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The dorsal abdominal glands and the higher classification of the Phoridae (Diptera)

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Abstract

A brief historical review of the proposed subfamilies and tribes within the Phoridae is provided. The value of the position of the female dorsal abdominal glands in the Metopininae is highlighted. It is proposed that these discharge between tergites 4 and 5 in the thus newly diagnosed Metopinini and between T5 and T6 in the resurrected tribe Gymnophorini, which embraces the Beckerinini of previous authors plus the Megaseliini, which are both synonymised with the newly diagnosed Gymnophorini. This tribe, therefore, now includes more than half the known species of Phoridae. The genus *Aenigmatopoeus* Schmitz is transferred from the Aenigmatiinae to the Metopininae, Metopinini, thus further undermining the presumed monophyly of the Aenigmatiinae, which may be just a polyphyletic assemblage with convergently similar flightless females.

Key words: Diptera, Phoridae, review, subfamilies, tribes, Metopininae, Metopinini, Gymnophorini, new data, revised diagnoses

Introduction

The scuttle flies (Diptera, Phoridae) are a large and diverse family of small flies with a greater range of larval habits than any other family of insects. Currently about 240 genera are recognised, but many are only known in one sex. Furthermore, because of sexual dimorphism, which may be extreme in genera whose females are flightless, the subsequent discovery of the missing sex has sometimes revealed that the males and females were both previously known but had been assigned to different subfamilies, tribes or even families (e.g. the flightless stage females of the Termitoxeniinae). This highlights the problems encountered when trying to divide this family into subfamilies and tribes.