

Description of the Female of *Tibetanja tagoroides* Naumann, Nässig & Rougerie (Lepidoptera: Eupterotidae)

Jalil AHMAD^{1*}

Navneet SINGH²

Rahul JOSHI³

Lepidoptera Section, Zoological Survey of India, Kolkata-700053, West Bengal, INDIA

e-mails: ¹jalilahmad23046@gmail.com, ²nsgill007@gmail.com, ³joshiarctidae@gmail.com

ORCID IDs: ¹0000-0001-7719-864X, ²0000-0002-6657-7983, ³0000-0001-8514-1272

*Corresponding author

ABSTRACT

The hitherto unknown female of *Tibetanja tagoroides* Naumann, Nässig & Rougerie, 2020 is described here for the first time. We report the voucher based records of *T. tagoroides* from India (Arunachal Pradesh). Diagnosis, photographs of habitus, male and female genitalia are provided for the studied taxa.

Keywords: Morphotaxonomy, Janinae, Arunachal Pradesh, male and female genitalia, voucher specimens.

INTRODUCTION

The genus *Tibetanja* Naumann, Nässig & Rougerie, 2020 was established as a monobasic, for the placement of a new species, *Tibetanja tagoroides* Naumann, Nässig & Rougerie, 2020 from Tibet. The genus was provisionally placed in the African subfamily Janinae of Eupterotidae on the basis of morphological features by Naumann *et al.* (2020) and is the only genus of Janinae known to occur in Asia. So far, genus is known by males of its type species only and reported from Tibet and India (Arunachal Pradesh). Vaidya & Sankararaman (2021) reported *T. tagoroides* from India by providing the photographic records from Arunachal Pradesh (Talley valley and lower Dibang valley). Naumann & Nässig (2022) extended the range of species within India from Arunachal Pradesh to Sikkim.

In this manuscript, we provide the description of the yet unknown female of *Tibetanja tagoroides* and also confirm the record of this species from India based on voucher specimens collected from the Arunachal Pradesh.

MATERIAL AND METHODS

The voucher specimens were collected from Arunachal Pradesh with the help of vertical sheet light trap fitted with 160w mercury bulb. Specimens were killed with ethyl acetate vapours, and further processed as per the methods advocated by Sterling (2024). Adult moths were photographed with Canon digital camera and genitalia were photographed under Leica S8AP0 HD binocular microscope. The distribution map of the genus is prepared with the help of QGIS. Collections are deposited in National Zoological collections of Zoological Survey of India (NZCZSI), Lepidoptera Section, Kolkata.

TAXONOMY

Genus *Tibetanja* Naumann, Nässig & Rougerie, 2020

Tibetanja Naumann, Nässig & Rougerie, 2020, *Nachrichten des Entomologischen Vereins Apollo*, N. F. 41 (3/4): 148.

Type species: *Tibetanja tagoroides* Naumann, Nässig & Rougerie, 2020.

Type locality: Xizang Zizhiqu, Tibet.

Tibetanja tagoroides Naumann, Nässig & Rougerie, 2020 (Figs a-h)

Tibetanja Naumann, Nässig & Rougerie, 2020, *Nachrichten des Entomologischen Vereins Apollo*, N. F. 41 (3/4), 152.

Type locality: Xizang Zizhiqu, Tibet.

Material examined: INDIA: ♂, Arunachal Pradesh, West Kameng, Tenga (92°27'.1 E" 27°12'46.3 N"), 20.vi.2018 (R. Lenka & party leg.), (genitalia vial no. _JA99); ♀, Arunachal Pradesh, Anjaw, Hawai (96.8325070 E" 2.896056 N" Alt. 1280 m.), 17.x.2023 (D. Gupta & party leg.) attracted to MV lamp (Genitalia vial no. JA_173) (National Zoological collection, Zoological Survey of India (NZCZSI)).

Description

Adult (Figs 1a, b, e, f) antennae broadly bipectinate, ground color brownish; forewing with a postbasal and postmedial zigzag, dentate lines, basal area paler, area between postbasal and postmedial lines darker and a diffused line run parallel; a median black spot is present, a subterminal line along with dark shadow runs from apex to tornus and makes an angle at vein M3; hindwings with postmedial dentate, zigzag line, medial diffused line runs parallel to it.

Male genitalia (Figs 1c-d) with uncus long, slender with two apical, lateral teeth directed ventrally; gnathos in form of two long, processes; valvae almost rectangular, apically rounded, distal saccular process with two asymmetric projections; juxta rounded; aedeagus (Fig. 1d) with large number of cornuti.

Female genitalia (Figs 1g-h) with quadrate papillae anales; posterior apophyses longer than anterior apophyses, antrum weakly sclerotized, a dark sclerotized structure present at base of one posterior apophysis (Fig. 1h); ostium bursae opening in a small ductus bursae; corpus bursae elongated, balloon shape, signum absent.

Sexual dimorphism: female (forewing length 44 mm) is larger than the male (forewing length 39 mm), darker, and having the apical notch of forewing more produced. Dentation of postmedial line is rounded in female whereas pointed in males.

Distribution: Tibet, India (Arunachal Pradesh, Sikkim) (Naumann *et al.* 2020; Vaidya & Sankararaman, 2021; Naumann & Nässig, 2022).

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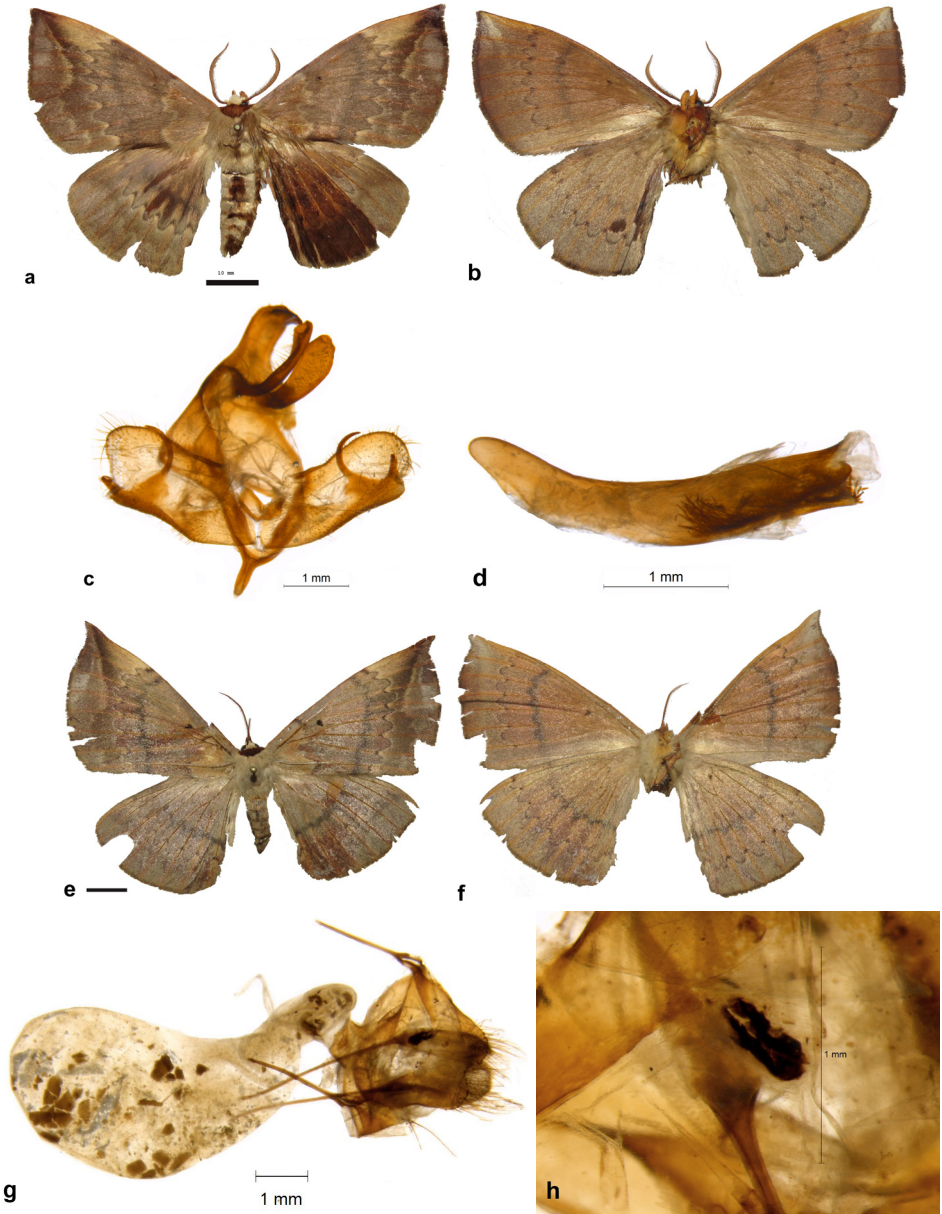


Figure 1. *Tibetanja tagoroides*, a) male dorsal view; b) male ventral view; c) male genitalia; d) aedeagus; e) female dorsal view; f) female ventral view; g) female genitalia; h) posterior apophysis (enlarged view).

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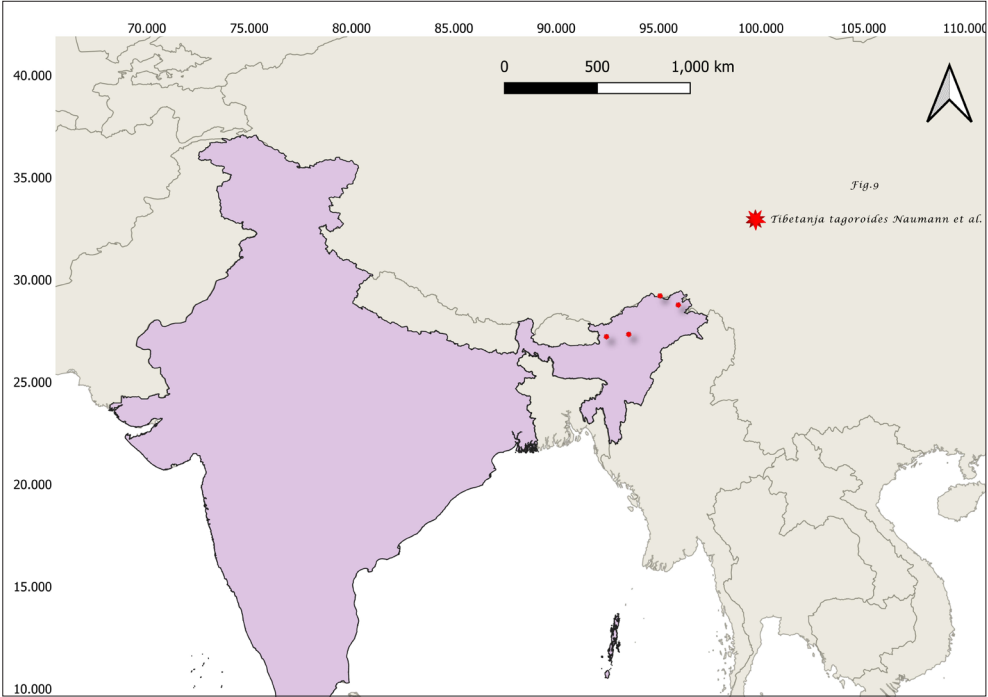


Figure 2. Distribution of *Tibetanja tagoroides*.