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Taxonomic review of the genus *Paratalanta* Meyrick, 1890 (Lepidoptera: Crambidae: Pyraustinae) from China, with descriptions of two new species

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Abstract

This study deals with the taxonomy of seven species and subspecies of the genus *Paratalanta* Meyrick in China. Among them, *P. furcata* **sp. nov.** and *P. annulata* **sp. nov.** are described as new. The male of *P. stachialis* Toll & Wojtusiak, 1957 is described for the first time. Images of adults and illustrations of both male and female genitalia are provided, along with a key to all the known Chinese species and a map showing their distribution.

Key words: Lepidoptera, Crambidae, Pyraustinae, *Paratalanta*, new species, China

Introduction

Paratalanta Meyrick, 1890 is restricted to the Palearctic and northern Oriental regions. Species of *Paratalanta* can be recognized superficially by the pale yellow ground colour and the unusually narrow and elongate fore wing in male of some species. Putative synapomorphies shared by members of the genus include: the ventro-distally directed, spicula-shaped sella and the cornutus placed at the distal end of the phallus in the male genitalia, and the irregularly quadrangular antrum with spines on the posterior margin in the female genitalia.

Meyrick (1890) established the genus *Paratalanta* for *Botyodes ussurialis* Bremer, 1864 and *Omiodes heterogenalis* Bremer, 1864 based on only a few diagnostic characters such as “middle tibiae in male dilated, enclosing tuft of hairs in groove”. However, Meyrick did not notice that these two species were not closely related until the publication of Hampson’s work. Hampson (1899) provided a new definition of *Paratalanta* by designating *Botyodes ussurialis* as the type species, and synonymizing *Botys cultralis* Staudinger, 1867 and *Botys amurensis* Romanoff, 1887 with *P. ussurialis*. The taxonomic treatment of *P. ussurialis* by Hampson was questioned by Toll and Wojtusiak (1957) because the males of different species of *Paratalanta* could be clearly distinguished by the proportion of the greatest width to the greatest length of the fore wings, the wing pattern and colour. They suggested to revalidate *cultralis* and *amurensis* and treat them as distinct subspecies of *cultralis*. As to *Omiodes heterogenalis*, it was transferred to *Phryganodes* by Hampson (1898) and then immediately to *Crocidophora* by Hampson (1899) again. Mutuura (1954) placed *O. heterogenalis* in *Circobotys* based on the similarity in genitalia structures. In 1957, Toll and Wojtusiak described *P. stachialis* from northeast China; Yamanaka (1972) described *P. ussurialis taiwanensis* from Taiwan; and Inoue (1982) raised *P. taiwanensis* to species status and described *P. taiwanensis sasakii* from Japan.

In addition, *Paratalanta* has a generic synonym *Microstega*, which was erected by Meyrick (1890) for *Epicorsia pandalis* Hübner, 1825. Pierce and Metcalfe (1938) referred *Pyralis hyalinalis* Hübner, 1796 to *Microstega* based on genitalia characters. *Microstega* was synonymized with *Paratalanta* by Kirpichnikova (1986) and Maes (1994) based on “the characteristic sclerotized hook (spicula-shaped sella) on the valvae of the male genitalia”. In the present study, we tend to accept this taxonomic treatment.

To date, *Paratalanta* includes eight species and subspecies (Table 1), of which five were previously recorded to occur in Mainland China (Toll & Wojtusiak 1957, Yamanaka 1972, Inoue 1982, Song & He 1997). The aim of

slide no. ZDD01865; 2 ♀♀, Xinmin Forest Farm, Jingyuan County (35.48°N, 106.33°E), Ningxia Hui Autonomous Region, 2100 m, 7.viii.2000, leg. Houhun Li & Shuxia Wang, gen. slide no. ZDD01866.

Diagnosis. Adult (Figs. 12, 13) with wingspan 30.2–35.5 mm. This species is characterized by the narrow and long fore wing having a rectangular reniform stigma in male; the straight spine-shaped sella and the juxta concave deeply to 1/2 length on the posterior margin in the male genitalia (Fig. 20); and the antrum with long setae on the postero-lateral margin (Fig. 26).

Distribution. China (Fujian, Guizhou, Heilongjiang, Hebei, Henan, Hubei, Jilin, Ningxia, Shaanxi, Sichuan, Taiwan, Yunnan), Korea, Japan, Russia (Far East).

Ecology. Caught in mountains from 300 m to 2100 m. Flight period from end of May to middle September.

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