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***Haruchlora maesi*, a new emerald moth genus and species from Mesoamerica (Lepidoptera, Geometridae, Geometrinae)**

JAAN VIIDALEPP^{1,3} & AARE LINDT²

¹Estonian University of Life Sciences, Kreutzwaldi 5D, EE-50104 Tartu, Estonia. E-mail: jaan.viidalepp@emu.ee

²Estonian Museum of Natural History, Lai St 29A, EE-00001 Tallinn, Estonia. E-mail: aare@loodusmuuseum.ee

³Corresponding author

Abstract

A new genus and species of Neotropical emerald geometrid moths, *Haruchlora* Viidalepp & Lindt, **gen. nov.**, and *Haruchlora maesi* Viidalepp & Lindt, **sp. nov.** are described. The new genus differs from all other New World Geometrinae genera in having a bifid uncus, in characters of the pregenital segments of the male abdomen, and in the male genitalia.

Key words: *Haruchlora*, new genus, new species, taxonomy, Geometridae, Nicaragua, Costa Rica

Introduction

There are 38 Neotropical genera of the subfamily Geometrinae recognised and redescribed by Pitkin (1996). The Neotropical genera hitherto described have either a reduced uncus or one with a digitate apical process, except for some species of *Tachyphyle* Butler and *Dichordophora* Prout. Both genera have green wings with almost straight white antemedial and postmedial lines. *Tachyphyle* is characterised by hind legs on which the proximal spurs are reduced and shifted to the base of the distal spurs. However, the species described below is likely mentioned twenty years ago by Pitkin (1993: 56) in her review of *Lissochlora* from Costa Rica as “one unidentified species (genus unknown)”, concerning a moth with a bifid uncus. Unfortunately the specimen mentioned by L. Pitkin was not examined because its current deposition is unknown.

When preparing the slide no. 8311 from a moth from Nicaragua described below, it was initially considered to be a teratological *Lissochlora* specimen (Viidalepp *et al.* 2010), but later an additional series of identical specimens was detected among moths collected in Costa Rica by Aare Lindt. We associate this species with the tribe Nemoriini according to its wing markings and characteristics of the antennae, the build of male hind legs and the structure of the pregenital segment, and the venation of wings.

The tribe Nemoriini was recognised by Ferguson (1969, 1985) as an American genus group and re-defined (as a subtribe Nemoriiti) by Holloway (1996) to include Indo-Australian genera of the Ochrognesiini Inoue, 1961. The shape of the eighth sternite of the male abdomen, bilobed at its posterior edge, is the most consistent feature of the tribe (Holloway 1996).

Pitkin (1996) listed 14 genera of nemoriines. In the keys of geometrine genera (Pitkin 1993: 48–51; 1996: 324–327), the comparison of external characters of the species described below, leads to the *Lissochlora albociliaria* species group, as the ante- and postmedial lines on wings are replaced by pairs of grey and white vein-marks.

The emerald moth genus *Lissochlora* Warren, 1900 (type species: *Aplodes flavifimbriata* Warren, 1897) was originally described based on the characters of wing shape and pattern. Prout (1912) subsequently synonymised *Lissochlora* with *Racheospila* Guenée, 1857, and *Lissochlora flavifimbria* with *Nemoria bryata* Felder & Rogenhofer. He structured this huge genus *Racheospila* in informal species groups. Prout (1932) also used informal species groups to divide the large genus *Racheospila*. Pitkin (1993) redefined *Lissochlora* as a genus characterised by the presence of a lateral spur or kink to the aedeagus of the male genitalia, and by the absence of

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