Excerpt from Canadian Entomologist. October, 1926.

DESCRIPTIONS OF SIX NEW MIRIDAE FROM EASTERN NORTH AMERICA. (HEMIPTERA-MIRIDAE).*

BY HARRY H. KNIGHT.

Ames, Iowa.

Plagiognathus tiliae n. sp.

This species runs to nigrolineatus Kngt. in my key (Hem. Conn., 1923, p. 431) but is distinguished at once by the lack of black lines on antennae and legs; uniformly pale yellow, or greenish yellow when newly emerged, hind femora with a few small fuscous points on anterior face.

8. Length 3.3 mm., width 1.34 mm. Head: width, .74 mm., vertex .31 mm. Rostrum, length 1.28 mm., just attaining posterior margins of hind coxae. Antennae: segment I, length .21 mm.; II, 1.08 mm.; III, .51 mm.; IV, .31 mm.; uniformly yellowish. Pronotum: length .57 mm., width at base, 1.1 mm.

Coloration uniformly pale yellow, or just the color of the Tilia blossoms among which the insect retreats; femora with a few obsolete fuscous points arranged in a double row on anterior aspect; tibial spines pale to brownish. Cloth-

^{*—}Contribution from the Department of Zoology and Entomology, Iowa State College, Ames, Iowa.

ed with soft, recumbent, simple pubescence of pale to golden yellow color.

9. Length 3.5 mm., width 1.5 mm. Head: width .72 mm., vertex .37 mm. Antennae: segment I, length .21 mm.; II, .85 mm., more slender than in the male; III, .48 mm.; IV, .28 mm. Pronotum: length .66 mm., width at base 1.24 mm. Coloration and pubescence similar to the male.

Holotype: & July 11, 1922, University Farm, St. Paul, Minnesota (H. H. Knight); author's collection.

Allotype: taken with the type; Minnesota University collection.

Paratypes: 78 & 9 taken with the types. DISTRICT OF COLUMBIA—54 & 9 June 10 to June 26, 1891-1908, Washington (O. Heidemann). & 9 June 16, 1915, Washington (W. L. McAtee). MICHIGAN—9 July 11, 1919, Washtenaw County (R. F. Hussey). MINNESOTA—9 July 6, 1921, collected at light, 20 & 9 July 14, 8 & 9 July 25, 1924, University Farm, St. Paul (H. H. Knight).

Found breeding in the flower clusters of *Tilia americana* by the writer, O. H. Heidemann and Mr. W. L. McAtee. The nymphs are pale green in color and feed on the developing buds of the flower cluster. The adult stage is attained just as the flowers come into full bloom and the yellow color of the mature bugs matches the color of the flowers perfectly. When disturbed the bugs hide among the petals and are then hard to see.

Psallus balli n. sp.

Distinguished from the known species of the eastern United States by the pale yellow to orange color and conspurcate character of the membrane; more strongly red on pronotum, scutellum, and cuneus.

3. Length 3.5 mm., width 1.4 mm. Head: width .76 mm., vertex .34 mm. Rostrum, length 1.28 mm., extending upon sixth ventral segment, yellowish, apex blackish. Antennae: segment I, length .23 mm.; II, 1.08 mm., slender, not attaining thickness of segment I; III, .60 mm.; IV, missing; yellowish brown, scarcely darker apically. Pronotum: length .53 mm., width at base 1.18 mm.

Coloration pale yellow to orange, more reddish on pronotum, scutellum and cuneus; apical half of clavus infuscated, base of clavus and subapical field of corium distinctly pale; cuneus reddish, outer margin and apex yellowish. Membrane fuscous, central and apical area conspurcate with fine white dots of irregular and coalescing form, a large pale spot just behind apex of cuneus and smaller areole, but having a triangular blackish spot on outer margin at middle. Legs yellowish to orange color, similar to the body; femora with minute fuscous points, one such apparently forming at base of each hair; tibial spines blackish, a fuscous spot at base of each, becoming obsolete apically. Clothed with yellowish to golden brown simple pubescence, and intermixed on dorsum with silvery sericeous pubescence, a few fuscous hairs on pronotum and scutellum.

9. Length 3.5 mm., width 1.4 mm. Head: width .73 mm., vertex .38 mm. Antennae: segment I, length .21 mm.; II, 1.03 mm.; III, broken. Pronotum: length, .53 mm., width at base, 1.18 mm. Pubescence and coloration very similar to that of the male.

Holotype: & March 18, 1926, Sanford, Florida (E. D. Ball); author's collection.

Allotype: same data as the type.

Paratype: & Aug. 31, 1925. Charleston, Mississippi (H. M. Harris).

Teleorhinus floridanus n. sp.

Allied to tephrosicola Kngt., but differs in structure of antennal segment II which has more than half its length strongly clavate; the combined length of segments III and IV not equal to length of segment II; coloration and pubescence very similar but pronotum of slightly different form; calli and anterior half of pronotal disk smooth and more distinctly depressed.

3. Length 6.5 mm., width 2.4 mm. Head: width across eyes 1.08 mm., vertex .53 mm.; greatest length 1.43 mm. Rostrum, length 2.7 mm., reaching upon hind coxae, yellowish brown, basal segment reddish, apical segment blackish. Antennae: segment I, length .37 mm., thickness .114 mm.; II, length 2.1 mm., slender at base, becoming abruptly clavate just before middle, thickness of clavate portion .18 mm., black, slender base yellowish; III, 1.2 mm., yellowish to dusky; IV, .77 mm., fuscous. Pronotum: length 1.26 mm., width 1.76 mm., anterior angles .91 mm.

Holotype: & April 24, 1920, Dunedin, Florida (W. S. Blatchley); author's collection.

Strongylocoris pallipes n. sp.

Differs from stygicus Say in the pale legs and the long finger-like spines at apex of the male right genital clasper.

8. Length 4.5 mm., width 2 mm. Head: width 1.16 mm., vertex .60 mm. Rostrum, length 1.12 mm., reaching base of intermediate coxae. Antennae: segment I, length .37 mm.; II, 1.28 mm.; III, .98 mm.; IV, .47 mm. Pronotum: length .93 mm., width at base 1.57 mm.

Black, shining, with punctation and pubescence very similar to *stygicus*, but legs entirely pale yellowish in color. Rostrum yellowish, apex black. Antennae fuscous to black, basal half of segment II yellowish brown. Distinguished by the form of the genital claspers; apex of right clasper with four finger-like spines, the two dorsal spines somewhat curved and nearly twice the length of the ventral pair.

Q. Length 5 mm., width 2.5 mm. Head: width 1.27 mm., vertex .73 mm. Antennae: segment I, length .38 mm.; II, 1.36 mm.; III, 1.04 mm.; IV, .50 mm. Pronotum: length 1.07 mm., width at base 1.81 mm. More robust than the male but very similar in coloration, punctation, and pubescence.

Holotype: & June 22, 1918, Battle Point, Virginia (J. G. Sanders); author's collection.

Allotype: same data as the type.

Paratypes: 28 29, taken with the types. 89 June 9, 1903, Beauforth, North Carolina (F. Sherman) numerous specimens of both sexes taken June 27, 1926, North Beach, Maryland (H. H. Knight and H. E. Ewing), found breeding on Baccharis halminifolia L. Many leaves of the plant, especially terminal growth, exhibited characteristic Mirid injury in the spotted and malformed leaves, where the nymphs had fed.

Platytylellus zonatus n. sp.

This species runs to rubrovittatus Stal in my key (Hem. Conn., 1923, p. 551), but is distinguished at once by the orange colored lateral margins of the hemelytra and the larger size.

3. Length 6.2 mm., width 2.4 m.m Head: width 1.26 mm., vertex .68 mm. Rostrum, length 2.2 mm., just attaining base of hind coxae. Antennae: segment I, length .58 mm.; II, 2 mm.; III, 1.46 mm.; IV, .77 mm. Pronotum: length 1.31 mm., width at base 2.1 mm.

Black, vertex except two lunate marks, lower half of face except tylus and apex of lora, collar, sides of pronotum, median line of disk and continuing on scutellum to cover one-third its width, orange red; embolium and narrow outer margin of corium, outer half of cuneus, and commissure of hemelytra, orange colored. More or less on pleura and sides of venter orange and obscured with blackish. Femora yellowish to orange but anterior and posterior aspects obscured with fuscous. Body surface covered with fine granular material, thickly clothed with fine short yellowish to fuscous pubescence. Genital segment without tubercles.

9. Length 6.6 mm., width 2.6 mm. Head: width 1.28 mm., vertex 74 mm. Antennae: segment I, length .60 mm., II, 1.8 mm.; III, 1.34, mm; IV, .83 mm. Pronotum: length 1.31 mm., width at base 2.26 mm. Slightly more robust than the male but very similar in coloration and pubescence.

Holotype: & July 12, 1919, Hennepin County, Minnesota (H. H. Knight), author's collection.

Allotype: July 8, 1914, Lake Itasca, Minnesota, (S. A. Graham); Minnesota University collection.

Paratypes: MICHIGAN—9 July 14, 1918, Cheboygan County (R. F. Hussey). MINNESOTA—28, taken with type. 8 July 5, 1922, 8 Aug. 7, 1924, Hennepin County (A. Hertig). NORTH DAKOTA—28 Aug. 4, 1920, Turtle Mts. (T. H. Hubbell). WISCONSIN—9 Aug. 13, 1916, Amery (J. G. Sanders). MANITOBA—89 July 30, 1922, 8 29 Aug. 12, 1920, Aweme (N. Criddle).

This species occurs among grasses in open marshy places, or about bog formations overgrown with herbaceous plants.

Platytylellus confraternus var. collaris n. var.

Differs from typical *confraternus* Uhler in the black from and vertex, and in the more broadly black pronotal disk although the collar remains red; pronotal disk black with lateral margins only red.

This form has the pronotal disk more distinctly convex, with an apparent flattening of the collar, characters which may indicate a distinct species, but until the male is studied for confirmation it seems best to place this form as a variety of *confraternus*. The color pattern of *collaris* is suggestive of typical fraternus Kngt., but the pronotum is more broadly black while the collar remains red.

Type: 9 April 4, 1911, Ormond, Florida (W. S. Blatchley); author's collection.

Paratype: 9, April, 1914, Gainesville, Florida (G. G. Ainslie).

Platytylellus confraternus (Uhler) was described from Colorado (1872) and at the same time recorded from certain eastern states. The writer has typical material from Colorado, the type locality, as well as from New Mexico, and after study of all available material is inclined to believe that the species does not range east of the 100th meridian. Most of the eastern records probably refer to fraternus Knight (Hem. Conn., 1923, p. 557.).

Sthenarus plebejus Reuter

Ofv. Finska Vet.-Soc. Forh., XLIX, 1906-1907, No. 5, p. 26.

I have recently received a male specimen, collected Nov. 19, 1924, Dunedin, Florida (W. S. Blatchley), which I can only determine as this species. It was described from Jamaica but has never been recorded from the United States. To facilitate its recognition the following redescription is added:

The small size and reddish brown color gives a superficial resemblance to *Plagiognathus cornicola* Kngt., but the differently shaped head and silvery, scale-like pubescence on sides of thorax give it the aspect of a *Psallus*; tibiae and spines pale, without trace of dark spots.

&. Length 2.6 mm., width .76 mm. Head: width .73 mm., vertex .36 mm.; base of vertex and posterior margins of eyes forming a slightly arcuate line and fitting closely against the pronotum; eyes rather large, their height (.37 mm.) as viewed from the side fully equal to width of vertex. Rostrum apparently (imbedded) attaining posterior margins of intermediate coxae. Antennae: segment I, length .17 mm.; II, .83 mm., about equal in thickness to segment I although more slender near base; III, .33 mm., IV. .31 mm.; yellowish brown, the last two segments dusky to fuscous; clothed with fine yellowish pubescence. Pronotum: length .46 mm., width at base 1 mm.; from base of pronotum to apex of scutellum, .43 mm., thus nearly equal to length of pronotum.

Clothed with simple, recumbent, only moderately abundant, yellowish pubescence, the propleura and sides of thorax bearing silvery, scale-like pubescence. Color fusco-brownish to reddish brown, calli, vertex, and scutellum becoming fuscous; hemelytra somewhat translucent, cuneus of the same shade of fusco-brownish as the corium; membrane uniformly fusco-brownish, veins scarcely paler. Ventral surface of body, head except vertex, first rostral segment, and coxae, reddish; femora, tibiae and spines uniformly yellowish, tarsi becoming dusky.