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Recharacterization and new distribution of a rare genus *Yerongponga* Lucas

Harkanwal Singh

Department of Zoology and Environmental Sciences, Punjabi University, Patiala, Punjab

Correspondence: dr.harkanwalsingh@gmail.com

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ABSTRACT

External male genitalia of Yerongponga exequialis Lucas has been studied in detail for the first time to update the diagnosis of this species. This genus has been reported for the first time from India.

Key words: Lepidoptera, Noctuidae, *Yerongponga exequialis,* Male genitalia, New record.

INTRODUCTION

Lucas erected genus *Yerongponga* on type species *Yerongponga exequialis* Lucas [1]. This is a monotypic genus. Poole catalogued only type species under this genus [2].

In the present research work, type species of genus *Yerongponga* Lucas i.e. *exequialis* Lucas has been collected from the far-flung localities of Mizoram. Male genitalia of *Y. exequialis* Lucas has been studied, described and photographed for the first time. Genus *Yerongponga* Lucas has been reported for the first time from India.

MATERIALS AND METHODS

Intensive and extensive collection-cum-survey tours have been conducted in Northeast India between September, 2009 to May, 2012. The collection of adult Noctuid moths have been made with the help of light traps fitted at different places during night time. Both vertical sheet and portable light trap methods have been used for this purpose. Petromax lamp/ battery operated lamp was also used for collection purpose in some areas where electricity supply was not available. Collection was done in pre-monsoon and post-monsoon seasons.

Only single male representative of *Yerongponga exequialis* Lucas has been collected from Mizoram. The identification of captured specimens was done with the help of relevant literature [3]. For study of genitalic attributes, the abdomen detached from the body of preserved moth with needle and forceps, as cutting of last few segments often damages the constituent parts of male and female genitalia [4]. The detached abdomen dropped in test tube containing 10% KOH overnight to soften the chitin and for removal of muscles and other unwanted parts. The potashed material washed in distilled water and residual traces of KOH removed later by dipping these structures in 1% glacial acetic acid. The abdomen dissected in 50% alcohol for taking out the male and female genitalic structures. Aedeagus separated from the main genitalia by carefully keeping juxta and transtilla intact. Vesica everted carefully with help of fine forceps. After proper dehydration in different grades of alcohol, the genitalic structures were cleared in clove oil and then mounted in Canada balsam on cavity slides. The terminology given by Klots has been followed in the present studies for naming different structures of genitalia [5].

OBSERVATIONS

GENUS *YERONGPONGA* LUCAS

Lucas, 1901. *Proc. R. Soc. Qd*. **16**: 82

Type species*:* *Yerongponga exequialis* Lucas

Diagnostic characters: Head thickly, clothed with short hairs; tongue well developed; antennae in female filiform, very short, single cilia; palpi long, sub ascending, second joint long, covered with dense brush of hair, third joint nearly as long as second, clothed with very short hairs, cylindrical, semi-club shaped. Femora densely hairy; posterior tibiae spurs very long and developed. Fore wings Cu_2 from before Cu_2/Cu_1, Cu_1, M_3 and M_2 approximate, M_1 from near R_3, R_4 and R_5 from R_3. Hind wings Cu_1, M3 and M_2 approximate at base, M_1 and Rs approximate, $Sc+R_1$ approaches cell close to base.

Male genitalia: Uncus long, curved near base, setosed with small setae, spine long, curved; tegumen long, narrow, weakly sclerotized; transtilla membranous; juxta strongly sclerotized, peacock shaped; vinculum long, weakly sclerotized; saccus well developed, long, tube like; valve asymmetrical, small, narrow, constricted medially; saccular margin convex, basal half strongly sclerotized, right cucullus long, left one small, round; aedeagus long, curved, narrow, strongly sclerotized; vesica small, scobinated, four robust, long cornuti; ductus ejaculatorius enters into the aedeagus sub apically.

***Yerongponga exequialis* Lucas**

Yerongponga exequialis Lucas, 1901, *Pr. R. Soc. Queensland*, **16**: 82-83

Description: Head fuscous, brown; palpi upturned, rich fuscous black with light blue scales, third joint tip pale; antennae bipectinate; collar brown at base, upper half tinged with grey. Thorax fuscous brown, with blue tinge. Forewing rich fuscous black, spot with a shiny purple iridescence and freely irrorated with light blue scales and dots, and marked with patches and ferrous ocherous spots; four transverse lines of dots, basal three indistinct and broken, fourth only plain and definite, first line marked with two dots, third line from a large subcostal spot beyond 1/2costa to a circle of dots on anterior border of large ferrous blotch opposite ¾ inner margin, and one third breadth of wing from inner margin; cilia indigo fuscous; submarginal row of dots on vein. Hindwing ferrous, brown towards base, shading to purple and iridescent towards hind margin where scattered blue white scales. Abdomen rich fuscous black. Underside fuscous, with median series of pale dots in both wings.

Material Examined:

Mizoram: Hrangchalkwan 18.ix.2012- 1♂.

Distribution: India; Australia.

Remarks: This species has been reported for the first time from India.

Abbreviations: *AED: Aedeagus; 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; R_1 : First radial vein; R_2 : Second radial vein; R_3 :Third radial vein; R_4 : Fourth radial vein; R_5 : Fifth radial vein; Rs : Radial sector; $Sc+R_1$: Stalk of Sc and R_1; CRN: Cornuti/Cornutus; JX : Juxta; TG : Tegumen; UN : Uncus; VES: Vesica; VN : Vinculum; VLV : Valva.*

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