

A NEW SPECIES OF TRIOZA FOERSTER (HOMOPTERA : PSYLLIDAE FROM THE CHATHAM ISLANDS

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SUMMARY

Trioza dentiforceps sp.n. is described from the Chatham Islands.

The cosmopolitan genus ***Trioza*** Foerster is represented in New Zealand by 31 native species. Eight of the 12 species which occur on woody composite food-plants are on species of the genus ***Olearia*** Moench. The new species described here is known only from the Chatham Islands and is the first of the family to be recorded from there. It is distinguishable from all other native species described from New Zealand (Ferris and Klyver, 1932; Tuthill, 1952) by the dorsally hooked apex of the clasper in the male and the strongly rounded ventral margin of the ventral valve in the female.

Trioza dentiforceps sp.n. (Figs. 1, 2, 3)

ADULT: Length (to tip of folded wings):

male 2.8 - 3.5 mm; female 3.2 - 3.5 mm.

Teneral specimens of both sexes sometimes creamy-white, without pigmentation except black tip on rostrum; fully-pigmented male with brown vertex and thorax, lateral margins of thorax black; femora light-brown, tibiae paler; abdominal tergites dark-brown but with a small paler median area, except last pre-genital segment which also has a black posterior margin; sternites with a much wider pale median area; abdominal tergites and sternites sometimes distinctly divided into two widely-separated pigmented lateral sclerites; female with vertex seldom or never brown, thorax not more than narrowly brown-margined, abdominal terga and sterna nearly always divided and less strongly pigmented than male. Head width equal to or slightly narrower than that of mesothorax; vertex with median groove, the halves flat and sub-quadrate, the convex anterior margins meeting in a median emargination; genal processes white, tapering, $\frac{2}{5}$ as long as basal width, $\frac{4}{5}$ as long as vertex, rounded apically; eyes red, semi-circular, inner margin straight, $\frac{1}{5}$ as wide as head; antennae $1 \frac{4}{5}$ as long as head-width. Fore wing of type

(Fig. 1) 2♂ as long as wide, costal margin slightly convex, dorsal margin nearly straight, apex rounded; hyaline, points present on membrane but non-pigmented and strongest behind Cu; Rs long and sinuate, M₁ ending at apex, medial cell very slightly narrower than cubital cell. Hind wing 7/10 length of forewing, 3 times longer than wide, points more strongly developed than on forewing, veins marked by a single row of stronger points. Metatibia with the usual serrate basal carina and short black apical spines, three inner and one outer.

Trioza dentiforceps sp.n. (scale lines = 0.2 mm).

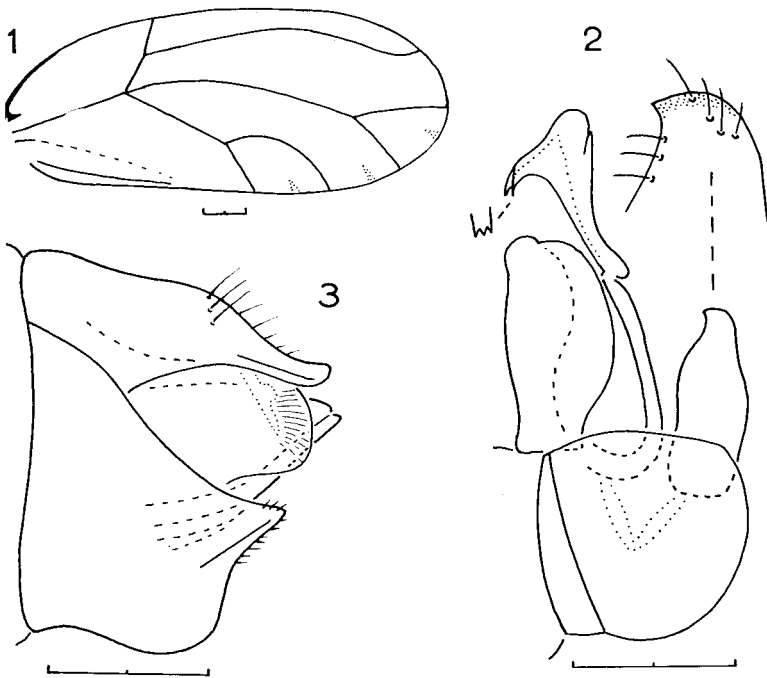


Fig. 1. Forewing.

Fig. 2. Male genitalia, lateral.

Fig. 3. Female genitalia, lateral.

Male genitalia (Fig 2): In lateral view genital segment sub-triangular, anterior and dorsal margins straight, posterior margin rounded, depth sub-equal to length of proctiger. Proctiger (lateral view) twice as long as wide, dorsal margin slightly convex at mid-length, passing into low rounded anal lobe, ventral margin broadly rounded from anal lobe and narrowed basally, setose distally and ventrally, hollowed to $\frac{1}{2}$ width in median ventral line. Clasper (lateral view) 3 times as long as wide, dorsal and ventral margins diverging to rounded convexities about mid-length, thence tapering to apex, the dorsal margin becoming strongly concave and forming a short pointed dorso-apical hook, the apex narrowly rounded, and dark brown to black; in caudal view clasper elongate triangular, without mesal lobes or teeth. Aedeagus jointed about mid-length, basal half as long as proctiger, J-shaped, parallel-sided; distal half $\frac{4}{5}$ as long as base, curved proximally, widening to apex, with sub-apical ventral lobe, apex rounded; dorsally with a narrow tapering curved retrograde extension at 45° dividing apically into two trifid points from which the convex margin of a membranous area passes to the base of the distal half.

Female genitalia (Fig. 3): In lateral view dorsal valve with apex sub-parallel sided, blunt apically, the dorsal margin concave, a convexity with long hairs caudad of the anal area, an elongate triangular longitudinal sclerite laterad of the anal area; ventral valve trapezoidal, the dorsal angle acute, apex symmetrically acute, much shorter than the dorsal valve, ventral margin prominently rounded and almost right-angled at mid-length. Ovipositer with acute apex of medium width, as long as dorsal valve.

NYMPH (last instar). Length 1.2 mm, width 0.8 m.m.

Colour brown, antennal and tarsal sheaths darker. Shape broadly oval. Margin with continuous series of closely set apically-truncate sectasetae. Wing sheaths extending anteriorly to half length of head. Surface of head and thorax, including wing sheaths, with scattered short conical setae, abdomen with transverse rows of similar setae.

EGG. Length 0.23 mm, width 0.06 mm, colour creamy-yellow.

Type: Holotype male (slide mount); Waitangi, Chatham Islands, 4.XI.59, L. J. Dumbleton. In Entomology Division, D.S.I.R., Nelson. **Paratypes:** 7 males, 6 females: same data. **Food-Plant:** *Olearia traversi* (F. Muell.), Akeake.

REFERENCES

- FERRIS, G. F. and KLYVER F. D., 1932: Report on a collection of Chermidae (Homoptera) from New Zealand. **Trans. Proc. N.Z. Inst.**, **63**: 34-71.
- TUTHILL, L. D., 1952: On the Psyllidae of New Zealand (Homoptera). **Pacif. Sci.**, **6**: 83-125.