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Rhinophoridae are a small family of calyptrate flies commonly known as "woodlouse flies" due to their unique parasitoid habit of developing inside their isopod hosts (Oniscidea). Beside this peculiarity, the adult stage lacks unique family autapomorphies, sometimes making their identification challenging. However, their larvae are highly apomorphic and peculiar due to their unusual locomotive behaviour of leach-like crawling or even somersaulting.

Until recently, woodlouse flies were considered an Old World group, with a peak in species diversity in the Turano-Mediterranean area. However, recent discoveries of new taxa in the tropics suggest that this was due to inadequate sampling of the Southern Hemisphere faunas. Confirming this lack of knowledge, four new genera and five new species are described here from both the Old and New World tropics, including a remarkable species endemic to the Mascarene Islands.

Recent phylogenetic studies are helping us to better understand rhinophorid boundaries, and the family circumscription is adjusted accordingly. During the last decade, several taxa have been either included or excluded, and others have been proposed as new to science, making the compilation of this world catalogue highly needed. A richly illustrated key to the world woodlouse fly genera is provided.

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THE WORLD WOODLOUSE FLIES (DIPTERA, RHINOPHORIDAE)

Pierfilippo Cerretti, Davide Badano, Silvia Gisondi, Giuseppe Lo Giudice, Thomas Pape



Axinia lucaris Colles, 1994

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