Nymphs of *Cymus novaezelandiae* (Heteroptera: Lygaeidae)

M. B. Malipatil

Zoology Department, Victoria University of Wellington, Private Bag, Wellington, New Zealand

The 3rd-, 4th-, and 5th-instar nymphs of *Cymus novaezelandiae* Woodward are described; the dorsal aspect of the 5th instar is illustrated.

INTRODUCTION

*Cymus novaezelandiae*, originally described from New Zealand only (Woodward 1954), has since been recorded from south-western Australia by Hamid (1970) and by Slater (1976), who also discussed its biology. *C. novaezelandiae* is the only species of subfamily Cyminae known from New Zealand.

Nymphs of *C. novaezelandiae*, described in this paper, agree with those known of other species of *Cymus* Hahn and of the genera included in tribe Cymini—at least *Nesocymus* Kirkaldy, *Pseudocymus* Van Duzee, *Arphnus* Stål, and *Cymus* (Slater 1952, 1963)—in having the pronotum and mesothoracic wing pads punctate. This character separates the Cymini from the Ninini (at least *Cymoninus* Breddin and *Ninus* Stål), which lack these punctures (Slater 1963).

The dimensions given in Table 1 are based on specimens preserved in 75% ethanol. All specimens examined are in the New Zealand Arthropod Collection, Entomology Division, Department of Scientific and Industrial Research, Auckland.

FIFTH INSTAR (Fig. 1)

Body elliptical in outline. Head, pronotum, thoracic pleura, and mesothoracic wing pads finely punctate.

Generally testaceous or reddish brown. Fourth antennal segment (except base and apex) uniformly pitchy black. Eyes brownish black. Distal end of 2nd and most of 3rd antennal segment, apex of 4th labial segment, and distal segment of tarsi blackish. Extensive patches on dorsum of head between eyes, calli, a spot on either side of midline near base of adult scutellar area, and abdominal scent gland auricles dark brown. Coloration varies as in adults (see Woodward 1954, Slater 1976). (Buller outlet specimen generally darker; femora, tibiae, and proximal tarsal segments also brownish black.)

Fig. 1. *Cymus novaezelandiae*, ♀ 5th-instar nymph.
Head large, broad above; tylus exceeding juga; antennifers acutely produced on sides of antennal bases; subocular suture indistinct. Bucculae flap-like, short, not extending posteriorly beyond anterior margin of eye. Eyes large, prominently projecting. Antennae short, finely pubescent; 1st segment stout, narrowing slightly distad; 2nd short; 3rd longest, slenderest; 4th fusiform, subacute apically. Labium nearing hind coxae; 1st segment ending slightly before base of head. Labrum slightly longer than 1st labial segment.

Pronotum trapezoidal; anterior margin nearly straight; posterior margin slightly concave in middle; sides nearly straight, slightly carinate; collar and constriction between lobes indistinct. Mesothoracic wing pads large, broad, with narrowly carinate sides, extending to beyond middle of abdominal tergum III. Legs short, stout, covered with short, pale pubescence; fore femora as incrassate as middle and hind femora; tibiae about as long as their femora; distal tarsal segments longer than proximal segments.

Abdomen with intertergal sutures nearly straight. Abdominal outline scalloped; lateral margins of each segment slightly convex in middle. All spiracles dorsal (i.e., including those on segments VII and VIII). Scent gland openings between terga III–IV and IV–V subequal in width. Submedian trichobothria on sternum III. Trichobothria of sterna V and VI represented by one brown spot each, nearer to posterior margin of sternum.


FOURTH INSTAR
General coloration similar to that of 5th instar but much paler. Wing pads extending to anterior margin of abdominal tergum II. Abdominal margins more scalloped than in 5th instar.

LOCALITY. Buller outlet, as above.

THIRD INSTAR
Generally paler than 4th instar. Body more elongate, more linear than in 4th and 5th instars. Labium reaching hind coxae.


ACKNOWLEDGMENTS
I thank Dr L. L. Deitz (Entomology Division, DSIR, Auckland) for the loan of material; and Professor J. A. Slater (University of Connecticut, Storrs) for suggestions incorporated in the manuscript.

REFERENCES


