

TAXONOMIC UPDATE AND BRIEF ACCOUNT OF GENITALIA ON TYPE SPECIES OF GENUS RAMADASA MOORE (LEPIDOPTERA: NOCTUIDAE)

JAGBIR SINGH KIRTI¹ & CHARAN KAMAL SEKHON²

¹Department of Zoology & Environmental Sciences, Punjabi University, Patiala, Punjab, India

²Department of Zoology, Sri Guru Granth Sahib World University (SGGSWU), Fatehgarh Sahib, Punjab, India

ABSTRACT

Male and female genitalic attributes of genus *Ramadasa* Moore have been studied and illustrated in detail for the first time. These characters can be incorporated in the revised diagnosis of genus.

KEYWORDS: External, Genitalia, *Ramadasa* Moore, Moth

INTRODUCTION

The species *pavo* was first time reported under the genus *Chasmina* by (Walker, 1856). In 1877, Moore proposed a new genus *Ramadasa* with *pavo* as its type species. During recent collection cum survey tours conducted in Western Ghats of India, six specimens of genus *Ramadasa* Moore were collected and identified with the help of literature (Hampson, 1894) and by comparison with reference collections lying in Entomology section of Indian Agriculture Research Institute, PUSA, New Delhi and Entomology museum of Forest Research Institute, Dehradun. The authentic identification of both the above species was also confirmed by comparison with the holotypes lying in the Natural History Museum (NHM) London. The external genitalia of the species has been described in this manuscript in considerable detail for the first time. The nomenclature for naming various external genitalic attributes has been followed from the terminology given by (Klots, 1970), and (Mikkola 2007). In the present work, male and female genitalia of type species are described and photographed.

MATERIALS AND METHODS

The adult representatives of Noctuid moth species were collected from the florescent lights fitted at different places in Western Ghats of India. The collected moths were killed and preserved in air tight wooden boxes. For the preparation of slides of external male and female genitalia, abdomen of preserved specimens were detached and potashed in 10% solution (Robinson, 1976), washed in 1% glacial acetic acid and dissected in 30% alcohol for taking out male and female genitalia. 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 photography of external male and female genitalic structures was done with the help of image processing unit in the department of Zoology, Punjabi University, Patiala. The terminology given by (Klots, 1970) has been followed in the present studies for nomenclature purpose. The adult Noctuid moths along with dissected specimens were preserved in insect cabinets.

OBERVATIONS

Ramadasa pavo (Walker)

Walker: 1856, *List. Spec. Lepid. Insects colln Br. Mus*, 9: 147.

Male Genitalia: Uncus long, hooked apically, heavily setosed with long setae; tegumen shorter than uncus, inverted u-shaped; vinculum broad, as long as tegumen; saccus wanting; valvae well developed, differentiated into parts; costa produced into finger like projection; cucullus with corona setosed with long hairs; sacculus broad, membranous; juxta triangular, sclerotized; transtilla membranous; aedeagus sclerotized tube; vesica membranous bearing large cornutus; ductus ejaculatorious entering medially.

Female Genitalia: Corpus bursae oblong, membranous with striations; signum present as sclerotized comb like patch; ductus ejaculatorious short, membranous; ostium bursae simple; posterior apophyses longer than anterior apophyses, papilla analis sclerotized, heavily setosed with macro and micro setae.

Wing Span: 46 mm.

OLD DISTRIBUTION

Borneo, Sumatra, Peninsular Malaysia, Java, Bali, Philippines, South China, Andaman Island.

MATERIAL EXAMINED

Karnataka: Ganeshgudi: 27.x.07, 2 ♂, 1 ♀.

CONCLUSIONS

Genitalic attributes of the species under reference will be helpful for authentic identification and further studies.

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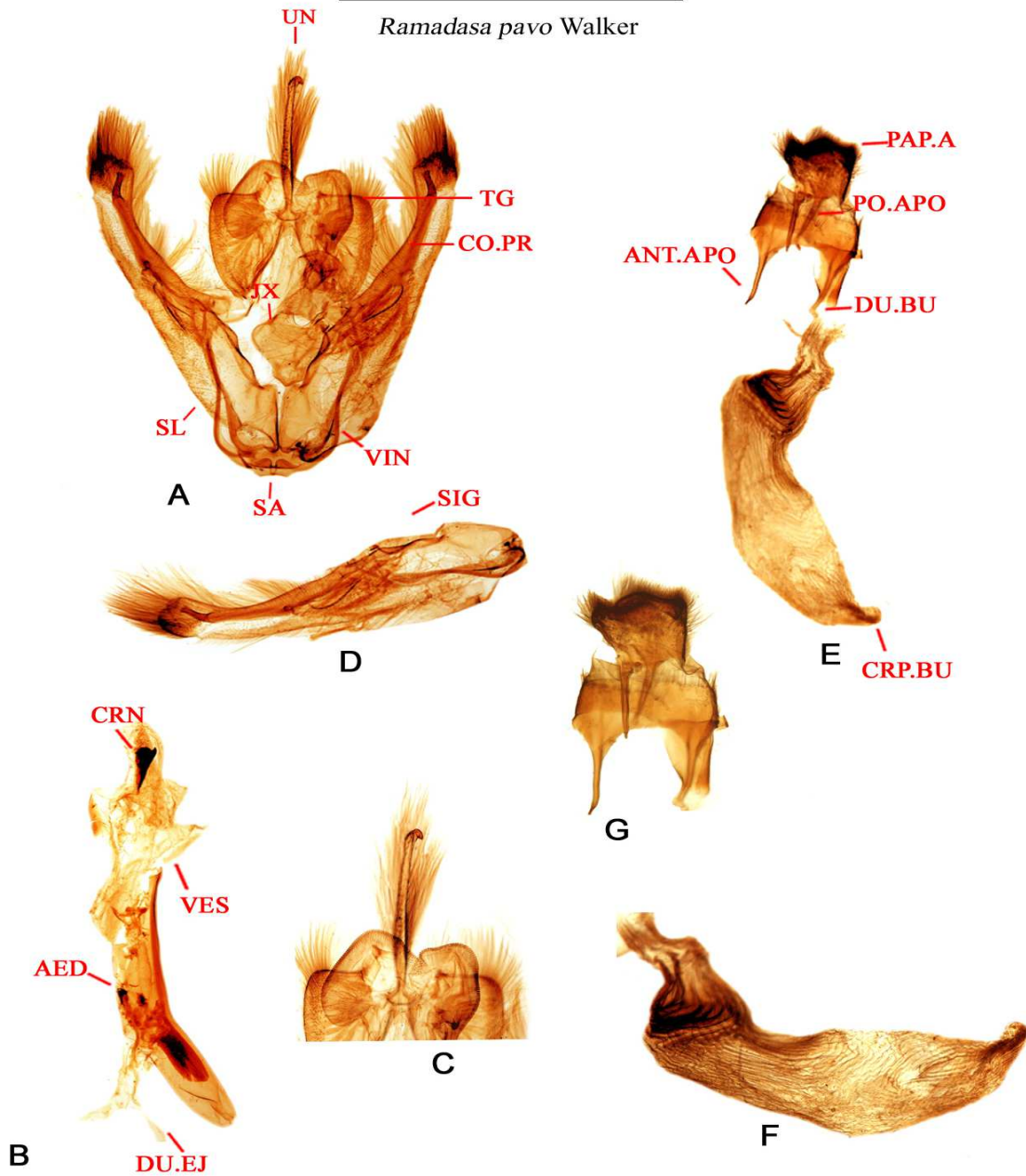
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Ramadasa pavo Walker



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)