



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 ♂, 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).



1

Adult of *Tatargina picta* Walker, [1865]



2

Male genitalia



3

Aedeagus

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 micro-taxonomy 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): 347

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

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 by Dubatolov (2006).

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

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