

## A Preliminary List of the Encyrtidae (Hymenoptera: Chalcidoidea) of Cuba, with Descriptions of Two New Species

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*Abstract.*—Fifty-one genera and 50 species of Encyrtidae are recorded from Cuba, including 21 genera and 17 species new to Cuba. Two species, *Copidosoma cubense* López and *Forcipestricis yрмаe* López, are described as new. *Holcencyrtus gordhi* (Trjapitzin and Trjapitzin) is a new combination from *Coelaspidia* Timberlake.

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The chalcidoid family Encyrtidae includes mainly primary endoparasitoids or hyperparasitoids of other arthropods, with a few species having been recorded as predators of eggs of Coccidae (Noyes et al. 1997). Many examples of successful biological control programs using encyrtids are known (Dean et al. 1979, van den Bosch et al. 1982, Noyes and Hayat 1994).

Despite the undoubted importance of Encyrtidae in biological pest control, very little information has been published on this group in Cuba. Alayo and Hernández (1978) summarize previous contributions to the study chalcidoids and list 20 genera of Encyrtidae as occurring in Cuba. Records of a few additional species were added later by Hernández and Ceballos (1993), Hernández et al. (1993a, 1993b) and Ceballos and Hernández (1995). A brief account of Cuban Encyrtidae was also provided by Trjapitzin and Sitdikov (1993) who also described a species from Cuba as new to science (*Encyrtus kerzhneri* Trjapitzin and Sitdikov).

Other than these works, all genera recorded from Cuba are included in a key to the Neotropical genera of Encyrtidae compiled by Noyes (1980). Further useful information on the family, including distribution and host relationships can be found in Tachikawa (1963, 1970), De San-

tis (1964), Noyes and Hayat (1984), Noyes (1988) and Noyes and Hanson (1996).

The purpose of this study is to add to the work of Alayo and Hernández by providing additional records of Encyrtidae of Cuba based on recent publications as well as collections made by Drs. Lubomir Masner and Stuart Peck (1995–1996) in Santiago de Cuba, and more recently by myself from various parts of the country.

Abbreviations for depositories: CNCI (Canadian National Collection of insects, Canada, Ottawa); BMNH (The Natural History Museum, London, England, UK); CENSA (National Centre of Animal and Plant Health, La Habana, Cuba).

The records listed below take the following format: encyrtid taxon: locality in Cuba, published reference or depository for material; host, reference if published record.

### LIST OF ENCYRTIDAE OF CUBA

(\*indicates new record)

- \**Acerophagus* sp.—Santiago de Cuba (Jardín Botánico), BMNH; parasitoid of Pseudococcidae (Hemiptera) (Noyes 1980).
- Adelencyrtus* sp.—Cienfuegos, Alayo and Hernández (1978); parasitoid of Diaspididae (Hemiptera) (Noyes 1980).
- \**Adelencyrtus moderatus* (Howard).—San-

- tiago de Cuba (Jardín Botánico, Caney) (det. J. S. Noyes), BMNH; parasitoid of Diaspididae (Hemiptera): *Aspidiella sacchari* (Hall 1988), *Aspidiotus glomeratus* (Noyes and Hayat 1994), *Aulacaspis takarai*, *Aulacaspis tegalensis*, *Duplacionaspis phragmitis* (Trjapitzin 1989).
- \**Adelencyrtus odonaspidis* Fullaway.—Santiago de Cuba (Jardín Botánico) (det. J. S. Noyes), BMNH; parasitoid *Odonaspis ruthae* (Hemiptera: Diaspididae) (Noyes and Hayat 1994), *Duplacionaspis sansevieriae* (Hemiptera: Diaspididae) (Trjapitzin 1989) and also recorded doubtfully as a parasitoid of *Antonina graminis* (Hemiptera: Pseudococcidae) (De Santis 1979).
- \**Aenasius caeruleus* Brues.—Santiago de Cuba (Jardín Botánico) (det. J. S. Noyes), BMNH.
- Aenasius lucidus* (Kerrich).—Rio Cauto, Kerrich (1967), De Santis (1979); parasitoid of *Phenacoccus solani* (De Santis 1979, Noyes and Hayat 1994), and other Pseudococcidae (Hemiptera) (Noyes 1980).
- Aeptencyrtus bruchi* De Santis.—La Habana, Guanabo, Trjapitzin (1999), Santiago de Cuba (Jardín Botánico), BMNH; parasitoid of *Antonina graminis* and *Saccharicoccus sacchari* (Hemiptera: Pseudococcidae) (De Santis 1983, Noyes and Hayat 1994).
- Ameromyzobia bulyginskayae* Trjapitzin.—[locality unknown], Trjapitzin (1971).
- \**Anagyrus fusciventris* (Girault).—Santiago de Cuba (Jardín Botánico) (det. J. S. Noyes), BMNH; mainly a parasitoid of *Pseudococcus longispinus* (Hemiptera: Pseudococcidae), but also recorded from *Maconellicoccus hirsutus*, *Pseudococcus calceolariae*, *P. montanus*, *P. gallicola* and *Ripersia palmarum* (Hemiptera: Pseudococcidae) (Noyes and Hayat 1994).
- Anagyrus saccharicola* Timberlake.—[locality unknown], Hernández et al. (1993a); parasitoid of *Saccharicoccus sacchari* (De Santis 1979, Hernández and Ceballos 1993a, Noyes and Hayat 1994), *Kiritshenkella sacchari* (Hemiptera: Pseudococcidae) (Herting 1972, Noyes and Hayat 1994), *Pseudococcus* spp. (Hemiptera: Pseudococcidae) (Noyes and Hayat 1994).
- \**Anicetus annulatus* Timberlake.—Santiago de Cuba (Jardín Botánico) (det. J. S. Noyes), BMNH; recorded as a parasitoid of various soft scale (Hemiptera: Coccidae) (Thompson 1954, Peck 1963, Herting 1972, Trjapitzin 1989, Noyes and Hayat 1994).
- Aphycus* sp.—[locality unknown], Alayo and Hernández (1978); parasitoid of Pseudococcidae and Coccidae (Hemiptera) (Thomson 1954, Herting 1972, Noyes and Hayat 1994).
- \**Apsilophrys* sp.—Santiago de Cuba (Jardín Botánico), BMNH; polyembryonic parasitoid of caterpillars of Gelechiidae (Lepidoptera) (Noyes 1980).
- \**Arhopoidiella* sp.—Santiago de Cuba (Gran Piedra), BMNH.
- \**Blepyrus insularis* (Cameron).—Santiago de Cuba (Jardín Botánico) (det. J. S. Noyes), BMNH; a parasitoid of *Ferrisia virgata* and some other mealybugs (Hemiptera: Pseudococcidae) (De Santis 1979, Noyes and Hayat 1994).
- \**Bothriocraera* sp.—La Habana (San José de las Lajas); ex *Pseudococcus longispinus* Maskell (det. M.A. Martínez), CENSA; parasitoid of various Pseudococcidae (Hemiptera) (Noyes 1980).
- Carabunia myersi* Waterston.—[locality unknown], Waterston (1928); a parasitoid of Cercopidae (Hemiptera) (Noyes 1980) and record from *Clastoptera flavidorsa* (De Santis 1979); *Clastoptera globosa* (De Santis 1989); *Clastoptera undulata* (Herting 1972, De Santis 1979); *Epicranion* sp. (De Santis 1979).
- \**Cerchysiella insularis* (Howard).—Santiago de Cuba (Gran Piedra) (det. J. S. Noyes) BMNH; parasitoid of *Carpophilus hemipterus* (Coleoptera: Nitidulidae) (Noyes and Hayat 1994), *Lobiopa insularis* (Coleoptera: Nitidulidae) (De Santis 1983).
- \**Cerchysiella scutellata* Howard.—Santiago

- de Cuba (Gran Piedra, Jardín Botánico, Caney) (det. J. S. Noyes), BMNH; parasitoid of *Carpophilus hemipterus* (Coleoptera: Nitidulidae) (Noyes and Hayat 1994) and *Stelidota geminata* (Coleoptera: Nitidulidae) (LaSalle and Gordh 1985).
- Cheiloneurus praenitens* Waterston.—San José and Santiago de las Vegas, Ceballos and Hernández (1995); secondary parasitoid of *Coccus hesperidum* (Hemiptera: Coccidae) (Kochetova and Guryanova 1976).
- Cheiloneurus pulvinariae* Dozier.—[locality unknown], De Santis 1979; secondary parasitoid of various soft scales and margarodids (Hemiptera: Coccidae and Margarodidae) (Peck 1963, Herting 1972, De Santis 1979, Hall 1988).
- \**Chrysoplatycerus* sp.—Santiago de Cuba (Caney), BMNH; parasitoid of Pseudococcidae (Hemiptera) (Noyes 1980).
- \**Coccidencyrtus* sp.—Santiago de Cuba (Jardín Botánico), BMNH; parasitoid of Diaspididae (Hemiptera) (Noyes 1980).
- Coccidoctonus dubius* Girault.—[locality unknown], Trjapitzin and Sitdikov (1993); parasitoid of *Saissetia oleae* (Hemiptera: Coccidae) (Noyes and Hayat 1994).
- Coccidoxenoides peregrinus* (Timberlake).—[locality unknown], Hernández et al. (1993b), parasitoid of Pseudococcoidea (Hemiptera) (Noyes 1980).
- Comperia merceti* (Compere).—[locality unknown], De Santis (1979); parasitoid of *Blattella germanica* (Dictyoptera: Blattellidae) (De Santis 1979); *Periplaneta americana* (Dictyoptera: Blattellidae) (Hagenbuch et al. 1988); *Supella longipalpa* (Dictyoptera: Blattellidae) (De Santis 1979); *Supella supellectilium* (Dictyoptera: Blattellidae) (Herting 1971).
- \**Copidosoma cubense* sp. nov. [description below].—Santiago de Cuba (Caney, Gran Piedra, Ires Arroyos); host unknown.
- \**Copidosoma floridanum* (Ashmead).—Santiago de Cuba (Caney, Ires Arroyo, Gran Piedra) (det. J. S. Noyes), BMNH; mainly polyembryonic parasitids of caterpillars of Plusiinae (Lepidoptera: Noctuidae) (Noyes 1988a, 1988b), (see also De Santis 1967, Herting 1976, Hayat 1986, Trjapitzin 1989, Noyes and Hayat 1994).
- Copidosoma truncatellum* (Dalman).—[locality unknown], De Santis (1979); a parasitoid of caterpillars of Amphipyridae (Lepidoptera: Noctuidae) and Hepialidae (Lepidoptera), and probably erroneously recorded from caterpillars of Plusiinae (Lepidoptera: Noctuidae) (Noyes 1988b) (see also Thompson 1954, Peck 1963, Herting 1976, De Santis 1979, Noyes 1980, Trjapitzin 1989). The record from Cuba is probably a misidentification of *Copidosoma floridanum* (see Noyes 1988b).
- \**Copidosomopsis* sp.—Santiago de Cuba (Jardín Botánico, Gran Piedra); polyembryonic parasitoid of Pyralidae and Tortricidae (Lepidoptera) (Lepidoptera) (Noyes 1980).
- Diversinervus elegans* Silvestri.—[locality unknown], De Santis (1983); parasitoid of various Coccidae (Hemiptera) (Thompson 1954, Herting 1972, Trjapitzin 1989).
- Encyrtus infelix* Embleton.—[locality unknown], Thompson (1954); recorded as a parasitoid of soft scale (Hemiptera: Coccidae), most notably *Coccus hesperidum* and *Saissetia* spp. (Thompson 1954, Peck 1963, Prinsloo 1991, Blumberg and Goldenburg 1992).
- Encyrtus kerzhneri* Trjapitzin and Sitdikov.—La Habana, Caimito, Trjapitzin and Sitdikov (1993).
- \**Exoristobia* sp.—Santiago de Cuba (Jardín Botánico, Caney, Ires Arroyos), BMNH; parasitoid of Syrphidae and Tachinidae (Diptera) (Noyes 1980).
- \**Forcipestricis yrmæ* sp. nov. [description below].—Santiago de Cuba (Jardín Botánico, Caney, Gran Piedra, Ires Arroyos); host unknown.
- Gahaniella saissetiae* Timberlake.—[locality unknown], Thompson (1954); secondary parasitoid of Coccidae and Pseudococ-

- cidae (Hemiptera) via other Encyrtidae (Noyes 1980).
- \**Helegonatopus pseudophanes* Perkins.—Santiago de Cuba (Gran Piedra) (det. J. S. Noyes), BMNH; in general hyperparasitoid of Dryinidae (Hymenoptera) parasitizing Auchenorrhyncha (Hemiptera) (Noyes 1980).
- Holcencyrtus gordhi* (Coelaspida) (Trjapitzin and Trjapitzin), **comb. nov.**—La Habana, Guanabo, Trjapitzin and Trjapitzin (1995).
- Homalopoda cristata* Howard.—[locality unknown], De Santis and Fidalgo (1994); parasitoid of *Aspidiotus secretus* (Hemiptera: Diaspididae) (Thompson 1954); *Ceroplastes giganteus* (Hemiptera: Coccidae) (Herting 1972, De Santis 1983).
- Homalotylus terminalis* Say.—[locality unknown], Peck (1963); a parasitoid of the larvae of Coccinellidae and Chrysomelidae (Coleoptera) (Thompson 1954, Peck 1963, De Santis 1979, Noyes 1980).
- Isodromus iceryae* Howard.—[locality unknown], De Santis (1979); parasitoid of larvae of Chrysopidae and Hemerobiidae (Neuroptera) (Peck 1963, Herting 1978 and Noyes 1980).
- Ixodiphagus hookeri* (Howard).—[locality unknown], (Peck 1963); a parasitoid of ticks (Acarina: Ixodidae) (Peck 1963, Herting 1971, De Santis 1979 and Trjapitzin 1989).
- Leptomastidea abnormis* (Girault).—[locality unknown], Hernández and Ceballos (1993); parasitoid of Pseudococcidae (Hemiptera) (Herting 1972, Noyes 1980 and Noyes and Hayat 1994).
- Leptomastix dactylopii* Howard.—[locality unknown], Hernández and Ceballos (1993); parasitoid of Pseudococcidae (Hemiptera) (Peck 1963, Herting 1972, Noyes 1980, Trjapitzin 1989 and Noyes and Hayat 1994).
- \**Lirencyrtus* sp.—Santiago de Cuba (Jardín Botánico), BMNH.
- Metaphycus helvolus* Compere.—[locality unknown], Trjapitzin (1989); parasitoid of Coccidae, Diaspididae, Lacciferidae, and Eriococcidae (Hemiptera) (Noyes 1980).
- Metaphycus portoricensis* (Dossier).—[locality unknown], De Santis (1979); parasitoid of *Asterolecanium pustulans* (Hemiptera: Asterolecaniidae) (De Santis 1979).
- Metaphycus stanleyi* Compere.—[locality unknown], Ceballos and Hernández (1992); parasitoid of Coccidae (Hemiptera) (Ceballos and Hernández 1992).
- Microterys nietneri* (Motschulsky).—[locality unknown], Ceballos and Hernández (1991); parasitoid of various Homoptera (Trjapitzin 1989, Noyes and Hayat 1994), parasitoid of *Coccus hesperidum* and *Ceroplastes floridensis* (Hemiptera: Coccidae) (Ceballos and Hernández 1991).
- \**Neococcidencyrtus crouzelae* De Santis.—Santiago de Cuba (Caney) (det. J. S. Noyes), BMNH; parasitoid of *Diaspis echinocacti* (Hemiptera: Diaspididae) (De Santis and Fidalgo 1994); *Hemiberlesia rapax* (Hemiptera: Diaspididae) (De Santis 1967).
- \**Ooencyrtus calpodicus* Noyes.—Santiago de Cuba (Jardín Botánico) (det. J. S. Noyes), BMNH; parasitoid of eggs of *Calpodes ethlius* (Lepidoptera: Hesperidae) (Noyes and Hayat 1994).
- \**Ooencyrtus latiscapus* Gahan.—Santiago de Cuba (Gran Piedra) (det. J. S. Noyes), BMNH; parasitoid of eggs of *Hemiceras rava* (Lepidoptera: Notodontidae) (De Santis 1979).
- Ooencyrtus submetallicus* (Howard).—[locality unknown], De Santis (1979); parasitoid of eggs of various Heteroptera (Hemiptera) (De Santis 1979, De Santis 1983, De Santis and Fidalgo 1994).
- \**Ooencyrtus syrphidis* Noyes.—Santiago de Cuba (Gran Piedra, Ires Arroyo, Jardín Botánico, Caney) (det. J. S. Noyes), BMNH; parasitoid of larvae of *Salpingogaster nigra* (Diptera: Syrphidae) (De Santis and Fidalgo 1994).
- \**Parablatticida* sp.—Santiago de Cuba (Caney, Gran Piedra, Ires Arroyos), BMNH.
- Plagiomerus cyaneus* (Ashmead).—[locality

unknown], Bruner (1929); parasitoid of Diaspididae (Hemiptera) (De Santis 1979 and Noyes 1980).

\**Prochiloneurus* sp.—Pinar del Rio, CENSA; secondary parasitoid of Pseudococcidae and Coccidae (Hemiptera) (Noyes 1998).

*Pseudaphycus angustifrons* Gahan.—[locality unknown], Gahan (1946); parasitoid of *Dysmicoccus brevipes* (Hemiptera: Pseudococcidae) (De Santis 1979).

\**Pseudectroma* sp.—Santiago de Cuba (Ires Arroyos), BMNH; parasitoid of Pseudococcidae (Hemiptera) (Noyes 1980).

*Pseudhomalopoda prima* Girault.—[locality unknown], De Santis (1979); parasitoid of various Diaspididae (Hemiptera) (Thompson 1954, Peck 1963, Herting 1972, De Santis 1979 and Noyes and Hayat 1994).

*Psyllaephagus trioziaphagus* (Howard).—Artemisa, Noyes and Hanson (1996); parasitoid of *Trioza diospyri* (Ashmead) and *Mastigmas ernsti* (Hemiptera: Triozidae) (Noyes and Hanson 1996).

*Psyllaephagus yaseeni* Noyes.—Soroa, Noyes (1990); parasitoid of *Heteropsylla cubana* (Hemiptera: Psyllidae) (Noyes and Hanson 1996).

\**Rhytidothorax* sp.—Santiago de Cuba (Jardín Botánico, Caney, Gran Piedra, Ires Arroyos), BMNH.

\**Syrphophagus aphidivorus* (Mayr).—Santiago de Cuba (Jardín Botánico) (det. J. S. Noyes); BMNH; secondary parasitoid of Aphididae (Hemiptera) (Thompson 1954, Peck 1963, Herting 1972, Hayat 1986 and Trjapitzin 1989).

\**Tachinaephagus* sp.—Santiago de Cuba (Jardín Botánico), BMNH; parasitoid of Diptera (Thompson 1954).

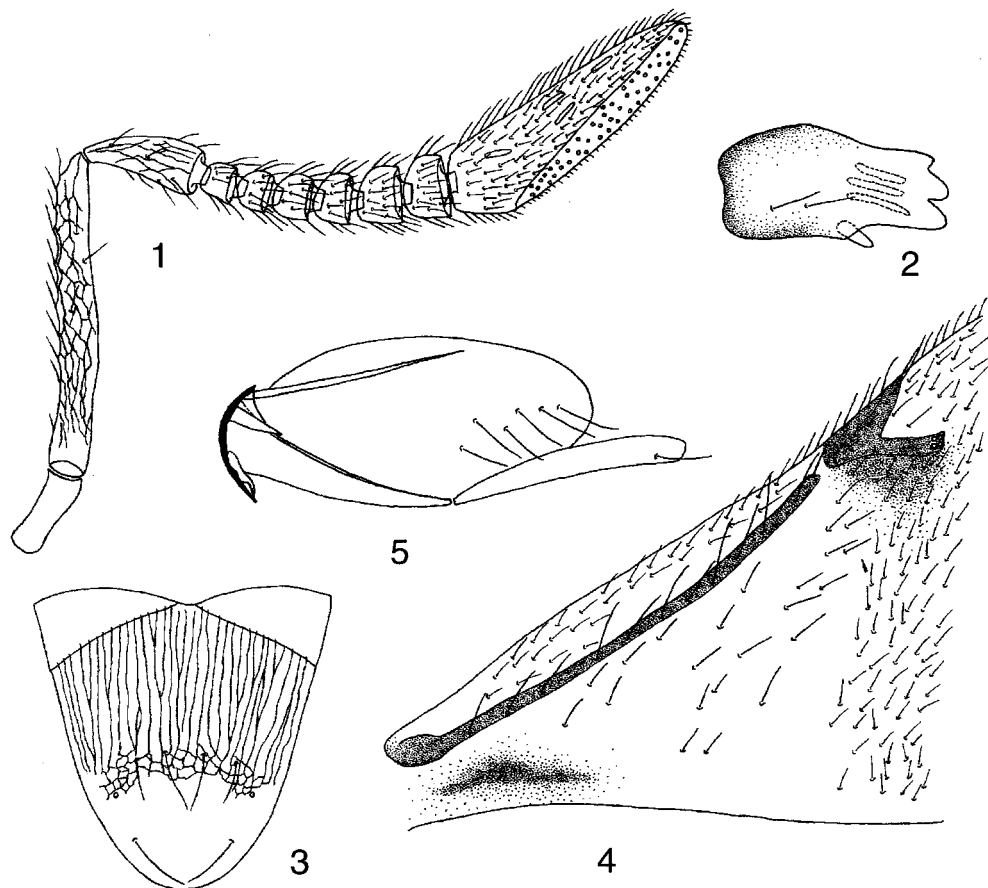
*Trichomasthus portoricensis* (Crawford).—[locality unknown], Thompson (1954); parasitoid of *Asterolecanium* (Hemiptera: Asterolecaniidae) (Noyes and Hayat 1994), *Ceroplastes cistuiliformis*, *Saissetia oleae* (Hemiptera: Coccidae) (De Santis 1979), *Parasaissetia nigra* (Hemiptera: Coccidae) (De Santis and Fidalgo 1994).

## DESCRIPTIONS OF NEW SPECIES

### *Copidosoma cubense* López, sp. nov.

(Figs. 1–5)

*Female* (critical point dried holotype, on card).—Length 1.16 mm. Head black bright metallic purple, antenna brown with apical sensory area yellow, mesosoma black with mesoscutum bright metallic green, axillae, sides of mesosoma and base of scutellum concolorous with head, apex of scutellum metallic green, wings hyaline with venation brown and a small brown area on forewing below marginal vein, legs concolorous with base of gaster, except for hind legs yellow, with one quarter of femur and dorsum of tibia brown, apical tarsomere brown. Gaster orange, dorsum from cerci to apex and ventrally at apex dark brown. *Head*: More or less lenticular in lateral view, more than twice as long as deep, shiny with polygonally reticulate sculpture with some inconspicuous setae on frontovertex, compound eyes almost naked, nearly touching occipital margin, antennal scrobes shallow, torulus more than 2× as high as wide, antennal scape 6× as long as broad (Fig. 1), sparsely setose with more or less longitudinally striate sculpture, pedicel with similar sculpture as scape and about as long as funicular segments 1–3, is more than twice as long as broad, all funicle segments not longer than broad, clava entire, a little longer than funicle, apex of clava obliquely truncate, truncation considerably exceeds half length of clava, clava about 1.2× as long as truncation. Mandible tridentate (Fig. 2). Relative measurements: head width 40, head length 38, minimum frontovertex width 18, POL (post ocellar line) 12, OOL (ocellar-ocular line) 2, OCL (ocellar-occipital line) 0, OD (ocellar diameter) 3, eye length 22, eye width 19, malar space 16, scape length 24, maximum scape width 4. *Mesosoma*: Mesoscutum shiny, with polygonally reticulate sculpture like that of head but of larger mesh size and with longer setae. Scu-



Figs. 1-5. *Copidosoma cubense* sp. nov. ♀. 1, Antenna. 2, Mandible. 3, Scutellum. 4, Base of forewing. 5, Ovipositor.

tellum convex with longitudinally striate sculpture, its apex shiny and almost smooth but with very shallow polygonally reticulate sculpture (Fig. 3). Forewing 2.3× as long as broad (Fig. 4), linea calva not interrupted, postmarginal vein shorter than marginal, stigmal vein longer than postmarginal. Propodeum without sculpture. Relative measurements: forewing length 99, forewing width 42, hind wing length 66, hind wing width 18. *Gaster*: Shiny with apex setose, hypopygium reaching about  $\frac{3}{4}$  along gaster, ovipositor not exerted (Fig. 5). Relative measurements: midtibia length 99, ovipositor length 70, gonostylus length 30.

*Male*.—Unknown.

*Variation*.—Length 1.0–1.21 mm. Speci-

mens vary in the extent of the dark color at the apex of the gaster and also in the extent of the brown area on the hind tibia.

*Material examined*.—HOLOTYPE ♀: CUBA: Santiago, Gran Piedra, 1100 m, Isabelica, Mateo Station, 4–17.xii.1996, L. Masner. PARATYPES: 6 ♀, same data as holotype. Holotype in CNC, paratypes in BMNH, CENSA.

*Comments*.—*Copidosoma* is a very large cosmopolitan genus, containing more than 150 described species. *Copidosoma cubense* can be separated from the other species by the combination of the color of the gaster and sculpture of scutellum. In *cubense* the gaster is mainly orange and the sculpture of the scutellum is longitudinally striate. This combination does not occur in any of

the described species. Only very few species of *Copidosoma* have longitudinally striate sculpture on the scutellum and in all these the gaster is entirely dark and metallic, e.g. *varicornis* and related species (*Paralitomastix* s. l.).

***Forcipestricis yrmae* López, sp. nov.**  
(Figs. 6–13)

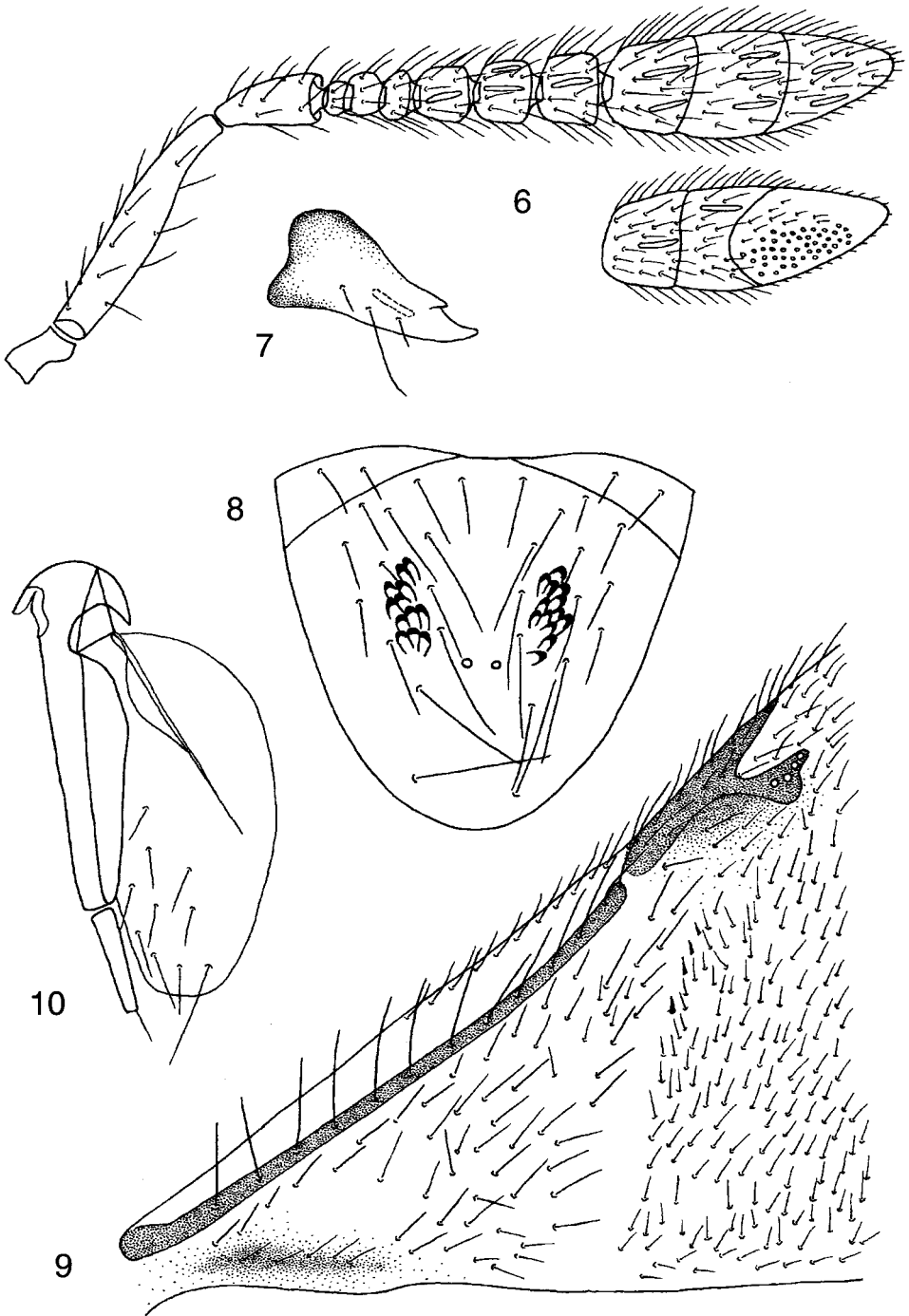
*Female* (critical point dried holotype on card).—Length 1.05 mm. Head dark brown, antenna with scape pale orange, funicle and clava brown, mesosoma dark brown, wings hyaline, with small brown area below marginal vein of forewing, venation of forewing brown, legs of same color as scape, metatibia with some brown area at apex, gaster dark orange with apex brown in dorsal view, in ventral view pale orange with base nearly yellow. *Head*: Subtriangular in lateral view, about 3.1× as broad as frontovertex which is smooth and shiny, without sculpture, setae on frontovertex dark brown, compound eyes setose, setae pale, ocelli forming an acute triangle. Scrobes well-defined and U-shaped. Torulus two times as high as wide. Posterior ocellus nearly touching compound eye. Antenna (Fig. 6) with scape 3.5× as long as broad, sparsely setose and about the same length as funicle, funicular segments wider than long, clava the same length as F2–F6, apex of clava obliquely truncate, truncation a little more than half length of clava, F1 almost anelliform, F2–6 gradually increasing in size, F6 2× as wide as F2. Mandible bidentate with two acute teeth (Fig. 7). Relative measurements: head width 37, head length 35, minimum frontovertex width 11, POL (post ocellar line) 5, OOL (ocellar-ocular line) 1, OCL (ocellar-occipital line) 2, OD (ocellar diameter) 3, eye length 23, eye width 19, malar space 14, scape length 15, maximum scape width 4. *Mesosoma*: Scutellum (Fig. 8) nearly completely smooth and shiny but with some shallow sculpture between pits, which form two small parallel submedian bands, two very long

setae, each inserted at end of each group of pits and two more long setae inserted at apex of scutellum. Forewing (Fig. 9) about 2.3× as long as broad, marginal vein longer than broad, postmarginal vein shorter than marginal, and stigmal vein a little shorter than postmarginal; linea calva narrow and not interrupted. Propodeum very short and smooth without median sculpture. Relative measurements: forewing length 92, forewing width 42, hind wing length 60, hind wing width 17. *Gaster*: Mostly smooth and shiny with apex setose, ovipositor (Fig. 10) not exerted. Relative measurements: (slide-mounted paratype): midtibia length 74, ovipositor length 55, gonostylus length 30.

*Male* (card mounted paratype).—Length 0.84–0.97 mm. Similar to female except for structure of antenna (Fig. 11), color of gaster, and genitalia (Fig. 12). Mandible and scutellum (Fig. 13) similar. Gaster brown in dorsal view and dark orange in ventral view. Relative measurements (card mounted paratype): head width 34, head length 30, minimum frontovertex width 14, POL (post ocellar line) 5, OOL (ocellar-ocular line) 2, OCL (ocellar-occipital line) 2, OD (ocellar diameter) 3, eye length 19, eye width 16, malar space 11, scape length 14, maximum scape width 4, forewing length 96, forewing width 36, hind wing length 63, hind wing width 15; (slide-mounted paratype): midtibia length 110, aedeagus length 41.

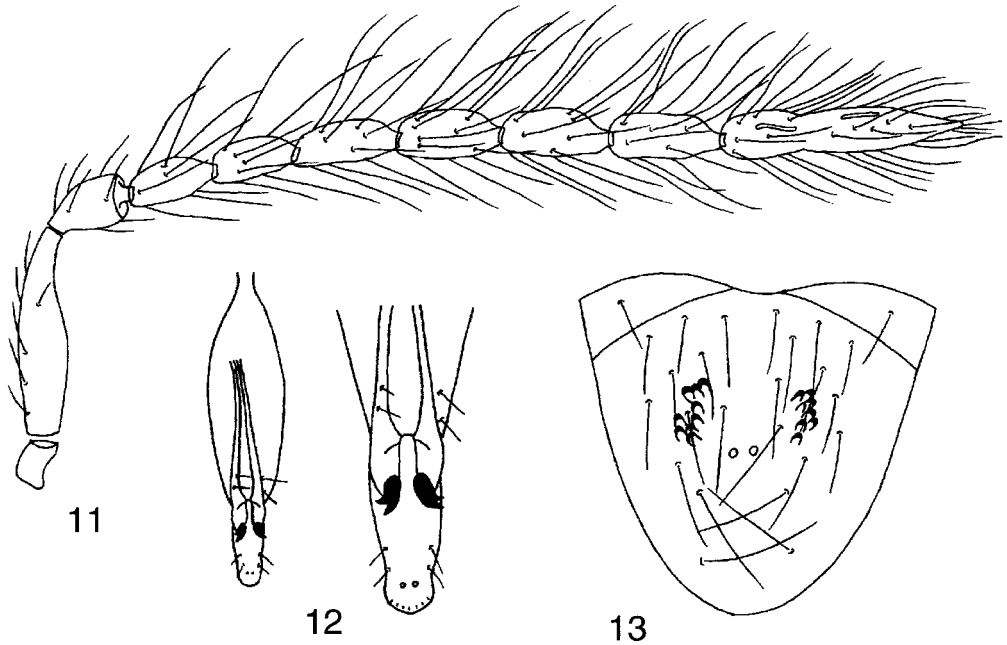
*Variation*.—There is slight variation except for the length of the female which varies from 0.85–1.11 mm and the gaster of the female is sometimes darker than described for the holotype.

*Material examined*.—HOLOTYPE ♀: CUBA: Santiago, Gran Piedra Isabelica, 7–17.xii.1995, elfin forest, S. Peck. PARATYPES: CUBA, 1 ♂, same data as holotype; 6 ♀, Santiago, Gran Piedra Isabelica, xii.1995, 1100m elfin Forest, S. Peck; 10 ♀, 2 ♂, Santiago, Gran Piedra, Met. Radar, 8–17.xii.1995, Elfin Forest, S. Peck; 4 ♀, Santiago, Gran Piedra, 1100m, Isabelica Meteo



Figs. 6–10. *Forcipestricis yrmæ* sp. nov. ♀. 6, Antenna. 7, Mandible. 8, Scutellum. 9, Base of forewing. 10, Ovipositor.





Figs. 11–13. *Forcipestricis yrmae* sp. nov. ♂. 11, Antenna. 12, Genitalia. 13, Scutellum.

Station, xii.1996, L. Masner; 15 ♀, Santiago, Gran Piedra Isabelica, Meteo Station, 4–17.xii.1996, 1100m, L. Masner; 1 ♀, Santiago, 16 Km NE Caney, 145m, 13.xii.1995, L. Masner; 1 ♀, Santiago, 5 Km NE, Siboney, Ires Arroyo, 150 m, creekbed, 18.xii.1995, L. Masner. Holotype in CNC, paratypes in CNC, BMNH, CENSA.

*Comments.*—*Forcipestricis* is a very large genus of mainly Neotropical distribution and probably contains more than 150 species (Noyes, pers. comm.), although to date only three species have been formally described, i.e. *F. gazeaui* Burks, *F. portoricencis* Gordh and *F. sordidus* (Howard).

*Forcipestricis yrmae* can be separated from these species by the color of the gaster, sculpture of the scutellum, distribution of the pits, and shape of the mandibles. In *yrmae* the gaster is largely orange, the scutellum is smooth with the pits placed in two distinct submedian groups, and the mandibles are bidentate. In all the named species the gaster is uniformly brown. *Forcipestricis portoricencis* and *sordidus* have the pits scattered, *gazeaui* has

the scutellum strongly sculptured, and both *gazeaui* and *portoricencis* have tridentate mandibles.

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