

THE GENUS *LENOPHILA* (DIPTERA: PLATYSTOMATIDAE)

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SUMMARY

The relationships of the endemic Australian genus *Lenophila* Guérin (= *Celetor* Loew) are discussed, together with some details of the subfamily classification of the Platystomatidae. It is concluded that *Lenophila* is a rather isolated genus with some resemblance to the Scholastinae.

A key to the 6 species of *Lenophila* is given. *L. achilles*, *L. secta*, *L. danielsi*, and *L. nila* are described as new species.

Some notes are given on the biology of the species, including the apparent larval association with *Eucalyptus* in *L. dentipes* and the adult and larval association with *Xanthorrhoea* in other species.

The alimentary system and the internal reproductive systems of male and female are described.

INTRODUCTION

Lenophila is a small endemic Australian genus of flies belonging in the family Platystomatidae of the superfamily Tephritoidea. Representatives of this family were formerly included in the Otitidae (Ortalidae) but modern practice is to separate the two families rather widely within the superfamily (see Steyskal, 1961, McAlpine, 1973). The genus was until recently known as *Celetor*, but Munro (1959) has shown that *Lenophila* is the oldest available name.

Schiner (1868) erroneously recorded two species of *Lenophila* from New Zealand under the names *Lamprogaster strigipennis* and *Lamprogaster caerulea*. This mistake is based on wrongly labelled specimens of *L. dentipes*, *L. caerulea*, and *L. achilles* collected by the Novara expedition and still preserved in WM.

These flies have a strong superficial resemblance to certain true fruit-flies (family Tephritidae), particularly *Procecidochores*, *Ceratitella*, and other *Ceratitis*-like forms. This is due to similarity in body form (particularly the form of the female abdomen) and in wing markings. The deceptive resemblance caused Guérin-Ménéville to give the inappropriate name *Lenophila*, which means fruit-loving. The species of *Lenophila* may be distinguished from these tephritids by the absence of a break in the costal wing vein where it joins the subcosta, by the absence of an acutely produced lobe to the anal cell (cell CuP) (though the cell itself may be acute at the posterodistal angle), and by the absence of incurved lower fronto-orbital bristles on the head. They may be distinguished from other Australian

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