



A review of *Jankowskia* Oberthür, 1884, with descriptions of four new species (Lepidoptera: Geometridae, Ennominae)

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Abstract

The genus *Jankowskia* Oberthür, 1884 is reviewed and four new species are described: *J. curva* **sp. nov.**, *J. acuta* **sp. nov.**, *J. improjecta* **sp. nov.**, and *J. obtusangula* **sp. nov.** *J. bituminaria raddensis* (Wehrli, 1941) is recorded for the first time from China. A key to all species of the genus is provided. The diagnoses for all species are given. Illustrations of adults and genitalia are presented.

Key words: *Jankowskia*, taxonomy, new species, Geometridae, Lepidoptera

Introduction

The genus *Jankowskia* Oberthür, 1884 is a genus of the tribe Boarmiini in the subfamily Ennominae. The species of *Jankowskia* are widely distributed in the East Asia area. This genus was established by Oberthür with the two species *Jankowskia athleta* Oberthür, 1884 and *Jankowskia thoracicaria* Oberthür, 1884, without designating a type species. *J. athleta* Oberthür, 1884 was subsequently designated as the type species of the genus by Fletcher (1979). *J. thoracicaria* Oberthür, 1884 was regarded as not a true *Jankowskia* and moved to *Biston* by Prout (1915). Djakonov (1926) described a monotypic genus *Pleogynopteryx* based on the species *Pleogynopteryx tenebricosa* Djakonov. *Jankowskia* and *Pleogynopteryx* were treated as two subgenera of *Boarmia* by Wehrli (1941) and two genera by Scoble (1999), until Kim *et al.* (2001) treated *Pleogynopteryx* as a junior synonym of *Jankowskia*.

Until now, five species and four subspecies in the genus *Jankowskia* were known. The species *Boarmia bituminaria* Lederer, 1853 was placed in the subgenus *Cleora* of *Boarmia* by Prout (1915), who treated numerous genera as subgenera of *Boarmia*. Wehrli (1941) placed this species in another subgenus *Pleogynopteryx* of *Boarmia* and designated *Pleogynopteryx tenebricosa* Djakonov as its synonym. The species *Boarmia fuscaria* Leech, 1891 was later transferred to the genus *Jankowskia* by the author himself (Leech, 1897). This species from Japan and China was mistakenly identified as *Jankowskia athleta* in Prout (1915). Wehrli (1929) described *Boarmia amurensis*, which was subsequently discovered to be preoccupied by *Boarmia amurensis* Staudinger, 1892. Wehrli (1941) proposed a replacement name *raddensis* for it and downgraded it to subspecies of *Boarmia* (*Pleogynopteryx*) *bituminaria*. Sato (1980) provided a revision of the genus *Jankowskia* for the first time. He described two new species, *J. taiwanensis* Sato, 1980 and *J. pseudathleta* Sato, 1980, and one new subspecies *J. fuscaria naitoi* Sato, 1980, together with the redescription of *J. athleta* and *J. fuscaria fuscaria* (Leech, 1891). He designated *Boarmia unmon* Sonan, 1934, *Boarmia* (*Jankowskia*) *athleta geloi* Wehrli, 1941 and *Boarmia* (*Jankowskia*) *athleta nanaria* Bryk, 1948 as new synonyms of *J. fuscaria fuscaria*. Sato (1980, 1984) also clarified that the record of *J. athleta* in Japan was a misidentification. The Japanese specimens partly belong to *J. fuscaria* and others belong to *J. pseudathleta*.