



## Revision of the genus *Paraplaneta* Warren, 1895 (Lepidoptera: Geometridae, Larentiinae) from Southeast Asia

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### Abstract

The genus *Paraplaneta* Warren, 1895, until recently treated as a junior synonym of *Cataclysmes* Hübner [1825], is revised. Both genera are members of the tribe Cataclymini (Herbulot, 1962–63). As a whole, eight species of *Paraplaneta* are recognized from Himalaya region (India, Pakistan) and China, including four new species: *P. anthracica*, *P. griseobrunnea*, *P. subfasciata* (from China), and *P. hreblayi* (from Pakistan), described herein. A lectotype for *Cataclysmes conturbata sternecki* Prout, 1938 is designated. Descriptions, diagnoses and illustrations of antennae, wing venation and male and female genitalia of most species are given. The tribal placement of *Paraplaneta* and related genera within the Cataclymini is discussed.

**Key words:** Cataclymini, *Paraplaneta*, redescription, new species, genitalia, pseudojuxta, coremata claws, external morphology

### Introduction

Warren (1895) described the genus *Paraplaneta*, designating *Larentia conturbata* Walker, [1863] as the type species, separating it from *Cataclysmes* Hübner by a single diagnostic character only: the pectinated male antennae. This probably was the reason that subsequent authors did not accept its validity and did not use it. Prout (1914: 266) placed *conturbata* in *Cataclysmes* again, which he divided into four sections (= subgenera), according to the characters of the antennae: *conturbata* was placed in section C – *Paraplaneta*. Later, Prout (1938: 171) does not even use these sections. Parsons *et al.* (1999: 112) also treated *Paraplaneta* as a synonym of *Cataclysmes*, mentioning seven species, more or less reflecting the previous state of knowledge (but without *C. grandis* Prout, 1914, for which a new genus, *Herbulotina* Pinker, 1971, had been described). Xue and Zhu (1999) revised the species of “*Cataclysmes*” (sensu Prout) from China, still treating *Paraplaneta* as a junior synonym. Five of six species recorded by them are in fact members of *Paraplaneta*, as shown below. Viidalepp (2009: 32) finally revived *Paraplaneta* as a valid genus, based on “differences of the male antennae pectination, the simpler armature in male genitalia, with deeply bipartite uncus, the configuration of coremata in male abdominal segments and the presence of large thumbtack-shaped signa in female genitalia” (without further explanations or figures).

The aim of the present study is to give a more detailed redescription of the genus *Paraplaneta* Warren, to clearly separate it from *Cataclysmes* Hübner by morphological differences, and to describe four new species from China and Pakistan.

### Material and methods

For this study, the material examined has been obtained from the following institutions (with acronyms used in the text): The Natural History Museum, London, England (BMNH); Institute of Zoology, Academia Sinica, Beijing,