBFP (4, WIBF); same data except: 10.XII–8.I.1993 (1,

WIBF); same data except: 7–25.VII.1994, M. Ivie & S. Bucklin (1, WIBF); same data except: 30.X–13.XI.1992, M.A. Ivie (7, WIBF); same data except: 10.XII–7.I.1993 (17, WIBF); same data except: 13.XI–10.XII.1992, T.R. Hughes (3, WIBF); Mt. Sage Nat. Pk., E side Mt. Sage, 1600ft. [480m], 23.X.1992, leaf litter, M.A. Ivie (1, WIBF). Virgin Gorda. Gorda Pk. N.P., 1275ft. [389m], 15.VII–11.X.1994; M.A. & L.L. Ivie, FIT#2 (6, WIBF).

Remarks. Large numbers have been taken moist forests in forest litter, and some from bait traps and on bat guano in caves.

***Aglyptinus angulatus* Peck and Cook, new species**

Figures 94, 95

Diagnostic description. Length 1.4–1.7 mm; greatest width 1.1–1.3 mm. Shining; color reddish brown; pronotal, margins, antennae, palps and tarsi paler. Head, pronotum and elytra finely, sparsely punctate. Antennae not reaching base of pronotum. Maxillary palps unmodified. Eyes large. Wings fully developed. Metasternum with transverse lines of microsculpture medially, diagonal lines of microsculpture laterally. Male protarsi and mesotarsi densely setose. Major male mesofemur broader than metafemur; posterior margin of metafemur weakly concave; metatibiae elongate; inner metatibial spur elongate, curved, sinuate apically. Aedeagus (Fig. 94, 95) strongly arched dorsoventrally, angulate at middle; apex broadly rounded. Parameres slender, curved.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: SAN CRISTOBAL/ PROV. Borbon, Cuevas/ Pomier, 28.VII.1995, 2000m/ tropical decid. forest, leaf litter/ S. & J. Peck, 95-48” (SBPC). Paratypes (55): with same label data as holotype (20, SBPC); with same data except: 13–28.VII.1995, FIT, 95-23 (7, SBPC); same data except: 28.VII–5.VIII.1995, FIT, 95-47 (5, SBPC); San Cristobal, 4kmNW Villa Altagracia, 300m, 12.IV–6.VII.1992, M.A. & R.O. Ivie, flight intercept trap (4, WIBF); DOM.REP: Barahona, 7kmNW Paradiso, 200m, rainforest remnant, 27.XI–4.XII.91, intercept tp., Masner & Peck, 91-43 (4, SBPC); DOM.REP: Pedernales, 26kmN Cabo Rojo, 565m, evergreen dry forest, 29.XI–3.XII.1991, FIT, Masner & Peck, 91-347 (4, SBPC); 24kmN Cabo Rojo, 665m, 22.VII–9.VIII.1999, trap #4 FIT, Ivie, Guerrero, Miller & Branham (11, WIBF).

Additional material examined. DOM. REP: Pedernales, 24kmN Cabo Rojo, 610m, 20–25.VIII.1988, wet forest FIT, M. Ivie, Phillips & Johnson (20, WIBF); same data except: 20.VIII.1988, wet forest litter nr. termite mound (2, WIBF); same data except: 20.VIII–9.IX.1988, FIT (4, WIBF); 24kmN Cabo Rojo, 612m, 18°06'N, 71°38'W, 10.VII.1993, D.S. Sikes & R.P. Rosenfeld, carrion trap (1, WIBF); same data except: 11.VII.1993, leaf litter (1, WIBF); ca. 35kmN Cabo Rojo, 1250m, Las Abejas, 26.VIII.1988, mix. leaf litter, M.A. Ivie, T.K. Phillips, & K.A. Johnson (1, WIBF); Las Abejas, 1225m, 18°09'03"N, 71°37'48"W, 28.VII–3.VIII.1999, G.O. Dominici, FIT (1, WIBF); DOM.REP: Hato Mayor, Par. Nac. Los Haitises, W. of Sabana de la Mar, 1–16.IV.1992, 10m, M.A. Ivie, FIT (3, WIBF); Par. Nac. Los Haitises, W. of Sabana de la Mar, Bosque Humido, 1.IV.1992, litter in buttresses, M.A. Ivie, D.S. Sikes & W. Lanier (1, WIBF); same data except: 2.IV.1992, M.A. Ivie, rotten log (1, WIBF); same data except: 16.IV–1.VII.1992, FIT (2, WIBF); Par. Nac. Los Haitises, 19°05'N, 69°29'W, s.l., 19.VII.1993, leaf litter, D. Sikes & R. Rosenfeld (1, WIBF); DOM.REP: Monte Plata, 3kmW Bayagua, Hwy. 23 at Rio Sabana, 27.VIII.1997, P.W. Kovarik, riparian leaf litter (1, WIBF); DOM.REP: La Vega, nr. Buena Vista, Hotel La Montana, 10.IV.1992, in pool, M.A. Ivie, D.S. Sikes & W. Lanier (1, WIBF). HAITI: 20 mi N Camp Perrin, 24.V.1950, H.B. Mills (5, SBPC); Camp Perrin, 24.V.1950, H.B. Mills (2, SBPC).

Distribution. Known only from Hispaniola.

Etymology. The epithet *angulatus* (Latin, with angles) refers to the shape of the aedeagus of this species.

***Aglyptinus bahamensis* Peck and Cook, new species**

Figures 70, 71

Diagnostic description. Length 1.3–1.4 mm; greatest width 0.9–1.0 mm. Shining; color light reddish brown with paler maculae at elytral apices. Head punctation of moderate size and spacing; pronotum finely, sparsely punctate; elytral punctures large, closer than head punctation. Antennae short, about as long as width of head; apical antennomere distinctly paler than preceding antennomeres. Maxillary palps unmodified. Eyes large. Wings fully developed. Metasternum finely, sparsely punctate medially; with fine lines of microsculpture laterally. Male protarsi and mesotarsi setose. Major male metafemur slender with weakly concave posterior margin; metatibia elongate; inner apical spur of metatibia elongate, curved, sinuate apically. Aedeagus (Fig. 70, 71) roundly arched dorsoventrally, sinuate before apex; in dorsal view, evenly tapering to rounded apex. Parameres straight, evenly tapering to narrow apex.

Type material. Holotype, male, with the following label data: “BAHAMAS: Andros Island/ Forfar Field Sta., nr./ Stafford Creek; 9-VI-2004/ M.C. Thomas, BLT” (FSCA). Paratypes (7): with same data as holotype (1, FSCA); BAHAMAS: Andros Island, Forfar Field Sta., Stafford Creek, 7.VI.2001, B.K. Dozier, blacklight trap in coastal coppice (1, FSCA; 1, SBPC); Andros Is., Atala Coppice, 3.VI.2001, M.C. Thomas & R.H. Turnbow, sifted litter ex shallow solution hole (1, FSCA; 1, SBPC); Andros Island, Maidenhair Coppice, 24–28.VII.2006, M.C. Thomas, T.R.S. Smith, UV trap in interior coppice (1, FSCA); Andros I., Blanket Snd (N), Forfar Fld. Sta., 17.V.1987, J. Browne, junction of low coast. coppice & dry pineland, blk. lt., 87-20J (1, SBPC).

Distribution. Known from Andros Island in the Bahamas.

Remarks. Because of the geographic proximity of Florida and Andros Island of the Bahamas, it might be expected that the species of the two areas might be closely related. However, comparison of *A. laevis* (LeConte) of Florida and other eastern states (Peck 2004) showed no close affinity.

Etymology. *Bahama* + Latin suffix *-ensis*, locality, refers to the occurrence of this species in the Bahamas Islands.

***Aglyptinus biseriatus* Peck and Cook, new species**

Figures 72, 73

Diagnostic description. Length 1.2–1.5 mm; greatest width 0.8–1.1 mm. Shining; color dark reddish brown; sides of pronotum, antennae and tarsi paler. Head finely, moderately sparsely punctate; pronotum and elytra finely, sparsely punctate. Antennae slightly longer than width of head, not reaching pronotal base; apical antennomere distinctly paler than preceding antennomeres. Maxillary palps unmodified. Eyes slightly reduced in size. Wings slightly reduced. Metasternum minutely, sparsely punctate medially; with fine lines of microsculpture laterally. Male protarsi and mesotarsi densely setose; male legs otherwise unmodified. Aedeagus (Fig. 72, 73) evenly rounded dorsoventrally, apex smoothly downturned and evenly tapered to rounded apex. Internal sac with two rows of spines and elongate, sinuate sclerite. Parameres tapering to narrow apex.

Type material. Holotype, male with the following label data: “CUBA: SANTIAGO PROV./ Gran Piedra, 2nd Chorrito/ 9.XII.1995, km8/ leaf and stick litter/ S. Peck, 95-88” (SBPC). Paratypes (52): with same data as holotype (9, SBPC; 3, FMNH; 3, FSCA; 3, MCZC); Cuba: Santiago de Cuba, Parque Nacional Gran Piedra, 550m, 20.001-75.673, 26.I.2012, R. Anderson, mixed hardwood litter, 2012-007 (15, SBPC); same locality, Trail to Cerro Mogote, 770m, 19.997-75.582, 28.I.2012, R. Anderson, wet mixed litter, 2012-009 (1, SBPC); same data except: 800m, 19.999-75.583, F. Cala, 2012-012 (7, SBPC); CUBA: Guantanamo, El Yunque, Peak, 540m, 20.313-74.574, 31.I.2012, F. Cala, wet rain forest litter, 2012-018 (4, SBPC); same data except: 1.II.2012, N. Franz, 2012-021 (7, SBPC).

Distribution. Known only from Cuba.

Etymology. The epithet *biseriatus* (Latin *bi*, two; *seriatus*, row) refers to the double row of spines in the aedeagal internal sac of this species.

***Aglyptinus capitaneus* Peck and Cook, new species**

Figures 74, 75

Diagnostic description. Length 1.5–2.1 mm; greatest width 1.0–1.5 mm. Shining; color light reddish brown to nearly black; sides of pronotum, appendages paler in dark specimens. Head and pronotum moderately finely, sparsely punctate; elytra moderately coarsely, densely punctate. Antennae long, reaching base of pronotum. Maxillary palps unmodified. Eyes large. Wings fully developed. Metasternum finely punctate medially, with fine lines of microsculpture laterally. Male protarsi and mesotarsi densely setose. Major male mesofemur broader than metafemur; metatibia elongate; inner metatibial spine elongate, curved, with sinuate apex. Aedeagus (Fig. 74, 75) elongate, slender, strongly arched dorsoventrally; apex narrow, downturned. Parameres broad at base, narrow apically.

Type material. Holotype, male, with the following label data: “CUBA: Santiago de Cuba/ Parque Nacional Gran Piedra/ Gran Piedra Trail/ 1180m, 20.011-75.627, 29.I.2012/ R. Anderson, wet pluviselva litter/ 2012-014” (SBPC). Paratypes (44): with same data as holotype (9, SBPC); same data except: Near Museo Isabélica, 1115m, 20.007-75.619, 26.I.2012, 2012-003 (1, SBPC); same data except: Estacion Ecologica Gran Piedra, 1080m, 20.010-75.637, mixed pine litter, 2012-005 (1, SBPC); same data except: near La Isabelica, 1075m, 20.003-75.613, 27.I.2012, wet pluviselva litter, 2012-008 (3, SBPC); Santiago Prov., Gran Piedra, Isabelica, 7–17.XII.1995, 1100m, elfin forest FITs, S. Peck, 95-84 (20, SBPC; 3, MCZC; 3, FSCA; 3, FMNH); Santiago Prov., Gran Piedra, Met. Radar, 6-17.XII.1995, 1100m, elfin forest FIT, S. Peck, 95-76 (1, SBPC).

Distribution. Known only from Cuba.

Etymology. The epithet *capitaneus* (Latin, large) refers to the relatively large size of this species.

***Aglyptinus dominica* Peck and Cook, new species**

Figures 104, 105

Diagnostic description. Length 1.1–1.9 mm; greatest width 0.8–1.4 mm. Shining; color dark reddish brown; antennae, pronotal margins, tibiae, tarsi and elytral epipleura paler. Pronotum moderately finely punctate; punctures larger and more dense on head and elytra. Antennae reaching base of pronotum. Maxillary palps unmodified. Eyes large. Wings fully developed. Metasternum with dense lines of microsculpture medially and laterally. Male protarsi and mesotarsi densely setose. Posterior margin of major male metafemur weakly concave; metatibia elongate; inner metatibial spine elongate, sinuate at apex. Aedeagus (Fig. 104, 105) elongate, slender, strongly arched, roundly curved dorsoventrally, depressed dorsally at apical fourth in lateral view; apex truncate, flat in dorsal view. Parameres straight, evenly narrowed from base to apex.

Type material. Holotype, male, with the following label data: “WEST INDIES: DOMINICA/ Middleham Falls trail, Cochrane/ N15 20.922' W61 20.747', 650 m/ Forest FITs, 31.V–11.VI.2004/ S. & J. Peck, 04-93” (SBPC). Paratypes (51) with the following label data: with same data as holotype (19, SBPC; 3, FSCA; 3, MCZC; 3, FMNH); same data except: Forest litter Berlese, 04-93A (1, SBPC); Dominica: Springfield Estate, 31.V–16.VI.2004, N15 20.841' W61 22.000', 400m, Mt. Joy House, wet montane forest, FIT, S. & J. Peck, 04-89 (3, SBPC); same data except: 550m, ridgetop forest above Mt. Joy, 04-90 (2, SBPC); Dominica: Syndicate Estate trail, E. of Dublanc, N15 31.202' W61 25.015', 560m, Montane rain forest carrion trap, 2–14.VI.2004, S. & J. Peck, 04-97 (11, SBPC); same data except: FIT, 04-98 (1, SBPC);

Dominica: Springfield Estate, 4–6.VI.2004, N15 20.841' W61 22.000', 550m, Ridgetop forest above Mt. Joy, dung trap, S. & J. Peck, 04-100 (1, SBPC); Dominica: Syndicate Estate trail, E. of Dublanc, N15 31.202' W61 25.015', 560m, Montane rain forest, treebase litter Ber., 13.VI.2004, S. & J. Peck, 04-105 (2, SBPC); Dominica: Cochrane, west of Morne Macaque, 15°20.852 N 61°20.698 W, 26.IV.2006, 2300 ft. 701m], Z. Prusak (2, FSCA).

Distribution. Known only from Dominica.

Etymology. The epithet *dominica* refers to Dominica where this species occurs.

***Aglyptinus fortipunctatus* Peck and Cook, new species**

Figures 76, 77

Diagnostic description. Length 1.2–1.7 mm; greatest width 0.9–1.2 mm. Moderately shining; color yellowish to light reddish brown, paler maculae at elytral apices. Head and pronotum finely, moderately sparsely punctate; elytra coarsely, densely punctate. Antennae short, reaching middle of pronotum. Maxillary palps unmodified. Eyes large. Wings fully developed. Metasternum finely, sparsely punctate medially; densely covered with fine lines of microsculpture laterally. Male protarsi and mesotarsi densely setose. Major male mesofemur broader than metafemur; metafemur with concave posterior margin; mesotibia elongate; inner metatibial spine elongate with curved apex. Aedeagus (Fig. 76, 77) weakly curved dorsoventrally, depressed before evenly tapered, acute apex. Parameres evenly narrowing to slender apex.

Type material. Holotype, male, with the following label data: “CUBA: SANTIAGO PROV./ SANTIAGO, Jardin Botanico/ 5.XII.1995, 50 m/ scrub forest litter/ S. Peck, 95-70” (SBPC). Paratypes (14): with same data as holotype except: 5–17.XII.1995, scrub forest FITs, 95-72 (10, SBPC); same data except: 5 m, disturbed forest, 95-74 (2, SBPC); Cuba: Santiago Prov., 6km NE Siboney, Rio Juragua, 150 m, 7.XII.1995, tree base litter, S. Peck, 95-86 (2, SBPC).

Distribution. Known only from Cuba.

Etymology. The epithet *fortipunctatus* (Latin *forti-*, strongly; *punctatus*, punctured) refers to the heavily punctate elytra of this species.

***Aglyptinus grandis* Peck and Cook, new species**

Figures 96, 97

Diagnostic description. Length 1.9–2.3 mm; greatest width 1.5–1.8 mm. Shining; color reddish brown; pronotal margins, labrum, palps, antennae and tarsi usually paler. Head, pronotum and elytra moderately finely, sparsely punctate. Antennae long, reaching pronotal base. Maxillary palps unmodified. Eyes of moderate size. Wings fully developed. Metasternum medially and laterally with fine lines of microsculpture. Male protarsi and mesotarsi densely setose. Major male mesofemur broader than metafemur; metatibia elongate; inner metatibial spine elongate, curved, sinuate apically. Aedeagus (Fig. 96, 97) elongate, slender, strongly curved dorsoventrally, sinuate before acute apex. Parameres broad basally, narrow apically.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: LA VEGA PROV./ PN. A. Bermudez/ 4km SW Cienaga, 1200 m/ forest litter, 21.VII.1995/ S. & J. Peck, 95-42” (SBPC). Paratypes (49) with the following label data: with same data as holotype (15, SBPC); DOM. REP.: La Vega Prov., 10 km NE Jarabacoa, Hotel Montana, forest FIT, 18.VII–4.VIII.1995, 550 m, S. & J. Peck, 95-30 (1, SBPC); PN. A. Bermudez, Cienaga, 19.VII–2.VIII.1995, 1000 m, trop. evgrn. forest, FIT, S. & J. Peck, 95-32 (15, SBPC); same data except: 1010 m, 95-33 (9, SBPC; 3, FSCA; 3, MCZC; 3, FMNH).

Additional material examined. Dominican Republic: La Vega Prov., PN. A. Bermudez, Cienaga, 19.VII–2.VIII.1995, 1020 m, trop. evgrn. forest, FIT, S. & J. Peck, 95-34 (15, SBPC); same data except: 21.VII.1995, trop. evgrn. forest litter, 95-44 (1, SBPC); same data except: 2km SW Cienaga, 2.VIII.1995, 1100 m, forest litter, 95-52 (7, SBPC); same data except: 1 km SW Cienaga, 1050 m, 95-53 (1, SBPC) same data except: 1100 m, 95-36 (17, SBPC); 10km NE Jarabacoa, Racquet Club, 550 m, FIT, 20.VII–4.VIII.1995, mixed for., S. & J. Peck, 95-37 (1, SBPC); Res. Cient. Ebano Verde, 19°01.9'N., 70°32.6'W, 4.IX.1997, 1000m, P.W. Kovarik (1, WBIF); Res. Sci. Ebano Verde, 1440m, 5.IX.1997, cloud forest tree fern litter (1, WBIF); Constanza, 1150m, 30.VIII.1988, mixed secondary pine forest, M.A. Ivie, T.K. Phillips, & K.A. Johnson (2, WBIF); 8kmS Constanza, 2.IX.1997, P.W. Kovarik, Berlese cloud for. lit. (3, WBIF); DOM.REP.: Independencia, 32km NW La Descubierta, sabana Real, 1800 m, cloud forest moss and litter, 26.XI.1991, S. & J. Peck, 91-334 (5, SBPC); DOM. REP.: Pedernales, 28kmN Cabo Rojo, 760 m, evergreen dry forest, 29.XI–3.XII.1991, FIT, Masner & Peck, 91-349 (1, SBPC); Las Abejas, 1225m, 18°09'03"N, 71°37'48"W, 28.VII–3.VIII.1999, G.O. Dominici, FIT (2, WBIF); DOM.REP.: Santiago, Par. Nac. A. Bermudez, Los Tablones, 1290m, M.A. & R.O. Ivie, FIT, on Rio Izquiero, 19°03'N, 70°50'W, 9.IV–7.VII.1992 (24, WBIF); DOM. REP.: Prov. Barahona, nr. Filipinas, Larimar Mine, 26.VI–7.VII.1992, R.E. Woodruff & P. Skelley, flight trap (7, FSCA); DOM. REP.: Pico Duarte, N19°08.22 W70°27.73, 1200–1400m. 17.VII.2004, A. Konstantinov, moss sifting (2, FSCA).

Distribution. Known only from Hispaniola.

Etymology. The epithet *grandis* (Latin, large) refers to the relatively large body size of this species.

***Aglyptinus grenadensis* Peck and Cook, new species**

Figures 112, 113

Diagnostic description. Length 1.1–1.7 mm; greatest width 0.9–1.3 mm. Shining; color dark reddish brown; clypeus, appendages, pronotal margins and elytral epipleura paler. Head and pronotum finely, sparsely punctate; elytral punctures larger, more dense. Antennae not reaching base of pronotum. Maxillary palps unmodified. Eyes large. Wings fully developed. Metasternum lacking microsculpture medially; dense lines of microsculpture laterally. Male protarsi and mesotarsi densely setose. Major male mesofemur broader than metafemur; metatibia elongate; inner metatibial spine elongate, curved, sinuate apically. Aedeagus (Fig. 112, 113) evenly, roundly curved dorsoventrally; flattened, acute at apex. Parameres constricted before apex.

Type material. Holotype, male, with the following label data: “WEST INDIES: GRENADA/ Grand Etang Forest Reserve/ N12°04.846', W61°42.333'/ 9–28.VIII.10, 360 m, Rain/ forest FIT., S. Peck, 10-61” (SBPC). Paratypes (62): with same data as holotype (27, SBPC); same data except: forest malaise, 10-60 (1, SBPC); same data as holotype except: N12°04.162', W61°42.162', 10–28.VIII.10, 400 m, rain forest malaise, 10-62 (2, SBPC); with same data except: rain forest FIT, 10-63 (12, SBPC; 3, MCZC; 3, FMNH); same data except: 15–18.VIII.10, carrion trap, 10-70 (5, SBPC); same data as holotype except: 15–18.VIII.10, carrion trap, 10-71 (4, SBPC); Grenada: Par. St. Andrews, Grand Etang Forest, 29.VIII.1990, nutmeg shell berlese, J. Telesford (3, FSCA); Grenada: Grand Etang N.P., Beausejour View Tr., ± 1970', 4.XI.1991, C.W. & L.B. O'Brien (2, WBIF).

Distribution. Known only from Grenada.

Etymology. The epithet *grenadensis* (Grenada + the Latin suffix *-ensis*, locality) refers to the occurrence of this species on Grenada.

***Aglyptinus hemipterus* Peck and Cook, new species**

Figures 86, 87

Diagnostic description. Length 1.8–1.9 mm; greatest width 1.3 mm. Shining; color dark reddish brown; antennae, palps and tarsi paler. Head moderately finely, sparsely punctate; pronotum and elytra finely, sparsely punctate. Antenna about as long as width of head. Maxillary palps unmodified. Eyes of moderate size. Wings reduced to about half normal length. Metasternum finely, sparsely punctate medially; with fine lines of microsculpture laterally. Male protarsi and mesotarsi densely setose. Major male metafemur and metatibia longer than in female. Aedeagus (Fig. 86, 87) elongate, slender; strongly, roundly arched dorsoventrally; upturned apex elongate, narrow. Parameres narrow, straight.

Type material. Holotype, male, with the following label data: “JAMAICA: St. Thomas/ WhitfieldHall, 4200’/ 1.I.73, S&J Peck/ B255, forest litter” (SBPC). Paratypes (6): with same data as holotype (2, SBPC); Jamaica: Middlesex, St. Ann Mt., Diablo, 5mi. [8.04 km]S. Moneague, 28.III.1991, T.K. Phillips (4, WIBF).

Distribution. Known only from Jamaica.

Etymology. The epithet *hemipterus* (Greek, *hemi-*, half; *pterus*, wing) refers to the reduced wing size of this species.

***Aglyptinus hispaniolensis* Peck and Cook, new species**

Figures 100, 101

Diagnostic description. Length 1.3–1.8 mm; greatest width 1.0–1.3 mm. Shining; color reddish brown; pronotal margins, labrum, palps, antennae and tarsi paler. Head finely, sparsely punctate; pronotum minutely, sparsely punctate; elytra more coarsely, densely punctate than head. Antennae not reaching pronotal base. Maxillary palps unmodified. Eyes moderately large. Wings fully developed. Metasternum minutely, sparsely punctate medially, with fine lines of microsculpture laterally. Male protarsi and mesotarsi densely setose. Major male mesofemur broader than metafemur; posterior margin of metafemur weakly concave; inner metatibial spine elongate with curved apex. Aedeagus (Fig. 100, 101) evenly curved dorsoventrally, flattened before rounded apex. Parameres gradually narrowed.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: LA VEGA PROV./ PN. A. Bermudez, Cienaga/ 19.VII–2.VIII.1995, 1100 m/ trop. evgrn. forest, FIT/ S. & J. Peck, 95-36 (SBPC). Paratypes (44): with same data as holotype (14, SBPC); same data as holotype except: 1000 m, 95-32 (10, SBPC; 3, MCZC; 3, FMNH); same data except: 1010 m, 95-33 (14, SBPC).

Additional material examined. DOMINICAN REPUBLIC: La Vega Prov., PN. A. Bermudez, Cienaga, 19.VII–2.VIII.1995, 1020 m, trop. evgrn. forest, FIT, S. & J. Peck 95-34 (18, SBPC); same data except: 21.VII–4.VIII.95, 1000 m, forest carrion traps, 95-39 (1, SBPC); same data except: 21.VII.1995, trop. evgrn. forest litter, 95-44 (10, SBPC); PN. Bermudez, 2km SW Cienaga, 2.VIII.1995, 1100 m, forest litter, S. & J. Peck, 95-52 (18, SBPC); PN. Bermudez, 1km W Cienaga, 1050 m, 2.VIII.1995, forest litter, S. & J. Peck, 95-53 (7, SBPC); 10km NE Jarabacoa, Hotel Montana, forest FIT, 18.VII–4.VIII.1995, 550 m, S. & J. Peck, 95-30 (24, SBPC); same data except: Racquet Club, mixed for. FIT, 20.VII–4.VIII.1995, 95-37 (8, SBPC); same data except: Racquet Club Rd., 30.VII.1995, forest litter, 95-50 (8, SBPC); same data except: 12km NE Jarabacoa, 4.VIII.1995, broken termite nest, 95-54 (1, SBPC); ca.10km E. Constanza, 1295m, 31.VIII.1988, mixed forest litter, M.A. Ivie, T.K. Phillips, & K.A. Johnson (7, WIBF); Constanza, 1150m, 31.VIII.1988, hardwood leaf litter, M.A. Ivie, T.K. Phillips, & K.A. Johnson (2, WIBF); same data except 30.VIII.1988, mixed secondary pine forest (6, WIBF); 8km S. Constanza, 2.IX.1997, P.W. Kovarik, Berlese cloud for. lit. (1, WIBF); DOM. REP.: Pedernales, 28km N Cabo Rojo, 760 m, evergreen dry forest, 29.XI–3.XII.1991, FIT, Masner & Peck, 91-349 (8, SBPC); Las Abejas, 1225m, 18°09’03”N, 71°37’48”W, 28.VII–3.VIII.1999, G.O. Dominici, FIT (8, WIBF); 24kmN. Cabo Rojo, 610m, 20.VIII.1988, wet forest litter nr. termite mound, M. Ivie, Phillips & Johnson (1, WIBF); same data except: at light & night beating, wet forest (1, WIBF); same data except: 20.VIII–9.IX.1988, FIT (2, WIBF); ca. 35kmN. Cabo Rojo, 1250m, Las Abejas, 26.VIII.1988, mix. leaf litter, M.A. Ivie, T.K. Phillips & K.A. Johnson (9, WIBF); same data

except: 26.VIII–9.IX.1988, FIT (6, WIBF); 24kmN. Cabo Rojo, 18°06'N, 71°38'W, 612m, 10.VII.1993, D.S. Sikes & R.P. Rosenfeld, carrion trap (1, WIBF); same data except: 11.VII.1993, leaf litter (1, WIBF); DOM. REP.: Barahona, 7km NW Paraiso, 200 m, rainforest remnant, 27.XI–4.XII.1991, FIT, Masner & Peck, 91-341 (7, SBPC); same data except: 27.XI.1991, tree base litter, S. & J. Peck, 91-343 (1, SBPC); DOM.REP.: San Cristobal, 4kmNW Villa Altagracia, 300m, 12.IV–6.VII.1992, M.A. & R.O. Ivie, FIT (1, WIBF); DOM.REP.: Santiago, N. side Pico del Yaque, 19°03'N, 70°56'W, 2515m, 8.IV.1992, bunchgrass litter, M.A. Ivie (1, WIBF); DOM.REP.: Hato Mayor, Par. Nac. Los Haitises, W. of Sabana de la Mar, 1–16.IV.1992, 10m, M.A. Ivie, FIT (5, WIBF); same data except: 16.IV–1.VII.1992, Bosque Humido (2, WIBF); same data except: 1.IV.1992, litter in buttresses, M.A. Ivie, D.S. Sikes & W. Lanier (2, WIBF); Par. Nac. Los Haitises, 2.VII.1992–16.VII.1993, D. Sikes & R. Rosenfeld, FIT (1, WIBF); DOM.REP.: Azua, E. side of crest, Sierra Martin Garcia, 7 km WNW Barrero, 18-21N, 70-58W, 860m, 25-26.VII.1992, C. Young, R. Davidson, S. Thompson, J. Rawlins, cloud forest adjacent to disturbed forest (1, CMNH). DOM. REP.: Barahona, nr. Filipinas, Larimar Mine, 26.VI–7.VII.1992, Woodruff & Skelley, flight trap (30, FSCA).

Distribution. Known only from Hispaniola.

Etymology. The epithet *hispaniolensis* (Hispaniola + the Latin suffix *-ensis*, locality) refers to the occurrence of this species on Hispaniola.

***Aglyptinus longipalpus* Peck and Cook, new species**

Figures 98, 99

Diagnostic description. Length 1.3–1.5 mm; greatest width 0.9–1.0 mm. Shining; color yellowish to dark reddish brown; pronotal margins, labrum and palps paler. Head, pronotum and elytra finely, sparsely punctate. Antennae elongate, extend beyond pronotal base. Maxillary palps elongate, penultimate palpomere broadly expanded. Eyes reduced to a few facets. Wings strongly reduced. Metasternum with minute scattered punctures medially, fine lines of microsculpture laterally. Male protarsi and mesotarsi densely setose. Male legs otherwise unmodified. Aedeagus (Fig. 98, 99) short, dorsoventrally angulate near base; fairly abruptly narrowing and flattening at apex. Parameres absent.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: INDEPENDENCIA/ 32km NW La Descubierta/ sabanaReal, 1800 m, cloud/ forest moss & litter, 26.XI.1991/ S. & J. Peck, 91-334” (SBPC). Paratypes (17): with same data as holotype (16, SBPC); same data except: 30km NW La Descubierta, 1646 m, cloud forest carrion, 25.XI.1991, 91-331 (1, SBPC).

Distribution. Known only from Hispaniola.

Etymology. The epithet *longipalpus* (Latin, long palp) refers to the elongate maxillary palps of this species.

***Aglyptinus luciae* Peck and Cook, new species**

Figures 108, 109

Diagnostic description. Length 1.4–2.1 mm; greatest width 1.1–1.6 mm. Shining; color reddish brown; pronotal margins and elytral epipleura paler. Moderately finely punctate; punctures larger, more dense on head and elytra. Antennae reach base of pronotum. Maxillary palps unmodified. Eyes large. Wings fully developed. Metasternum with dense lines of microsculpture laterally; without microsculpture medially. Male protarsi and mesotarsi densely setose. Posterior margin of major male metafemur concave; metatibia elongate; inner metatibial spine elongate, curved, sinuate at apex. Aedeagus (Fig. 108, 109) roundly curved dorsoventrally, apex flattened; in dorsal view, constricted before narrowly rounded apex. Parameres straight, evenly narrowed from base to apex.

Type material. Holotype, male, with the following label data: “LESSER ANTILLES: St. Lucia/ 11 km W Dennery, Barré de L’Isle/ trail, submontane forest, 14.VII.07/ N13°55.6’ W60°57.5’, ±300 m/ Forest litter, S. & J. Peck, 07-64” (SBPC). Paratypes (75): with same data as holotype (11, SBPC); St. Lucia: 3km W Dennery, lowland forest, 13.VII.07, N13°54.1’ W60°55.5’, 30 m, litter, S. & J. Peck, 07-62 (1, SBPC); St. Lucia: Mon Repos, 6.5 km W Fox Grove Inn, 10–28.VII.07, submontane forest FITs, N13°52.5’ W60°56.4’, 300 m, S. & J. Peck, 07-53B (18, SBPC); same data except: 12.VII.07, submontane forest litter, 07-58 (1, SBPC); same data except: 12–16.VII.07, carrion traps, 07-59 (1, SBPC); same data except 9.VII.07, submontane forest litter, 07-51 (1, SBPC); same data except: 22.VII.07 (1, SBPC); same data except: 16–21.VII.07, dung traps (1, SBPC); St. Lucia: Quielles Forest Res., Piton St. Esprit site, 13.84937°N, 60.97956°W, 5.V.2009, 571 m, Berlese, I.A. Foley (1, WIBF); same data except: 29.V–2.VI.2009, FIT, R.C. Winton & H. Hinkson (1, WIBF); Quielles Forest Res., LaPorte cabin, 272 m, 13.84041°N, 60.97408°W, 4–10.V.2009, FIT, I.A. Foley & R.C. Winton (4, WIBF); same data except 10–15.V.2009, R.C. Winton & I.A. Foley (5, WIBF); Quielles For. Res., 13.85332°N, 60.78223°W, 10.V.2009, 323 m, I.A. Foley & R.C. Winton, Berlese leaf litter (1, WIBF); St. Lucia: Gros Piton trap site, 784 m, 13.8114°N, 61.0651°W, 15.VI.2009, C.A. Maier & R.C. Winton (1, WIBF); St. Lucia: Gros Piton, 13.81026°N, 61.06525°W, 14–24.V.2009, uv light, R.C. Winton & E.A. Ivie (1, WIBF); same data except: 9–15.VI.2009, E.A. Ivie & C.A. Maier, uv light trap (1, WIBF); same data except: 3.VI.2009, Berlese litter (1, WIBF); St. Lucia: Piton Troumasse trap site, 793 m, 13.8535°N, 61.0098°W, 22.VI.2009, litter Berlese, C.A. Maier (1, WIBF); same data except: 17.VI.2009 (1, WIBF); St. Lucia: Piton Troumasse, 13.8548°N, 61.0174°W, 30.VI.2009, litter Berlese, C.A. Maier & M.L. Gimmel (2, WIBF); St. Lucia: Barre de L’Isle, 13.9341°N, 60.9586°W, 320 m, 18.V.2009, litter Berlese, A.R. Cline (15, WIBF); St. Lucia: Descartier, 13.8371°N, 60.9762°W, 320 m, 19.V.2009, litter sifting, A.R. Cline (2, WIBF); same data except: 347 m, 4.VI.2009, S.M. Clark *et al.* (1, WIBF); St. Lucia: Bordelais trap site, 13.9689°N, 60.8859°W, 25–29.VI.2009, FIT, M.L. Gimmel & E.A. Ivie (1, WIBF); same data except: 185 m, 9–14.VII.2009, malaise, C.A. Maier & M.L. Gimmel (1, WIBF).

Distribution. Known only from St. Lucia.

Etymology. The epithet *luciae* refers to the occurrence of this species on St. Lucia.

***Aglyptinus maculus* Peck and Cook, new species**

Figures 88, 89

Diagnostic description. Length 1.6–1.7 mm; greatest width 1.0–1.2 mm. Shining; color dark reddish brown; antennae, palps and tarsi paler; yellowish macula at apex of each elytron. Head, pronotum and elytra minutely, sparsely punctate. Antenna short, about as long as width of head. Maxillary palps unmodified. Eyes of moderate size. Wings fully developed. Metasternum finely, sparsely punctate medially; with fine lines of microsculpture laterally. Male protarsi and mesotarsi densely setose. Major male mesofemur distinctly broader than metafemur; posterior margin of metafemur weakly concave; metatibia elongate. Aedeagus (Fig. 88, 89) roundly arched dorsoventrally, sinuate apically, evenly narrowed to rounded apex. Parameres narrow, straight.

Type material. Holotype, male, with the following label data: “JAMAICA: Ocho Rios/ Fern Gully FIT/ 19.II-1.III.84/ D. Lindeman” (SBPC). Paratypes (2): with same data as holotype (SBPC).

Distribution. Known only from the type locality on Jamaica.

Etymology. The epithet *maculus* (Latin, spot) refers to the pale spot at the apex of each elytron in this species.

***Aglyptinus martiniquensis* Peck and Cook, new species**

Figures 106, 107

Diagnostic description. Length 1.3–1.7 mm; greatest width 1.0–1.3 mm. Shining; color reddish brown; antenna, pronotal margins and elytral epipleura paler. Head, pronotum and elytra finely, sparsely punctate. Antennae reach base of pronotum. Maxillary palps unmodified. Eyes large. Wings fully developed. Metasternum lacking microsculpture medially; dense lines of microsculpture laterally. Male protarsi and mesotarsi densely setose. Major male mesofemur broader than metafemur; metatibia elongate; inner metatibial spur elongate, curved, sinuate apically. Aedeagus (Fig. 106, 107) evenly, roundly curved dorsoventrally, flattened and narrowly rounded apex. Parameres constricted before apex.

Type material. Holotype, male, with the following label data: “LES[SER] ANT[ILLES]: MARTINIQUE/ 4km N Ste-Luce, Foret/ Montravail, 300 m N14°29.9/ W60°55.7, 11–28.VII.2012/ Humid forest FIT, S. Peck, 12-53 (SBPC). Paratypes (16): with same data as holotype (11, SBPC); same data except: malaise, 12-52 (1, SBPC); Martinique: 4km SW LeMarin, Morne Aca, N14°27.8 W60°53.9, 260 m, 13–28.VII.2012, humid forest, hilltop clearing FIT, S. Peck, 12-55 (2, SBPC); 4km SE LeMarin, Foret Creve Coeur, N14°27.05 W60°50.91, 35 m, 10–28.VII.2012, dry forest malaise, S. Peck, 12-51 (2, SBPC).

Distribution. This species is known only from Martinique.

Etymology. The epithet *martiniquensis* (Martinique + the Latin suffix *-ensis*, locality) refers to the occurrence of this species on Martinique.

***Aglyptinus minutus* Peck and Cook, new species**

Figures 78, 79

Diagnostic description. Length 1.0–1.2 mm; greatest width 0.7–0.9 mm. Shining; color reddish brown to nearly black; pronotal margins, venter, elytral epipleura and appendages paler. Head, pronotum and elytra minutely, sparsely punctate. Antennae long, reaching beyond pronotal base. Maxillary palps unmodified. Eyes reduced to a few facets. Wings greatly reduced. Metasternum minutely, sparsely punctate medially; with fine lines of microsculpture laterally. Male protarsi and mesotarsi densely setose; male legs otherwise unmodified. Aedeagus (Fig. 78, 79) short, broad, weakly arched dorsoventrally, rounded apically. Parameres lacking.

Type material. Holotype, male, with the following label data: “CUBA: Granma/ Parque Nacional Pico Turquino/ Aguada de Joachin/ 1370m, 20.015-76.840, 3.II.2012/ R. Anderson, dry mixed forest litter/ 2012-023” (SBPC). Paratypes (63): with same data as holotype (5, SBPC); with same data except: Cerro Joachin peak, 1660m, 20.013-76.834, wet cloud forest litter, 2012-022 (49, SBPC; 3, FSCA; 3, MCZC; 3, FMNH).

Additional material examined. CUBA: Santiago de Cuba: Parque Nacional Gran Piedra, near La Isabelica, 1075m, 20.003-75.613, 27.I.2012, R. Anderson, wet pluviselva litter, 2012-008 (6, SBPC); same data except: 1115m, 20.007-75.619, 29.I.2012, 2012-013 (2, SBPC); same data except: near Museo Isabelica, 2012-003 (12, SBPC); Cuba: Santiago Prov., Gran Piedra, Met. Radar, 6.XII.1995, 1100m, elfin forest litter, S. Peck, 95-75 (2, SBPC); same data except: Isabelica, 95-79 (1, SBPC); Cuba: Alto de Menmo?, Pico Caracas, 5.III.2013, suelo, F. Cala (11, SBPC); Cuba: Pico Caracas, 6.III.2013, suelo, F. Cala, A. Deler-H. (9, SBPC).

Distribution. Known only from Cuba.

Etymology. The epithet *minutus* (Latin, small) refers to the size of this species.

***Aglyptinus parvoculus* Peck and Cook, new species**

Figures 90, 91

Diagnostic description. Length 1.4–1.7 mm; greatest width 1.0–1.3 mm; Shining, color dark reddish brown; appendages somewhat paler. Head, pronotum and elytra with moderately large, dense punctures. Antennae slight longer than width of head. Maxillary palps unmodified. Eyes strongly reduced; about half of normal size; formed of about 20–25 larger but indistinct facets. Wings strongly reduced. Metasternum finely punctate medially; with fine lines of microsculpture laterally. Male protarsi and mesotarsi densely setose. Major male metafemur and metatibia elongate. Aedeagus (Fig. 90, 91) slender, evenly curved dorsoventrally. Parameres narrow, straight.

Type material. Holotype, male, with the following label data: “JAMAICA:/ Portland Gap/ dung bait, 1973/ S. & J. Peck” (SBPC). Paratypes (11) with same data as holotype (SBPC).

Distribution. Known only from the type locality on Jamaica.

Etymology. The epithet *parvoculus* (Latin *parvus*, small; *oculus*, eye) refers to the reduced eyes of this species.

***Aglyptinus parvus* Peck and Cook, new species**

Figures 110, 111

Diagnostic description. Length 1.1–1.2 mm; greatest width 0.8–0.9 mm. Shining; color light to dark brown; pronotal margins, elytral epipleura, venter and appendages paler. Head, pronotum and elytra minutely, sparsely punctate. Antennae short, not reaching base of pronotum. Maxillary palps unmodified. Eyes moderately large. Wings fully developed. Metasternum with fine lines of microsculpture medially and laterally. Male protarsi moderately setose. Male legs unmodified. Aedeagus (Fig. 110, 111) short, broad, weakly dorsoventrally angulate at basal third; narrowing to flat, narrowly rounded apex. Parameres absent.

Type material. Holotype, male, with the following label data: “ST. LUCIA: Edmund F.R., 521m/ 13.8411°N, 60.0028°W/ 13JULY2009, ex rotting log/ C.A. Maier” (WIBF). Paratypes (10): with same data as holotype (1, WIBF); St. Lucia: Quielles For. Res., LaPorte Trail, 323m, 13.85332°N, 60.98280°W, 10.V.2009, I.A. Foley and R.C. Winton (2, WIBF); St. Lucia: Piton Troumasse, 13.8547°N, 61.0127°W, 646m, 27.V.2009, ex rotting log, C.A. Maier (1, WIBF); St. Lucia: Piton Troumasse trap site, 793m, 13.8535°N, 61.0098°W, 27.V–1.VI.2009, UV light, R.C. Winton *et al.* (1, WIBF); St. Lucia: Millet Forest trail, 13.89983°N, 60.99467°W, 10.VII.2009, M.L. Gimmel, ex polypore (4, WIBF); St. Lucia: Mon Repos, 6.5km W Fox Grove Inn, 12.VII.07, submontane forest litter, N13°52.5', W60°56.4', 300m, S. & J. Peck, 07–58 (1, SBPC).

Distribution. Known only from St. Lucia.

Etymology. The epithet *parvus* (Latin, small) refers to the size of this species.

***Aglyptinus sinuatus* Peck and Cook, new species**

Figures 80, 81

Diagnostic description. Length 1.5–1.8 mm; greatest width 1.0–1.3 mm. Shining; variable in color: yellowish to reddish brown to dark brown; head and pronotum often darker than elytra. Head moderately fine, densely punctate; pronotum moderately finely, sparsely punctate; elytra moderately coarsely, densely punctate. Antennae length about equal to head width, not reaching pronotal base. Maxillary palps unmodified. Eyes large. Wings fully developed. Metasternum minutely, sparsely punctate medially;

with fine lines of microsculpture laterally. Male protarsi and mesotarsi densely setose. Major male mesofemur broader than metafemur; metafemur elongate, narrow, posterior margin weakly concave; metatibia elongate; inner metatibial spine elongate, curved, sinuate apically. Aedeagus (Fig. 80, 81) elongate, slender, roundly curved dorsoventrally; tip of apex sinuate, upturned. Inverted internal sac with three rows of spines. Parameres broad at base, with narrow apex.

Type material. Holotype, male, with the following label data: “CUBA: SANTIAGO PROV./ 10km NE Caney/ Arroya Grovert, 300m/ leaf and log litter/ S. Peck, 95-93 (SBPC). Paratypes (149): with same data as holotype (25, SBPC); Cuba: Gran Piedra, Isabelica, 14.XII.1995, 1100m, elfin forest litter, S. Peck, 95-95 (1, SBPC); Cuba: Santiago Prov., Gran Piedra, Met. Radar, 6–17.XII.1995, 1100m, elfin forest FIT, S. Peck, 95-76 (14, SBPC; 3, MCZC; 3, FMNH; 3, FSCA); same data except: Isabelica, carrion traps, 95-80 (1, SBPC); Gran Piedra, Segundo Chorrito, 7.XII.1995, 600m, km8, tree base litter, S. Peck, 95-82 (4, SBPC); same data except: 7–17.XII.1995, forest stream FIT, 95-83 (14, SBPC); Cuba: Santiago de Cuba, Siboney-Jutici Ecol. Reserve, 20m, 19.955-75.747, 26.I.2012, R. Anderson, dry scrub litter, 2012-002 (2, SBPC); Parque Nacional Gran Piedra, near Museo Isabelica, 1115m, 20.007-75.619, 26.I.2012, R. Anderson, wet pluviselva litter, 2012-003 (3, SBPC); same data except: near La Isabelica, 1130m, 20.004-75.619, 2012-004 (1, SBPC); same data except: 1075m, 20.003-75.613, 27.I.2012, 2012-008 (2, SBPC); Parque Nacional Gran Piedra, Estacion Ecologica Gran Piedra, 1085m, 20.011- 75.637, 26.I.2012, R. Anderson, mixed pine litter, 2012-006 (2, SBPC); Parque Nacional Gran Piedra, trail to Cerro Mogote, 770m, 19.997-75-582, 28.I.2012, R. Anderson, wet mixed litter, 2012-009 (5, SBPC); Cuba: Holguin, Mayari, P.N. Mensura Piloto, 20.48123-75.80952, 716m, 10.V.2013, R. Anderson, dry pluviselva litter, 2013-003 (1, SBPC); Holguin, Mayari, Pinarito, 20.41548-75.82008, 409m, 12.V.2013, R. Anderson, karst forest litter, 2013-008 (17, SBPC); Cuba: Camaguey, Sierra de Cubitas, Res. Ecol. Limones-Tuabaquey, Hojo de Bonet, 21.61027-77.78371, 143m, 14.V.3013, A. Deler Hernandez, sinkhole forest litter, 2013-010 (10, SBPC); same data except: 21.60121-77.78468, 168m, R. Anderson, karst forest litter, 2013-012 (4, SBPC); Cuba: Cienfuegos, Mayari, 2km E, 21.96651-80.11497, 842m, 18.V.2013, R. Anderson, hardwood forest litter, 2013-017 (1, SBPC); Mayari, 1km E, 21.97114-80.12172, 866m, 18.V.2013, R. Anderson, karst forest litter, 2013-018 (7, SBPC); Cienfuegos, P.N. Pico San Juan, road, 21.98542-80.14873, 1026m, 19.V.2013, R. Anderson, hardwood forest litter, 2013-023 (1, SBPC); same data except: 21.98542-80.14632, 1086m, F. Cala Requelme, elfin forest litter, 2013-024 (1, SBPC); same data except: 21.98542-80.14873, 1026m, A. Deler Hernandez, hardwood forest litter, 2013-025 (2, SBPC); Cienfuegos, Rio Cabagan, 21.93123-80.08461, 651m, 20.V.2013, R. Anderson, gallery forest litter, 2013-026 (12, SBPC); Cienfuegos, Jardin Botanico Cienfuegos, 22.12179-80.32646, 73m, 21.V.2013, R. Anderson, hardwood forest litter, 2013-028 (9, SBPC); Santiago de Cuba, Parque Nacional Gran Piedra, 20.01154-75.67310, 550m, 23.V.2013, R. Anderson, mixed hardwood litter, 2013-031 (1, SBPC).

Distribution. The species is known only from Cuba.

Etymology. The epithet *sinuatus* (Latin, with bends) refers to the dorsoventrally sinuate aedeagal apex of this species.

***Aglyptinus vincentii* Peck and Cook, new species**

Figures 114, 115

Diagnostic description. Length 1.4–1.8 mm; greatest width 1.0–1.2 mm. Shining; color yellowish to reddish brown; antennae, pronotal margins and elytral epipleura paler. Pronotum finely, sparsely punctate; punctures larger, more dense on head and elytra. Antennae not reaching pronotal base. Maxillary palps unmodified. Eyes large. Wings fully developed. Metasternum with dense lines of microsculpture laterally; without microsculpture medially. Male protarsi and mesotarsi densely setose. Major male metafemur about equal in width with mesofemur; metatibia elongate; inner metatibial spine elongate, curved, sinuate apically. Aedeagus (Fig. 114, 115) elongate, slender, moderately curved dorsoventrally; apex flat in lateral view, abruptly narrowed in dorsal view. Parameres, straight, narrow apically.

Type material. Holotype, male, with the following label data: “WEST INDIES: St. Vincent/ Hermitage Forest E of Spring/ Village, N13°14.86’ W61°12.77’/ 15–27.VIII.06, forest edge FIT trap/ 348m, S. & J. Peck, 06-102B” (SBPC). Paratypes (53): with same data as holotype (19, SBPC); same data except: clearing malaise trap, 06-101A (2, SBPC); same data except: clearing FIT trap, 06-101B (1, SBPC); same data except: 16–27.VIII.06, forest malaise trap, 06-103A (5, SBPC); same data except: forest FIT trap, 06-103B (17, SBPC; 3, MCZC, 3, FSCA; 3, FMNH).

Additional material examined. ST. VINCENT: hermitage Forest E of Spring Village, same data except: forest edge malaise, N13°14.86’ W61°12.77’, 16–27.VIII.06, 340m, 06-104A (12, SBPC); same data except: 23–27.VIII.06, forest edge FIT, 06-104B (13, SBPC); same data except: 16–27.VIII.06, forest FIT, 360m, 06-105 (28, SBPC); same data except: 21.VIII.2006, uv trap, 350m, 60-116 (1, SBPC); same data except: tree base litter, 18.VIII.06, 06-117 (1, SBPC); same data except: tree base forest litter, 348m, 06-106 (2, SBPC); St. Vincent: Vermont Nature Trails, E of Layou, N13°13’ W61°13’, 19.VIII.06, tree base litter, 420m, S. & J. Peck, 06-111 (9, SBPC); same data except: 24.VIII.06, forest litter, 370m, 06-119 (1, SBPC); same data except: 7km E Buccament, 11-20.VI.07, rainforest FIT, 07-18 (6, SBPC); St. Vincent, Emerald Valley Hotel, Buccament, N13°12.0’ W61°13.8’, 10–0.VI.07, FIT, 20m, S. & J. Peck, 07-14 (2, SBPC).

Distribution. Known only from St. Vincent.

Remarks. This is probably the unnamed species mentioned from St. Vincent by Hlisnikovsky (1964).

Etymology. The epithet *vincentii* refers to the occurrence of this species on the Lesser Antilles island of St. Vincent.

***Creagrophorus* Matthews 1887**

Creagrophorus Matthews 1887. Type species: *Creagrophorus hamatus* Matthews (des. Hatch 1929: 57 (2 orig. spp.)). Revised by Wheeler 1979.

Distribution. West Indies, Mexico, Panama, Japan, India.

Biology. Feeding on fruiting bodies of puffballs (Gasteromycetes) in moist forests.

Key to species of male *Creagrophorus* of the West Indies

1. Posterior margin of metafemur with a single large toothlike process at apex; pre-apical process absent. St. Vincent and Grenada ***C. unidentatus* Peck and Cook, n.sp.**
- Posterior margin of metafemur with two toothlike processes **2**
- 2(1). Pre-apical process of posterior margin of metafemur elongate, slender, as long as or longer than apical process **3**
- Apical toothlike process of posterior margin of metafemur distinctly larger than reduced, apically directed pre-apical process **4**
- 3(2). Pre-apical toothlike process of posterior margin of metafemur distinctly longer than apical process. Cuba ***C. cubensis* Peck and Cook, n.sp.**
- Toothlike processes of posterior margin of metafemur subequal in length. Hispaniola ***C. hispaniolensis* Peck and Cook, n.sp.**
- 4(2). Inverted internal sac with two distinct clusters of larger spines (Fig. 123, 125, 127) **5**

- Inverted internal sac with scattered small spines, without distinct clusters of larger spines (Fig. 119) 7
- 5(4). Apical process of posterior margin of metafemur large, broad at base, elongate, curved, narrowing to acute apex; pre-apical process reduced to small denticle. Hispaniola ***C. microdenticulus* Peck and Cook, n.sp.**
- Apical processes of posterior margin of metafemur not large, broad at base, elongate, curved, narrowing to acute apex; known only from the Lesser Antilles 6
- 6(5). Dorsum with distinct, strong punctation; apical two-thirds of mesotibia abruptly, strongly widened; aedeagus (Fig. 122) depressed before apex. Dominica ... ***C. dominica* Peck and Cook, n.sp.**
- Dorsum finely, sparsely punctate; mesotibia not abruptly widened; aedeagus (Fig. 126) not depressed before apex ***C. sanctalucia* Peck and Cook, n.sp.**
- 7(4). Bicolored: head and pronotum dark brown, elytra light yellowish brown; aedeagus (Fig. 118) evenly curved dorsoventrally. Martinique ***C. bicolor* Peck and Cook, n.sp.**
- Unicolorous reddish brown; aedeagus (Fig. 116) weakly depressed before apex. Jamaica ***C. jamaicensis* Peck**

***Creagrophorus jamaicensis* Peck 1972**

Figures 116, 117

Creagrophorus jamaicensis Peck 1972: 56; 1978: 249; Wheeler 1979: 461. Holotype male in INHS, seen. Type locality: Hermitage Dam, St. Andrew Parish, Jamaica.

Diagnosis. Length 1.2–1.4 mm; greatest width 1.0–1.1 mm. Shining, with faint iridescence; color medium to dark reddish brown, antennae paler. Punctation fine and sparse. Eyes large. Wings fully developed. Posterior margin of male metafemur with small toothlike process at apical fourth and large triangular process apically. Aedeagus (Fig. 116, 117) evenly curved dorsoventrally, weakly depressed before apex; inverted internal sac (Wheeler 1979, fig. 37) with scattered small spines.

Distribution. Known only from Jamaica. Previously known localities, from Peck (1972, 1978). Jamaica. Port Antonio. St. Andrew Parish. Hermitage Dam.

New records. Jamaica. Ocho Rios, Fern Gully, FIT, 19.II–1.III.84, D. Lindeman (1, SBPC).

***Creagrophorus bicolor* Peck and Cook, new species**

Figures 118, 119

Diagnostic description. Length 1.3–1.5 mm; greatest width 1.0–1.1 mm. Shining; head and pronotum dark brown; elytra, venter and appendages yellowish. Punctation moderately fine and sparse. Eyes large. Wings fully developed. Posterior margin of male metafemur medially with broad process angled toward apex; moderately long, acute process apically. Aedeagus (Fig. 118, 119) evenly, shallowly curved dorsoventrally; inverted internal sac with scattered small spines and a few larger spines apically.

Type material. Holotype, male, with the following label data: “LES[SER] ANT[ILLES]: MARTINIQUE/ 4 km SW Le Marin, Morne Aca/ N14°27.8 W60°53.9, 260 m/ 13–28.VII.2012, Humid forest/ Hilltop clearing FIT, S. Peck, 12-55” (SBPC). Paratypes (21): with same data as holotype (16, SBPC); MARTINIQUE: 4 km N Ste-Luce, Foret Montravail, 300 m, N14°29.9, W60°55.7, 11–28.VII.2012, humid forest FIT, S. Peck, 12-53 (5, SBPC).

Distribution. Known only from Martinique.

Etymology. The epithet *bicolor* (Latin *bi-*, two; *color*, color) refers to the contrasting dorsal coloration of this species.

***Creagrophorus cubensis* Peck and Cook, new species**

Figures 120, 121

Diagnostic description. Length 1.3–1.6 mm; greatest width 1.1–1.3 mm. Shining, with faint iridescence; color yellowish brown to dark brown, venter and appendages paler. Punctuation fine and sparse. Eyes large. Wings fully developed. Pre-apical process of posterior margin of metafemur elongate and apically acute, apical process smaller and triangular. Aedeagus (Fig. 120, 121) evenly, rounded curved dorsoventrally; inverted internal sac with scattered small spines and two dense clusters of large spines apically.

Type material. Holotype, male, with the following label data: “CUBA: Santiago Prov./ Gran Piedra, Met. Radar/ 6–17.XII.95, 1100m/ elfin for. FIT/ S. Peck, 95-76” (SBPC). Paratypes (10): with same data as holotype (1, SBPC); Gran Piedra, Isabelica, 7–17.XII.95, 1100m, elfin forest FITs, S. Peck, 95-84 (8, SBPC); Santiago Prov., Santiago, Jardin Botanico, 5–17.XII.95, 5m, disturb. for. FITs, S. Peck, 95-74 (1, SBPC).

Distribution. Known only from Cuba.

Etymology. The epithet *cubensis* (Cuba + the Latin suffix *-ensis*, locality) refers to the occurrence of this species on Cuba.

***Creagrophorus dominica* Peck and Cook, new species**

Figures 122, 123

Diagnostic description. Length 1.4–1.8 mm; greatest width 1.0–1.4 mm. Shining, darker specimens with iridescent sheen. Color medium to dark reddish brown; venter, antennae and palpi paler. Punctuation moderately coarse and sparse. Eyes large. Wings fully developed. Posterior margin of male metafemur with broad toothlike process medially, angled toward apex; moderately long, acute process apically. Aedeagus (Fig. 122, 123) curved dorsoventrally, depressed before flat apex; inverted internal sac with a few scattered small spines and two dense clusters of large spines apically.

Type material. Holotype, male, with the following label data: “WEST INDIES: DOMINICA/ Springfield Estate, 31.V–16.VI.04/ N15°20.841' W61°22.000', 550 m/ ridgetop forest above Mt. Joy, FIT/ S. & J. Peck, 04-90” (SBPC). Paratypes (19): with same data as holotype (7, SBPC); with same data except: 400 m, Mt. Joy House, wet montane for. FIT, 04-89 (6, SBPC); Springfield Estate, 30.V–16.VI.04, N15°20.796' W61°22.142', mature 2nd forest, 4FITs, 330–360 m, S. & J. Peck, 04-86 (1, SBPC); Middleham Falls trail, Cochrane, N15°20.922' W61°20.747', 650 m, forest FITs, 31.V–11.VI.04, S. & J. Peck, 04-93 (5, SBPC).

Distribution. Known only from Dominica.

Etymology. The epithet *dominica*, Latin noun in apposition, refers to the occurrence of this species on the Lesser Antilles island of Dominica.

***Creagrophorus hispaniolensis* Peck and Cook, new species**

Figures 128, 129

Diagnostic description. Length 1.6–2.0 mm; greatest width 1.3–1.4 mm. Shining, with iridescence; color dark brown to black, venter paler. Head and pronotum with a few scattered punctures; elytra finely,

sparsely punctate. Eyes large. Wings fully developed. Posterior margin of male metafemur with two processes subequal in size, slender, acute, at and before apex. Aedeagus (Fig. 128, 129) shallowly, evenly curved dorsoventrally; inverted internal sac with two clusters of large spines apically.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: Prov. Pedernales/ Las Abejas, 1225m/ 18°09'03”N, 71°37'48”W/ 28JUL–03AUG1999/ G.O. Dominici, F.I.T.” (WIBF). Paratypes (2): DOM.REP.: Prov. Pedernales, ca. 35 km N Cabo Rojo, 1250m, Las Abejas, 26AUG–09SEP1988, flight intercept trap, M. Ivie, Philips & Johnson (WIBF).

Distribution. Known only from at and near the type locality on Hispaniola.

Etymology. The epithet *hispaniolensis* (Hispaniola + the Latin suffix *-ensis*, locality) refers to the occurrence of this species on Hispaniola.

***Creagrophorus microdenticulus* Peck and Cook, new species**

Figures 124, 125

Diagnostic description. Length 1.3–1.8 mm; greatest width 1.0–1.3 mm. Shining, pale to dark reddish brown. Punctuation fine and sparse on head and pronotum, larger punctures on elytra. Eyes large. Wings fully developed. Posterior margin of male metafemur with small denticle at apical fourth and large, curved, acute process at apex. Aedeagus (Fig. 124, 125) shallowly, evenly curved dorsoventrally; inverted internal sac with scattered small spines and two dense patches of large spines apically.

Type material. Holotype, male, with the following label data: “DOM[INICAN] REP[UBLIC]: LaVega Prov./ PN. A. Bermudez, Cienaga/ 19.VII–2.VIII.95, 1000m/ trop. evgrn. for. FIT/ S. & J. Peck, 95-32” (SBPC). Paratypes (50): with same data as holotype (20, SBPC; 3, MCZC; 3, FSCA); with same data except: 1010m, 95-33 (21, SBPC; 3, FMNH);

Additional material examined. DOMINICAN REPUBLIC: LaVega Prov., PN. A. Bermudez, Cienaga, 19.VII–2.VIII.95, 1010m, trop. evgrn. for. FIT, S. & J. Peck, 95-33 (27, SBPC); with same data except: 1020m, 95-34 (20, SBPC); with same data except: 1100m, 95-36 (20, SBPC); DOM. REP.: Barahona, 7kmNW Paraiso, 200m, rainforest remnant, 27.XI–4.XII.91, intercept tp., Masner & Peck, 91-341 (2, SBPC); DOM. REP.: Prov. Hato Mayor, Par. Nac. Los Haitises, W. of Sabana de la Mar, Bosque Humido, 16.IV–1.VII.1992, M.A. Ivie, FIT (13, WIBF); DOM. REP.: Prov. LaVega, 12km NE Jarabacoa, 550m, 01–07.IX.1988, pine forest, flight intercept trap, M. Ivie, Philips & Johnson (1, WIBF); DOMINICAN REPUBLIC: Hato Mayor, Parque Los Haitises, 3 km W Cueva de Arena, 19-04N, 69-29W, 20 m, 7–9.VII.1992, R. Davidson, J. Rawlins, S. Thompson, C. Young, mesic lowland forest (2, CMNH).

Distribution. Known only from Hispaniola.

Etymology. The epithet *microdenticulus* (Latin *micro*, small; *denticulus*, tooth) refers to the small toothlike process at the apical fourth of the posterior margin of the metafemur in males of this species.

***Creagrophorus sanctalucia* Peck and Cook, new species**

Figures 126, 127

Diagnostic description. Length 1.2–1.5 mm; greatest width 0.9–1.1 mm. Shining, evenly reddish brown, antennae and palpi paler. Head and pronotum finely, sparsely punctate; elytra more coarsely, densely punctate. Eyes large. Wings fully developed. Posterior margin of male metafemur with small process at apical two-fifths, larger triangular process at apex. Aedeagus (Fig. 126, 127) evenly, moderately strongly rounded dorsoventrally; apical fourth of dorsal surface with conspicuous small setae; inverted internal sac with many small spines and two apical clusters of larger spines.

Type material. Holotype, male, with the following label data: "LESSER ANTILLES: St. Lucia/ Mon Repos, 6.5 km W Fox Grove Inn/ 10–28.VII.07, submontane forest FITs/ N13°52.5' W60°56.4', 300m/ S. & J. Peck, 07-53B" (SBPC). Paratypes (11): with same data as holotype (4, SBPC); St. Lucia: Barre de L'Isle, 13.9368°N 60.9593°W, 340m, 03.VII.2009, ex puffballs, C.A. Maier & M.L. Gimmel (6, WIBF); Barre de L'Isle, 13.9326°N 60.9582°W, 285m, ex puffball in termite nest, M.L. Gimmel & C.A. Maier (1, WIBF).

Distribution. Known only from St. Lucia.

Etymology. The epithet *sanctalucia*, latinized form of Saint Lucia, refers to the occurrence of this species on St. Lucia.

***Creagrophorus unidentatus* Peck and Cook, new species**

Figures 130, 131

Diagnostic description. Length 1.1–1.6 mm; greatest width 0.9–1.2 mm. Shining; dark reddish brown to nearly black, appendages paler. Pronotum finely, sparsely punctate. Eyes large. Wings fully developed. Posterior margin of male metafemur with single large toothlike process at apex, no process on mesofemur. Aedeagus (Fig. 130, 131) strongly curved dorsoventrally, dorsal margin depressed before apex; inverted internal sac with scattered small spines and two apical clusters of larger spines.

Type material. Holotype, male, with the following label data: "WEST INDIES: St. Vincent/ Hermitage Forest, E of Spring/ Village, N13°14.86' W61°12.77'/ 16–27.VIII.06, forest edge malaise/ 340 m, S. & J. Peck, 06-104A" (SBPC). Paratypes (14): with same data as holotype (1, SBPC); same data except: 23-27.VIII.06, forest edge FIT, 06-104B (2, SBPC); same data except: 15–27.VIII.06, 348m, 06-102B (3, SBPC); same data except: clearing malaise trap, 06-101A (1, SBPC); same data except: clearing FIT trap, 06-101B (1, SBPC); same data except: 16-27.VIII.06, forest FIT trap, 06-103B (1, SBPC); Grenada: Grand Etang Forest Reserve, N12°04.162' W61°42.162', 10–28.VIII.10, 400 m, rain forest FIT, S. Peck, 10-63 (5, SBPC).

Distribution. Known only from the islands of St. Vincent and Grenada.

Etymology. The epithet *unidentatus* (Latin *uni*, one; *dentatus*, toothed) refers to the single toothlike process on the posterior margin of the male metafemur of this species.

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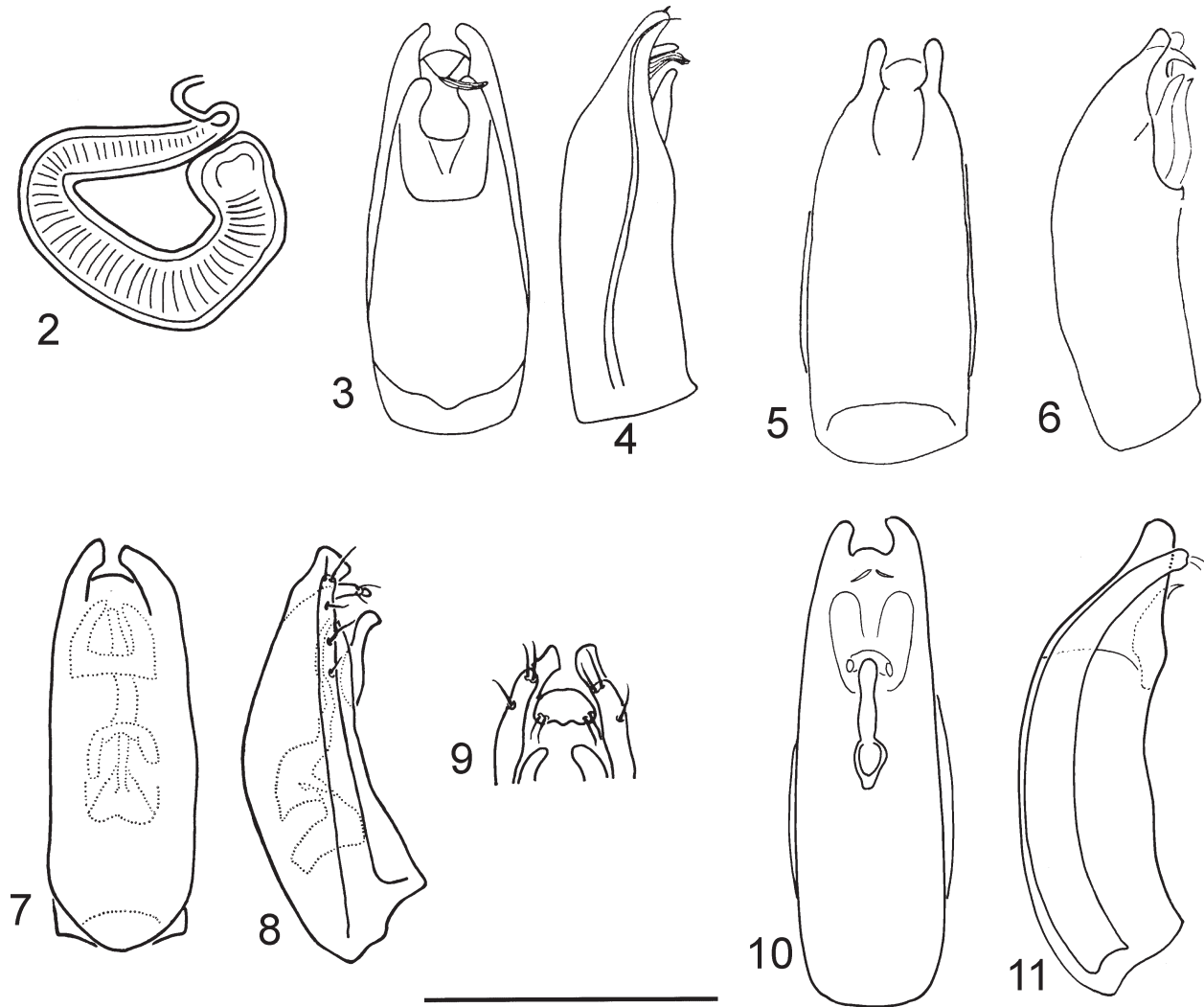
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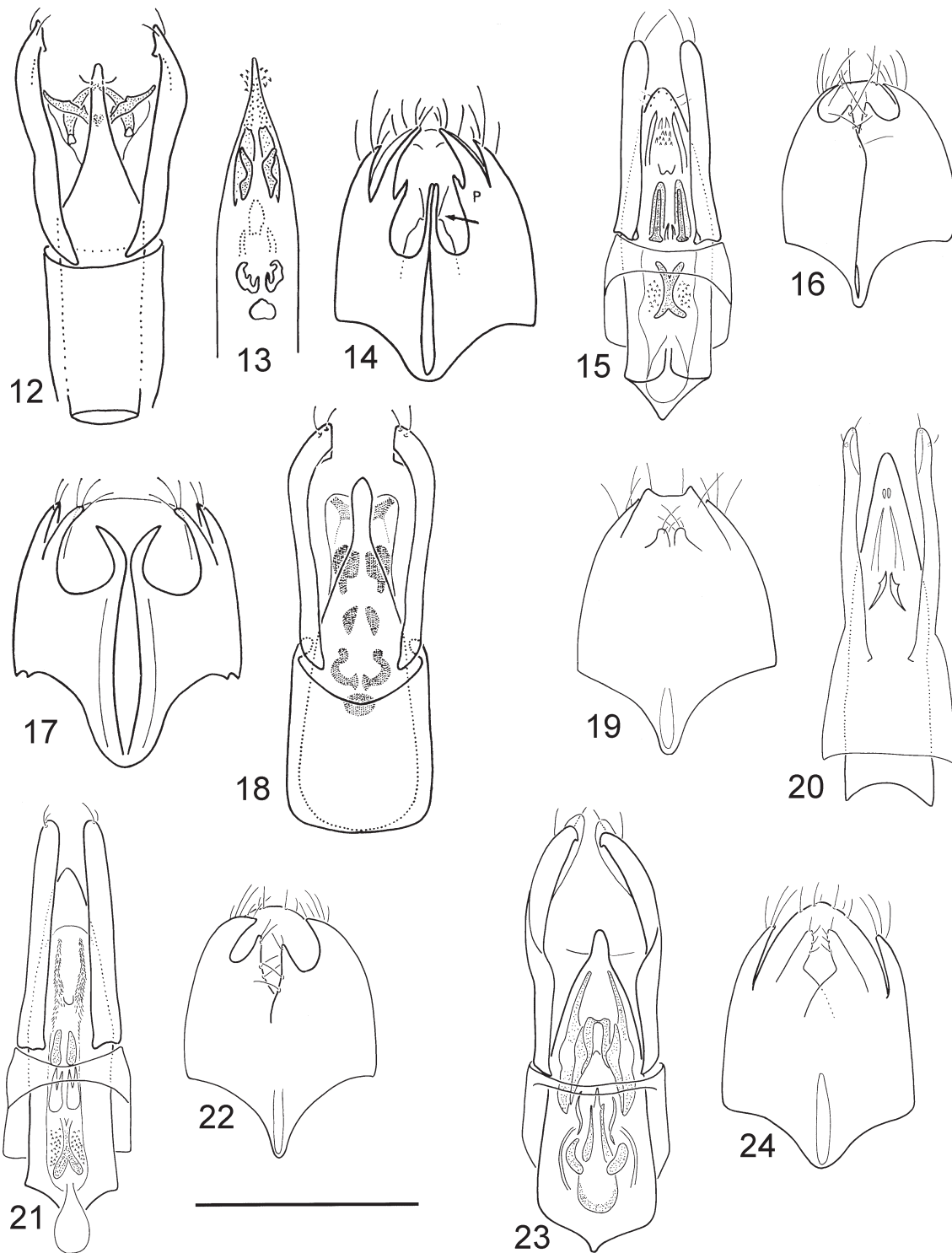
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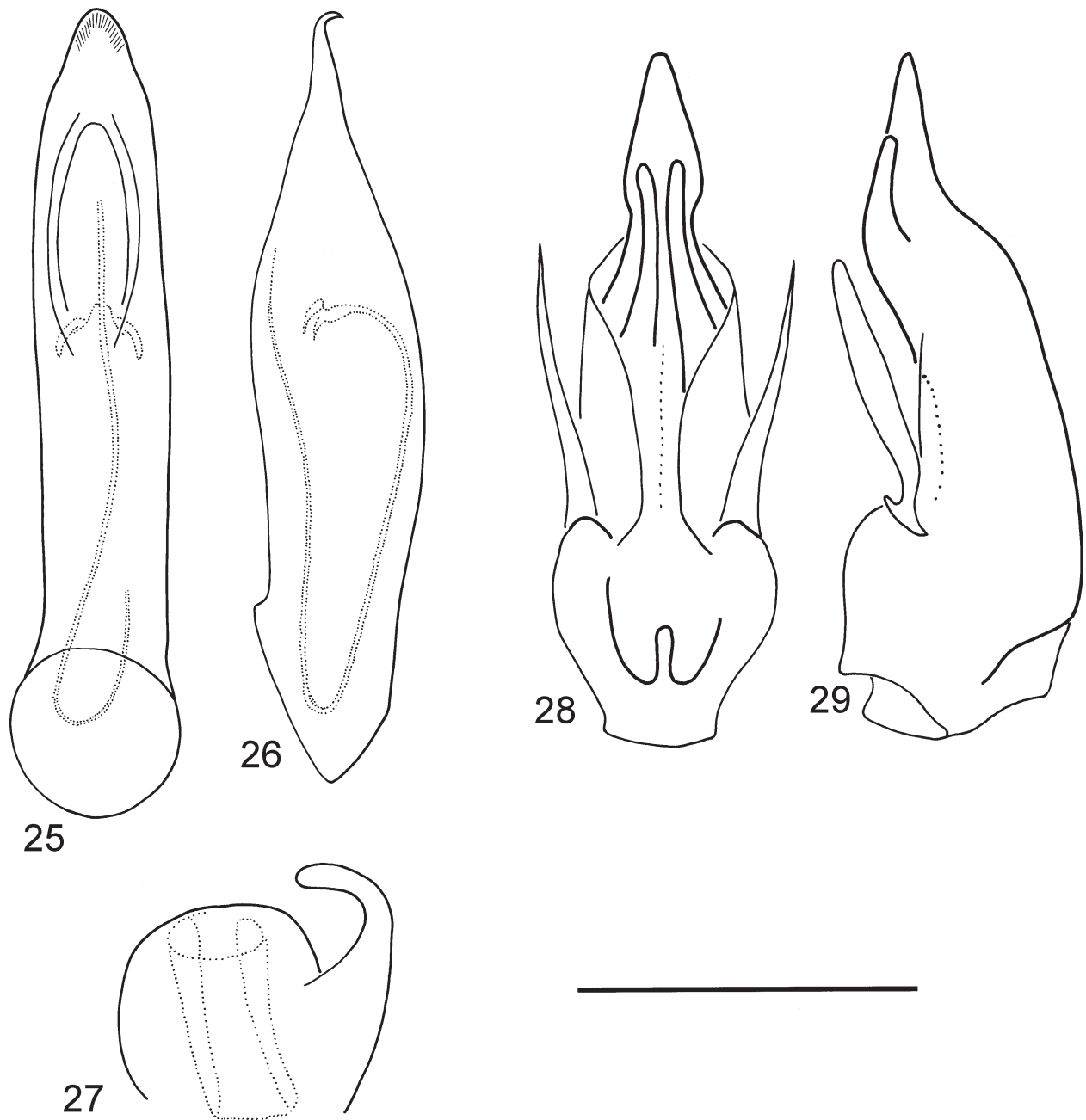
Figure 1. Map of the major islands of the West Indies.



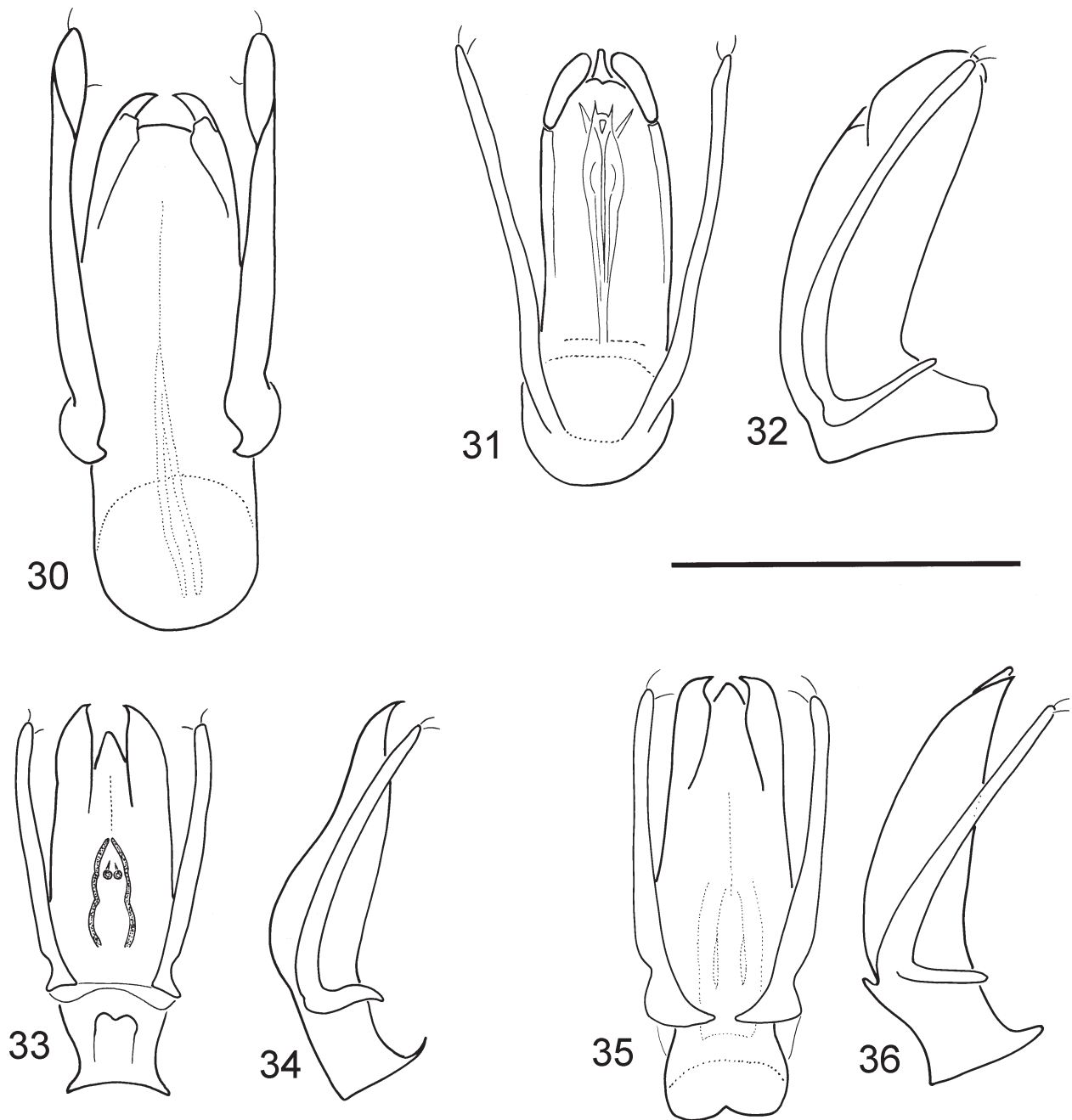
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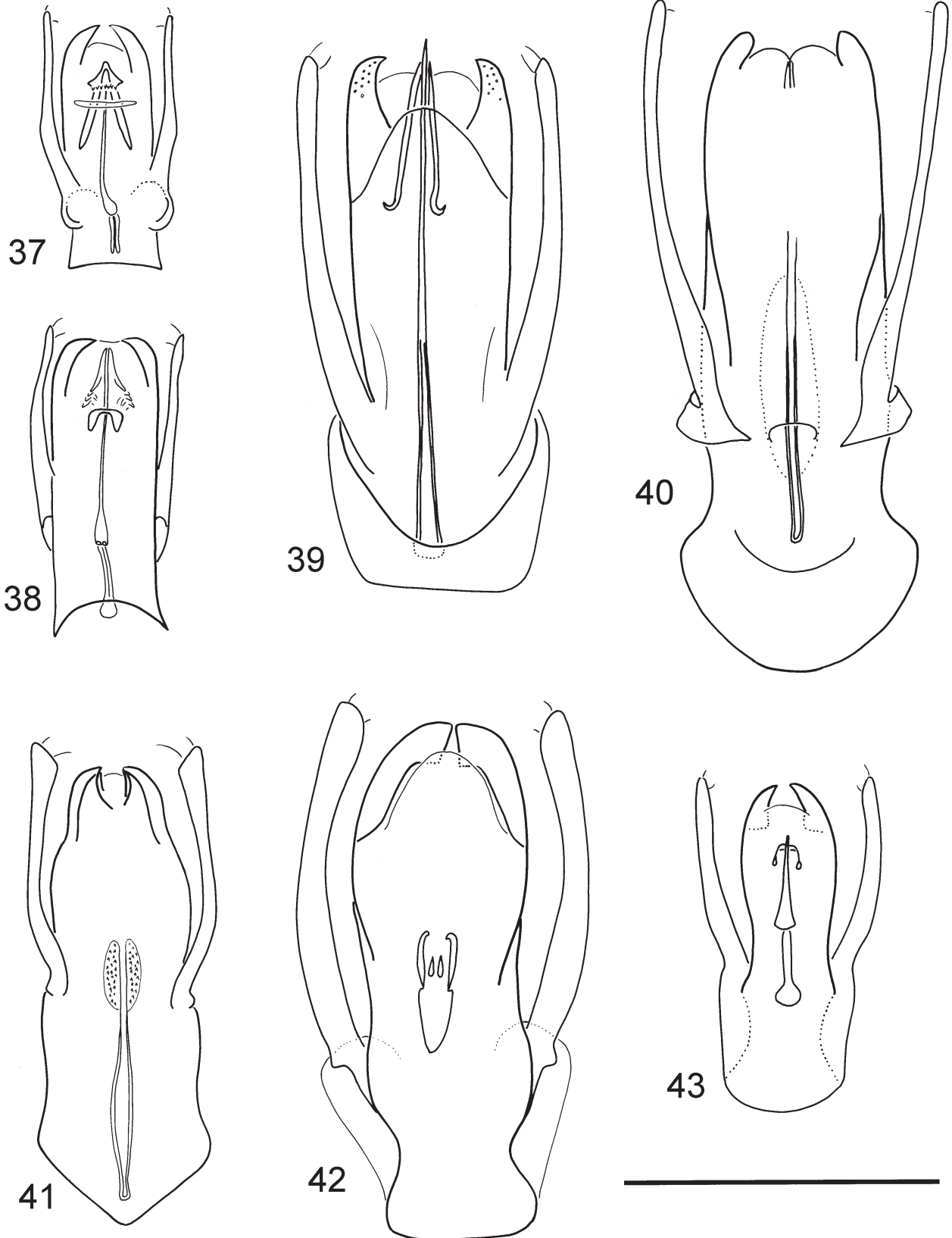
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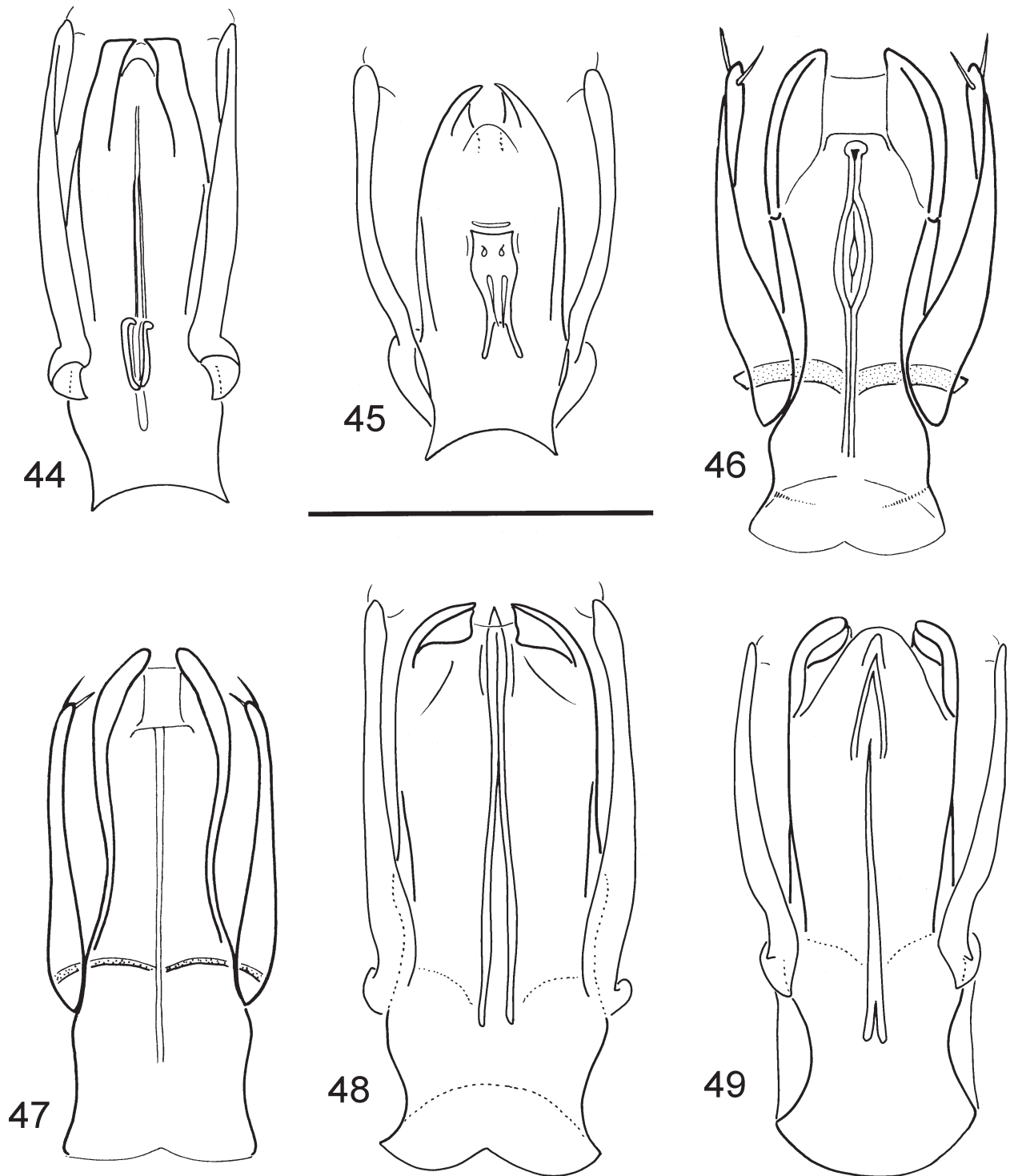
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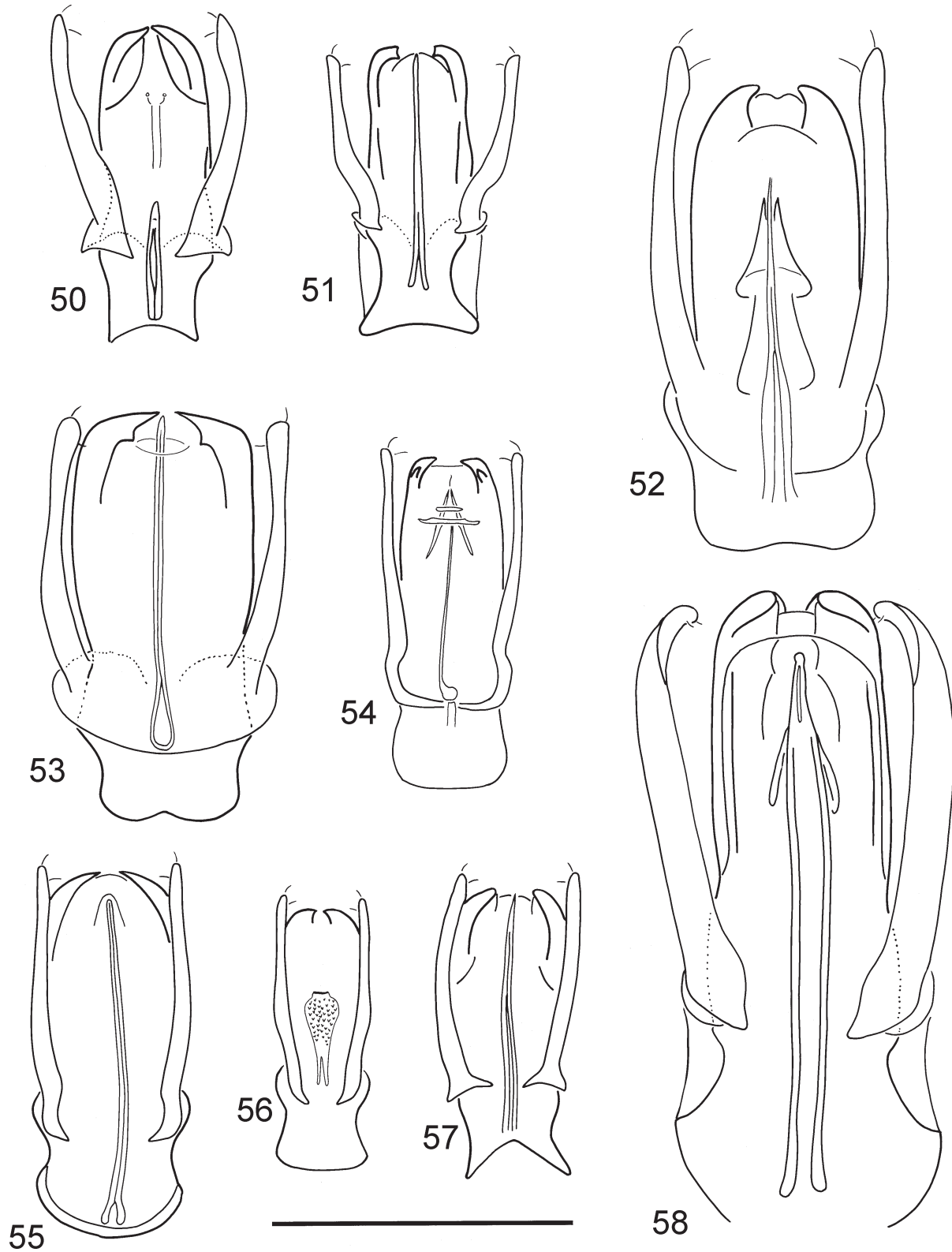
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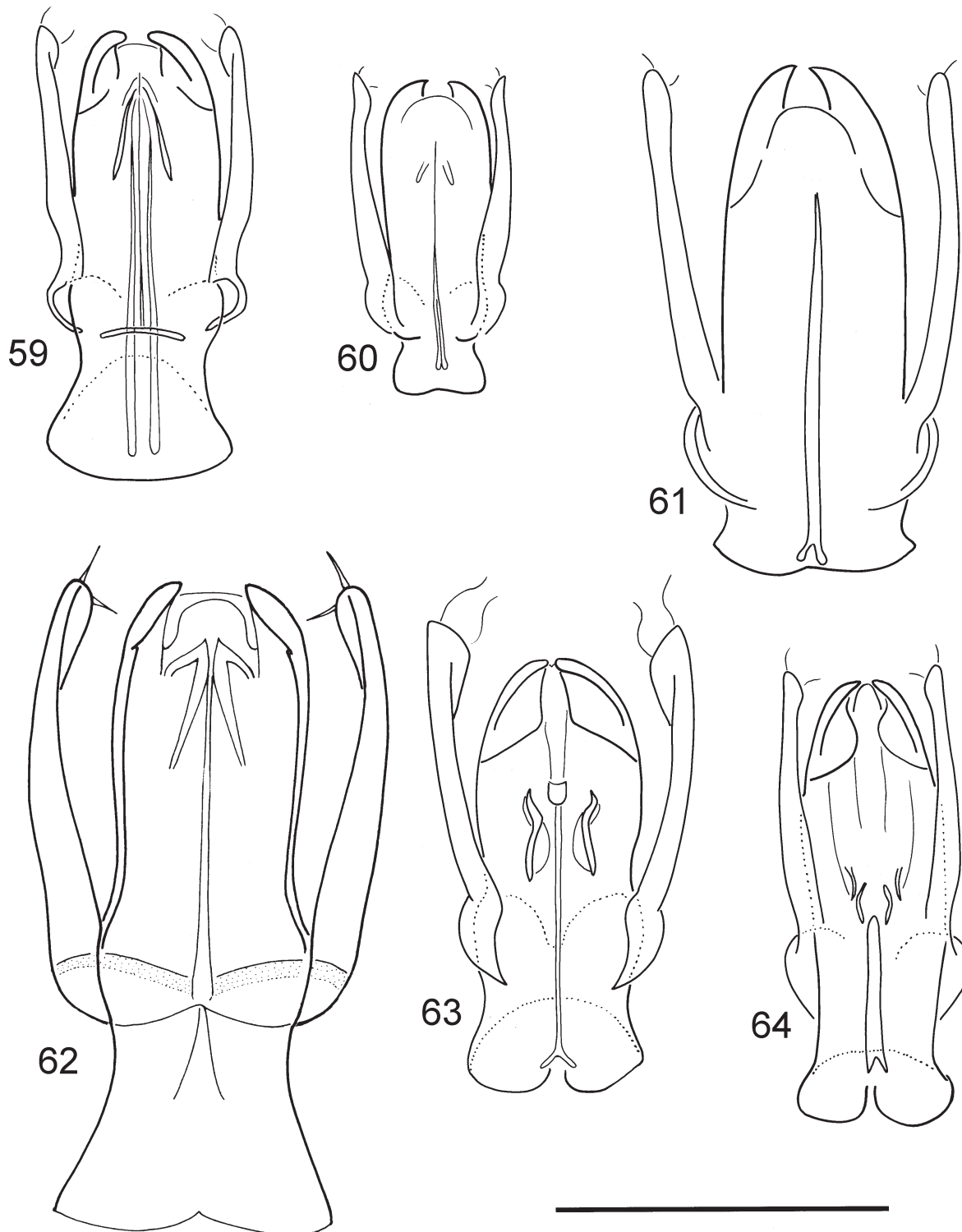
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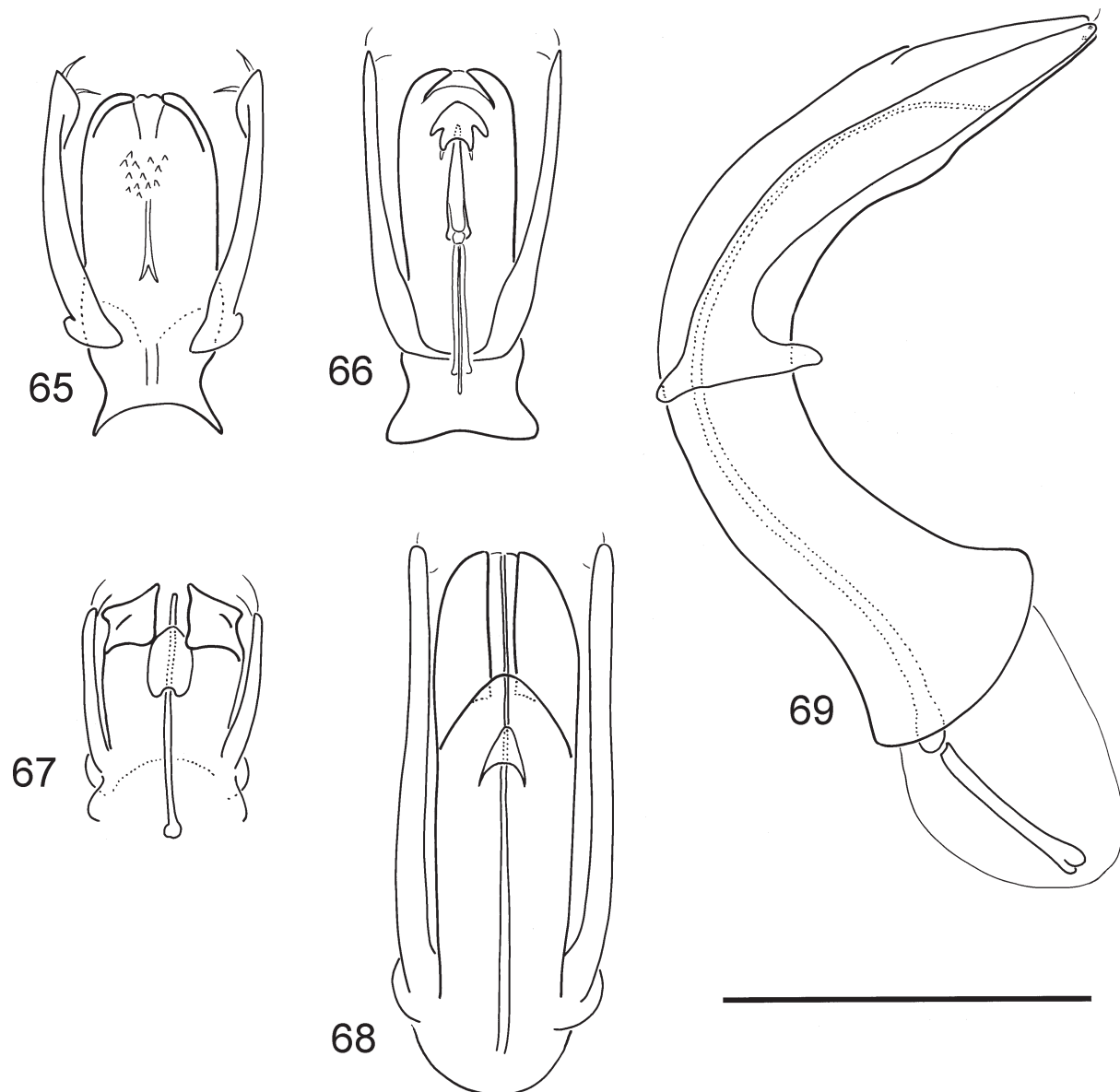
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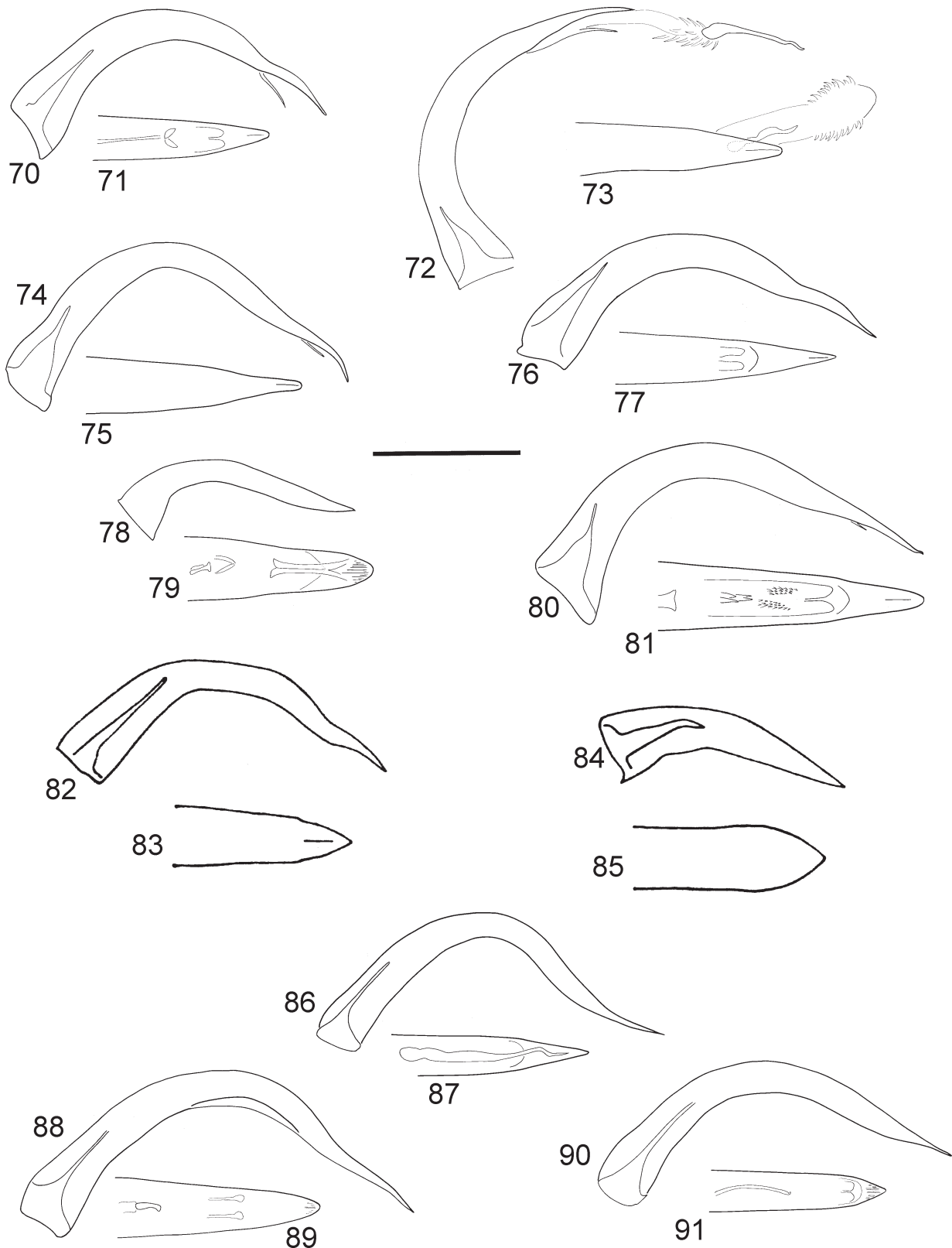
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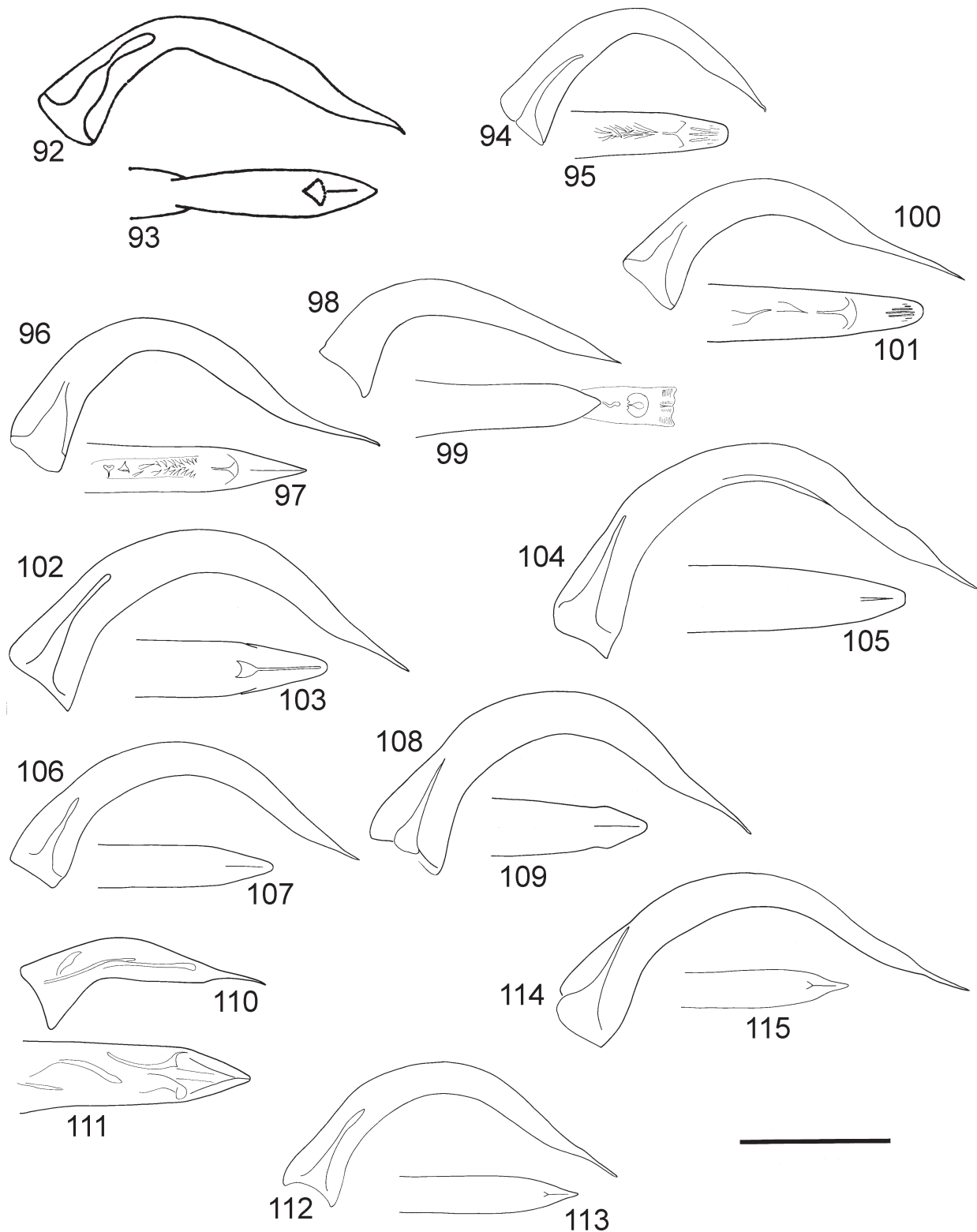
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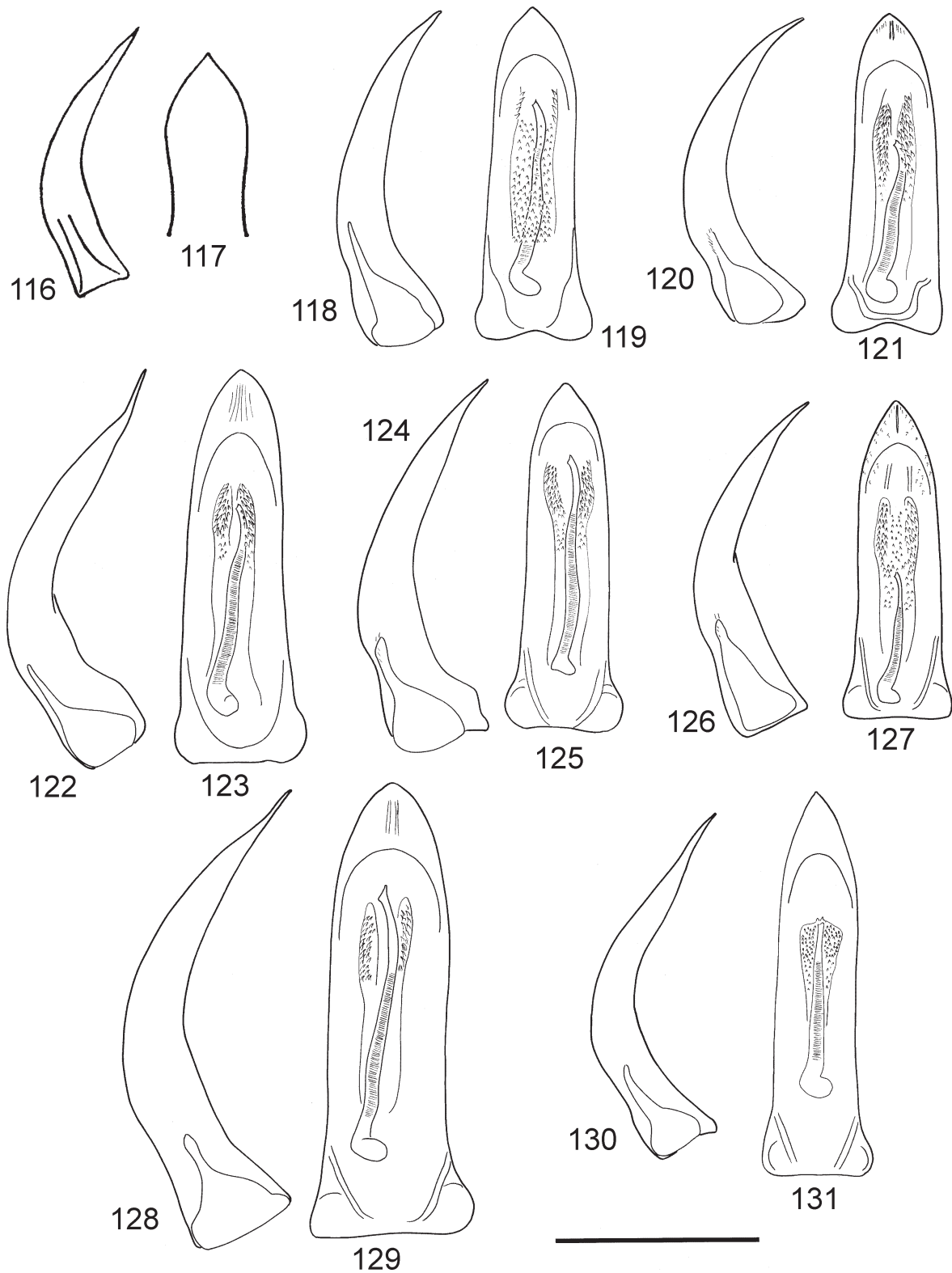
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