

***Curiosimusca*, gen. nov., and three new species in the family Aulacigastridae from the Oriental Region (Diptera: Opomyzoidea)**

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Abstract

A new genus, *Curiosimusca*, and three new species (*C. khooi*, *C. orientalis*, *C. maefangensis*) are described from specimens collected in the Oriental Region (Malaysia, Thailand). *Curiosimusca* is postulated to be the sister group of *Aulacigaster* Macquart and for the present is the only other genus included in the family Aulacigastridae (Opomyzoidea). Morphological evidence is presented to document our preliminary hypothesis of phylogenetic relationships.

Key words: Aulacigastridae, Diptera, systematics, Oriental Region

Introduction

While preparing a monograph on the family Aulacigastridae (Rung & Mathis in prep.), we discovered several specimens of enigmatic flies from Malaysia and Thailand. The specimens from Malaysia had been identified and labeled as “possibly Aulacigastridae.” Our subsequent study of these specimens has revealed them to be the closest extant relatives of *Aulacigaster* Macquart, which until now has been the only recently included genus in the family Aulacigastridae. The primary purpose for this paper is to describe these curious flies as a new genus, only the second genus for the family Aulacigastridae, and to describe its three included new species from the Oriental Region. As background and to provide context for the descriptions, we present a brief historical review and diagnosis for the family Aulacigastridae. We also present evidence, all morphological, to substantiate a hypothesis of phylogenetic relationships.

The Aulacigastridae are a relatively small family of flies that are associated with slime fluxes of deciduous trees (Robinson 1953, Cole & Streams 1970, Davis & Zack 1978,