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A new species of genus *Patania* Moore, 1888 from India (Lepidoptera: Crambidae, Spilomelinae)

N. Singh, J. Ahmad & K. Chandra

Abstract

In this article, we describe a new species, *Patania shompen* Singh & Ahmad, sp. n. from Great Nicobar Island. The differential diagnosis of the new species is provided with the *Patania iopasalis* (Walker, 1859), *Patania obfuscalis* (Yamanaka, 1998) and *Patania clava* Xu & Du, 2016.

KEY WORDS: Lepidoptera, Crambidae, Spilomelinae, *Patania*, new species, diagnosis, India.

Una nueva especie del género *Patania* Moore, 1888 de la India (Lepidoptera: Crambidae, Spilomelinae)

Resumen

En este artículo, describimos una nueva especie, *Patania shompen* Singh & Ahmad, sp. n. de la Isla Gran Nicobar. Se proporciona la diagnosis diferencial de la nueva especie con *Patania iopasalis* (Walker, 1859), *Patania obfuscalis* (Yamanaka, 1998) y *Patania clava* Xu & Du, 2016.

PALABRAS CLAVE: Lepidoptera, Crambidae, Spilomelinae, *Patania*, nueva especie, diagnosis, India.

Introduction

The genus *Patania* Moore, 1888 was erected for inclusion of two species: *Botys concatenalis* Walker, 1866, as the type species from Darjeeling, India and *Patania semivialis* Moore, 1888. For the long time, *Patania* remained as a sunk generic name (HAMPSON, 1896, 1898; SHIBUYA, 1928, 1929; KLIMA, 1939; BAE *et al.*, 2008). However, ROSE & SINGH (1989), KIRTI & GILL (2007) and XU & DU (2016) treated *Patania* as a distinct generic name. Globally, there are about 50 described species of *Patania* (XU & DU, 2016), with 25 species from India (NUSS *et al.*, 2003-2021; SINGH *et al.*, in prep). In this paper, we describe a new species from Great Nicobar Island. The new species is closely similar to *Patania iopasalis* (Walker, 1859), *Patania obfuscalis* (Yamanaka, 1998) and *Patania clava* Xu & Du, 2016. The differential diagnosis is discussed below.

Material and Method

Collection of adult moths was made by using vertical sheet light trap. The collected specimens were processed as per standard techniques in Lepidopterology. The type specimens and other material studied in this manuscript is deposited in the National Zoological Collections of Zoological Survey of India, Kolkata.

Taxonomic Account

Genus *Patania* Moore, 1888

Patania Moore, 1888. *Lep. Atk.*: 209

Type species: *Botys concatenalis* Walker, 1866, by original designation

Type Locality: Darjeeling, INDIA

Patania shompen Singh & Ahmad, sp. n. (Figs 1-2, 5-7)

Type material: Holotype, ♂, INDIA, Andaman and Nicobar Islands, Great Nicobar Island, SW Road, 12-XI-2018, leg. K. C. Gopi & Party (NZCZSI). Paratype, 1 ♂, INDIA, Andaman and Nicobar Islands, Great Nicobar Island, Laxmi nagar, 11-XI-2018, leg. K. C. Gopi & Party (NZCZSI).

Description: Adult bright ochreous, head with frons and vertex having fuscous spots, labial palpus with basal and subapical brown patches, collar with two fuscous spots, tegula and thorax with fuscous spots. Forewing with basal, subbasal lines present, the latter interrupted below cell; antemedial line inwardly angled below cell; area below cell and between antemedial and subbasal lines suffused with fuscous scales; a medial spot in cell; discocellular annulus filled with fuscous, giving rise to a line reaching inner margin; outwardly slanted postmedial line from costa to vein M3, then slightly bent outward to meet anal angle, minutely dentate; area beyond it and from costa to vein Cu2 fuscous, another fuscous patch below vein Cu1 and between medial and postmedial lines. Hindwing with a spot in cell, a medial broad line from Cu1 to inner margin; a broad postmedial line from costa to vein M3 then outwardly bent to meet anal angle; apical area fuscous, extending in form of a marginal line; abdomen with two dorsal spots on second segment, two similar spots on subterminal segment. Male genitalia with uncus broadly triangular; gnathos clubbed; tegument short and broad; saccus v shaped, slightly compressed laterally; valva broad, tongue shaped, costa almost straight and minutely wavy; fibula small flap like; aedeagus broadening towards apex, a subapical patch of multi-layered spines, apical protrusion small, almost rectangular, vesica with a prominent spine near a large bunch of small spines.

Diagnosis: Externally, *Patania shompen* Singh & Ahmad, sp. n. is closely similar to *P. iopasalis* (Walker, 1859) and *P. clava* Xu & Du, 2016, but is distinct due to the antemedial line of forewing strongly and inwardly angled below cell (it is minutely angled below cell in *P. clava* and almost straight with a small indentation below costa in *P. iopasalis*), darkly scaled thorax (paler in *P. clava* and *P. iopasalis*) and labial palpus is having basal and subapical brown patches (whereas only basal patch is present in *P. clava* and only subapical patch in *P. iopasalis*). In male genitalia, *P. shompen*, sp. n. is distinct by the gnathos with clubbed apex, bearing setae (in *P. clava*, gnathos is finger like, slightly widened apically, and in *P. iopasalis* it is sheet like, without apical setae), aedeagus with a small, rectangular protrusion (without any defined head like structure) from apex (in *P. clava* aedeagus apex is having a slant nail head like protrusion with a long base and in *P. iopasalis* aedeagus is having an ovate head like robust protrusion with a short base). Another, closely similar species is *Patania obfuscalis* (Yamanaka, 1998), but *P. shompen*, sp. n. is distinguished by the male genitalia with costa almost straight, gnathos well formed, apical protrusion of aedeagus broader and cornutus is conspicuously longer, whereas in the male genitalia of *P. obfuscalis*, the middle costa is slightly inflated and bearing a cluster of setae, gnathos is vestigial, apical protrusion of aedeagus is narrower and cornutus is conspicuously shorter.

Distribution: So far, the species is only reported from Great Nicobar Island.

Etymology: The Shompen are the indigenous nation of the Great Nicobar Island.

Patania obfuscalis (Yamanaka, 1998) (Figs 3-4, 8-9)

Pleuroptya obfuscalis Yamanaka, 1998. *Tinea*, **15** (suppl. I): 106, figs 897, 900, pl. 142, fig. 30

Type locality: Bagmati, Mt. Phulchouki, [NEPAL]

Material examined: INDIA, Mizoram, Lunglei, Hrangchawkawn, 03-X-2013, 1 ♂, leg. Harsimran Singh (NZCZSI), Sikkim, North Sikkim, Mangan, 24-IV-2014, 1 ♂, leg. Harsimran Singh (NZCZSI).

Diagnosis: *Patania obfuscalis* is another member of a closely similar group of species, *P. iopasalis*, *P. clava*, and *P. shompen*, sp. n. Externally, *P. obfuscalis* can be distinguished from *P. iopasalis*, *P. clava*, and *P. shompen*, sp. n. by the shorter labial palpi. In male genitalia, *P. obfuscalis* is distinct from all the three closely similar species by the middle of costa slightly inflated and bearing a cluster of setae.

Remark: The images of adults and male genitalia (except the vesica spines) of Indian material exactly match with the description and illustrations of types (YAMANAKA, 1998: 106, fig. 897, pl. 142: 30) and the description by XU & DU (2016: 134). We assume that images of vesica given by YAMANAKA (1998: fig. 897) are due to some technical error. If not so, then our *P. obfuscalis* is probably a new one. But till the physical verification of the type material, we are considering the Indian species as *P. obfuscalis*.

Distribution: Nepal and some areas of China, excluding Hainan Island (XU & DU, 2016), North East India (Sikkim, Mizoram).

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