

## AMERICAN PSYLLIDÆ V

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Since completing the work of recasting the family and redescribing many species as based upon the collections then at hand, other accessions have come in from various localities. Among a collection sent to me by Mr. E. P. Van Duzee are three new species; two species have been sent by Prof. T. D. A. Cockerell, and others of interest have been collected in Southern California. Among the latter are several very interesting, though previously known species, inhabiting coniferous trees at an altitude of about ten thousand feet above the sea.

### *Paratrioza ocellata* Crawf.

This species, originally described from Colorado, has been collected in Milford, Utah (Bradley), and in Imperial County, California (J. C. Bridwell). On a spruce (species unknown to writer) on the summit of Old Baldy, near Claremont, Calif., this species was found in countless thousands, infesting the leaves and small twigs. A slight disturbance of the branches would drive them forth to swarm about like gnats or midges. This apparently was limited to the one species of spruce.

### *Trioza varians* Crawf.

Two specimens, a male and a female, were sent to me by E. P. Van Duzee, collected in the Selkirk mountains, British Columbia (Bradley).

### *Trioza aurantiaca* Crawf.

Specimens of this common species were taken by the writer on wild willow (*Salix lasiolepis*) at Laguna Beach, Calif., and near Stanford University, Calif., on the same food-plant.

### *Psylla americana* Crawf.

This species is very abundant, especially throughout the west, at all altitudes. Several specimens were collected at Laguna Beach, Calif. (Crawford) on *Salix lasiolepis* and some on the summit of Old Baldy at 10,000 feet altitude on *Pinus ponderosa* and spruce.

### *Psyllopa magna* n. sp.

(Figure 209, B, D)

Length of body, 2.3 mm.; length of forewing, 2.7 mm.; greatest width, 1.1 mm.; width of vertex between eyes, 0.61 mm.; with eyes 0.92 mm. General color yellowish brown to brown; notum faintly striped; facial cones a little lighter; cubital cell of forewing brown. Insect quite large, robust.

Head broad, deflexed, with eyes fully as broad as thorax or broader; vertex almost plain, with a slight foveal impression on each side of median line in rear center; anterior margin strongly elevated above base of cones, slightly emarginate at median line, with anterior ocellus in front. Facial cones moderately large,



parallel to plane of vertex, but deflexed strongly therefrom at base, broadly rounded at apex, not strongly divergent, pubescent. Eyes prominent, dark; ocelli brown. Labrum not large; rostrum short. Antennæ almost as long as body, quite dark.

Thorax board, almost flat, quite coarsely punctuate. Pronotum quite long, with lateral tubercle pronounced; pleurites long, large; forecoxae large. Hind tibiae with small spur at base. Wings large, hyaline, with maculae, rounded at apex, but not broadly so, about two and a half times as long as broad, broadest subbasally; marginal cells subequal, radial cell very large, long; pterostigma small, narrow; with a macula at apex of clavus, one in both marginal cells and at apex of cubital cell; with a long macula covering posterior two-thirds of discoidal cell and extending as far in as base of radial cell.

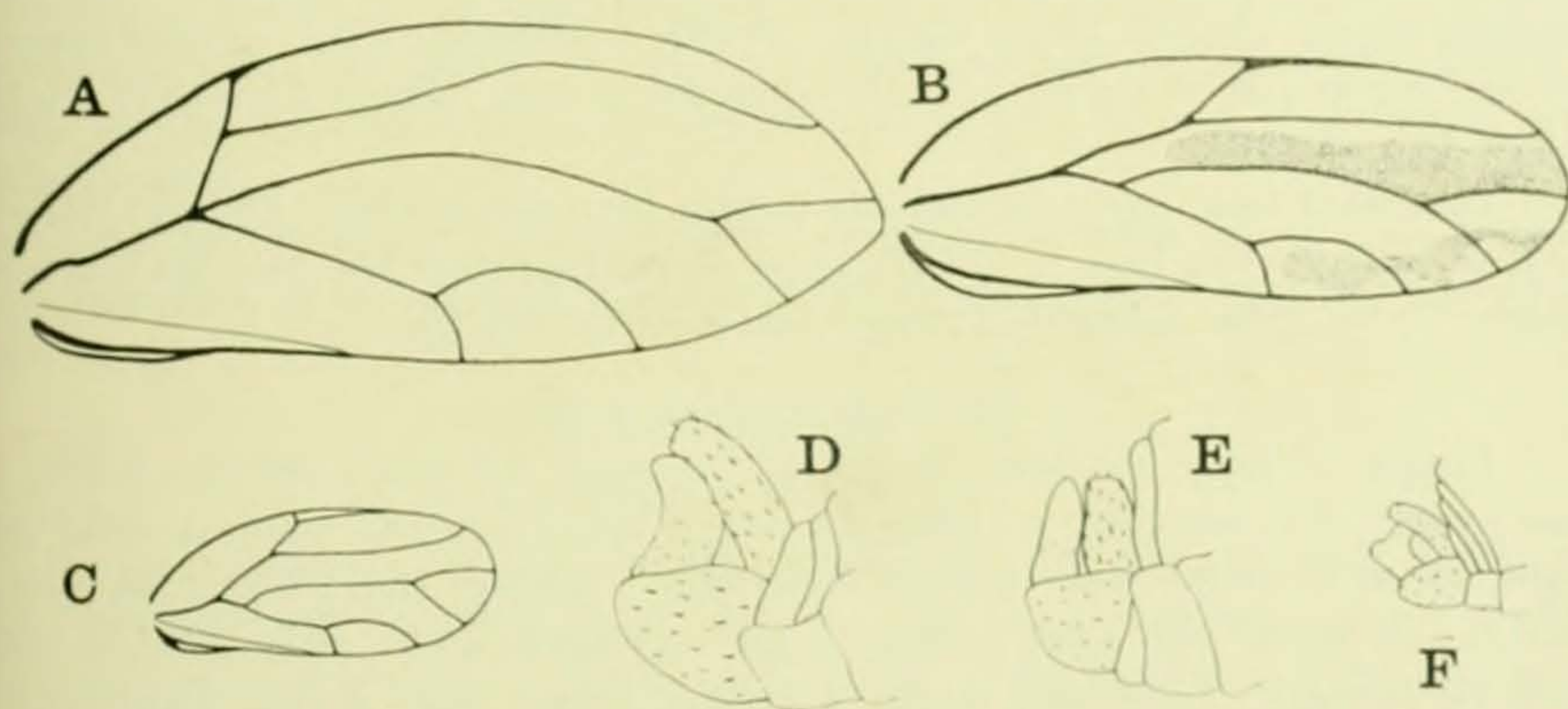


Figure 209. A, *Trioza montana*; B, *Psyllopa magna*; C, *P. floridensis*; D, *P. magna*; E, *T. montana*; F, *P. floridensis*.

*Male*—Abdomen large, robust; genital segment large; claspers short, stout, almost as long as anal valve, very broad at base, converging toward apex; anal valve short, only slightly overreaching claspers, simple, slightly pubescent. *Female*—Genital segment large, darker than rest of abdomen, almost as long as same; dorsal plate slightly longer than ventral; both quite acute at apex.

Described from numerous males and females collected at Woods Hole, Massachusetts, by Prof. T. D. A. Cockerell.

*Psyllopa floridensis* n. sp.

(Figure 209, C, F)

Length of body, 1.2 mm.; length of forewing, 1.3 mm.; greatest width, 0.5 mm.; width of vertex between eyes, 0.27 mm., with eyes 0.41 mm. General color light yellowish to yellowish orange, with whitish stripes or spots on vertex and notum; pronotum with several light spots; dorsulum with median stripe; scutum with three dorsal stripes. Insect very minute.

Head quite strongly deflexed, small, with eyes about as broad as thorax; vertex relatively long, strongly descending, broadly rounded on front margin,



quite deeply impressed discally on each side of median line, emarginate above anterior ocellus. Facial cones very short, broad at base, broadly rounded at apex, not projecting much beyond vertex, almost parallel to it and depressed therefrom, slightly pubescent. Eyes relatively very large, globular; labrum moderately large; rostrum short. Antennæ short, relatively quite stout, not as long as dorsum, black at tip.

Thorax quite strongly arched, not very robust, striped yellow and whitish; pronotum rather short; lateral tubercle small but pronounced; propleurites rather narrow, extending almost subhorizontally toward coxæ. Wings small, quite hyaline, about two and a third times as long as broad, broadly rounded at apex; first marginal cell large; pterostigma small; cubital petiole short.

*Male*—Abdomen short; genital segment small, rounded; claspers relatively large, with a projection near apex extending toward anal valve; anal valve scarcely longer than claspers, simple. *Female*—Abdomen stout; genital segment not as long as rest of abdomen, acutely pointed at apex; dorsal plate very slightly longer than ventral.

Described from one male and one female from Seven Oaks, Florida, collected in May by E. P. Van Duzee. This species resembles rather remotely the European species *Aphalaroida succincta* (Heeg.) but is a true *Psyllopa*.

*Psyllopa ribesiae* n. sp.

Length of body, 2.2 mm.; length of forewing, 2.7 mm.; greatest width, 1.1 mm.; width of vertex between eyes, 0.55 mm.; with eyes, 0.87 mm. General color light brown to rather dark brown, sometimes a whitish pulverulence on notum; darker specimens with light median stripe on scutum and a narrow white stripe midway laterally, remainder dark; dorsulum brown with dorsal light stripe; pronotum lighter with dark maculæ; vertex quite light with a few dark maculæ. Body moderately large.

Head quite strongly deflexed, broad, with eyes fully as broad as thorax, or broader; vertex elevated narrowly on occipital margin; discally impressed quite deeply on each side by a fovea; anteriorly bulging, rounded, emarginate at median line, not acute on each side. Facial cones moderately long, depressed a little below vertex at base, porrect, slightly divergent, subacute to rounded at apex, pubescent. Eyes large, black; ocelli brown, conspicuous; genæ large. Antennæ quite long, almost as long as body, brown, black apically.

Thorax broad, large, rather strongly arched, striped, punctate; pronotum long, with lateral tubercle quite large, rather indistinct on margin; pleurites not large. Wings large, hyaline, broadly rounded at apex; pterostigma quite large; marginal cells large, subequal; veins set biserially with very minute setæ; a dark macula at tip of clavus.

*Male*—Genital segment moderately large, rounded; claspers quite short and slender, simple, well separated to base, acute at apex; anal valve slightly longer than claspers, simple, broadest at base, narrow at apex. *Female*—Abdomen stout; genital segment short, about half as long as rest of abdomen, stout, acute at apex; plates subequal in length.



Described from three males and seven females taken by Ellsworth Bethel at Boulder, Colorado, on leaves of *Ribes longiflorum*. This species somewhat resembles members of the genus *Psylla* in the wing characters, but in others it is very close to the genus *Psyllopa*.

*Psyllaalni trimaculata* n. var.

Body dimensions approximately the same as for the variety *americana* Crawf. Body large; general color yellowish orange, with a large, dark, brownish orange macula on dorsulum cephalad, and two on each side of scutum with a narrow stripe of yellow between; eyes black.

Head and vertex similar to var. *americana*; vertex broadly excavate, short; facial cones of medium length, almost as long as vertex, scarcely differentiated sharply from vertex at base, divergent, quite acutely pointed at apex, scarcely pubescent. Thorax as in other varietal forms. Wings large, hyaline, broadly rounded at apex; venation quite similar; pterostigma narrow. *Female*—Abdomen large; genital segment moderately stout, almost as long as rest of abdomen, quite acute at apex.

Described from two females from Gowanda, New York (E. P. Van Duzee). It is possible that future study will show this to be a distinct species, but hardly probable.

*Trioza montana* n. sp.

(Figure 209, A, E)

Length of body, 2.7 mm.; length of forewing, 3.3 mm.; greatest width, 1.3 mm.; width of vertex between eyes, 0.54 mm.; with eyes, 0.88 mm. General color greenish yellow throughout. Body quite large. This species is very similar in many respects to *Trioza albifrons* Crawf. The characters not mentioned here may be inferred to be the same as in that species.

Vertex discally with a foveal impression on each side, sulcate at anterior extremity; roundly bulging forward over antennal bases, rather whitish to whitish yellow. Facial cones rather short, divergent, subacute at apex, strongly depressed from plane of vertex at base.

Thorax arched; pronotum moderately long; episternum moderately large; forecoxae not large; dorsulum long. Wings large, hyaline, quite acutely rounded at apex, about two and a half times as long as broad; second marginal cell smaller than first; second cubital very long; radius long, curved; apex of wing within second marginal cell.

*Male*—Genital segment relatively small; claspers short, stout, subacute at apex, not strongly arched laterally; anal valve scarcely longer than claspers, simple, roundly acute at apex, broad at base. *Female*—Abdomen large; genital segment distinctly shorter than rest of abdomen; dorsal plate scarcely longer than ventral, quite acute at apex.

Described from three males and six females collected at the summit of Old Baldy, near Claremont, Calif. (Crawford), on foliage of *Pinus ponderosa*, white fir (*Abies*) and a spruce (species unknown to writer). This species, though



resembling somewhat *T. albifrons*, differs from it in the characters of the male genitalia and the form of the wing, and to a less degree in cephalic characters.

***Psyllopa ilicis* (Ashmead) Crawford.**

*Psylla ilicis* (nymph) Ashmead, Can. Ent. XIII (1881), p. 225.

Note—This species has been named *ilicis*, retaining the name given by Ashmead to a larval form which he found producing galls on *Ilex cassine*, in Florida. He describes very briefly the nymphal forms and states that "judging from the size of the pupa, it is probably the smallest species known." Although the food plant of these specimens at hand is unknown, yet it seems, almost beyond doubt, that this is the adult form of the same insect which Ashmead discovered on *Ilex*. It would be very interesting if this fact could be determined by some resident entomologist in Florida, and the same reported so that it might be known. The writer would be very glad to receive specimens which were taken on such a food plant, or similar specimens taken on any food plant.

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The generic name *Cardiaspis* Schwarz in Psyllidæ is preoccupied by Amyot in Hemiptera: *Cardiaspis* Amy., Annales Soc. Ent. de France (1846), p. 158. Also, in Coleoptera, by Saunders (1866). I suggest as a substitute for this, *Cardiaspina* n. n. Schwarz describes it in Proc. Ent. Soc. of Washington, Vol IV. (1896), p. 72.



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