

**Taxonomic studies on Indian Gelechiidae VIII. A new species of genus
Pityocona MEYRICK from North India (Lepidoptera: Gelechioidea)**

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ABSTRACT. *Pityocona bifurcatus* sp. nov. is reported from various North Indian localities. Besides its detailed description and relevant illustrations, relation of the new species to *Pityocona xeropis* MEYRICK has been commented upon.

KEY WORDS: Gelechiidae, *Pityocona*, new species, North India.

INTRODUCTION

Pityocona MEYRICK is represented by only three species from all over the world, viz. *P. porphyroschia* MEYRICK, *P. attenuata* CLARKE and *P. xeropis* MEYRICK (GAEDE 1937; CLARKE 1986). Out of these, only *P. xeropis*, the type species is known from South India. Thirty five males and seven females collected from different localities in the state of Haryana, Rajasthan and Chandigarh (U.T.) between April to October of 2000-2002 were examined and found to be in total agreement in morphological and genitalic features with the members of the mentioned genus (MEYRICK 1925; CLARKE 1969, 1986). However, thorough comparison of the collected specimens with the so far known species confirmed its status as a new species of *Pityocona*.

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SYSTEMATICS

Genus *Pityocona* MEYRICK

Pityocona MEYRICK, 1918, *Exotic Microlepidoptera*, 2 : 116.

Type-species : *Pityocona xeropis* MEYRICK, 1918, *Exotic Microlepidoptera*, 2 : 116.

Pityocona bifurcatus sp. nov.

(Figs 1 – 6)

Diagnosis

Pityocona bifurcatus sp. nov. categorically differs from *P. xeropis* MEYRICK, the closely allied species already reported from India in labial palps without any banding pattern, and irroration of forewings with white and not dark fuscous. Furthermore, presence of equidistantly positioned black specks in the middle of forewing above plical fold distinctly departs it from the compared species. The new species also has well defined vein M_1 in hindwing and symmetrically bifurcated uncus of male genitalia, as against, weakly indicated M_1 in hindwing (CLARKE 1986) and asymmetrically bifid uncus in the male genitalia of *P. xeropis* (CLARKE 1969).

Description

Male: Head shiny creamy white, Labial palps creamy white, fuscous near apices on outer side. Thorax creamy white. Forewing (Fig. 2) narrow, costa nearly straight; apex produced, pointed; termen oblique; tornus inconspicuous. Ground colour brown, sparsely irrorated with white above; three black specks equidistantly placed on dorsal side, with a concolorous speck below first in plical fold; traces of two fuscous streaks – one below costa and another on plical fold; an elongated patch at apex fuscous; cilia along margin light brown. Ventral surface fuscous. Discal cell about two-third of wing length. Hindwing (Fig. 3) with dorsal and ventral surfaces greyish-fuscous; cilia along inner margin light brown, two to three times of wing width. Discal cell about two-third of wing length; CuA_2 from about distal two-fifth of posterior margin of discal cell. Hind tibia adorned with ochraceous hair scales above.

Abdomen shiny fuscous. Male genitalia (Fig. 4) with uncus less than half of tegumen, bifurcated, each half bulged outwards and densely setose on outer corner; gnathos more sclerotised and bifurcate at tip; saccus triangular; valvae with dorsal margin concave and ventral wavy; cucullus spatula-like. Aedeagus (Fig. 5) narrowing distally; vesica adorned

with numerous microscopic spines. Female genitalia (Fig. 6) with corpus bursae ovoid; signum minutely denticulate triangular plate-like; ductus bursae longer than corpus bursae, bearing numerous microscopic denticles, except at its proximal and distal part; genital plate half ring-like; anterior apophyses about half of posterior; papillae anales beset with setae of varying lengths.

Wingspan (full): Male: 11-12 mm; female : 11-12mm.

Material examined

Holotype : ♂, 25.vi.2001; Chandigarh (U.T.). India.

Paratypes : 1♂, 18.vi.2000; 2♂♂, 21.vii.2000; 9♂♂, 27.viii.2000; 3♂♂, 28.viii.2000; 1♀, 29.viii.2000; 2♂♂, 30.viii.2000; 1♂, 05.ix.2000; 1♂, 06.ix.2000; 1♂, 1♀, 10.ix.2000; 1♂, 15.iii.2001; 1♂, 15.v.2001; 1♂, 27.ix.2001; 1♂, 29.ix.2001; 1♂, 02.x.2001; 1♀, 25.iii.2002; Chandigarh. 2♂♂, 21.ix.2000; 1♂, 06.iv.2002; Kalesar (Forest Rest House), Haryana. 1♀, 05.vii.2000; 1♀, 08.vii.2000; 1♂, 23.ix.2000; Pipli (Zoological Park), Haryana. 1♂, 21.ix.2001; Kalka, Haryana. 1♂, 02.x.2002; Faridabad (Badkhal Lake), Haryana. 1♂, 23.x.2001; Hanumangarh (Forest Rest House), Rajasthan. 1♂, 01.x.2000; 1♂, 07.viii.2000; 1♀, 09.viii.2000; 1♀, 08.viii.2000; Jharoal (Forest Rest House), Rajasthan. Coll: V. K. WALIA and D. WADHAWAN. (Type specimens deposited in reference collection of Entomology section, Department of Zoology, Panjab University, Chandigarh. INDIA).

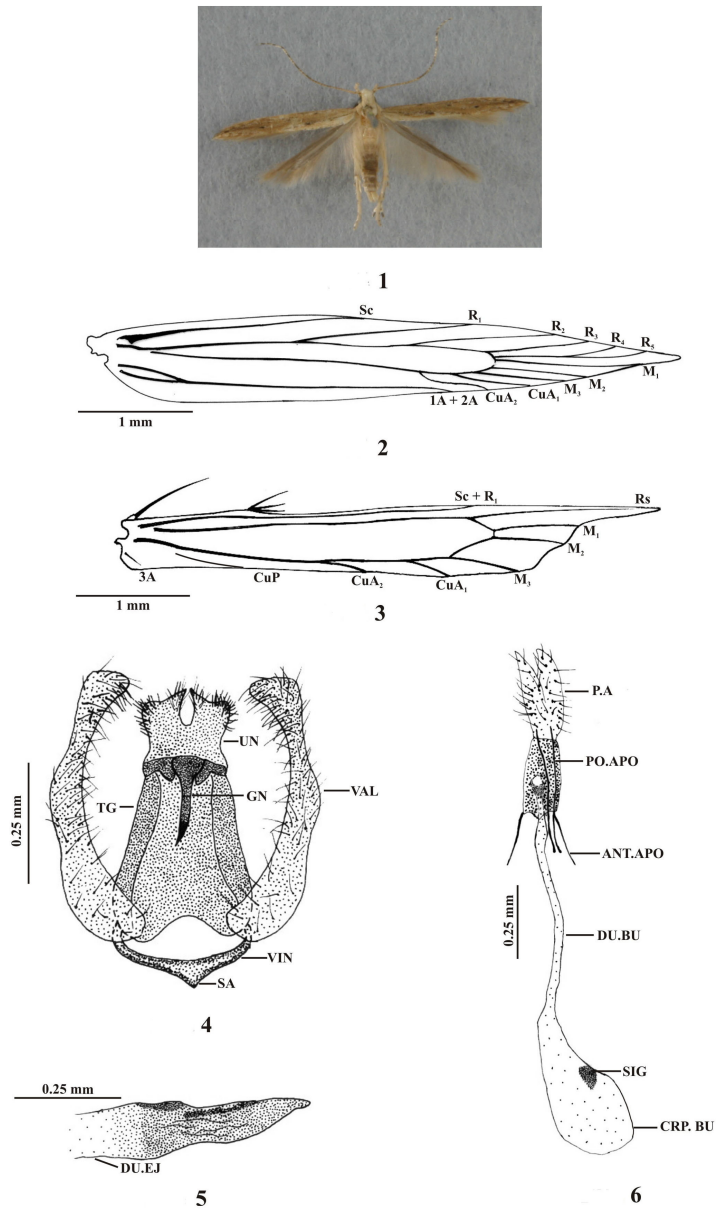
Flight period : March to October.

Distribution

Chandigarh (India).

Etymology

Bifurcated condition of both uncus and gnathos in male genitalia inspired naming of present species as *Pityocona bifurcatus* sp. nov.



Figs 1 – 6. *Pityocona bifurcatus* sp. nov. ; 1 – habitus; 2 – forewing; 3 - hindwing; 4 - male genitalia; 5 - aedeagus; 6 - female genitalia.

Abbreviations used in figures: 1 A + 2 A = fused first and second anal veins; ANT. APO = anterior apophysis; CRP. BU = corpus bursae; CuA₁ = first anterior cubital vein; CuA₂ = second anterior cubital vein; DU. BU = ductus bursae; Du. Ej = ductus ejaculatorius; GN = gnathos; M₁ = first median vein; M₂ = second median vein; M₃ = third median vein; P. A = papilla analis; PO. APO = posterior apophysis; R₁ = first radial vein; R₂ = second radial vein; R₃ = third radial vein; R₄ = fourth radial vein; R₅ fifth radial; Rs = Radial sector vein; SA = saccus; Sc = subcosta; Sc+R₁ fused subcosta and first radial; SIG = signum; TG = tegumen; UN = uncus; VAL = valva; VIN = vinculum.

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