

## Review of the Australian Signal Flies of the Genus *Microepicausta* (Diptera: Platystomatidae)

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**ABSTRACT.** Three Australian species of the platystomatid genus *Microepicausta* Hendel, 1914, are identified and keyed. Available information on their distribution and habitat is recorded. *Elassogaster terrae-reginae* Malloch, 1928, is a new junior synonym of *Microepicausta gracilis* Hendel, 1914. The following Australian species are described: *Microepicausta fenestra* sp. nov., *Microepicausta wirthi* sp. nov.

### Introduction

In listing material, the following collectors' names are abbreviated to the initials: R. A. Barrett, A. Daniels, G. Daniels, R. Eastwood, G. F. Hill, Z. Liepa, D. K. McAlpine, R. Meier, K. R. Norris, J. Walsh, T. A. Weir.

The following abbreviations refer to institutions holding collections:

AM	Australian Museum, Sydney
ANIC	Australian National Insect Collection, CSIRO, Canberra
MNM	Hungarian Natural History Museum, Budapest
QM	Queensland Museum, Brisbane
SPHTM	School of Public Health and Tropical Medicine (platystomatid collection now transferred to AM)
USNM	National Museum of Natural History, Washington

Morphological terminology here used follows that of McAlpine (1973).

### Systematics

#### Genus *Microepicausta* Hendel

*Microepicausta* Hendel, 1914a: 52–54. Type species (original designation) *M. gracilis* Hendel.

**Description and delimitation.** See Hendel (1914a) and further notes by McAlpine (2001: 152). The genus should be identifiable from the key to platystomatid genera in McAlpine (2001: 121–130). The species superficially resemble those of *Plagiostenopterina* Hendel and *Elassogaster* Bigot, but the males have a single hollow terminal filament on the aedeagus, while apparently all related genera have two (rarely three) terminal filaments, each with apical gonopore.

Evenhuis (1989:493) listed six Australasian species of *Microepicausta*. His two included Australian species, *M. gracilis* Hendel and *M. terraereginae* (Malloch) are now considered to be synonyms, and *M. evitta* (Malloch) from the Bismarck Archipelago is now placed in the genus *Par* McAlpine, 2001. The known Australian species, treated below, live on the northern and eastern Australian coasts as far south as Tasmania, with one record for coastal South Australia. Other species that I have seen range from West New Guinea to New Ireland and the Solomon Archipelago.

**Keywords:** *Microepicausta*; Platystomatidae; Diptera; taxonomy

**Taxonomic registration:** (LSID publication) <http://zoobank.org/7FA73A85-55D2-429B-AD7D-817D50B49768>

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