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NEW AND INTERESTING WEST INDIAN HOMOPTERA

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This is the first of a contemplated series of papers dealing with a rather large collection of Homoptera accumulated by the writer during a period of nearly three years' residence in Haiti and Porto Rico. All types of new species described in this paper are deposited in The Ameri-

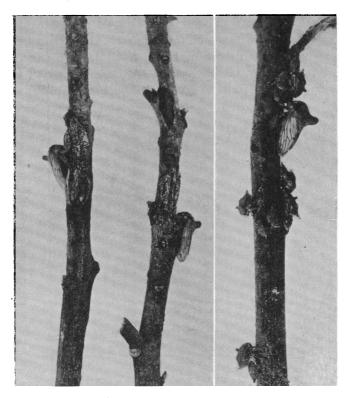


Fig. 1. Avocado twigs, showing old egg scars, nymphs and adults of the tree-hopper, *Platycotis (Lophopelta) tuberculatus* Fairmaire. Natural size.

can Museum of Natural History, and reference has been made to certain records of material in its collections. The drawings have been carefully made by Louis Pierre-Noel of the Service Technique, under the supervision of the writer.

MEMBRACIDÆ

Platycotis (Lophopelta) tuberculatus Fairmaire

Figure 1

This species is extremely abundant at Kenskoff, Haiti, where it seriously injures the terminal shoots of the avocado with its egg-punctures and feeding. P. tuberculatus Fairmaire (\preceip) and ornata Fairmaire (\preceip) are considered to be the same species by Dr. Goding. This insect serves as an outstanding example of maternal solicitude for its young. An undetermined trichogrammatid egg parasite has been reared.

Antianthe viridissima Walker

Adults and nymphs taken on *Cestrum inclusum* Urban by George N. Wolcott, on Mt. Puilsboreau, Haiti, April 4, 1926 (Acc. 26–20), were determined by Dr. Goding as this species. The writer collected specimens at Kenskoff, Haiti, August 24, 1930 (Acc. 30–250).

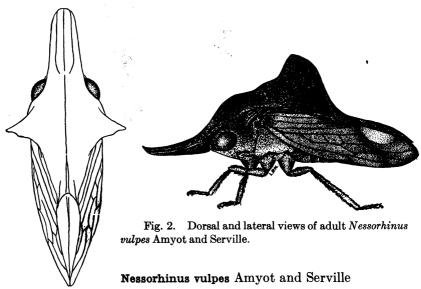


Figure 2

Five adults were taken on Cassia emarginata at Port-au-Prince, Haiti, May 12, 1926, by George N. Wolcott (Acc. 26–29). The species was originally described from Port-au-Prince and Santo Domingo as found on "bois de campêche," Hæmatoxylon campechianum.

Nessorhinus gibberulus Stål

This is the most abundant and common species of membracid in Porto Rico. The records under *Antianthe expansa* Germar in Wolcott's 'Insectæ Portoricensis' should be referred to this species.

Nessorhinus graciloides, new species

Figure 3

Closely related to *N. gracilis* Metcalf and Bruner from Cuba; differs at once in the shorter and less slender elongate dorsal process, and the distinctly shorter lateral processes. Furthermore the posterior process is black with white patches instead of vellowish testaceous.

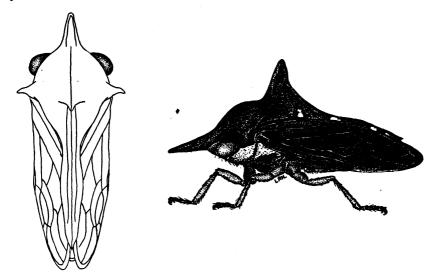


Fig. 3. Dorsal and lateral views of adult Nessorhinus graciloides, new species.

General color a dark brown-black, covered very lightly with inconspicuous grayish hairs; clumps of grayish-white hairs form a distinct whitish stripe along the lower side of the thorax, and four whitish spots along the posterior process, the apical spot being much smaller than the others; tegmina semiopaque fuscous black, the veins paler; venter fuscous; eyes and legs reddish testaceous.

The anterior process rather short, strongly deflexed, distinctly narrowing to apex, with two longitudinal lateral carinæ, decidedly closer to the lateral margins than to each other; pronotum densely punctate; lateral processes or horns very short, distinctly turned; dorsal process compressed, comparatively short, subacute at tip, the sides sloping downward, reminding one of a mountain peak; posterior process elongate, slender, following the contour of the tegmina but distinctly shorter than the latter.

Length, apex of anterior process to apex of tegmina, male, 7 mm.; width across lateral processes, male, 2.80 mm.

Described from a single male taken by the writer from an undetermined shrub at Caguas, Porto Rico, May 24, 1925.

CICADELLIDÆ

Protalebra similis Baker

Port-au-Prince, Haiti: January 3, 1930, on sweet potato foliage. This plant appears to be a true host plant for this small species, as the writer has also taken specimens from the sweet potato at Vega Baja, Porto Rico, October 15, 1924.

Empoasca minuenda Ball

This extremely small species is very common, everywhere in Haiti, on avocado foliage.

Macropsis rugicollis Dozier

Fond-des-Nègres, Haiti: the writer took a series of twenty-five specimens on June 12, 1930, by beating tall shrubbery (Acc. 30–191). Although not definitely established, it is believed that "Feuilles sirop," Piper amalago, is its host plant. The species was originally described in 1927 from two males from Cerro del Cacique, Santo Domingo, at an elevation of 5000 feet. Some of the Haitian specimens have the elytra covered with a bluish bloom. Four females were taken by George N. Wolcott at The Citadel, Milot, Haiti, May 21, 1925 (Acc. 25–410).

Deltocephalus nigripennis DeLong

Post Chabert, Haiti: a specimen taken by Dr. Wolcott January 3, 1927 (Acc. 27-193).

Xerophlœa viridis (Fabricius)

A common species taken by sweeping grass at the following points in Haiti: Hinche, August 30, 1930; Mt. Puilsboreau, October 11, 1930; Cayes, September 4, 1930; and Boucan Brou, April 2, 1930.

Acinopterus angulatus Lawson

According to Dr. Lawson, the West Indian specimens generally fall under this name. Taken in abundance at the following points in Haiti: Hinche, August 30, 1930; Cayes, September 4, 1930; l'Azile, September 5, 1930; Kenskoff, August 24, 1930; Mt. Puilsboreau, October 11, 1930; Damien, August 2, 1930; and Arcahaie, March 24, 1930.

Cicadella interrupta (Signqret)

This species is one of the most common leaf-hoppers in Haiti and Santo Domingo, where it breeds on coffee, weeds, etc.; Fond-des-Nègres, Haiti, February 14, 1930, breeding on stems of coffee (Acc. 30-64).

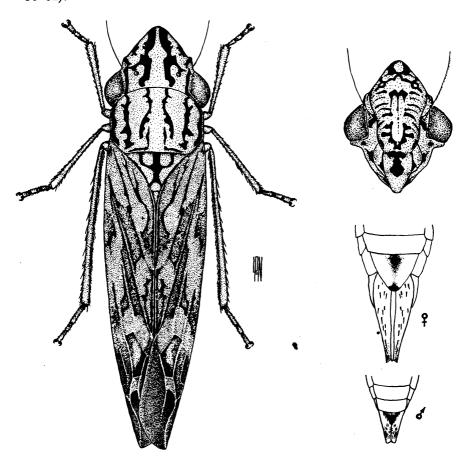


Fig. 4. Adult female *Cicadella dubiosa*, new species, frons, and male and female genitalia.

Cicadella dubiosa, new species

Figure 4

Of a general elongate appearance, this species has the greatly protruded vertex, color pattern, and distinct markings that readily differentiate it from all known West Indian species.

Vertex, pronotum, and scutellum yellowish with irregular broken black markings as in Fig. 4; the elytra with a mixture of pale lilac, olive green, and black; dorsum of abdomen red, the ventral portion pale with a black spot on each side near lateral margins, except the female segment which is marked with black at middle of its hind margin and at tip; legs pale, sparsely marked with black.

Vertex appearing greatly produced beyond the eyes, bluntly angled, as long as wide at base. Pronotum convex, narrower than the head, one and a quarter times wider than long. Elytra very long and rather narrow.

Genitalia: the female segment nearly twice as long as the preceding, the hind margin rather straight, the anterior margin produced angulate, the plates reaching slightly beyond the ovipositor; male ultimate segment well-rounded on hind margin, the plates very short and small.

Length, female, 9.25 mm.; male, 8 mm.

Described from a pair collected by the writer while beating guava bushes at Port-Margot, Haiti, October 10, 1930 and a pair collected on a stem of coffee at Fond-des-Nègres, Haiti, June 12, 1930 (Acc. 30–194). The species is common at times breeding on stems of coffee.

The two species named below, while typical of the genus Cicadella as long interpreted, fall into the new genus Entogonia, erected by Melichar ('Monographie der Cicadellinen,' 1926) in his attempt to further divide and more easily identify the exceedingly numerous and varied species heretofore placed in the heterogeneous Cicadella.

The two species, Cicadella coffeacola Dozier and C. coffeaphila Dozier, described from coffee in Porto Rico in 1927 (Journ. Dept. of Agric. of Porto Rico, X, July and October, 1926, pp. 263–264), fall into the subdivision Entogonia.

Cicadella (Entogonia) constans Walker

Figure 5

WALKER, 1858, 'List of Homoptera,' British Museum, Supplement I, p. 198.

Closely related to C. coffeaphila, coffeacola, occatoria, and hispaniola but distinguished immediately by the markings on vertex and frons.

General color shiny green with black longitudinal stripes; vertex pale bluish-green, with two broad black longitudinal vitte that divide just before the anterior margin, the inner branches joining again upon the tip of the vertex and the outer branches running downward on to the greenish frons and merging with the dark coloring of the lower portion of the frons; the vittæ of the vertex are continued on pronotum and scutellum as distinct broad stripes or bands; in addition, a narrower, lateral stripe is present on each side of pronotum near the lateral margin; elytra dark to pale greenish, striped with black; legs characteristically a distinct orange-yellow.

Vertex slightly shorter than basal width, greatly produced beyond the eyes, nearly two-thirds as long as the pronotum, obtusely rounded. Pronotum convex, about as broad at posterior margin as the head. Elytra long and narrow.

Genitalia: the female segment about twice as long as the preceding, the hind margin not distinctly emarginate nor angled, the plates yellow with a median black stripe; ovipositor black. Male ultimate segment well rounded on hind margin; plates broad at base, narrowed in triangular fashion to acute points that are barely exceeded by the pygofers.

Length to tip of elytra: female, 7.25 mm.; male, 6.25 mm.

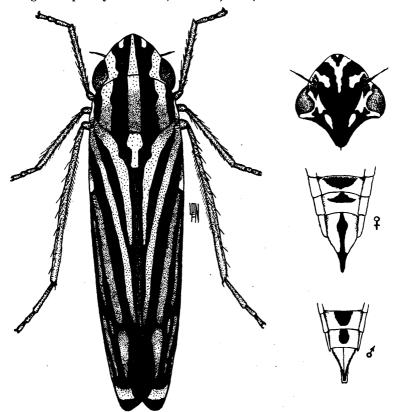


Fig. 5. Adult female Cicadella (Entogonia) constans Walker, frons, and male and female genitalia.

Description made from a series of both sexes collected by the writer at Kenskoff, Haiti, June 19, 1930, on apple and avocado (Acc. 30–208), August 10, 1930 (Acc. 30–236), and June 6, 1931 (Acc. 31–104); several taken sweeping on Mt. Puilsboreau, Haiti, October 11, 1930.

This species has heretofore been known only from the original description based on three females from Port-au-Prince. It appears to be abundant in the mountains at high elevations.

Cicadella (Entogonia) hispaniola, new species

Figure 6

Very close in general appearance to *C. constans* Walker but immediately separated by the more blunt vertex, smaller size, and different markings on the vertex and frons.

General color greenish with black stripes; vertex pale yellowish with two very broad, irregular black longitudinal bands or vittee that continue without dividing on to the frons, being very broad at apex of vertex and narrowing as they follow down the frons to the black clypeus; the two broad vittee of the vertex are continued on to the pronotum and scutellum; in addition, on each side of the pronotum is a very narrow longitudinal stripe very close to the lateral margin; elytra with the costal area, a fine

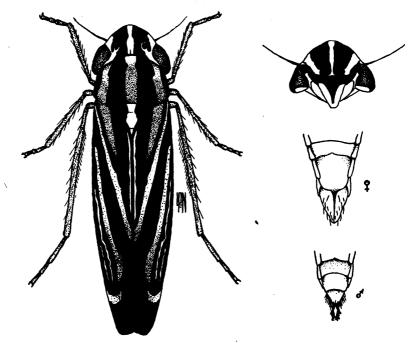


Fig. 6. Adult female Cicadella (Entogonia) hispaniola, new species, frons, and male and female genitalia.

line along the commissural margin, and a short, partial, median stripe at base of clavus, pale blue; on clavus, following along the claval suture, is a narrow stripe of an olive-green color, terminating in pale blue; a second somewhat oblique longitudinal, similarly colored stripe is found along the middle of the elytra.

Vertex distinctly shorter than basal width, produced beyond the eyes but obtusely or bluntly rounded, slightly over half as long as the pronotum. Pronotum convex, about as broad at posterior margin as width of head, including eyes. Elytra rather long and narrow.

Genitalia: female segment over twice as long as the preceding, the hind margin slightly angularly emarginate, somewhat keeled along the median line, the apex slightly produced. Male ultimate segment well-rounded on posterior margin; plates broad at base, rapidly narrowed to long, acute, distinctly flaring or divergent tips that are slightly exceeded by the pygofers.

Length to tip of elytra: female, 6.25 mm.; male, 5.50 mm.

Described from a series of both sexes taken by the writer at Kenskoff, Haiti, June 19, 1930 (Acc. 30–208); several, sweeping road-side vegetation on Mt. Puilsboreau, Haiti, October 11, 1930. Taken at similar elevations in the mountains, as *C. constans*, but apparently less common.

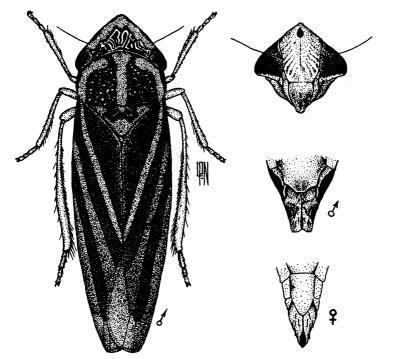


Fig. 7. Adult male *Graphocephala haitiensis*, new species, frons, and male and female genitalia.

Graphocephala haitiensis, new species

Figure 7

A medium-sized, beautiful species with dominant coloration of orange and violetblue that immediately attracts attention.

Nearly two-thirds of the posterior part of the vertex is of a violet-black ground color with an irregular hieroglyphic-like pattern of grayish markings; the anterior

band of the vertex is a beautiful orange with broken black lines along margin; eyes brown-black. Most of the pronotum is of a violet-blue color with the margins of this area and numerous transverse irregular markings black; the remaining portion of vertex orange, so arranged that there appears to be a wide median vitta, with one on each side which extends along the anterior margin and continues almost to the median vitta. Frons is very pale in color with more or less indistinct broken oblique stripes on sides and a very characteristic small black dot near apex of vertex. Vertex flattened, distinctly shorter than the pronotum, acutely produced, nearly right-angled; the vertex is more bluntly produced in the female and the margins are more perceptibly convex. Frons distinctly convex. Elytra of moderate length.

Scutellum orange, the anterior portion on disk with two irregular areas of pale greenish outlined with heavy black; inner two-thirds of the clavus a violet-blue color, the outer third orange, the latter color appearing as an oblique longitudinal stripe; then follows a broader oblique stripe of violet-blue, a second stripe of yellowish orange; the remainder is dark green; in the female the orange color of the elytra appears more yellowish. Legs a rose-violet tinge.

Length to tip of elytra: female, 6.25 mm.; male, 5.50 mm.

Described from holotype female collected by sweeping and beating vegetation on Mt. Puilsboreau, Haiti, October 11, 1930, and allotype male taken in the mountains at Kenskoff, Haiti, August 24, 1930 (Acc. 30–248); a male taken by George N. Wolcott at Kenskoff, April 26, 1927 (Acc. 27–55).

Graphocephala dominicana, new species

Differentiated from G. haitiensis by its larger size and striking blue and red coloration.

Vertex red, with an irregular hieroglyphic-like pattern of gray and black occupying the posterior two-thirds; interrupted black lines along margins; pronotum, scutellum, legs, and most of under portion of abdomen, red; on each side of the disk of pronotum with a large blue-colored area, whitish in its upper outer angle, that occupies nearly two-thirds of the entire surface; the blue areas are separated by a median longitudinal stripe of the red ground color. On each side of the pronotum is also a distinct white vitta running along the lateral border which is outlined on its inner side with a narrow black edging. Frons pale-colored without definite markings. Elytra a beautiful dark blue with two short oblique stripes or vittæ of a very dark red.

Vertex flattened, nearly two-thirds as long as the pronotum, distinctly and acutely produced before the eyes, from somewhat convex but distinctly flattened longitudinally on disk. Elytra rather long.

Length to tip of elytra: female, 7.25 mm.; male, 6.75 mm.

Described from five females and five males collected by Francisco Sein, on shrubbery, at about 5000 feet elevation in mountains near Cerro del Cacique, Santo Domingo, December 17, 1924.

Phlepsius smithi, new species

Figure 8

Readily recognized by its very large size and distinct maculation of elytra.

Vertex rusty yellowish, with two spots on posterior margin; pronotum rusty yellowish with irregular fuscous markings; frons fulvous with pattern of fuscous markings. Elytra whitish with very distinct fuscous points and splotches. Body

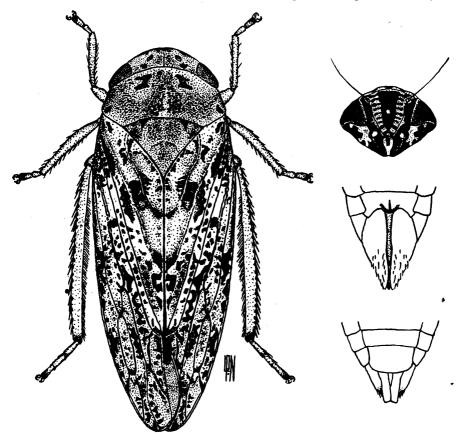


Fig. 8. Adult female *Phlepsius smithi*, new species, frons, female and male genitalia.

beneath pale fulvous. Legs pale, marked with fuscous. The color of the single male at hand is decidedly paler than that of the female.

Head narrower than the pronotum; vertex sloping, two and a half times as wide as long, broadly rounded; the ocelli prominent. From rather long and narrow, flattened and impressed near its base. Pronotum twice as wide as long, convex, transversely wrinkled. Elytra long, distinctly exceeding the abdomen.

Genitalia: female ultimate ventral segment slightly longer than the preceding, the posterior margin concave on either side of the distinctly produced but well-rounded median apex.

Length of female, 8.75 mm.; of male, 7.75 mm.

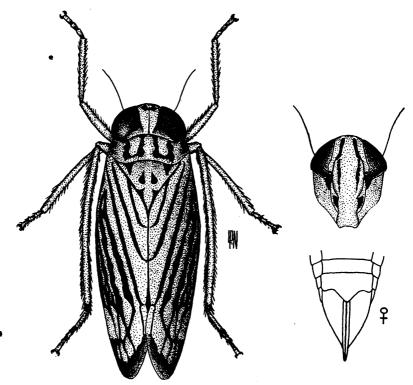


Fig. 9. Adult female Jassus wolcotti, new species, frons, and female genitalia.

Described from two females taken by the writer at lights at Petionville, Haiti, June 12, 1930, and a male taken on leaf of a large wild fig tree, *Ficus* species, near Williamson, Haiti, August 20, 1931.

This beautiful species is named in honor of my predecessor, Dr. Roger C. Smith, former Chief Entomologist of the Service Technique.

Jassus wolcotti, new species Figure 9

Easily recognized by its yellowish-tan color with black markings.

General color of the head, frons, legs, and under surface, pale testaceous; the vertex pale with a narrow transverse infuscation just beneath the pair of prominent dark-reddish ocelli at the anterior margin; near the posterior margin is a pair of dark

impressed spots; eyes dark brown; pronotum and scutellum with four continuous longitudinal black vittæ, irregular in thickness; lateral margins of pronotum also outlined with black; frons pale, with two median, longitudinal fuscous vittæ running its length to the clypeus; these vittæ somewhat transversely interrupted for the lower two-thirds of their length; two fuscous cloudings beneath the antennal sockets; a slight infuscation along the sides of the loræ at middle. Elytra with the veins of the clavus and corium black, slightly irregular in degree of thickness of infuscation, giving the elytra a black-striped appearance; apical border thickly infuscated.

Head narrower than pronotum; vertex slightly wider along the hind margin than the median length, the anterior margin slightly produced beyond the eyes, with a distinct median impressed line; narrowed toward the base, then flaring outward along the posterior margin of the eyes, bifoveate; the ocelli slightly nearer to the lateral margins of the vertex than to each other; from twice as long as wide, only a faint indication of a median carina; pronotum shorter than either the vertex or the scutellum. Elytra with venation very distinct, just barely exceeding the ovipositor.

Genitalia: last ventral segment of the female about twice as long as the preceding, posterior margin slightly concave on either side of the distinctly produced median half which is very slightly rounded at apex, and not having an apical slit or notch as in some species; pygofers bearing a few fine hairs, distinctly exceeded by the ovipositor.

Described from two females collected at Port-au-Prince, Haiti, one by Dr. George N. Wolcott, November, 1926 (Acc. 26–53) and the other by the writer May 1, 1931 (Acc. 31–116). The species is named in honor of Dr. Wolcott who by his careful collecting has greatly increased our knowledge of West Indian Homoptera.

FULGORIDÆ

Dysimia maculata Muir

A few adults were taken by the writer on foliage of "latanier" palm, *Coccothrinax gracilis* Burret, on hillside at Fond-des-Nègres, Haiti, February 14, 1930 (Acc. 30-75).

Acanalonia servillei Spinola

Kenskoff, Haiti: August 24, 1930; two adults beaten from "Bois senegal," Capparis comosa Jacquin, by the writer (Acc. 30-244).

Acanalonia viriditerminala (Lethierry)

A specimen taken on El Yunque in Porto Rico, February, 1925, by the writer is placed as this species. Four specimens collected at Aibonito, Porto Rico, July 14, 1924 (Amer. Mus. Nat. Hist. No. 3710).

Cyarda difformis Walker

Nymps and adults were found abundant, breeding on stems of "Fleur dent," *Cordia serrata*, at Port-au-Prince, Haiti, March 9, 1390 (Acc. 30–105); abundant at Fond-des-Nègres, Haiti, February 14, 1930 (Acc. 30–60); Sanchez, Dominican Republic, May 28, 1915 (Amer. Mus. Nat. Hist. No. F3682).

Pseudhelicoptera species

A single specimen of an undescribed species was taken by F. Sein on top of a pine-covered mountain at Cerro del Cacique, Santo Domingo, December 17, 1924. It closely resembles P. nasuta Fowler but is slightly smaller, the coloration is different, and a lateral view of the rostrum shows it to be more obtuse than pointed. It is impossible to describe this interesting species because, through an accident, the specimen lost its head after generic determination. The record is given to establish the presence of this Central American genus in the West Indies.

Parahydriena hyalina Muir

One specimen collected at Arecibo, Porto Rico, March 14, 1914 (Amer. Mus. Nat. Hist. 3523B) and one from Mayaguez, June 21, 1915 (F3979B). Originally described from a female from Lares, Porto Rico, taken June 14, 1921.

Ladella pallida (Walker)

Three specimens from Aibonito, Porto Rico, July 14–17, 1914 (3708); one from Maricao, July 27, 1914 (3724); one from Coamo Springs, Porto Rico, July 17, 1914 (3712); and one from Mayaguez, July 24, 1914 (3725). The species was originally described from Porto Rico.

Bothriocera venosa Fowler

A very common species throughout Haiti and Porto Rico on coffee, and numerous other plants. Collected by the writer at Fond-des-Nègres, Haiti, June 12, 1930; Port Margot, Haiti, October 10, 1930, on guava; and Marianni, Haiti, April 3, 1930.

Dictyophora cubanensis Melichar

One specimen from Cabanas, Cuba, September 5, 1913 (3341); one from Cerro Cabras, September 11, 1913 (3347); two from north of Vinales, September 16, 1913 (3388). Originally described from Havana, Cuba.

Cyphoceratops furcata Uhler

Two specimens taken by the writer sweeping at Port-au-Prince, Haiti, June 1, 1931.

Tangiopsis tetrastichus Uhler

Ten adults taken by the writer sweeping weeds and low shrubbery at Port-au-Prince, May 5, 1931 (Acc. 31–); one specimen from Carrefour, Haiti, January 7, 1922 (F4612); one from Bassin General, Haiti, June 22, 1930; one from Fond-des-Nègres, Haiti, February 14, 1930; one from Arcahaie, Haiti, March 24, 1930; one from Sanchez, Dominican Republic, June 7, 1915 (F3765). The writer has studied the type in the Ball Collection.

Ugyops occidentalis Muir

Three specimens taken at Narajito, Porto Rico, July 6, 1915 (F4007), and one specimen from Aibonito, Porto Rico, July 14, 1914 (3708). Originally described by Muir from a pair collected at Aibonito, July 12, 1914. This material was compared with the type by the writer.

Catonia haitiensis, new species

Figure 10

Easily recognized by the general chalky white or pale color of elytra, with the dark brown "saddle-like" area on disk of clavus.

Vertex distinctly produced beyond the eyes, the sides narrowed toward apex, almost twice as wide at base as its median length, a reddish brown in color. Frons broad at apex, roundly narrowed toward base at vertex, a very distinct longitudinal median carina, the lateral margins also carinated; pale fulvous, the upper half darkened. Pronotum pale, the mesonotum distinctly more testaceous fulvous. Elytra with a background of chalky white, with scattered irrorate fleckings of a yellowish brown; a very prominent chocolate-brown transverse area across the middle of the clavus, reminding one of a "saddle," which at once distinguishes this species from all others described.

The male is smaller in size, with the frons entirely pale yellowish; the elytra a more decided chalky white; and the "saddle" area somewhat darker.

Length of body, female 3.5 mm., male 2.75 mm.; length to tip of elytra, female 5.75 mm., male 4.75; width across the elytra, female 2.25 mm., male 2 mm.

Described from one female and three males collected at lights, Port-au-Prince, Haiti, April 18-June 2, 1930, by the writer.

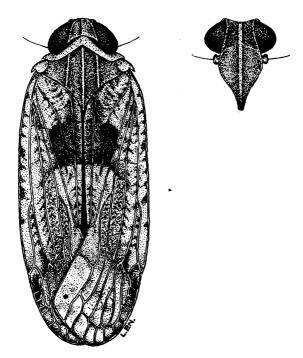


Fig. 10. Dorsal view of adult female Catonia haitiensis, new species, and frons.

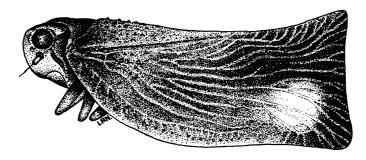


Fig. 11. Lateral view of adult female Ormenis coffeacola, new species.

Ormenis coffeacola, new species

Figure 11

Easily distinguished by its truncated elytra and distinct translucent pale spot toward apex.

General color pale grayish-brown, darkened along apical border of elytra; a very distinctive irregular pale white area on lower half of elytra toward the apex; head and thorax testaceous orange; eyes reddish brown. Frons only slightly longer than wide, with a rather indistinct median carina present, testaceous in color without markings; antennæ short, pale orange. Scutellum slightly arched, with median and lateral carinæ faintly indicated. Elytra nearly three times as long as wide, very much broadened behind to truncated apex, the apical angles distinctly produced although slightly rounded; longitudinal veins numerous, elevated but inconspicuous as they are concolorous with the elytra; numerous granulations or tubercles on clavus and a few scattered near base of corium and along base of costa. Legs testaceous.

Length of body, 3.5 mm.; length to tip of elytra, 5 mm.

Described from eight adults collected on coffee stems at Fond-des-Nègres, Haiti, February 14, 1930, by the writer (Acc. 30–62); six specimens collected at Aux Cayes, Haiti, March 19–20, 1922 (Amer. Mus. of Nat. Hist. No. F4644).

Coffee is the only host plant thus far known, for this species, and while abundant at times it does not appear to be of much economic importance.

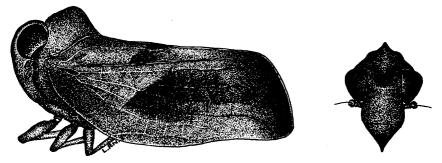


Fig. 12. Lateral view of adult female Thionia gibbicollis, new species, and frons.

Thionia gibbicollis, new species

Figure 12

The greatly elevated thorax will readily distinguish this unusual species.

General color yellowish brown with a blackish clouded area across middle of clavus and on elytra. Vertex transverse, twice as wide as long, distinctly emarginate on posterior margin. Frons nearly twice as long as wide, widened slightly toward apex, being broader at apex than between the eyes, without a distinct median carina; dark brown in color. Pronotum very short. Mesonotum and scutellum together

forming a decidedly elevated gibbous hump, a median carina indicated, forming a discal peak. Elytra two and a half tims as long as wide, sloping downwards at apex; the longitudinal veins distinct, the cross-veins simple. Legs with the femora a rusty brown, the tibiæ and tarsi testaceous yellow.

Length to tip of elytra, 4.75-5.25 mm.

Described from two females collected by sweeping and beating shrubbery at Hinche, Haiti, August 30, 1930, H. L. Dozier; a paratype female collected by W. A. Hoffman, labelled "Haiti," in the U. S. National Museum.

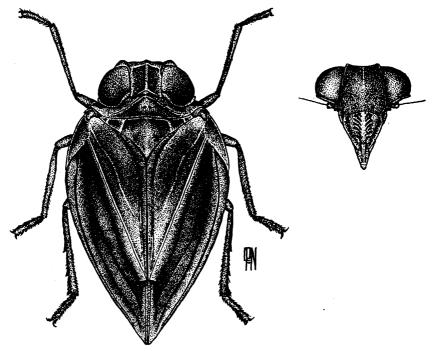


Fig. 13. Dorsal view of adult female *Thionia borinquensis*, new species, and frons.

Thionia borinquensis, new species

Figure 13

A very broad, compact species.

General color light yellowish-brown, the elytra with venation and certain clouding dark brown. Vertex slightly longer than wide, the margins and median carina distinctly elevated; anterior margin produced, slightly angulate at middle; posterior margin decidedly incised or emarginate. From nearly twice as long as wide, widened below, being distinctly wider at apex than between the eyes, a median carina present,

very pronounced for a third of its length from base, becoming less distinct toward apex; surface of frons somewhat rugulose or uneven, yellowish brown without definite markings; the clypeus with partial, short, lateral, oblique dark brown stripes that appear characteristic of the species, although in some examples more mixed and indistinct. Pronotum short, strongly produced forward, with two small depressions on disk. Scutellum with a weak oblique lateral carina on each side, lacking a distinct median carina. Elytra almost twice as long as broad, presenting a very much broader appearance at base when viewed dorsally; the elytra slope obliquely downward at apex; venation very simple, the longitudinal veins very distinctly elevated, distinct cross-veins lacking; yellowish brown in color, the venation dark brown, a more or less distinct longitudinal pitch-brown clouding present, especially dark on corium. Wings light smoky brown, the venation distinctly darker.

Length of body, 5.5 mm.; length to tip of elytra, 6.75 mm.; greatest width, 3 mm.

Described from a series of six specimens collected at Aibonito, Porto Rico, July 14–17, 1914, in the collection of The American Museum of Natural History (Nos. 3708 and 3710).



Fig. 14. Lateral view of female Colpoptera clerodendri, new species, and frons.

Colpoptera clerodendri, new species

Figure 14

Distinguished by its distinct yellow coloration and characteristic markings on frons.

The head and pronotum are a pretty yellow in life, fading considerably in dried specimens, the remainder testaceous; anterior and lateral margins of vertex fuscous; frons yellow with two very distinct, longitudinal, fuscous vittæ; mesonotum testaceous brown with a median and two lateral lighter colored stripes indicated. Elytra testaceous, venation fuscous, costal margin clear transparent, the apical portion infuscated

Vertex only half as long as wide, only slightly produced beyond the eyes; the disk of the vertex and pronotum distinctly depressed; mesonotum comparatively long, with no indication of a median carina and the lateral oblique carinæ very short and weak. Elytra about three times as long as greatest width, terminating in a distinct slope to the slightly rounded apex.

Length to tip of elytra, 6.75 mm.

Described from a series of nine specimens collected at Fond-des-Nègres, Haiti, by the writer, February 14, 1930, on "Hortensia," *Clero-dendron fragrans* variety *pleniflora*, a large-leaved weed growing in thick stands in coffee glades (Acc. 30–61); a series of fifteen collected from same host at same locality, June 12, 1930 (Acc. 30–189); very abundant breeding on same plant on side of Tapion hill, June 13, 1930; a series taken sweeping near Kenskoff, June 19, 1930 (Acc. 30–207); a series of seventeen adults swept from *C. fragrans* at Kenskoff, June 6, 1931 (Acc. 31–104).

Colpoptera insularis, new species

The largest and longest true Colpoptera described.

General color and appearance a very dark fuscous, the vertex, frons, and legs paler; eyes reddish brown; vertex fuscous, except for a definite pale central area on the disk and at the hind angles; frons pale with a definite recognizable pattern of light brown markings, consisting of a series of fuscous fleckings around the margins, and a pair of irregular brown areas or spots on each side of the median carina on the disk; pronotum and mesonotum fuscous. Elytra entirely fuscous-black, except for a pale marginal fleck at tip of clavus and narrow translucent area running along the costal margin, distinctly enlarging inward just beyond the middle; venation concolorous.

Vertex transverse, about half as long as wide, lateral margins slightly elevated, the disk depressed; frons fairly wide at base, enlarging to well below the eyes and then roundingly narrowed to the clypeus; tricarinate, and, in addition, near the base, can be seen, on each side, the beginning of a very short, weak carina; pronotum produced anteriorly, the disk deeply depressed; mesonotum nearly four times as long as the pronotum, tricarinate. Elytra comparatively very long and narrow, narrowed only very slightly just before the apex which is well-rounded with a slight downward slope.

Length to tip of elytra, 7.25 mm.

Described from three specimens swept by the writer from coffee and a shrub in coffee glade at Fond-des-Nègres, Haiti, June 12, 1930 (Acc. 30–192).



Fig. 15. Lateral view of Colpoptera nana, new species, and frons.

Colpoptera nana, new species

Figure 15

At once recognized by its very short, compact appearance; decidedly smaller than all known members of the genus.

General color varies usually from testaceous brown to a dark brown. The only conspicuous or definite marking is a small distinct, clear or translucent, area on hind

margin of the elytra just before the apex; eyes pale; frons, vertex, pronotum, and legs are fuscous mottled with lighter testaceous; elytra dark brown except for the aforementioned clear spot, certain cross-veins near the apex, on terminal third of clavus, and the apical veins just at their tips which become pale.

Vertex transverse, less than half as long at the middle as its greatest width; pronotum longer than the vertex, produced anteriorly, fitting into the obtusely emarginate hind border of the vertex. Mesonotum slightly elevated, nearly three times as long as the pronotum, tricarinate. Elytra about two and a half times as long as its greatest width, decidedly widest across the middle, the hind margin narrowing to the apex; venation prominently elevated.

Length to tip of elytra, 3.75-4 mm.

Described from an adult collected by H. E. Box at Bona, Dominican Republic, July 5, 1925; five adults taken sweeping low shrubbery and weeds at Kenskoff, Haiti, August 24, 1930, and June 19, 1930 (Acc. 30–206); five adults from Kenskoff June 6, 1931 (Acc. 31–115); and two adults collected sweeping at Hinche, Haiti, August 30, 1930, by the writer.

It is thought that the weed, "Langue chatte," Eupatorium odoratum, may be the host-plant of this species.



Fig. 16. Lateral view of adult female Colpoptera maculata, new species, and frons.

Colpoptera maculata, new species

Figure 16

Distinguished from the other described species of the genus by its maculated elytra and distinct male genitalia.

General color pale testaceous-brown with very characteristic fuscous clouding and maculations; eyes pale; vertex pale with fuscous stripe along lateral margins; frons pale, the upper third unevenly clouded with fuscous; pronotum mottled, the mesonotum distinctly fuscous on disk between the lateral carinæ, elytra pale testaceous with a fuscous area on clavus and corium near base, a small spot near middle of clavus, and a more or less distinct fuscous clouding covering most of apical two-thirds of the elytra; venation concolorous with the areas except near apex where they appear very pale contrasted with the dark coloration.

Vertex transverse, about one-third as long as wide; from narrow at base, enlarging gradually to below eyes and then rounding to the clypeus, tricarinate; pronotum produced obutsely forward, slightly longer than the vertex, with very characteristic pitlike depressions along the sides; mesonotum over three times as long as the pronotum, tricarinate; elytra nearly three times as long as greatest width, narrowing gradually to just before the apex where it enlarges, terminating distinctly wedge-shaped.

Male genitalia: periandrium forming a tube. Genital styles large, produced into slender process at apex, the upper margin with distinct hairs or setæ.

Length to tip of elytra, 6 mm.

Described from a series of five adults collected by the writer at Guanica, Porto Rico, February 12, 1925; five adults collected by H. E. Box at Aguirre, February 1925; one adult from Juana Diaz, February 11, 1925, by the writer; three adults from Ponce, July 20–22, 1914 (Amer. Mus. Nat. Hist. No. 3716); one specimen from Maricao, July 27, 1914 (No. 3724); one specimen from Tallabao near Ponce, July 23, 1914 (No. 3720); two specimens taken on Mona Island, February 21–26, 1914 (Nos. 3508C and 3516).

This appears to be the most abundant species of *Colpoptera* in Porto Rico.

NEOCOLPOPTERA, new genus

Very close to *Colpoptera* and differentiated from that genus principally by its slightly more produced head and its distinctly longer form. The general coloration of the known species is very pale in contrast to the described species of *Colpoptera*.

Vertex distinctly produced beyond the eyes, the margins carinated, the disk depressed; the posterior margin distinctly emarginate, into which fits the angulately produced pronotum; viewed from above, the sides of the genæ flare outward; mesonotum with or without median carina, the lateral carinæ originating at a point just below the anterior margin at the middle, run downward and outward in an oblique manner and then turn down. From starting narrow, gradually rounding and enlarging to a point on a line with the lower margin of eyes or well below, then narrowing again to the clypeus. Elytra comparatively long and slender.

Genotype.—Neocolpoptera portoricensis, new species.

Neocolpoptera portoricensis, new species

Figure 17

A large, robust species, easily recognized by its markings. In life there is a sulphur-yellow spot or area on the upper middle of the elytra, all signs of which fade after death.

General color a pale testaceous, the carinæ of the vertex, thorax, and frons, fuscous; frons pale except the fuscous carinæ; eyes light brown; venation of elytra distinctly fuscous; a short cross-band near base of clavus, a clouded area covering tip of clavus, and an extended clouding on apical portion of elytra, fuscous; legs with lineate fuscous markings.

Vertex extending well beyond the eyes, very short, the hind margin deeply emarginate, into which fits closely the obtusely angled, produced pronotum; from dorsal view the base of the frons and the flared upper sides of the genæ can be plainly seen. The disks of both the vertex and the pronotum are depressed, accentuated by the fuscous carinated lateral margins. Frons twice as long as its greatest width, starts narrow, gradually enlarges to well below the eyes and then roundly narrows to the clypeus; tricarinate. Mesonotum slightly roundingly elevated, with very

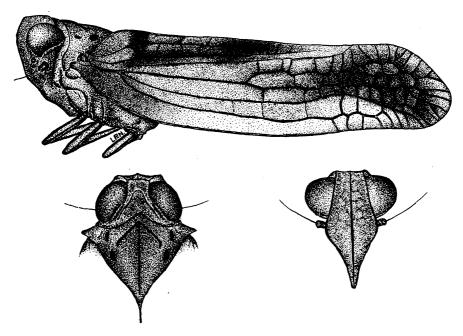


Fig. 17. Adult female Neocolpoptera portoricensis, new species, dorsal view of head and thorax and frons.

prominent carinæ; the lateral carinæ, joined together at an acute right angle near the anterior margin, run obliquely in an almost straight line and then are cut short by a downward dash; the median carina anteriorly joins or bisects the right angle made by the lateral carinæ and extends almost the entire length of the mesonotum; on the sides of the mesonotum are two short fuscous elevations.

Length to tip of elytra, 8.25 mm.

Described from five specimens collected at Aibonito, Porto Rico, July 14–17, 1914 (Amer. Mus. Nat. Hist. Nos. 3707–9 and 3523B).

Neocolpoptera monticolens, new species

Figure 18

Apparently congeneric with N. portorizensis but a much more slender and delicate species. It appears to be confined to the high mountains of Porto Rico.

General color pale testaceous yellowish, including the eyes; the upper two-thirds of the elytra for its entire length dark fuscous, leaving the costal region a clear transparent. This striking coloration immediately identifies the species. The marginal carinæ of vertex, the pronotum, and the sides of the mesonotum a distinct fuscous. From pale, without markings except the fuscous basal margin joining the vertex.

Vertex distinctly produced beyond the eyes, the margins elevated, the disk depressed, less than one-third as long as the mesonotum; pronotum very short, produced forward at the middle at an acute angle, fitting into the emarginate hind border of vertex. Mesonotum about as long as wide, with only the faintest indication

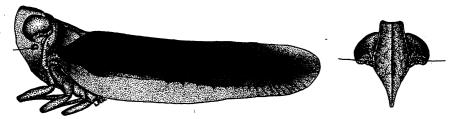


Fig. 18. Lateral view of adult female Neocolpoptera monticolens, new species, and from

of a possible median carina; the lateral carinæ are joined forward at the middle near anterior margin, continue downward obliquely, then straighten out, terminating about halfway down; the somewhat flattened disk is outlined by the lateral carinæ. Frons nearly twice as long as wide, starting narrow and then enlarging gradually to its widest part on a line with the lower margin of the eyes, then again narrowing to the clypeus; 'the margins elevated and a median longitudinal carina is present.

Length to tip of elytra, 7.5 mm.

Described from a series of seven adults collected at Aibonito, Porto Rico, July 14–17, 1914 (Amer. Mus. of Nat. Hist. No. 3709); one specimen from Cayey, Porto Rico, May 30, 1914 (Amer. Mus. of Nat. Hist. F3931); and several adults taken by the writer beating shrubbery in tropical rain forest on El. Yunque, Porto Rico, February, 1925.