

GENUS *SETODES* (RAMBUR) NEW TO AUSTRALIAN FAUNA
(TRICHOPTERA: LEPTOCERIDAE)

BY ARTURS NEBOISS

Curator, Department of Entomology, National Museum of Victoria,
71 Victoria Crescent, Abbotsford 3067

Abstract

The genus *Setodes* Rambur is recorded from Australia for the first time, and a new species – *Setodes bracteatus* is described from North-Queensland.

Introduction

The genus *Setodes* Rambur constitutes a group of small, delicate insects with a wing span 10-15 mm, with almost a world wide distribution (Schmid, 1980). The differences between *Setodes* and *Leptocerus* Leach were established and their respective type species formally designated by Milne (1934). However, placement of many species is still in doubt (Fischer 1966 & 1972). The presently described Australian species closely resembles *Setodes niveolineata* Kimmins (1962) from Kokoda, New Guinea. If at any future date the present-day generic concept of *Setodes* is revised and generic separation takes place, these two species undoubtedly will remain together in one generic group.

Setodes bracteatus described in this paper, together with a group of other species shown by Neboiss (1981) is restricted to the rainforest areas of North Queensland as delineated by Kikkawa et al. (1981) and does not extend further south than the estimated south-eastern boundary of Torresian province near Townsville (Neboiss, 1981).

The present study is based on material now deposited in the institutions indicated in the text by the following abbreviations:

ANIC—Australian National Insect Collection, Canberra.

BM— British Museum (Natural History), London.

NMV— National Museum of Victoria, Melbourne.

QM— Queensland Museum, Brisbane.

Genus *Setodes* Rambur, 1842

Setodes Rambur, 1842, p. 515; Ulmer, 1907 p. 145; 1951 p. 421. Marlier, 1962 p. 194.

Type species: *Setodes punctella* Rambur 1842 = *Phryganea viridis* Fourcroy, 1785. Subsequent designation by Milne, 1934.

Generic diagnosis:

Head and thorax clearly marked with silvery-white, longitudinal lines which extend onto the wings in closed position. Antennae long, about twice the length of wings, in males slightly longer than in females, segment 1 enlarged, ovoid; segment 2, short, globular; segment 3 and subsequent segments slender with fuscous annulations. Maxillary palpi (Fig. 2) slender, 5-segmented, segments 4 and 5 granular in appearance, flexible. Spurs 0:2:2.

Wing venation similar in both sexes. Anterior wings long, narrow, lanceolate, apex acute, apical forks 1 and 5 present, discoidal cell short, thyridial cell long and narrow; posterior wing narrower than anterior, acute apically, costal margin obtusely angled, Rs incomplete at base, discoidal cell absent.

***Setodes bracteatus* sp. n. (Figs. 1-9)**

This Australian species is characterized by having four silvery stripes on thorax. All other diagnostic features are found in the male and female genitalia.

Male genitalia (Figs. 4-6)

Dorsal section of segment 9 very short, ventral section long, posterior margin broadly triangular in ventral view; superior appendages short, dorso-ventrally flattened; tergite 10 with lateral margins gradually curved to bluntly

pointed apex, slightly down-turned distally. Phallus in lateral view (Fig. 3) broad at base, apex bluntly pointed and arched downward, a pair of transparent hook-like processes on dorsal margin; a pair of strong downwardly-directed parameres arises dorso-basally, apices of which are curved and pointed; a pair of slender processes arise on the inner surface, their length varies between individuals. Inferior appendages short, three-branched; upper basal branch laterally flattened, inner surface covered with long bristles, the postero-ventral angle produced into a digitiform process; the two lower branches curved, apices pointed, directed mesally.

Female abdomen (Figs. 7-9) with segment 9 short, laterally with a row of sparse marginal bristles dorsally a pair of short lobes, bearing a few short setae; segment 10 extended distally to a slender digitiform process; lateral lobes rather large, elongate, apically incised, lower lobe being the smallest with several long bristles at apex. Ventral plate broad, apically rounded, mesally produced to a short central projection and covered with stout scattered spicules.

Length of anterior wing: ♂ ♀ 4.5-5.5 mm.

Type material: Holotype ♂ Gordon Creek, Iron Range, Cape York Peninsula, North Queensland, 18 Apr.-18 June 1975, M. S. and B. J. Moulds (NMV, T-7479); paratypes 50 ♂ 20 ♀, collected with holotype (ANIC, BM, NMV; QM); 10 ♂ 3 ♀, same loc., 2-9 June 1971, E. F. Riek (ANIC, NMV) (specimen PT-1156 ♀ figured); 9 ♂ 2 ♀, same loc., 27 Apr.-4 May 1973, S. R. Monteith (ANIC); 4 ♂ 1 ♀, Upper Daintree, 11 June 1971, E. F. Riek (ANIC, NMV) (specimen PT-1139 ♂ figured).

Other material examined: **North Queensland**—1 ♀, Gordon Creek, Iron Range, 16 Oct. 1974, M. S. Moulds (NMV); 1 ♀, Middle Claudie River, Iron Range, 2-9 Oct. 1974, M. S. Moulds (NMV); 1 ♂, Mossman, 12 June 1971, E. F. Riek (ANIC); 2 ♂, Lacey's Creek, Mission Beach, 13 May 1980, I. D. Naumann and J. C. Cardale (ANIC); 2 ♂ 1 ♀, Downfall Creek, Tinaroo Falls Dam, 22 May 1980, I. D. Naumann and J. C. Cardale (ANIC); 1 ♂, Little Mulgrave River, 28 June 1971, E. F. Riek (ANIC); 1 ♂, 40 km W of Tully, 31 May 1971, E. F. Riek (ANIC); 1 ♀, Rocky Creek, Tully, 1

May 1979, A. Wells (NMV); ♂ ♀ (numerous), Alice River, Hervey Range Road, 25 km W of Townsville, 9 May 1979, A. Wells (NMV).

Distribution: North Queensland.

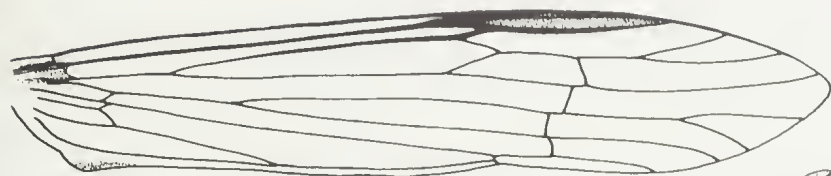
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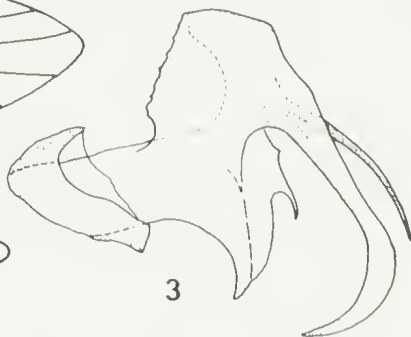
Fig. 1-9. *Setodes bracteatus*, sp. nov., male, 1-6, 1, wings; 2, maxillary palp; 3, phallus, lateral; 4, 5, 6, genitalia, lateral, dorsal, ventral; 7, 8, 9, female genitalia, lateral, dorsal, ventral.



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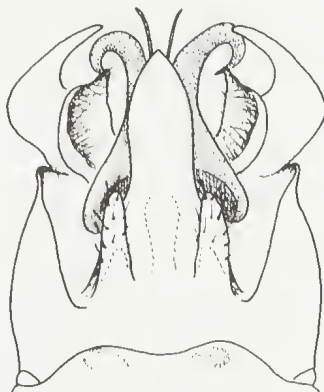
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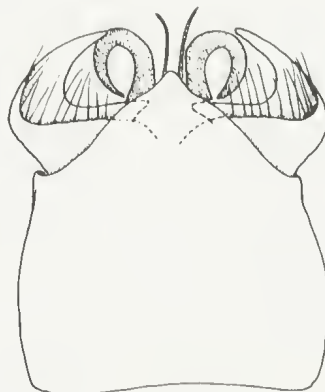
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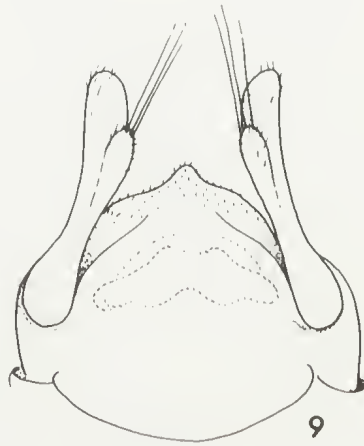
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