CONCERNING CUBAN MIRIDAE (INSECTA: HEMIPTERA)

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ABSTRACT

Sixty three species of mirids, including nine new records, two new genera, and five new species are reported from Cuba. Specimens from the Moravske Museum, Czechoslovaquia, identified by the author; Pastor Alayo's 1974 publication of Cuban mirids, and search through Carvalho's Catalogue of the Miridae were the principal sources of these records. Aguayomiris and Derophthal-moides new genera, and Aguayomiris pallipes, Ceratocapsus parallelus, C. avelinae, Adfalconia bicolor, and Derophthalmoides multimaculatus new species are described. Partial keys to separate the new from allied genera are given.

RESUMEN

Sesenta y tres especies de míridos, incluyendo nueve registros nuevos, dos géneros nuevos y cinco especies nuevas, se informan de Cuba. Ejemplares del Moravske Museum, en Checoslovaquia, e identificados por el autor; la publicación de 1974 de Pastor Alayo sobre los Míridos de Cuba y búsqueda en el Catálogo de los Miridae del Mundo de Carvalho fueron las fuentes de las citas tratadas. Los géneros Aguayomiris y Derophthalmoides y las especies Aguayomiris pallipes, Ceratocapsus parallelus, C. avelinae, Adfalconia bicolor y Derophthalmoides multimaculatus se describen como taxones nuevos. Se incluyen claves parciales para aclarar la posición sistemática de los géneros nuevos.

INTRODUCTION

M aterial for study loaned to me by Dr. J. L. Sehlik is identified throughout the text by MM, as it is deposited at the Moravske Museum at Brno, Czechosłovaquia. Only Province is given for localities of known taxa and complete locality data are given for new taxa. Pastor Alayo, from the Academy of Sciences at La Habana, Cuba, published a list of Cuban mirids in 1974. His records are mentioned and some of his information is updated. Records in Carvalho's (1957-1959) catalogue are also cited. Taxa are listed alphabetically by subfamily, tribe, genus, and species. Holotypes, allotypes, and paratypes are deposited in the Moravske Museum. Other paratypes are deposited in the National Museum of Natural History (NMNH), Washington, D. C., and in my collection (JMC). Measurements are in millimeters.

DISCUSSION

BRYOCORINAE

Bryocorini

Aguayomiris Maldonado, new genus

Type species: *Aguayomiris pallipes,* new species.

Head roundly produced between antennae; finely sulcate and punctate; eyes sessile,

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hemispherical. Pronotum and scutellum punctate, the first coarsely so. First antennal segment shorter than width of vertex; all segments sparsely set with short, relatively slender setae. Collar longer mesally than lenght of an eve, posterior lobe of pronotum inflated basally; calli well developed, short, smooth; lateral margins rounded. Hemelytra smooth, sparsely clothed with silvery, decumbent setae; embolium narrow and not incrassate; cuneus slightly wider than long, cuneal fracture shallow. Black species with vellow-white legs. Small, under 3.0. Male: left clasper curved, elongate, with a basal appendage; right clasper short, wide, caudally, strongly sclerotized.

I dedicate this genus to the late Cuban-Puerto Rican eminent biologist Dr. Carlos G. Aguayo. In Carvalho's (1955a) key to the genera of the World, Aguayomiris runs to Sixeonotus, as both have a narrow embolium. Sixeonotus, however, has a short collar, the setae are comparatively long, semierect, and abundant, and the embolium is incrassate. Externally Aquayomiris is guite similar to Sixeonotus. However, their genitalia are totally different. The new genus also has the general aspect, that is, mostly black body with whitish legs and densely pitted prothorax, of other Bryocorini. I call this the Pycnoderes group of genera because it is the most common and oldest species group name. The genera in this group are Cyrtocapsus, Sixeonotus, Parapycnoderes, Pycnoderes, Schaffnerisca, and Sixeonotopsis. This genera can be separated by means of the following key, a modification of my key (1973) to separate Parapycnoderes.

Key to the *Pycnoderes* group of Bryocorini genera

oval

Parapycnoderes Maldonado, 1973 Collar shorter than calli or eye; oval or long oval Pycnoderes Guérin-Mênéville, 1857

- 5. Clavus and corium inflated Schaffnerisca Carvalho, 1974 Clavus and corium not inflated 6

Aguayomiris pallipes Maldonado, n. sp. Figures 1-5

Male - above and below black; membrane, including cells, dark gray, veins blackish, legs pale yellowish. Antenna: segments I and II pale yellowish, segments III and IV grayish. Rostrum pale yellowish, apex dark brown. Habitus as in figure 5.

Head - length 0.25, width across eyes 0.65, vertex 0.4. Antenna: I, 0.25; II, 0.5; III, 0.45: IV, 0.25. Rostrum reaching middle of mesosternum. Pronotum: width at humeral angles 1.01, length 0.74, punctures coarser on disc of pronotum than on head, collar or scutellum; collar: mesal length 0.2, lateral length 0.12. Scutellum: width 0.44, length 0.25, finely punctate. Setae on pronotum and hemelytra fine, short, and moderately abundant. Greatest width across hemelytra 1.20; cuneus width 0.4, length 0.3. Length to apex of hemelytra 2.6-2.7. Genitalia as in figures 1-4; right clasper angular, apex strongly sclerotized.

Female - color mostly as in male; antennal segment II with apical half grayish. Head: length 0.2, width across eyes 0.4, vertex 0.35. Antenna: I, 0.2; II, 0.45; III, 0.6; IV, 0.25; with sparsely set short, fine setae. Pronotum: width 1.01, length 0.7, mesal length of collar 0.2; shape and pubescence as in male. Scutellum: width 0.4, length 0.3, finely punctate. Width across hemelytra 1.05; cuneus: basal width 0.4, length 0.3. Length to apex of hemelytra 2.4.

Holotype - male, CUBA, Habana-Alamar, 18-26.vi.1965, leg. Jar Prokop, in MM.

Allotype - female, CUBA, Habana-Alamar-Cojimar, 2-10 m., 15-29.ix, 1966, leg. Jar Prokop, in MM. Paratypes - 191, both sexes, all but two from Habana Province, one from Matanzas and the other from Pinar del Río; 20 in JMC, 5 in NMNH, others in MM. Because of the coloration and general appearance this new species could have been confused with *Sixeonotus insignis* by Alayo (1974). The shape of both claspers definitely sets apart this genus from *Sixeonotus*.

Euricipitia clarus (Distant)

Reported as *E. splendens* by Alayo (1974). Also found in Hispaniola (JMC and J. C. Schaffner's collections), Panamá, and Venezuela.

Cyrtocapsus caligineus (Stal)

Listed and illustrated by Alayo (1974). A common species in the circumcaribbean area as witnessed by specimens in my collection.

Cyrtocapsus femoralis Reuter

Previously known only from northern South America (Carvalho, 1954). In MM from Habana and Pinar del Río. New record.

Hemisphaerodella mirabilis Reuter

Recorded and illustrated by Alayo (1974). A small, black, brachypterous neotenic species relatively common in the Greater Antilles and also reported from southern United States, Central America, and South America. Can be collected on *Ipomea* spp.

Heterocoris dillatatus Guérin-Ménèville

Listed and illustrated by Alayo (1974). A remarkably shaped metallic-blue species endemic to Cuba. In MM and JMC from La Habana.

Heterocoris cyaneus Knight

Listed by Carvalho (1957).

Monalocoris filicis (Linnaeus)

Listed and illustrated by Alayo (1974). Undoubtedly a misidentification. It represents the North American *Monalocoris americanus* Wagner and Slater (1952). The genus is primarily Holarctic, with a few representatives in the Neotropics.

Pycnoderes angustatus Reuter

Listed and keyed by Alayo (1974). The narrow elongate body will allow recognition of this species. Known from Florida, Jamaica (Carvalho, 1957); specimens from Hispaniola in JMC.

Pycnoderes quadrimaculatus Guérin-Ménèville

Listed by Alayo (1974) and listed by Carvalho (1957). A very common species in the New World. Sometimes very abundant or cucurbits (Maldonado, 1969). In MM from Pinar del Río, Matanzas, and Habana.

Pycnoderes vanduzeei Reuter

Listed, keyed, and illustrated by Alayo (1974). In MM from Matanzas, Pinar del Río, and Habana. This is one of the smaller species in the genus, frequently found on weeds such as *Commelina* (Maldonado, 1969).

Sixeonotus insignis Reuter

Listed by Alayo (1974). Very likely a misidentification. Recorded by Alayo from a single specimen identified by Uhler and in the Gundlach collection. Alayo states that the specimen is badly damaged by psocids. See discution under *Aguayo miris pallipes* n. sp.

CYLAPINAE

Fulvini

The three species mentioned below should be considered as tentative identifications until specimens referred to are carefully studied.

Fulvius anthocorides Stal

Listed and illustrated by Alayo (1974).

Fulvius bisbistillatus (Stal)

Alayo recorded this species in a typed, unpublished list that he sent me several years

ago. This species, illustrated by me (1969), is a different from Alayo's illustration (1974) of *F. anthocorides.* New record.

Fulvius brevicornis Reuter

Listed from Cuba by Carvalho (1957). This species does not have the cuneus bicolored as in Alayo's drawing of *F. anthocorides.* It represents a third record of the tribe for Cuba.

ORTHOTYLINAE

Halticini

Halticus bractatus (Say)

Alayo (1974) listed and illustrated this widely distributed New World species. Henry (1983) published a key to the 4 species of our region.

Orthotylini

Adfalconia bicolor, Maldonado, n. sp. Figure 6

Female - overall color brownish with blackish areas and pale orange head. Legs and antennae (last two segments missing in all specimens) straw color; last tarsal segment blackish. Pronotum: anterior lobe blackish. posterior brown, in two paratypes the black extends almost to base of pronotum. Venter of head, pleurae, and abdominal sterna black. Scutellum black. Hemelvtra: clavus same shade of brown as posterior lobe of pronotum; corium on outer apical half with small variable blackish area contiguous to embolium and extending to inner 2/3 of corium; embolium brownish as clavus; cuneus straw color; membrane translucent, pale stramineous, slightly lighter than legs, veins of cell light brown.

Head and anterior lobe of pronotum smooth; posterior lobe of pronotum, scutellum, and hemelytra, except embolium and cuneus, finely punctured. Head finely carinate basally; length 0.15, width across eyes 0.6, interocular space 0.4. Antenna: I, 0.15; II, 0.45; first segment slightly thicker than second; second slightly thickened toward apex, pilosity fine and very scarce; rostrum reaching middle coxae. Pronotum: length 0.55, basal width 0.85; calli obsolete; lateral margin straight, posterior margin very slightly concave above scutellum; scutellum width 0.37, length 0.3. Hemelytra: embolium defined basally only, deflexed along radial vein; cuneus very small, cuneal fracture deep; greatest width across hemelytra 1.0. Total length 2.0.

Holotype - female, CUBA, Oriente, La Gran Piedra, 1,200 m., 27.xii.1965, leg. Jar Prokop, in MM. Paratypes - 6 females: 1 in NMNH, 2 in JMC, 3 in MM. The specimen fit quite well Carvalho and Rosas' (1962) generic

DERAEOCORINAE

Deraeocorini

Diplozoma collaris Van Duzee

Listed by Alayo (1974). Also known from Florida and Puerto Rico (Maldonado, 1969). In MM from Habana.

Hyaliodini

Hyaliodes vittaticornis Bruner

Originally described from Cuba. Listed and illustrated by Alayo (1974). Specimens in MM from Habana and Pinar del Río.

Paracarnus cubanus Bruner

Listed, keyed, and illustrated by Alayo (1974). In my 1969 paper I give a key to the species in the genus and quote China's suggestion that *P. cubanus* is a synonym of *P. mexicanus* Bruner, 1934. Henry and Wheeler (1982) also maintained the name *P. cubanus*, indicating that until Distant's type could be re-examined, it was best to recognize Bruner's species.

Paracarnus myersi China

Listed and keyed by Alayo (1974). Known only from Cuba (China, 1931).

Paracarnus puncticollis (Motschulsky)

Alayo (1974) listed and keyed *P. maestralis* Bruner, 1934, a junior synonym of *P. puncticollis* (Carvalho, 1955b). description in having the embolium well defined basally but fading near the middle of the corium, and an unusually short cuneus. Adfalconia cunealis, the other species in the genus, is uniformly black above and the basal half of the membrane fumate, whereas the new species is bicolored and its membrane is uniformly clear.

Ceratocapsus avelinae, Maldonado, n. sp. Figures 20-24

Male - Overall coloration fuscous. Hemelytra fuscous, cuneus darker, embolium whitish. Head slightly paler than pronotum and slightly darker than antenna. Legs yellowish brown; coxae and trochanters paler. Osteolar peritreme whitish. Abdomen same shade of fuscous as hemelytra. First two antennal segments yellowish brown; apex of second plus all third and fourth segments darker. Setae sparse and inconspicuous. Habitus as in figure 24.

Elongate oval. Head across eyes 0.62, interocular space smooth, basal margin finely carinate, 0.2; length 0.3. Antenna: I, 0.25; II, 0.8; III, 0.5; IV missing; setae short and inconspicuous; first segment thickest, segments II and III of equal thickness. Pronotum punctate, calli obsolete, width at humeral angles 0.82. Scutellum width 0.4, length 0.3, finely punctate. Hemelytra, except embolium and cuneus punctate; cuneus as wide as long, 0.35. Genitalia (Figs. 20-23) with the complex form typical of genus. Length 2.4.

Female - coloration as in male; last antennal segment darkest. Head: width across eyes 0.62, interocular space 0.25, smooth, base finely carinate; length 0.2. Pronotum: length 0.4, width at humeral angles 0.82, punctate and shaped as in male. Scutellum: width 0.5, length 0.35, finely punctate; cuneus as wide as long, 0.35. Length 2.7.

Holotype - male, CUBA, Prov. Matanzas, Varadero, 1.5 m., 4.xi.1966, leg. F. Gregor, in MM. Allotype - female, same data, in MM. Paratypes: 2 males, CUBA, Pinar del Río, Soroa, 100 m., leg. Jar Prokop; 2 females, Habana, one from Suraco, the other from Alomar-Cojimar; 1 male and 1 female each in NMNH and JMC.

Runs to second part of couplet 17 of Carvalho, Fontes, and Henry's (1983) key because of its mostly uniformly brownish color, oval body, lack of punctures on the head and its almost glabrous body. *Ceratocapsus graziae* and *C. surinamensis*, the species in this couplet, have quite different genitalia. I have not seen specimens of *C. cubanus*. Reuter's short description mentions an oval body, whitish membrane, and antennal segments pinkish apically. These last two characters are different in *C. avelinae*. The species is named after the late Mrs. Avelina Talavera de Aguayo.

Ceratocapsus cubanus Bergroth

Alayo (1974) listed and illustrated *C. punctulatus* (Reuter, 1875), not *C. cubanus* Bergroth, 1910, a new name for *punctulatus*. Listed in Carvalho (1958a). See discussion under *C. avelinae* n. sp.

Ceratocapsus parallelus Maldonado, n. sp. Figures 14-18

Male - overall color pale-reddish brown. Gradually fading from slightly deeper and with very pale-reddish tinge on head to palevellowish at apex of corium. First and second antennal segments yellowish-brown, third with basal half vellowish brown fading to yellow toward apex. Base of rostrum, head below, meso- and metapelura, and abdomen deeper red than head above. Coxae, trochanters, and basal half of femora vellow, apical half of femora yellowish with a reddish tinge, tinge slightly deeper than above; tibiae and tarsi yellowish, apical segment of tarsi dark gray. Fore wings with small areas on outer apical half of corium and apex of embolium vellowish, perhaps because of translucency and absence of pits; cuneus reddish, membrane with areolar area and triangular are posterior to cells yellow, remaining parts of membrane grayish (Fig. 14).

Body parallel sided. Head: sightly produced in front, vertex smooth; length 0.31, width across eyes 0.5, vertex 0.2 wide. Antenna: I, 0.2; II, 0.85; III, 0.6; IV, -; segments with very short fine setae, first very narrow basally, gradually thickened to apex, apically thicker than other segments; last three segments of approximately same thickness. Rostrum reaching between middle coxae. Pronotum: collar as long as apical thickness of second antennal segment; calli obsolete, with a few fine punctures length 0.4, width at humeral angles 0.79. Scutellum: width 0.4, length 0.25, pits finer than on pronotum. Width across hemelytra 0.85; cuneus length 0.35, basal width 0.24, smooth. Veins of cells of membrane poorly defined. Genital segments as in figures 15-19. Length.

Female - coloration and shape as in male; ventral parts slightly less reddish, scutellum deeper brown, fourth antennal segment gray. Head: length 0.34, width across eyes 0.6, vertex 0.25. Rostrum reaching middle coxae. Pronotum: length 0.55, width 0.9. Scutellum length 0.2, width 0.4. Width across hemelytra 0.85. Length 5.1.

Holotype - male, CUBA, Habana-Alamar-Cojimar; 2-10 m., 25-31.vii.1966; leg. Jar Prokop, in MM. Allotype - female, CUBA, Pinar del Río, Pinales, 26.vii.1966, leg. F. Gregor, in MM. Paratypes - 15 of both sexes; 2 in NMNH, 10 in MM, and 3 in JMC, same data as holotype. The parallel sides separates this species from its congeners; fits in the first part of couplet 4 in the following key.

I take the opportunity to present a partial key to some genera described after Carvalho's key to the genera of the world. As the name of two imply they are somehow related to *Ceratocapsus* and should fall near this genus in Carvalho's key. I have divided *Ceratocapsus* in two groups according to the characteristics mentioned in the key without assigning them any rank because this point needs further clarification.

Key to the *Ceratocapsus* and some allied genera

- Antenna thick, first segment about twice as thick as collar and densely pubescent; pronotum shagreen; hemelytra black with flattened scalelike setae and two other types of setae...

Wallerstein, 1975 Antenna slender, first segment not as

Hyalochloria unicolor Reuter

Described from Jamaica. In MM from Habana. Small, delicate, greenish, and with small black ornamentation. Can be identified using the key provided by Henry (1978). New record for Cuba.

Jobertus chryselectrus Distant Alayo (1974) lists and illustrates this delicate small species. A key to the species is given by Maldonado (1980).

MIRINAE

Mirini

Calondas fasciatus Distant

Listed by Alayo (1974). Known from Brazil and Panamá (Carvalho, 1959).

Creontiades debilis Van Duzee

Listed and illustrated by Alayo (1974). A circumcaribbean species. This species and *C. rubrinervis* below can be identified with my 1969 key.

Creontiades rubrinervis (Stal)

Listed by Alayo (1974) and by Carvalho (1959). More abundant than the previous species. Common on some terrestrial vines typical of the seashore or in wet areas. In MM from Matanzas, Habana, Pinar del Río, and Oriente.

Dagbertus fasciatus (Reuter)

Specimens from Cuba, Hispaniola, and Puerto Rico show marked differences in coloration. In MM from Habana and Matanzas, 8 specimens. Moderately large collections of this species can be made from flowers of appropriate host plants such as *Cordia nitida* or *Tecoma stans*. New record.

Dagbertus olivaceus (Reuter)

Listed and illustrated by Alayo (1974). The lack of reddish areas and the different genitalia distinguish this species from *D. fasciatus.*

Derophthalmoides Maldonado, new genus

Type species: *Derophthalmoides multimaculatus* Maldonado, n. sp.

Brownish, spotted and mottled with yellowish. Head vertical, eyes large, rostrum reaching mesocoxae. Antennal segments mostly linear, second segment slightly incrassate toward apex, nearly glabrous, first segment as long as interocular space; lora not raised. Pronotum declivous, posteriorly well above level of head, smooth; scutellum smooth, slightly wider than long, convex, not swollen or gibbous. Hemelytra with moderately deep fracture, strongly deflexed at cuneal fracture, clavus without punctures. Segments of legs cylindrical, femora not extending beyond tip of abdomen, anterior tibia without apical tuft of setae. Pronotum, hemelytra, and scutellum with very scarce short adpressed scalelike pilosity only.

Genitalia as in figures 7 to 11; left clasper with well developed subbasal apodeme, apex bent at 90°, otherwise simple; right clasper not linear or cylindrical, with short small apodeme near midlenght, thus somewhat Y- or sickle-shaped.

Habitus, size, and deflection of hemelytra much as in *Derophthalma*. Both genera have vertical head, declivous pronotum, elevated scutellum, strongly deflexed hemelytra, and only one type of setae. *Derophthalma* (Carvalho and Gomes, 1980) has pitted pronotum and scutellum, scutellum conspicuously swollen; the left clasper in most species has a subbasal apodeme and the right clasper is basically cylindrical with a thin, hook-like apex. This set of characters separate *Derophthalma* from *Derophthalmoides*. The same type of general shape of the right clasper occurs in several Mirini genera (*Proba*, *Eusticus*, etc.) but these have the right clasper cylindrical as in *Derophthalma*. *Derophthalmoides* runs to couplet 18 of Carvalho's key to the genera of the world (1955) but neither part of the couplet apply to it as it has only small inconspicuous adpressed flattened setae.

Derophthalmoides multimaculatus, Maldonado, n. sp. Figures 7-13

Male - Figure 12; brown with abundant yellowish spots on vertex, pronotum, scutellum, pleurae, abdomen, membrane, and legs. First antennal segment with one or two vellow spots, second with vellow band about midlength. Base of clavus and corium more extensively vellowish to level of apex of scutellum, clavus uniformly brownish to apex, corium uniformly brownish to apex and lateral to radial vein. Embolium yellowish with spots and dashes of brown. Cuneus light brown, margined with vellow, disc with small brown spots surrounded by larger irregular brownish, lighter spots. Membrane dark brown, spotted with yellow. Very scarce short, adpressed pilosity.

Head vertical (Fig. 13), distance from anterior margin of eye to apex of clypeus less than half width of an eve; width across eves 1.0, interocular space 0.35, length 0.2, vertex smooth. Antenna: I, 0.35; II, 1.5; last two segments missing. Pronotum: length 0.75, width at humeral angles 1.42, lateral margins very slightly concave, rounded, posterior margin broadly convex. Mesoscutum exposed; scutellum convex, slightly above surface of clavus but not swollen or gibbous; width and length 0.65. Hemelytra: greatest width at about level with apex of clavus 1.62, strongly deflexed at base of cunei; cuneus length 0.65, basal width 0.3. Length of body to base of cuneus 2.5. Genitalia as in figures 7 to 11.

Holotype - male, CUBA, Matanzas, Varadero, 1-5 m., 4.xi.1966; leg. F. Gregor, in MM. Paratype - male, CUBA, same data, in JMC. Its small size and deflexed hemelytra give this species the appearance of a *Derophthalma* but differs as described above. The abundant yellow spots all over the body characterize this species and separates it from all other Cuban Mirini.

Phytocoris angustifrons Knight

Probably the same species listed by Alayo as *Phytocoris* sp. This species is known from the southern United States (Carvalho, 1959). New record for Cuba.

Polymerus testaceipes (Stal)

Listed and illustrated by Alayo (1974). A very common species that occurs in pale and dark forms. It is common on a variety of weeds in the circumcaribbean area (JMC collection). In MM from Pinar del Río, Habana, Matanzas, and Las Villas.

Polymerus basalis (Reuter)

A North American species listed by Alayo (1974). It is a widespread species in North America and Mexico (Carvalho, 1959).

Proba sallei (Stal)

Listed as *Dagbertus sallei* Stal by Alayo (1974). This species is known from North America south to Peru. Specimens from Hispaniola in my collection.

Taylorilygus pellidulus (Blanchard)

In MM from Habana, Matanzas, and Pinar del Río. A cosmopolitan species (Carvalho, 1959). New record for Cuba.

Prepops atripennis (Reuter)

Listed and illustrated by Alayo (1974). This is a North American species (Carvalho, 1959).

Prepops latipennis (Stal)

Illustrated and listed in the genus *Opistheuria* by Alayo (1974). This is a Central American species (Carvalho, 1959).

Prepops circummaculatus (Stal)

Listed by Alayo (1974). This is a South American species. This record may belong to another species, as happened with Hispaniolan and Puerto Rican specimens identified by me as *P. circummaculatus* and later described by Carvalho and Pontes (1973) as *P. maldonadoi.*

Stenodemini

Collaria oleosa (Distant)

Listed and illustrated by Alayo (1974). In MM from Habana. Common greenish species collected by me at low levels on grasses in most circumcaribbean countries.

Dolichomiris linearis Reuter

Listed and illustrated by Alayo (1974). In MM from Matanzas, Las Villas, Habana, and Oriente. Common in grasses, especially those with long vertical inflorescens (Maldonado, 1969). Should occur all over the island.

Trigonotylus doddi (Distant)

, Listed in many papers, including Alayo's (1974), as *T. dohertyi* (Distant). Citing Eyles, this synonym was reported by Carvalho (1975). A cosmopolitan species. In MM from Habana, Oriente, and San Antonio de la Vega. Common on grasses, often together with *Dolichomiris linearis* (Maldonado, 1969).

ORTHOTYLINAE

Pilophorini

Sericophanes parviceps Reuter

Listed and illustrated by Alayo (1974) and listed by Carvalho (1958b). The species in this tribe are ant-mimics, with the abdomen strongly constricted basally.

PHYLINAE

Dicyphini

Cyrtopeltis tenuis Reuter

Listed by Alayo (1974) and by Carvalho (1958a). Common on tobacco and other solanaceous plants. A cosmopolitan species.

Cyrtopeltis modesta (Reuter)

Listed by Carvalho (1958a).

Cyrtopeltis varians (Distant)

Listed and illustrated by Alayo (1974). In the Americas it should be found wherever tobacco is grown. Also occurs on other solanaceous plants. A key to the American species in the genus is given in my 1969 paper.

Macrolophus basicornis (Stal)

Listed in Alayo (1974) and Carvalho (1958a). *Macrolophus aureus* (Distant) reported by Bruner (1934) from Cuba, is a synonym. A key to the American species in the genus is given in my 1969 paper.

Macrolophus praeclarus (Distant)

Listed and illustrated by Alayo (1974) and listed by Carvalho (1958a). A specimen in bad condition in MM.

Phylini

Capellanus sparsus (Distant)

In MM. Also recorded from Guatemala and Mexico. A new record for Cuba.

Lepidopsallus rubidus (Uhler)

Listed by Alayo (1974). The occurence of this North American species in Cuba is doubtful.

Psallus polita Uhler

Henry recently restudied the type and found that it represents what I called (1969) *Paramixia carmelitana* (Carvalho). In MM from Las Villas, Oriente, Matanzas, Habana, and Pinar del Río. New record for Cuba.

Reuteroscopus hamatus Kelton

In MM from Habana. Less abundant in the Greater Antilles than *R. ornatus* (personal observation). Also known from Florida and Central America (Kelton, 1964).

Reuteroscopus ornatus (Reuter)

Listed by Alayo (1974). Many specimens in MM from Habana, Matanzas, and Oriente. Intermediate forms in coloration, probably teneral, were found among this material but their genitalia suggest that they represent this species. Known from the Greater Antilles, Central America, and the United States (Kelton, 1964).

Rhinacloa basalis (Reuter)

Described from Mexico and later reported from Puerto Rico (Maldonado, 1969). *Rhinacloa pallida* (Reuter), *R. castanea* (Carvalho), and *Lepidopsallus pusillus* Knight are synonyms (Schuh and Schwartz, 1985); all these names recorded from Cuba (Carvalho, 1958a). In MM from Habana, Pinar del Río, and Matanzas. New record for Cuba.

Rhinacloa cardini (Barber and Bruner)

Listed and illustrated by Alayo (1974). and listed by Carvalho (1958a) as *Campylomma*. This new combination declared by Schuh and Schwartz (1985). A widespread species in the Caribbean (JMC collection).

Rhinacloa clavicornis (Reuter)

Recorded by Schuh and Schwartz (1985). *Rhinacloa subpallicornis* listed and illustrated by Maldonado (1969) and Alayo (1974) is a synonym (Schuh and Schwartz, 1985).

Rhinacloa pallidipes Maldonado

Described from Puerto Rico, later reported from Florida (Henry, 1983). Reported from Cuba, Mexico and Venezuela by Schuh and Schwartz, 1985.

Spanagonicus albofasciatus (Reuter)

Listed and illustrated by Alayo (1974). In MM from Habana and Matanzas. Found around the Caribbean and in southern United States (Carvalho, 1958a).

Tytthus neotropicalis Carvalho

In MM from Habana. Described from Brazil and later reported from Puerto Rico (Maldonado, 1969). New record for Cuba.

Tytthus parviceps (Reuter)

Listed and illustrated by Alayo (1974) and listed by Carvalho (1958a). In MM from Habana, sympatric with *T. neotropicalis*. This is a widespread species known from the Old World and the circumcaribbean region (JMC collection).

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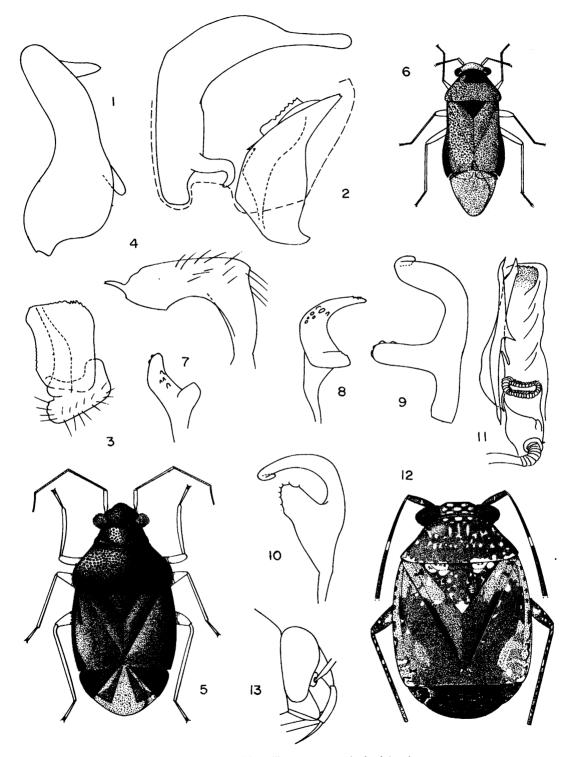


PLATE I. Aguayomiris pallipes n. sp., male 1. right clasper, lateral, 2. claspers in situ, 3. left clasper, dorsal, 4. left clasper, lateral, 5. habitus. Adfalconia bicolor n. sp., female, 6. habitus. Derophthalmoides multimaculatus n. sp. 7. right clasper, lateral, 8. right clasper, dorsal, 9. left clasper, dorsal, 10. left clasper, lateroventral, 11. aedeagus, dorsal, 12. habitus, 13. head, lateral.

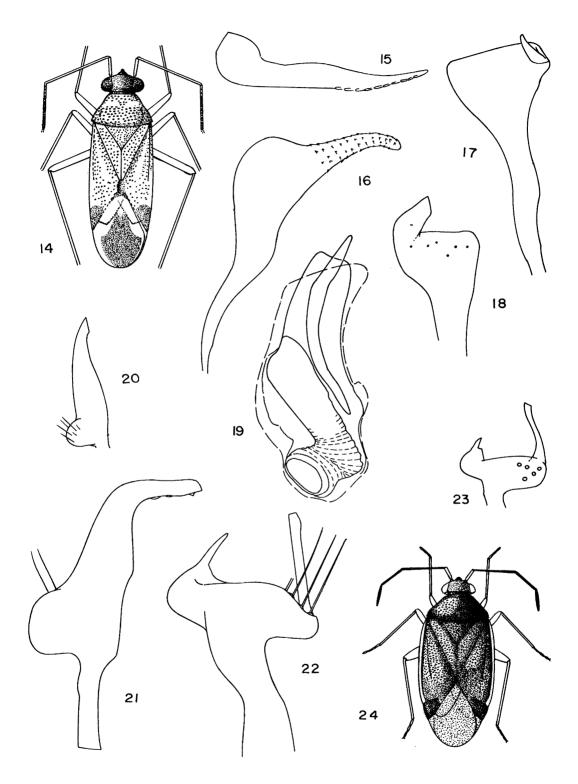


PLATE II. Ceratocapsus parallelus n. sp. 14. habitus, 15. right clasper, caudal, 16. right clasper, dorsal, 17. left clasper, dorsal, 18. left clasper, lateral, 19. aedeagus. Ceratocapsus avelinae n. sp. 20. left clasper, lateral, 21. left clasper, lateral, 22. right clasper, dorsal, 23. right clasper, lateral, 24. habitus.