

ELEVEN NEW SPECIES OF CAMPYLOMMA (HEMIPTERA:
MIRIDAE) FROM THE MARQUESAS ISLANDS*

By

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The genus *Campylomma* Reuter appears to be world-wide in distribution, 17 species having been described, although there are no records from South America. Adding 11 species described in the present paper we have a total of 28 species. Insects of this genus are very small and hence not often saved by the general collector, which may account for the lack of records from the Neotropical region and other parts of the world. Only one species, *Campylomma verbasci* Mey., has been recognized from North America, and this form is also common in Europe. That 11 new species of *Campylomma* should be recognized from the Marquesas Islands is surprising information for one interested in the distribution of Hemiptera. Here, in a few islands, we find more species of *Campylomma* than have elsewhere been recorded from whole continents. It is also noteworthy that in my study of the Miridae of Samoa¹ only two species of *Campylomma* were recognized from those islands. Here again, more careful collecting for small forms may reveal a few more.

The characters used for separating the several species of *Campylomma* may be mentioned for the benefit of later students. A few species are distinguished by definite rings and dots on the antennae, but not so the Marquesan species. The best structural characters are found in the relative lengths of the rostrum, second antennal segment, width of head across eyes, vertex or space between eyes, and width and length of pronotum. It would help greatly in sorting species if future workers would use an eyepiece micrometer and give definite measurements. The type of pubescence is often distinctive and should be carefully noted. Color characters are helpful when used in combination with the above-mentioned features, particularly the black setigerous dots found on the hind femora. Since this spotting of the femora is difficult to describe accurately in a few words, illustrations are provided for the species herein described.

In the study of small Miridae like *Campylomma*, nothing contributes so much to the accurate determination of specimens as careful mounting of perfect material. The rostrum and legs provide important characters, therefore should not be covered with adhesive. The mounting point should be small and the tip bent to fit the right side of the thorax only, thus preventing the rostrum from being covered.

* Pacific Entomological Survey Publication 8, article 19. Issued October 15, 1938.

¹ Knight, H. H., *Insects of Samoa, Hemiptera* (2), 197, 1935.

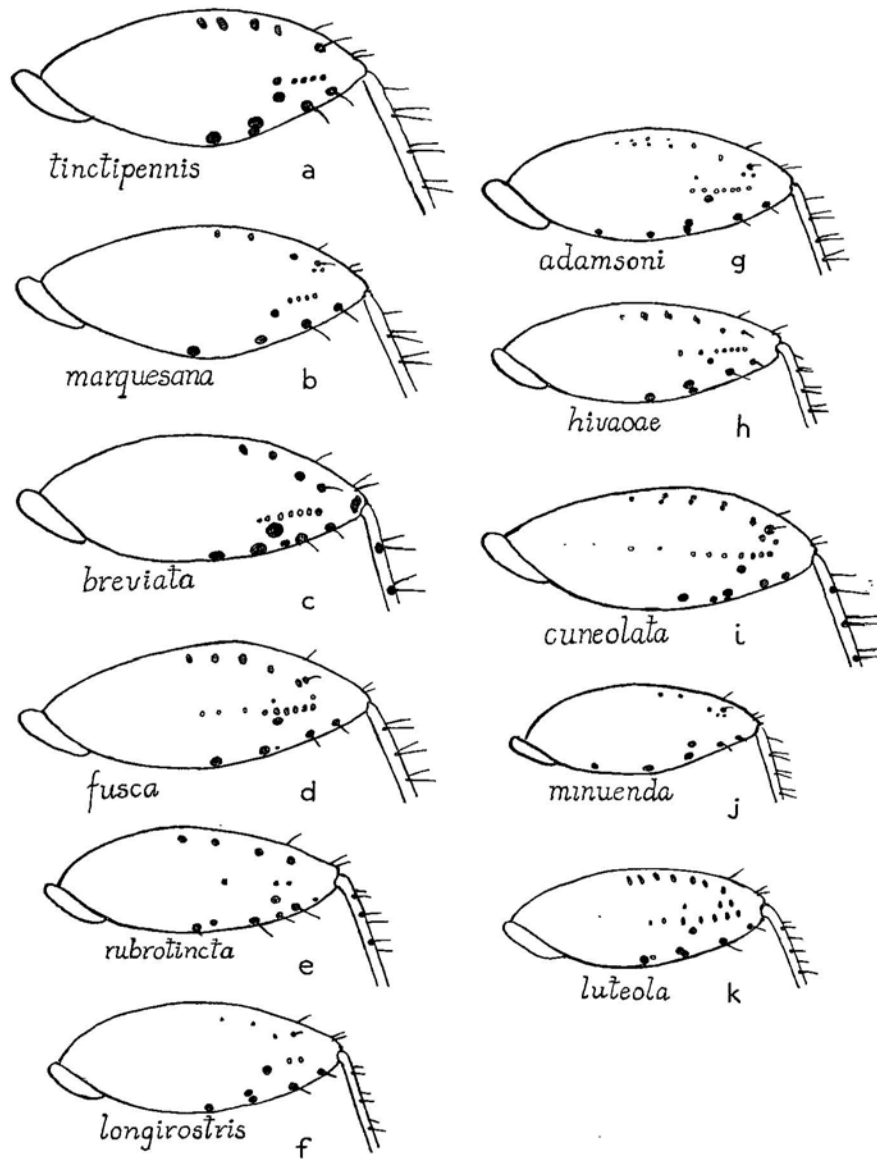


FIGURE 1.—Anterior aspect of left hind femur of species of *Campylomma*: a, *C. tinctipennis*; b, *C. marquesana*; c, *C. breviata*; d, *C. fusca*; e, *C. rubrotincta*; f, *C. longirostris*; g, *C. adamsoni*; h, *C. hivaoae*; i, *C. cuneolata*; j, *C. minuenda*; k, *C. luteola*.

Key to Known Species of *Campylomma* from the Marquesas Islands

1. Rostrum not extending beyond posterior trochanters..... 2
Rostrum extending to middle of venter or genital segment.....10
2. Rostrum extending upon posterior coxae..... 5
Rostrum not extending beyond middle coxae..... 3
3. Pubescence simple, without sericeous pubescence..... 4
Clothed with black, bristlelike pubescence and intermixed with a small amount of sericeous, pale pubescence; body reddish.....**rubrotincta** Knight
4. Hind femora with heavy black dots (fig. 1, *c*); cuneus pale, inner margin slenderly, bright red.....**breviata** Knight
Hind femora with moderate black dots (fig. 1, *i*); cuneus roseate, outer margin paler.....**cuneolata** Knight
5. Length of second antennal segment not or very slightly exceeding width of head across eyes..... 6
Length of second antennal segment greater than width of head across eyes..... 7
6. Uniformly yellowish in color; posterior femora with distinctive dots (fig. 1, *g*)....
.....**adamsoni** Knight
Hemelytra distinctly reddish; hind femora with distinctive spots (fig. 1, *h*).....
.....**hivaoae** Knight
7. Tylus distinctly projecting..... 8
Tylus not very prominent..... 9
8. Hemelytra fuscous, embolium and cuneus paler (δ); female uniformly pale, membrane only infuscated; length 3.1 mm.....**fusca** Knight
Hemelytra uniformly yellowish, membrane pale; length 2.4 mm.....**luteola** Knight
9. Color uniformly yellowish; rostrum reaching to middle of hind coxae; length 2.6 mm.....**marquesana** Knight
Hemelytra roseate, female roseate on apical area of corium only; length 2.9 mm.
.....**tinctipennis** Knight
10. Rostrum extending beyond middle of venter or upon genital segment; length 2.7-2.9 mm.....**longirostris** Knight
Rostrum only reaching to middle of venter; length 2 mm.....**minuenda** Knight

Campylomma marquesana, new species (fig. 1, *b*).

Distinguished by the uniformly yellowish color, characteristic dots on hind femora, and rostrum reaching to middle of hind coxae.

Male. Length 2.5 mm. Head: width 0.78 mm., vertex 0.30 mm. Rostrum: length 1.08 mm., reaching to middle of hind coxae. Antennae: segment I, length 0.17 mm.; II, 0.95 mm., equal in thickness to segment I, slightly more slender near base; III, 0.60 mm.; IV, 0.26 mm.; yellowish to brownish, last two segments blackish. Pronotum: length 0.91 mm., width at base 1.08 mm. Clothed with suberect, bristlelike, black, pubescent hairs, intermixed on hemelytra with a few more recumbent, fine, pale, pubescent hairs.

General coloration pale yellowish, probably greenish yellow in life, eyes dark brown; hind femora with black dots on anterior face as shown in figure 1, *b*; tibial spines black, with very small dot at base of each. Membrane fuscous, veins slightly paler.

Female. Length 2.6 mm. Head: width 0.69 mm., vertex 0.33 mm. Antennae: segment I, length 0.17 mm.; II, 0.73 mm.; III, 0.56 mm.; IV, 0.30 mm. Pronotum: length 0.52 mm., width at base 1.08 mm. Very similar to the male in coloration and pubescence.

Marquesas Islands. Hivaoa: Kaava Ridge, alt. 2,460 ft., Jan. 6, 1932, collected at light by LeBronnec; holotype male in Bishop Museum.

Paratypes as follows:

Hivaoa: thirty-five specimens taken with the type. Kaava Ridge, alt. 2,000 ft., two specimens, Oct. 27, 1931, on *Glochidion ramiflorum*; Kakahopuanui, alt. 2,460 ft., one specimen, Jan. 5, 1932, taken at light; Kakahopuanui, alt. 2,800 ft., one specimen, Oct. 27, 1931, beating on *Glochidion ramiflorum*, collected by LeBronnec. Avaoa Valley, alt. 1,350 ft., 28 specimens, Jan. 4, 1932, taken at light by LeBronnec. Feani Ridge, Tenatinaei, alt. 3,970 ft., five specimens, Jan. 12, 1932, collected by LeBronnec.

Uapou: Teavanui Pass, alt. 2,900 ft., three specimens, Nov. 26, 1931, collected at light by LeBronnec. Teoatea, Hakahetau Valley, alt. 1,950 ft., one specimen, taken at light, Nov. 17, 1931; one specimen, alt. 2,000 ft., Nov. 19, 1931, beating on *Metrosideros collina*, collected by LeBronnec.

Tahuata: Vaitahu Valley, seashore, two specimens, June 17, 1930, collected at light by LeBronnec and H. Tauraa.

Fatuhiva: Ouia Valley, near sea level, one specimen, Sept. 2, 1930, collected on *Sida* sp. by LeBronnec.

Campylomma adamsoni, new species (fig. 1, *g*).

Allied to *C. marquesana* but smaller, the second antennal segment not (♀) or slightly exceeding (♂) width of head across eyes; arrangement of spots on hind tibiae also distinctive (fig. 1, *g*).

Male. Length 2.4 mm. Head: width 0.69 mm., vertex 0.30 mm. Rostrum, length 0.91 mm., reaching to middle of hind coxae. Antennae: segment I, length 0.17 mm.; II, 0.71 mm., very slightly exceeding width of head across eyes, thickness equal to segment I but more slender near base; III, 0.49 mm.; IV, 0.21 mm.; uniformly yellowish, last two segments fuscous. Pronotum: length 0.43 mm., width at base 0.92 mm. Dorsum clothed with prominent, suberect, fuscous, pubescent hairs and intermixed with more recumbent, fine, pale pubescence; a prominent, black, bristlelike hair set each side on lateral margin of disk just behind the anterior angle.

General coloration pale yellowish, probably more greenish yellow in life, membrane pale to dusky; hind femora with black dots on anterior face as shown in figure 1, *g*; tibial spines prominent, black, a slight dot at base of each.

Female. Length 2.4 mm. Head: width 0.66 mm., vertex 0.30 mm. Antennae: segment I, length 0.16 mm.; II, 0.64 mm., scarcely equal to width of head across eyes; III, 0.45 mm.; IV, 0.25 mm.; uniformly yellowish, last two segments fuscous. Slightly more robust than the male but very similar in pubescence and coloration.

Marquesas Islands. Eiao: uplands towards N. end, east ridge, alt. 1,855 ft., Sept. 29, 1929, collected by A. M. Adamson; holotype male in Bishop Museum.

Paratypes as follows:

Eiao: nine specimens taken with the type. Vaituha, alt. 1,100 ft., five specimens, Oct. 2, 1929, on *Dodonaea viscosa*; three specimens taken at light, Oct. 2, 1929, collected by Adamson. Above Vaituha, alt. 800 ft., one specimen, Oct. 1, 1929, taken on *Melochia velutina*, by Adamson. Near center of island, alt. 1,665 ft., ten specimens taken on *Hibiscus tiliaceus*, Sept. 28, 1929, by Adamson; one specimen, alt. 1,700 ft., April 16, 1931, on *Premna tai-tensis*; one specimen, alt. 1,500 ft., April 22, 1931, on *Dodonaea viscosa*, collected by LeBronnec and Tauraa.

Hatutu: one specimen, middle of east side, alt. 800 ft., Sept. 30, 1929, on *Melochia velutina*, by Adamson.

Uahuka: Penau Ridge, alt. 2,200 ft., one specimen, March 5, 1931, on *Weinmannia parviflora*, collected by LeBronnec and Tauraa.

Hivaoa: Kakahopuanui, alt. 2,500 ft., one specimen, Jan. 5, 1932, collected by LeBronnec. Tahauku, one specimen taken near seashore, July 10, 1929, collected by Mumford and Adamson. Teava Uhia i te kohu, alt. 2,100 ft., eight specimens, Feb. 15, 1930, beating on *Hibiscus tiliaceus*, collected by Mumford and Adamson.

Tahuata: Vaitahu Valley, seashore, one specimen taken at light, Aug. 8, 1930, by LeBronnec.

Fatuhiva: Ouia Valley, near sea level, Sept. 2, 1930, three specimens taken on *Ocimum basilicum*, by LeBronnec.

Campylomma luteola, new species (fig. 1, *k*).

Allied to *C. adamsoni* but smaller, distinguished by the more prominent tylus and different spotting of the femora.

Male. Length 2.3 mm. Head: width 0.65 mm., vertex 0.30 mm.; tylus distinctly more prominent than in allied species, *C. fusca* excepted. Rostrum: length 0.95 mm., reaching to middle of posterior trochanters. Antennae: segment I, length 0.17 mm.; II, 0.70 mm., nearly cylindrical, slightly more slender than segment I; III, 0.52 mm.; IV, 0.25 mm.; yellowish, last two segments fuscous. Pronotum: length 0.41 mm., width at base 0.91 mm.; disk much flattened. Dorsum clothed with prominent, suberect, black pubescence, intermixed with a few very fine, pale hairs.

General coloration pale to yellowish, deeper yellow on head and pronotum; hind femora with many fuscous dots as shown in figure 1, *k*; tibial spines prominent, black, a very small dot at base of each.

Female. Length 2.4 mm. Head: width 0.62 mm., vertex 0.27 mm.; tylus prominent as in the male. Antennae: segment I, length 0.14 mm.; II, 0.64 mm.; III, 0.46 mm.; IV, 0.24 mm.; yellowish, last two segments fuscous. Pronotum: length 0.39 mm., width at base 0.90 mm. Very similar to male in pubescence and coloration.

Marquesas Islands. Fatuuku: alt. 860 ft., Nov. 19, 1930, beating on *Morinda citrifolia* by Tauraa; holotype male in Bishop Museum. Paratypes: twelve specimens taken with the type.

Campylomma tinctipennis, new species (fig. 1, *a*).

Distinguished from allied species by the roseate color of the hemelytra which is paler along claval suture, apex of embolium and on cuneus; rostrum attaining apices of hind coxae.

Male. Length 2.9 mm. Head: width 0.82 mm., vertex 0.35 mm. Rostrum: length 1.23 mm., attaining apices of hind coxae. Antennae: segment I, length 0.19 mm.; II, 0.91 mm., cylindrical, nearly as thick as segment I, clothed with fine, short, dusky pubescence; III, 0.65 mm.; IV, 0.34 mm.; yellowish brown, last two segments fuscous to black. Pronotum: length 0.52 mm., width at base 1.17 mm. Dorsum clothed with rather prominent, black, bristlelike pubescence, hairs stronger and more erect on clavus, pronotum, and scutellum.

General coloration yellowish, sides of body tinged with roseate and brownish; hemelytra roseate; cuneus except inner margin, tip of clavus, and more or less broadly along claval suture, pale to yellowish. Membrane fuscous, veins reddish. Scutellum roseate to fuscous. Legs pale to yellowish, hind femora spotted on anterior face as shown in

figure 1, *a*; front and middle femora with three dots beneath; tibial spines prominent, black, basal dots scarcely evident.

Female. Length 3 mm. Head: width 0.82 mm., vertex 0.39 mm. Rostrum attaining posterior margins of hind coxae. Antennae: segment I, length 0.19.; II, 0.86 mm.; III, 0.69 mm.; IV, 0.32 mm. Pronotum: length 0.56 mm., width at base 1.21 mm. Slightly more robust than the male and paler in color; the roseate color much reduced, sometimes apparent only on apical area of corium.

Marquesas Islands. Nukuhiva: Tekao Hill, alt. 3,020 ft., July 25, 1931, taken on *Metrosideros collina* by LeBronnec and Tauraa; holotype male in Bishop Museum.

Paratypes as follows:

Nukuhiva: Tekao Hill, alt. 3,020 ft., 11 specimens, July 23, 1931, collected on *Metrosideros collina* by LeBronnec and Tauraa. Ooumu, alt. 3,000 ft., 12 specimens on *Weinmannia parviflora*, May 27, 1931; and 27 specimens, May 28, 1931, on *Metrosideros collina* and *Weinmannia parviflora*, collected by LeBronnec and Tauraa. Muake, north side, 24 specimens, alt. 2,500 ft., and 12 specimens, alt. 3,000 ft., Aug. 3, 1931, collected on *Metrosideros collina* by LeBronnec and Tauraa. Oomaka, alt. 2,350 ft., seven specimens, Aug. 6, 1931, on *Metrosideros collina*, collected by LeBronnec and Tauraa. Tapuaooa, alt. about 2,500 ft., eight specimens, May 30, 1931, on *Weinmannia parviflora*; one specimen, about 2,750 ft., June 17, 1931; eight specimens, June 16, 1931; two specimens, June 18, 1931; two specimens, July 20, 1931; all taken on *Metrosideros collina* by LeBronnec and Tauraa. Toovii, alt. 2,500 ft., 15 specimens, Aug. 4, 1931, by beating *Metrosideros collina*, collected by LeBronnec and Tauraa. Tauamaka, alt. 2,900 ft., three specimens, Nov. 10, 1929, beating on *Metrosideros collina* by Mumford and Adamson. Ridge north of Teuanui, alt. 2,800 ft., two specimens, Oct. 26, 1929, collected on *Metrosideros collina* by Mumford and Adamson. Vaihakameama, about 2,700 ft., four specimens, June 19, 1931, on *Weinmannia parviflora* by LeBronnec and Tauraa. Vaiotekea, alt. 2,200 ft., one specimen, Aug. 6, 1931, beating on *Metrosideros collina* by LeBronnec and Tauraa.

Uapou: Teoatea, Hakahetau Valley, alt. 1,950 ft., one specimen, Nov. 20, 1931; alt. 2,000 ft., nine specimens, Nov. 19, 1931; alt. 1,950 ft., three specimens, Nov. 16, 1931; all collected on *Metrosideros collina* by LeBronnec. Teavanui Pass, alt. 2,900 ft., three specimens taken at light, Nov. 26, 1931, collected by LeBronnec.

Hivaoa: Kopaafaa, alt. 2,800 ft., one specimen, Feb. 25, 1930, collected on *Weinmannia parviflora* by Mumford and Adamson. Tepuna, alt. 3,010 ft., one specimen, Aug. 1, 1929, collected on *Metrosideros collina* by Mumford and Adamson.

Tahuata: Vaitahu, seashore, one specimen, June 17, 1930, taken at light by LeBronnec and Tauraa.

Campylomma breviata, new species (fig. 1, *c*).

Allied to *C. tinctipennis* and resembling it in color, but distinguished at once by the shorter rostrum which extends only to middle coxae.

Male. Length 2.7 mm. Head: width 0.86 mm., vertex 0.30 mm. Rostrum: length 0.91 mm., just reaching to middle of intermediate coxae. Antennae: segment I, length 0.17 mm.; II, 0.91 mm., cylindrical, slightly more slender than segment I; III, 0.65 mm.; IV, 0.30 mm.; yellowish, last two segments fuscous. Pronotum: length 0.48 mm., width at base 1.08 mm. Dorsum clothed with prominent, black, bristlelike pubescence, intermixed on hemelytra with a few very fine, recumbent, pale, pubescent hairs.

General coloration pale yellowish; pleura, sternum, and sides of venter fuscous; hemelytra tinged with red, embolium and tip of cuneus more strongly red; cuneus pale yellowish, apex and inner margin slenderly, bright red; membrane fuscous, veins bright red. Legs pale to yellowish, femora strongly marked with black spots as shown in figure 1, *c*; tibial spines prominent, black; setigerous dots large and prominent.

Female. Length 2.8 mm. Head: width 0.86 mm., vertex 0.30 mm. Antennae: segment I, length 0.17 mm.; II, 0.82 mm.; III, 0.65 mm.; IV, 0.30 mm. Pronotum: length 0.52 mm., width at base 1.12 mm. More robust than the male and paler in color; reddish coloration apparent only on apex of cuneus and mere traces on corium. Pubescence similar to that of the male.

Marquesas Islands. Hivaoa: Kaava Ridge, alt. 2,000 ft., Oct. 27, 1931, beating on *Glochidion ramiflorum*, collected by LeBronnec; holotype male in Bishop Museum.

Paratypes as follows:

Hivaoa: one specimen taken with type; Kakahopuanui, alt. 2,460 ft., one specimen, Jan. 5, 1932, taken at light by LeBronnec. Kopaafaa, alt. 2,770 ft., one specimen, Aug. 3, 1929, collected by Mumford and Adamson.

Uapou: Teoatea, Hakahetau Valley, alt. 2,000 ft., one specimen, Nov. 19, 1931, collected by LeBronnec. Teavanui Pass, alt. 2,900 ft., one specimen, Nov. 26, 1931, taken at light by LeBronnec.

Uahuka: Tauheeputa, alt. 1,770 ft., one specimen, March 23, 1931, collected on *Glochidion ramiflorum* by LeBronnec and Tauraa.

Campylomma rubrotincta, new species (fig. 1, *e*).

Distinguished from allied species by a small amount of sericeous, pale pubescence intermixed with the suberect, black, bristlelike pubescence on the hemelytra; the whole body colored by reddish in the hypodermis.

Male. Length 2.7 mm. Head: width 0.74 mm., vertex 0.26 mm. Rostrum: length 0.78 mm., just reaching to middle of intermediate coxae. Antennae: segment I, length 0.19 mm.; II, 1.08 mm., scarcely equal to thickness of segment I, more slender on basal half; III, 0.57 mm.; IV, 0.26 mm. Pronotum: length 0.47 mm., width at base, 1.08 mm. Clothed with prominent, suberect, blackish pubescence and intermixed on hemelytra with a small amount of pale sericeous pubescence.

General coloration dusky to reddish, cuneus dark ruby red but pale at the fracture, membrane fuscous; femora dusky red, dotted with black as shown in figure 1, *e*; tibiae pale, more or less reddish on basal half, armed with prominent black spines, a dark spot at base of each.

Female. Length 2.5 mm. Head: width 0.73 mm., vertex 0.30 mm. Antennae: segment I, length 0.17 mm.; II, 0.93 mm.; III, 0.60 mm. Pronotum: length 0.47 mm., width at base 1.12 mm. More robust than the male but very similar in pubescence and coloration.

Marquesas Islands. Nukuhiva: Vaiotekea, alt. 2,000 ft., Aug. 6, 1931, collected by LeBronnec and Tauraa; holotype male in Bishop Museum.

Paratypes as follows:

Nukuhiva: nine specimens taken with type; Oomaka, alt. 2,350 ft., Aug. 6, 1931, beating on *Metrosideros collina*, one specimen collected by LeBronnec and Tauraa.

Campylomma cuneolata, new species (fig. 1, *i*).

Distinguished from allied species by the short rostrum and the roseate cuneus.

Male. Length 2.7 mm. Head: width 0.69 mm., vertex 0.30 mm. Rostrum: length 0.82 mm., just reaching to middle of intermediate coxae. Antennae: segment I, length 0.19 mm.; II, 0.91 mm.; III, 0.60 mm.; IV, 0.34 mm.; brownish yellow, last two segments blackish. Pronotum: length 0.43 mm., width at base 0.95 mm. Clothed with prominent, suberect, black pubescence with very little finer pubescence intermixed.

General coloration pale to brownish yellow, clavus and corium becoming dusky, cuneus distinctly roseate, outer margin paler, genital segment fuscous on base; hind femora with black spots as shown in figure 1, *i*; tibial spines prominent, black, with distinct fuscous spot at base of each.

Female. Length 2.6 mm. Head: width 0.67 mm., vertex 0.32 mm. Antennae: segment I, length 0.18 mm.; II, 0.78 mm.; III, 0.56 mm.; IV, 0.27 mm. Pronotum: length 0.43 mm., width at base 0.97 mm. More robust than the male but very similar in pubescence and coloration.

Marquesas Islands. Uapou: Tekohepu Summit, alt. 3,000 ft., Nov. 28, 1931, collected by LeBronnec; holotype male in Bishop Museum.

Paratypes as follows:

Uapou: Teavanui Pass, alt. 2,900 ft., two specimens, Nov. 28, 1931, beating on *Bidens lantanoides*; one specimen, alt. 3,200 ft., Nov. 28, 1931, beating on *Angiopteris* sp., collected by LeBronnec. Teavavanui, alt. 3,200 ft., one specimen, Nov. 28, 1931, beating on *Angiopteris* sp. by LeBronnec. Teavaituhai, Paaumea Valley, alt. 3,020 ft., one specimen, Nov. 20, 1931, beating on *Bidens lantanoides* by LeBronnec.

Campylomma minuenda, new species (fig. 1, *j*).

Distinguished from allied species by the small size, pale color, and the long rostrum which extends to middle of the venter.

Male. Length 1.9 mm. Head: width 0.57 mm., vertex 0.27 mm. Rostrum: length 0.92 mm., reaching to middle of venter. Antennae: segment I, length 0.13 mm.; II, 0.60 mm., nearly equal in thickness to segment I but tapering, more slender on basal half; III, 0.38 mm.; IV, 0.21 mm.; pale, last two segments dusky. Pronotum: length 0.37 mm., width at base 0.82 mm. Dorsum clothed with prominent, suberect, black pubescent hairs, and intermixed with an equal amount of more recumbent, pale yellowish pubescence.

Color uniformly pale testaceous, membrane lightly infuscated; hind femora with distinct black dots on anterior face as shown in figure 1, *j*; tibiae armed with prominent black spines; those on basal half with small black dot at base of each.

Female. Length 2 mm. Head: width 0.56 mm., vertex 0.30 mm. Antennae: segment I, length 0.13 mm.; II, 0.52 mm.; III, 0.35 mm.; IV, 0.21 mm. Pronotum: length 0.35 mm., width at base 0.82 mm. Slightly more robust than the male but very similar in pubescence and coloration.

Marquesas Islands. Uahuka: Teavamataiki, alt. 730 ft., March 24, 1931, taken on *Melochia velutina* by LeBronnec and Tauraa; holotype male in Bishop Museum.

Paratypes as follows:

Uahuka: Teavamataiki, alt. 730 ft., 16 specimens, March 24, 1931, collected on *Melochia velutina* by LeBronnec and Tauraa. Teanatuhiwa, alt. 300 ft., 16 specimens, March 18, 1931, on *Waltheria americana* by LeBronnec and Tauraa.

Tahuata: four specimens, alt. 100 ft., June 7, 1930, on *Sida* sp.; Vaitahu, seashore, one specimen, June 17, 1930; Hanahevane Valley, seashore, one specimen, July 16, 1930; Motopu, alt. 15 ft., 20 specimens, July 17, 1930, on *Sida* sp., all collected by LeBronnec and Tauraa.

Fatuhiva: Ooia Valley, alt. 500 ft., five specimens, Sept. 9, 1930, beating on *Melochia velutina* by LeBronnec.

Mohotani: two specimens, northern part of island, alt. 400 ft., Feb. 4, 1931, on *Melochia velutina*.

Campylomma longirostris, new species (fig. 1, *f*).

Distinguished from allied species by the long rostrum which reaches beyond middle of venter or upon genital segment.

Male. Length 2.7 mm. Head: width 0.75 mm., vertex 0.37 mm.; tylus more prominent than in *C. marquesana*. Rostrum: length 1.21 mm., reaching upon base of genital segment. Antennae: segment I, length 0.18 mm.; II, 0.86 mm., cylindrical, slightly more slender at base, thickness slightly less than segment I; III, 0.57 mm.; IV, 0.30 mm.; yellowish, last two segments fuscous. Pronotum: length 0.43 mm., width at base 1.08 mm. Dorsum clothed with prominent, suberect, bristlelike pubescence, base of vertex and anterior margin of pronotum set with a few stronger bristles.

General coloration uniformly yellowish, cuneus without indication of deeper color, membrane fuscous. Legs pale yellowish, hind femora with fuscous dots as shown in figure 1, *f*; tibial spines black, prominent, without indication of setigerous dots.

Female. Length 2.9 mm. Head: width 0.82 mm., vertex 0.38 mm. Rostrum: length 1.48 mm., reaching upon base of ovipositor. Antennae: segment I, length 0.17 mm.; II, 0.91 mm.; III, 0.65 mm.; IV, 0.34 mm. Pronotum: length 0.56 mm., width at base 1.25 mm. More robust than the male but very similar in pubescence and coloration.

Marquesas Islands. Nukuhiva: ridge north of Teuanui, alt. 2,800 ft., Oct. 26, 1929, on *Metrosideros collina*, collected by Mumford and Adamson; holotype male in Bishop Museum.

Paratypes as follows:

Nukuhiva: one specimen taken with type; Tauamaka, alt. 2,900 ft., one specimen, Nov. 10, 1929, beating on *Metrosideros collina*, collected by Mumford and Adamson.

Fatuhiva: Tahuna, alt. 2,050 ft., one specimen, Sept. 3, 1930, beating on *Metrosideros collina*, collected by Mumford and Adamson.

Campylomma hivaoae, new species (fig. 1, *h*).

Distinguished from allied species by the short second antennal segment and reddish coloration of the hemelytra.

Male. Length 2.8 mm. Head: width 0.82 mm., vertex 0.34 mm.; tylus moderately prominent. Rostrum: length 1.12 mm., reaching upon base of hind coxae. Antennae: segment I, length 0.17 mm.; II, 0.78 mm., cylindrical, nearly equal in thickness to segment I, length not equal to width of head; III, 0.56 mm.; IV, 0.30 mm.; brownish yellow, last two segments blackish. Pronotum; length 0.52 mm., width at base 1.12 mm. Dorsum clothed with suberect, bristlelike, black, pubescent hairs, intermixed on pronotum and clavus with a few erect bristles.

General coloration yellowish to salmon pink, hemelytra distinctly reddish, apex of embolium and outer base of cuneus paler; membrane uniformly blackish, veins bright red. Legs pale yellowish, hind femora with black spots as shown in figure 1, *h*; tibial spines black, prominent, a very small spot at base of each.

Female. Length 2.6 mm. Head: width 0.73 mm., vertex 0.35 mm. Antennae: segment I, length 0.17 mm.; II, 0.69 mm., more slender than in the male; III, 0.56 mm.; IV, 0.30 mm. Pronotum: length 0.46 mm., width at base 1.04 mm. Very similar to the male but hemelytra pale reddish, cuneus and embolium paler.

Marquesas Islands. Hivaoa: Kakahopuanui, Kaava Ridge, alt. 2,800 ft., Oct. 27, 1931, beating on *Glochidion ramiflorum*, by LeBronnec; holotype male in Bishop Museum.

Paratypes as follows:

Hivaoa: Tenatinaei, Feani Ridge, two specimens, alt. 3,970 ft., Jan. 12, 1932, and one specimen, Jan. 13, 1932, collected by LeBronnec; Kakahopuanui, Kaava Ridge, alt. 2,800 ft., one specimen, Oct. 27, 1931, on *Glochidion ramiflorum*, and one specimen, Jan. 7, 1932, by beating *Weimannia* sp., collected by LeBronnec.

Campylomma fusca, new species (fig. 1, *d*).

Distinguished from allied species by the longer and more prominent tylus, rostrum attaining posterior margins of hind coxae; hemelytra fuscous, embolium and cuneus pale.

Male. Length 3.1 mm. Head: width 0.82 mm., vertex 0.36 mm. Rostrum: length 1.34 mm., attaining posterior margins of hind coxae. Antennae: segment I, length 0.21 mm.; II, 0.91 mm., cylindrical, thickness slightly less than segment I; III, 0.60 mm.; IV, 0.39 mm.; yellowish, last two segments blackish. Pronotum: length 0.52 mm., width at base 1.12 mm. Dorsum clothed with suberect, bristlelike, black pubescent hairs, with stronger, more erect hairs on base of clavus and pronotum.

General coloration pale greenish yellow, hemelytra distinctly infuscated, embolium and cuneus paler; hind femora with black dots on anterior face as shown in figure 1, *d*; tibial spines black, with small fuscous dot at base of each.

Female. Length 3.1 mm. Head: width 0.82 mm., vertex 0.43 mm.; tylus distinctly more prominent than in *C. marquesana*. Antennae: segment I, length 0.21 mm.; II, 0.95 mm.; III, 0.65 mm.; IV, 0.39 mm. Pronotum: length 0.82 mm., width at base 1.21 mm. More robust than the male but pubescence very similar; color uniformly pale with tinge of yellow, membrane only infuscated.

Marquesas Islands. Uapou: Vaihakaatiki, Hakahetau Valley, alt. 3,020 ft., Nov. 18, 1931, collected by LeBronnec, beating on *Vaccinium* sp.; holotype male in Bishop Museum.

Paratypes as follows:

Uapou: Vaihakaatiki, Hakahetau Valley, alt. 3,020 ft., two specimens by beating *Vaccinium* sp. and six specimens by beating *Cyrtandra* sp., Nov. 18, 1931, collected by LeBronnec. Teoatea, Hakahetau Valley, alt. 2,000 ft., five

specimens, Nov. 16, 1931; alt. 1,950 ft., 10 specimens, Nov. 19, 1931, and one specimen, Nov. 21, 1931; all collected on *Metrosideros collina* by LeBronnec. Teavaituhai, Hakahetau Valley, alt. 3,020 ft., one specimen, Nov. 20, 1931, beating on *Sclerotheca* sp., by LeBronnec. Teavaituhai, alt. 3,020 ft., three specimens, Nov. 20, 1931, beating on *Cyrtandra* sp., by LeBronnec. Teavaituhai, alt. 3,000 ft., one specimen, Dec. 8, 1929, on *Sclerotheca* sp., collected by Adamson. Tekohepu Summit, alt. 3,200 ft., seven specimens, Nov. 28, 1931, beating on *Cyrtandra* sp., and one specimen on *Metrosideros collina*; alt. 3,300 ft., one specimen, Nov. 27, 1931, beating on *Sclerotheca* sp., collected by LeBronnec.

Hivaoa: Kaava Ridge, alt. 2,800 ft., six specimens, Jan. 7, 1932, beating on *Reynoldsia* sp.; one specimen, Oct. 27, 1931, beating on *Ageratum conyzoides* by LeBronnec. Avaoa Valley, alt. 1,350 ft., one specimen, Jan. 4, 1932, taken at light, by LeBronnec. Feani Ridge, Tenatinaei, alt. 3,970 ft., two specimens, Jan. 13, 1932, by LeBronnec. Matauuna, alt. 3,800 ft., one specimen, March 3, 1930, taken on *Sclerotheca* by Mumford and Adamson.

Tahuata: Amatea, alt. 2,600 ft., one specimen, June 28, 1930, collected by LeBronnec and Tauraa.