Revision of Chlororithra Butler, 1889 (Lepidoptera, Geometridae, Geometrinae)

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Abstract

The genus Chlororithra Butler, 1889 is revised. Based on an examination of the syntypes of C. missioniaria Oberthür, we elevate that taxon to species status. Differences between C. fea Butler and C. missioniaria and variation within each species are discussed in detail and illustrated. A lectotype is designated for C. fea. Tribal placement of the genus is discussed.

Key words: Geometridae, Geometrinae, Chlororithra, new status, review

Introduction

Chlororithra, a small genus in Geometrinae, was described as monotypic by Butler (1889) based on C. fea from India. Oberthür (1916) described C. fea missioniaria as a variation of fea from Tsekou (Yunnan, China) based on specimens that exhibited two distinct forms: one with a black-brown apical patch on the underside of the hindwing and the other that lacked the patch. C. missioniaria was treated as a subspecies of C. fea by Prout (1933, 1935) and as synonym of C. fea by Scoble (1999). No further details have been published on the species, and the genitalia have not been illustrated, although Prout (1912) refered to the male genitalia of C. fea.

An examination of a long series of Chlororithra from different sources revealed that the male and female genitalia of C. missioniaria are quite distinct from those of C. fea, and it should be treated as a distinct species. The purposes of this paper are to provide details of the generic characters of Chlororithra for the first time; revise the taxonomic status of C. missioniaria and transfer seven paralectotypes of C. missioniaria to C. fea; describe differences between and variation within each species; provide illustrations of the genitalia for the first time; and provide illustrations of external features.