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Website: www.mutagens.co.in E-mail: submit@mutagens.co.in researchsubmission@hotmail.com

# Research Paper

# FIRST RECORD OF GENUS *PANDESMA* GUENÉE (NOCTUIDAE: LEPIDOPTERA) FROM INDIA

Jagbir Singh<sup>1</sup> and Charan Kamal Sekhon<sup>2</sup>

<sup>1</sup>Department of Zoology and Environmental Sciences, Punjabi University, Patiala-147001, Punjab, India. <sup>2</sup> Department of Zoology, Sri Guru Granth Sahib World University (SGGSWU), Fatehgarh Sahib, Punjab – 140406. INDIA.

#### Abstract

In the present communication, genus *Pandesma* Guenée is the first record from India, genus has also been redescribed by incorporating external male and female genitalic attributes in its diagnosis.

Key words: Lepidoptera, Noctuidae, Pandesma Guenée, India.

## **INTRODUCTION**

Guenée erected genus *Pandesma* Guenée [1] and Hampson designated *Pandesma quenavadi* Guenée as its type species [2]. In the present communication, the diagnosis of the genus has been upgraded by incorporating external male and female genitalic attributes. The study material i.e., representatives of *Pandesma quenavadi* Guenée were collected from far flung localities of Himachal Pradesh, Karnataka and Tamil Nadu.

#### **MATERIAL AND METHODS**

The adult Noctuid moth species were collected from the florescent lights fitted at different localities in various states of India. The collected moths were killed and preserved in air tight wooden boxes. The identification of captured specimens was done with the help of relevant literature[3]. For the preparation of external male and female genitalia slides, abdomen of preserved specimens were detached and potashed in 10% solution, washed in 1% glacial acetic acid and dissected in 30% alcohol for taking out external male and female genitalia as per standard techniques given by Robinson[4].

#### **OBSERVATION**

GENUS *PANDESMA* GUENÉE Guenée, 1852, *Hist. Nat. Ins. Spec. Gen. Lepid.*, 6: 438.

Type species: *Pandesma quenavadi* Guenée.

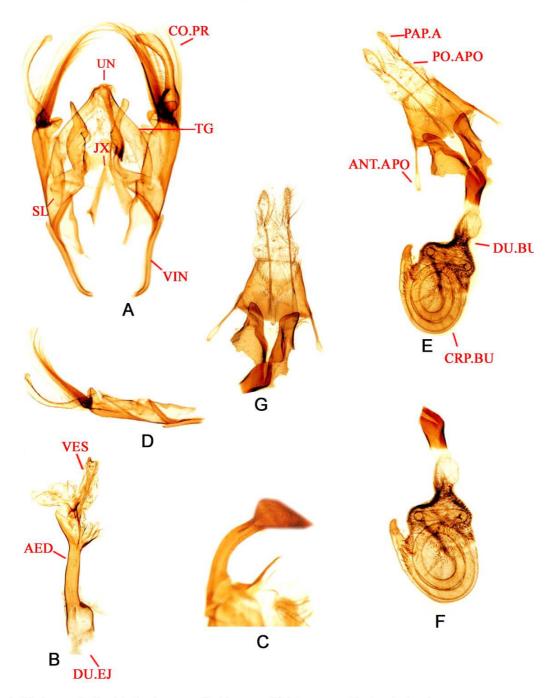
Distribution: Japan, China, Oriental and Australian region.

Pandesma quenavadi Guenée

Guenée, 1852, Hist. Nat. Ins., Spec. Gen. Lepid., 6: 438.



Pandesma quenavadi Guenee



- A. Male genitalia, B. Aedeagus, C. Uncus with Tegumen (Lateral view),
- D. Valva (Left), E. Female genitalia, F. Corpus bursae (Enlarged),
- G. Papilla analis with Apophyses (Enlarged)

**Male genitalia:** Uncus long, strong, cygnate shaped; tegumen broad with both the arms sclerotized, inverted v-shaped; almost equal the length as uncus; vinculum longer than tegumen, sclerotized, u-shaped; saccus wanting, valve highly developed, differentiated into parts, costa well developed into finger like curved projection; cucullus with uniform brush like long hairs attached to margin; ampulla well marked; sacculus sclerotized, produced into long sickle shaped projection; juxta membranous transtilla present sclerotized; aedeagus slightly sclerotized; vesica membranous, flower shaped, scobinate with single cornutus; ductus ejaculatorious entering apically;

**Female genitalia:** Corpus bursae small, rounded, sclerotized, posterior part broad, ornamented with sclerotized spine like structures; signum absent; ductus bursae small, membranous towards corpus bursae and sclerotized towards ostium bursae; ostium bursae simple; posterior apophyses short, sclerotized, spatulate apically; anterior apophyses longer than posterior apophyses, spatulate apically; papilla analis flat, triangular, weakly sclerotized with micro setae.

Wing Span: 48 mm.

**Old Distribution**: Sri Lanka and Burma.

**Material Examined:** 

Himachal Pradesh: Barog: 07.viii.09, 5  $\circlearrowleft$   $\circlearrowleft$ , 2  $\circlearrowleft$   $\circlearrowleft$ .

Karnataka: B.R. Hills: 9.xii.06, 2  $\circlearrowleft$   $\circlearrowleft$ , Medikeri: 13.xi.05, 2  $\circlearrowleft$   $\circlearrowleft$ .

Tamil Nadu: Kotagiri: 22.xi.08,  $1 \circlearrowleft$ .

**Remarks**: The species *quenavadi* Guenée is the type species for the genus *Pandesma* Guenée. The characters found in this species are included in the diagnosis of genus to update its characterization. And genus *Pandesma* Guenée is the first record from India.

**Abbreviations:** AED: Aedeagus; JX : Juxta; TG : Tegumen; UN : Uncus; VES: Vesica; VN : Vinculum; VLV : Valva; PAP.A: Papilla analis; CRP. BU: Corpus bursae; SIG: Signum; DU.BU: Ductus bursae.

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