



Taxonomic review of the genus *Indomyrlea* Roesler & Küppers 1979 of China, with descriptions of five new species (Lepidoptera: Pyralidae: Phycitinae)

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Abstract

The taxonomy of the Chinese species of the genus *Indomyrlea* Roesler & Küppers, 1979 is revised. Five new species, namely *I. bannensis* Ren & Li **sp. nov.**, *I. fastigipalpa* Ren & Li **sp. nov.**, *I. nigra* Ren & Li **sp. nov.**, *I. proceripalpa* Ren & Li **sp. nov.**, and *I. sinuopalpa* Ren & Li **sp. nov.**, are described. The following taxonomic changes are proposed: *Sandrabatis* Ragonot, 1893 and its type species *Sandrabatis crassiella* Ragonot, 1893 are synonymized with *Ceroprepes* Zeller, 1867 and *Ceroprepes ophthalmicella* (Christoph, 1881), respectively; *Indomyrlea phaeella* (Hampson, 1903) **comb. nov.** is transferred from *Sandrabatis*. The original combination *Nephoptyx eugraphella* Ragonot, 1888 is resurrected from its previous affiliation with *Indomyrlea*. A checklist and a key to all the known species of the world are included.

Key words: Lepidoptera, Pyralidae, Phycitinae, *Indomyrlea*, *Sandrabatis*, *Ceroprepes*, new species, new combination, new synonymy

Introduction

The genus *Indomyrlea* Roesler & Küppers, 1979 is a small phycitinae group distributed in East and Southeast Asia. Previously the genus was composed of three species. The type species *I. sutasoma* Roesler & Küppers, 1979 and *I. kalmasapada* Roesler & Küppers, 1979 were described based only on male collected from Sumatra. The third species *I. eugraphella* (Ragonot, 1888), which was transferred from *Nephoptyx* by Roesler & Küppers (1979), was described from India. It seemed that the male synapomorphy of the genus is reliable for it was obtained from three known species. However the female synapomorphy of the genus is unreliable for it was only based on one combined species. If the transfer of the species is wrong, then the generic characters may also be wrong. So some uncertain affinity led us to revise the genus and attempt to clarify the relationship between *Indomyrlea* and other genera.

During the study, we found that the genus *Sandrabatis* Ragonot, 1893 might be relevant to our questions. *Sandrabatis* consists of two species: the type species *S. crassiella* Ragonot, 1893 from Assam and *S. phaeella* Hampson, 1903 from Sikkim. The original description of the type species was based on only external characters of female. Later Hampson (1896) obtained a few specimens from India and Sri Lanka and attributed the name *S. crassiella* to those specimens. He also used the specimens to redescribe the genus. Hampson's concept of *Sandrabatis* was subsequently adopted by all the subsequent authors (e.g. Inoue 1955, 1959, 1982; Roesler 1979, 1983; Choi *et al.* 1998; Bae *et al.* 2008 and Yamanaka 2013). Among these followers, Roesler & Küppers (1979) described and figured the female genitalia of *S. crassiella* based on the specimens collected from Sumatra; Choi *et al.* (1998) illustrated both the male and female genitalia of *S. crassiella* based on specimens collected from Korea. However, we found that the male illustrated by Choi *et al.* was similar to *Indomyrlea sutasoma*, and the female was similar to *S. crassiella* sensu Roesler & Küppers (1979). It became obvious that *Sandrabatis* and *Indomyrlea* were confused by several authors in literature.