Four new genera of Nearctic Cecidomyiidae (Diptera) for species previously incorrectly placed

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Abstract

Four new genera belonging to the tribe Dasineurini (Diptera: Cecidomyiidae: Lasiopteridi) are described for previously incorrectly placed species. The new genera are: Cembrotia Gagné, type species Janetiella coloradensis Felt; Cupressatia Gagné, type-species Janetiella siskiyou Felt; Strobilotia Gagné, type species Phytophaga carpophaga Tripp; and Rhizocecis Gagné, type species Cecidomyia rhois Coquillet. Resulting new combinations are: Cembrotia coloradensis (Felt), Cupressatia siskiyou (Felt), Cupressatia thujae (Hedlin), Strobilotia carpophaga (Tripp) and Rhizocecis rhois (Coquillet).

Key words: gall midges, conifers, Lasiopteridi, Dasineurini, Ledomyiini

Introduction

Four new genera are described in this paper to provide names for species that were originally placed in catchall genera and lately mostly assigned to unplaced Cecidomyiinae in Gagné (2010). The descriptions are made at this time for eventual inclusion in a work in progress on the plant-feeding gall midges of North America. Three of the genera serve to place economically important species that feed on conifers, the fourth places a species that forms aerial rootlet galls on poison ivy. All four new genera belong to the supertribe Lasiopteridi, placed there because they share the following characters: an irregular number of antennal flagellomeres, those of the male with a single node and closely appressed circumfila; gonocoxal lobes that closely sheath the aedeagus; and the absence of sensilla on the aedeagus.

Material and methods

The descriptions that follow are based on the type series or the parts thereof of the designated type species that are in the insect collection of the National Museum of Natural History in Washington, DC (USNM). Additional specimens in the USNM of each of the species were also studied. Morphological terminology follows usage in McAlpine et al. (1981).

Cembrotia Gagné, new genus

Figs. 1–5

Diagnosis. Adults of Cembrotia can be separated from all other genera of the supertribe by the following combination of characters: C broken immediately posterior to junction with R₅; R₅ reaching C slightly anterior to wing apex; empodia much longer than tarsal claws; tarsal claws with basal tooth; second through seventh abdominal tergites of both sexes with posterior setae continuous across sclerite and lateral setae present; gonocoxal mediobasal lobe not prominently subdivided into dorsal and ventral lobes, blunt apically; gonostylus bulbous, widest near midlength,