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Description of female genitalia of *Iambia harmonica* (Hampson)

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Abstract

Genitalia plays key role in species identification. In the present communication, external female genitalic attributes of *Iambia harmonica* (Hampson) has been studied in detail and incorporated into the diagnosis of this species.

Keywords: Lepidoptera, Noctuidae, *Iambia harmonica*, Genitalia.

1. Introduction

Walker (1863) erected genus *Iambia* and also designated *Iambia inferalis* Walker as its type species. Warren (1914) described a new species *brunea* Warren and after 44 years, Sugi (1958) described another new species *jamesi* Sugi. Viette (1968) described new species *volasira* Viette. Poole (1989) catalogued 22 species in genus *Iambia* Walker. In same year, Holloway (1989) described male and female genitalia of *tessellata* Prout and shifted this species under genus *Iambia* Walker. Besides this, genitalia of another species *lyricalis* Holloway was also described.

In present study, only one species i.e. *Iambia harmonica* (Hampson) has been collected and studied. The female genitalia has been photographed and described in detail for authentic identification and updating the diagnosis of present species.

2. Materials and Methods

A total number of four representatives of *Iambia harmonica* (Hampson) have been collected with the help of light traps from different localities of Maghalaya and Mizoram. The collected specimens were killed with the help of ethyl acetate vapours and processed as per standard techniques in Lepidopterology. The identification of captured specimens was done with the help of relevant literature.

3. Observations

Genus *Iambia* Walker

Walker, 1863. *List spec. Lepid. Insects Colln. Br. Mus.*, 13: 109.

4. Type species

Iambia inferalis walker.

5. Diagnosis

Proboscis fully developed; palpi upturned, the 2nd joint reaching about to middle of frons and moderately scaled, the 3rd moderate; frons smooth; eyes large, round; antennae of male ciliated. Thorax clothed chiefly with scales, the prothorax without crest, the metathorax with spreading crest; tibiae moderately fringed with hair. Abdomen with dorsal crests on basal segments. Fore wing with the apex rounded, termen very slightly crenulate and somewhat excised from vein Cu₂ to tornus; veins Cu₁ and M₂ from near angle of cell; M₁ from upper angle; R₃ from R₂ anastomosing with R₄ to form the areole; R₁ from cell. Hind wing with veins Cu₁ and M₃ from angle of cell; M₂ obsolescent from middle of discocellulars; M₁ and Rs from upper angle; Sc+R₁ anastomosing with the cell near base only.

6. *Iambia harmonica* (Hampson)

Callopostia harmonica Hampson, 1902. *J. Bomb. Soc.*, 14: 203.

7. Description

Head ochreous white, irrorated with red brown; black patch between antennae; palpi upturned,

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pale white, with brown patches on sides; antennae minutely ciliated; collar pale white, with purplish red brown patches. Thorax grey, mixed with deep purplish grey and brown. Forewing pale olive- brown mixed with purplish grey to postmedial line; subbasal line represented by a black brown spot on costa followed by a striga and two small spots below cell; black brown spots in and below the cell before antemedial line; antemedial line represented by double spots on costa, then deep red, double, oblique slightly sinuous, claviform represented by few black scales at extremity; orbicular and reniform grey defined by olive and white at sides; a black brown patch between them in cell; two black brown spots on middle of costa and deep red incurved line from cell to inner margin; postmedial line white defined on each side by deep red, some grey beyond it before the olive brown terminal area; fine, wavy, white subterminal line; cilia grey with fine white lines at base.

Hindwing fuscous brown; cilia whitish with brown line through them. Abdomen fuscous brown. Underside white, irrorated with deep red brown; cell spot in hindwing.

8. Female genitalia

Papilla analis long, quadrate, setosed; anterior and posterior apophysis almost of same length; ductus bursae long, narrow tube, membranous towards papilla analis, sclerotized towards corpus bursae; corpus bursae sclerotized, irregular spindle- shaped, with a serrate row of spines; signum absent.

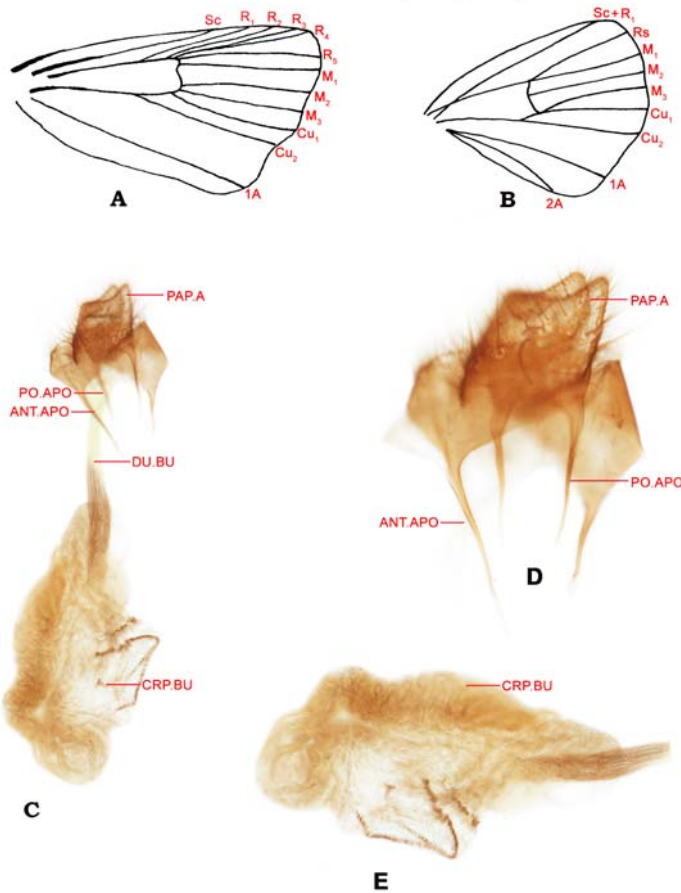
9. Material Examined

Meghalaya: Jowai 08.ix.2009-1♀.
 Mizoram: Sangau 21.ix.2012- 2♀♀; Thingsul 18.ix.2009- 1♀.

PLATE



Iambia harmonica (Hampson)



A. Forewing, B. Hindwing, C Female genitalia, D. Papilla analis with Apophysis, E. Corpus bursae (Enlarged)

10. Distribution

Meghalaya, Mizoram, Sikkim.

11. Abbreviations

PAP.A: Papilla analis; ANT. APO: Anterior apophysis; CRP. BU : Corpus bursae; DU.BU : Ductus bursae; PO.APO : Posterior apophyses; Cu1: First cubital vein; Cu2 : Second cubital vein; 1A : First anal vein; 2A : Second anal vein; M1 : First medial vein; M2 : Second medial vein; M3 : Third medial vein; R₁ : First radial vein; R₂ : Second radial vein; R₃ :Third radial vein; R₄ : Fourth radial vein; R₅ : Fifth radial vein; Rs : Radial sector; Sc+R₁ : Stalk of Sc and R₁.

12. Acknowledgements

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