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A new record of the genus *Tatargina* Butler, 1877 (Insecta: Lepidoptera: Erebidae) from India

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Abstract

Tatargina (*Tatargina*) *picta* (Walker, [1865] 1864), a species of Arctiinae, is reported for the first time from India, which also represents the first record of the nominotypical subgenus i.e., *Tatargina* from India. Additionally, a global checklist of the genus *Tatargina* is provided.

Keywords: Arctiini, Checklist, New Record, Tatargina picta

Introduction

The genus Tatargina Butler, 1877, belonging to Arctiini, Arctiinae, Erebidae, was established for its type-species Deiopeia picta Walker, [1865], 1864 collected from Moulmeine [Mawlamyine: Myanmar]. Hampson (1901), Rothschild (1914), Strand (1919) and Fang (1982, 1985) considered Tatargina as a synonym of Pericallia Hübner, [1820] 1816. Fang (2000) reinstated it as a valid genus. Dubatolov (2006) reviewed Tatargina with description of a new subgenus Hindargina Dubatolov and included four species from the globe, one species in nominotypical subgenus i.e., T. (Tatargina) picta (Walker, 1865), and three species in Hindargina i.e., T. (Hindargina) pannosa (Moore, 1879), T. (Hindargina) sipahi (Moore, 1872) and T. (Hindargina) ceylonensis (Hampson, 1901). Bayarsaikhan et al. (2020) added the fifth *T. erythromelaena* Bayarsaikhan & Bae from Cambodia. Though the authors did not mention its subgenus, however, from the genital apparatus, it is evident that T. erythromelaena belongs to a nominotypical subgenus. From India, the genus is known by two species: T. (Hindargina) pannosa and T. (Hindargina) sipahi (Singh et al. 2021).

Herein, we study the morphotaxonomy of *T. (T.) picta* collected from Nagaland and Mizoram, a first record of species and the nominotypical subgenus i.e. *Tatargina* from India. Additionally, we provide a global checklist of *Tatargina*.

Material and Methods

The collection was done from the localities mentioned in the material examined. For the collection and preservation of adult moths, standard techniques of Lepidopterology have been followed. LEICA microscope model number M165C is used for the photography of adults and genitalia. The specimens are deposited in the Lepidoptera Section of the Zoological Survey of India, Kolkata, India.

Taxonomic Account

Genus Tatargina Butler, 1877: 366

Type-species: Deiopeia picta Walker, [1865]: 263

Diagnosis: Antennae with single-pectination; male genitalia with uncus triangular, collar of the proximal section of tegument broad; valva extended with an apical process and two distinct processes on its ventral edge; aedeagus having apical sclerotization with a tiny row of spines; vesica without any cornuti, some regions with little spinocular (Dubatolov, 2006).

Distribution: India, Sri Lanka, Indo-China, South China (Dubatolov, 2006; Bayarsaikhan et al., 2020; N. Singh et al., 2021).

Tatargina (Tatargina) picta (Walker, [1865] 1864): 263

Type-locality: Moulmeine [Mawlamyine: Myanmar]

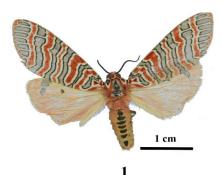
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Material examined: Mizoram: 01 3, Serchhip district, Thenzawl, 783 m, 92.7567 E, 23.3209 N, 6-iv-2017, Harsimranjeet Singh leg. (Coll. NZCZSI). Nagaland: 01 ♂, Kohima district, Kohima, 1444m, 94.1049 E, 25.6716 N, 23-iv-2017, Harsimranjeet Singh leg. (Coll. NZCZSI).

Diagnosis: Externally, *Tatargina* (*T.*) *picta* is closely similar to T. (T.) erythromelaena from Cambodia, but is distinct by the larger black spots of patagium (Bayarsaikhan et al. 2020). In the male genitalia, *T. (T.) picta* is distinct by the presence of three processes in the right valva (two in T. (T.) erythromelaena) and in vesica by the smaller spines (Figure 3). *Tatargina (T.) picta* is unmistakable from other two Indian species i.e. T. (Hindargina) pannosa and T. (Hindargina) sipahi by the adults having forewing with the ground colour red and six rows of irregular, black margined, grey bands/ patches.

Distribution: India (Kohima (Nagaland), Thenzawl (Mizoram)) (Present Study), Cambodia, China, Taiwan, Japan (Ryukyu Is.), Myanmar, Vietnam, Thailand (Bayarsaikhan et al. 2020).



Adult of Tatargina picta Walker, [1865]

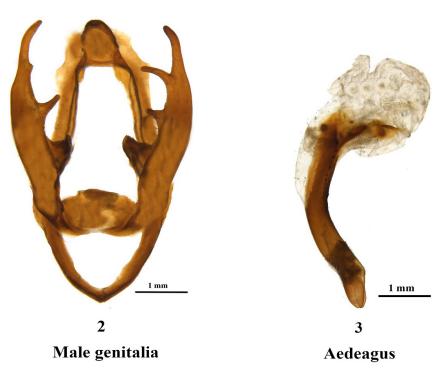


Figure 1. Habitus of *T. picta*. Figure 2. Male genitalia of *T. picta*.

Figure 3. Aedeagus of *T. picta*.

Remarks: The Chinese population of T. picta bears six rows of irregular, black-margined grey fascia on the forewing (Dubatolov 2006: 286, colour plate-6, Figure 1) whereas, the Indian population of *T. picta* studied from Nagaland and Mizoram have continuous and thick fascia (in form of bands) on the forewing (Figure 1). In the male genitalia of Indian T. picta, apical and ventral processes of the right valva are longer and narrower (Figure 2), which are shorter in the Chinese *T. picta* (Dubatolov 2006: 213, Figure 1). We are considering the differences as a part of population variations. However, further studies on some larger samples, coupled with DNA barcodes may shed more light on the better understanding on the microtaxonomy of *T. picta*.

A global checklist of genus Tatargina Butler, 1877

1. Tatargina ([Tatargina]) erythromelaena Bayarsaikhan & Bae, 2020: 591

Type-locality: Rovieang, Preah Vihear Province, [Cambodia].

Distribution: Cambodia (Preah Vihear province) (Bayarsaikhan et al. 2020). Elsewhere: not known.

2. Tatargina (Tatargina) picta (Walker, [1865]): 263

Type-locality: Moulmeine [Mawlamyine: Myanmar].

Distribution: Kohima (Nagaland), Thenzawl (Mizoram) (Present Study). Elsewhere: Cambodia, China, Taiwan, Japan (Ryukyu Is.), Myanmar, Vietnam, and Thailand (Bayarsaikhan et al. 2020).

3. Tatargina (Hindargina?) ceylonensis (Hampson, 1901):

Type-locality: Ceylon, Hambantota [Sri Lenka].

Distribution: Sri Lanka (Hampson, 1901). Elsewhere: not known.

4. Tatargina (Hindargina) pannosa (Moore, 1879): 397

Type-locality: Dharamsala (N.W. Himalayas) [India: Himachal Pradesh].

Distribution: North West Himalayas (Hampson, 1901). Elsewhere: Nepal (Kishida 1998).

5. Tatargina (Hindargina) sipahi (Moore, 1872): 573

Type-locality: 'Deccan'. Lectotype designated Dubatolov (2006).

Distribution: Maharashtra, Tamil Nadu (Dubatolov, 2010), Madhya Pradesh (Kirti & Singh, 2016). Elsewhere: not known.

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