TWO NEW SPECIES OF OXYETHIRA EATON (HYDROPTILIDAE: TRICHOPTERA: INSECTA) FOR TASMANIA

by Alice Wells

(with one text-figure)


Two new species collected recently from the World Heritage Area of Tasmania, are described in the microcaddisfly genus Oxyethira (Hydroptilidae: Trichoptera: Insecta). In addition, new records are given for Tricholeiochiton pennyae, biogeographically one of the more enigmatic Tasmanian hydroptilid species, and for Oxyethira tasmaniensis, both also known only from the Tasmanian World Heritage Area.

Key Words: Tasmanian Trichoptera, new species, Hydroptilidae.

INTRODUCTION

Survey work in the Tasmanian World Heritage Area of southwestern Tasmania, using a combination of sweep-netting and pitfall-trapping, continues to yield new Trichoptera species, and to provide further data on others. Newly described here are two species of Oxyethira Eaton, O. driesseni and O. torquata, both of which conform in general features with members of subgenus Trichoglene.

Only two other hydroptilid species were taken with these new species. Both Oxyethira (Trichoglene) tasmaniensis Wells and Tricholeiochiton pennyae Wells were described from the World Heritage Area (Wells 1998) and, given the quite intensive collecting effort elsewhere in Tasmania, it is highly probable that all four species reported here are restricted to the World Heritage Area. Moreover, T. pennyae may exhibit behaviour atypical of hydroptilids. The bodies of both males and females of this species are unusually sturdy looking, and generally far more sclerotised than is normal in the family. These features, coupled with the prevalence of this species in pitfall traps, suggest that T. pennyae may be far less able, or less likely, to fly than most other microcaddisflies. Given this possibility and the curious occurrence of this species so far south, with its closest congener in northeastern Queensland (Wells, 1998), this species warrants further investigation.

Depository institutions are abbreviated as follows: ANIC – Australian National Insect Collection, Canberra; NMV – Museum Victoria, Melbourne. Distribution refers to the provinces as used by Neboiss (1977).

Oxyethira (Trichoglene) driesseni
Wells, 2002
Fig. 1A–C

Material examined
Holotype ♂ Tasmania, Lake St Clair, Site RCE young, 17 Jan. 2000, ANIC. Paratypes: 3♂ Tasmania, Lake St Clair, Site RCW old, 17 Jan. 2000, ANIC, NMV (1♂); ♂ Lake St Clair, Site SCRW, 25 Nov. 2000, ANIC.

Length of forewing: ♂ 2.0–2.2 mm. Resembling Oxyethira columba (Neboiss, 1977) and O. mienica Wells, 1981 in general form of male genitalia, but clearly distinguished from both by the greatly developed dorso-lateral processes tipped by an incurved hook above a tuft of setae and by tergite X, which is apically acuminate.

Male genitalia (Fig. 1A–C) segment IX concave apico-ventrally, produced posteriorly at dorso-lateral angles to form two processes, the most ventral of which is hooked apically and bears a tuft of setae subapically; dorsal plate (tergite IX) tapered sharply towards acuminate apex, a group of four papillae subapically on dorsal surface; inferior appendages reduced to small lobes, bearing a pair of setae apically; subgenital plate about as long as inferior appendages, membranous, with a long seta at each apico-lateral angle; phallus extremely long, apically expanded and bearing a lateral spine.

Etymology
Named for Michael Driessen, whose collecting in the Tasmanian World Heritage Area has made a considerable contribution to knowledge of the Tasmanian fauna.

Distribution
Tasmania, C province. Known only from type locality. Tasmanian endemic.

Oxyethira (Trichoglene) torquata
Wells, sp. nov.
Fig. 1D–F

Material examined
Fig. 1 — (A–C) Oxyethira (Trichoglene) driesseni sp. nov., male genitalia: A, ventral; B, lateral; C, dorsal views. (D–F) Oxyethira (Trichoglene) torquata sp. nov., male genitalia; D, ventral; E, lateral; F, dorsal views. Abbreviations: ae, aedeagus; dpl, dorsal plate; inf app, inferior appendages; lat IX, lateral lobes of abdominal segment IX; sp, lateral spine on dorsal plate.

Etymology
Named for the twisted form of the lateral processes of dorsal plate.

Distribution
Tasmania, Central province. Known only from type locality. Tasmanian endemic.

Oxyethira (Trichoglene) tasmaniensis Wells


Holotype ♀ Tasmanian World Heritage Area, Southwest National Park, Melaleuca, 43°25′10″S 146°08′46″E, (ANIC).
Material examined

Distribution
Tasmania, Central province. Tasmanian endemic.

Tricholeiochiton pennyae Wells

*Tricholeiochiton pennyae* Wells 1998: 82

Holotype ♂ Tasmanian World Heritage Area, Southwest National Park, Melaleuca, 43°31’00”S 146°09’41”E, (ANIC).

Material examined

Distribution
Tasmania, Central province. Tasmanian endemic.

REFERENCES


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