Five new species of Tachydromiinae (Diptera: Empididae s.l.) from New World Tertiary ambers

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Abstract

Five new species of Tachydromiinae (Empididae s.l.) are described, four from Mexican amber (Chaetodromia pulchra sp. nov., Drapetis dissentis sp. nov., Micrempis brevis sp. nov., Stilpon mexicanus sp. nov.) and one from Dominican amber (Chersodromia dominicana sp. nov.). These are the first tachydromiine species described from New World Tertiary (Oligocene-Miocene) ambers. Thirty-two Tertiary fossil species of Tachydromiinae are now known worldwide.

Key words: Empidoidea, Tachydromiinae, systematics, Mexican and Dominican amber

Introduction

Empididae s.l., commonly called balloon flies or dance flies, are found worldwide, but are most frequently encountered in temperate and montane regions. The family consists of over 3,000 species exhibiting a wide array of size and form. Most adults and all known larvae are predaceous on other insects. Adults of extant forms can be found on trees, in vegetation, or on the surface of water and humid environments. Larval habitats range from aquatic to terrestrial and include such substrates as soil, leaf litter, dung, and rotten wood. Members of this family are frequently found in amber inclusions as well as sedimentary deposits and are one of the more generically diverse families represented in the fossil Diptera record. However, much undetermined material exists in collections awaiting description.

The subfamily Tachydromiinae is one of the most abundantly represented groups of Empididae s.l. found in both Tertiary and Mesozoic ambers (e.g. see Grimaldi & Cum-