

Male Genitalic Studies of Some Indian Species of Genus *Amsacta* WALKER

(Lepidoptera, Arctiidae)

With 12 Figures

S. L. GUPTA

New Delhi

The genus *Amsacta* WALKER, of family Arctiidae, commonly known as „Kutra“ is one of the important and destructive pest, having a wide range of distribution. The specimens have a variety of food plants and common habits. During certain seasons, a large number of hairy caterpillars appear and either feed on and destroy specific crops or more actively migrate from field to field attacking almost any crop coming in their way. They are leaf eaters and are often responsible for considerable damage, particularly to cereals, fodders, pulses, and cruciferous crops. They are sporadic pests and appear in large numbers when the conditions are favourable.

STRAND (1919) listed 35 species of this genus from the world, including 7 Indian species. Of these, present study includes only 4 species, viz: *A. albistriga* (WALKER), *A. lactinea* (CRAMER), *A. lineola* (FABRICIUS), and *A. moorei* (BUTLER). HAMPSON (1901), in his Catalogue of Lepidoptera Phalaenae, has given a key for the separation of above four species on the basis of wing venation, type of antennae, legs and colour pattern which are very much variable from specimen to specimen. So the author took up the study of genitalic armature which has been widely used in settling the phylogeny and taxonomy of various groups of insects. The details of the male genitalic armature of the four species and a key, for their ready separation based on it, are given.

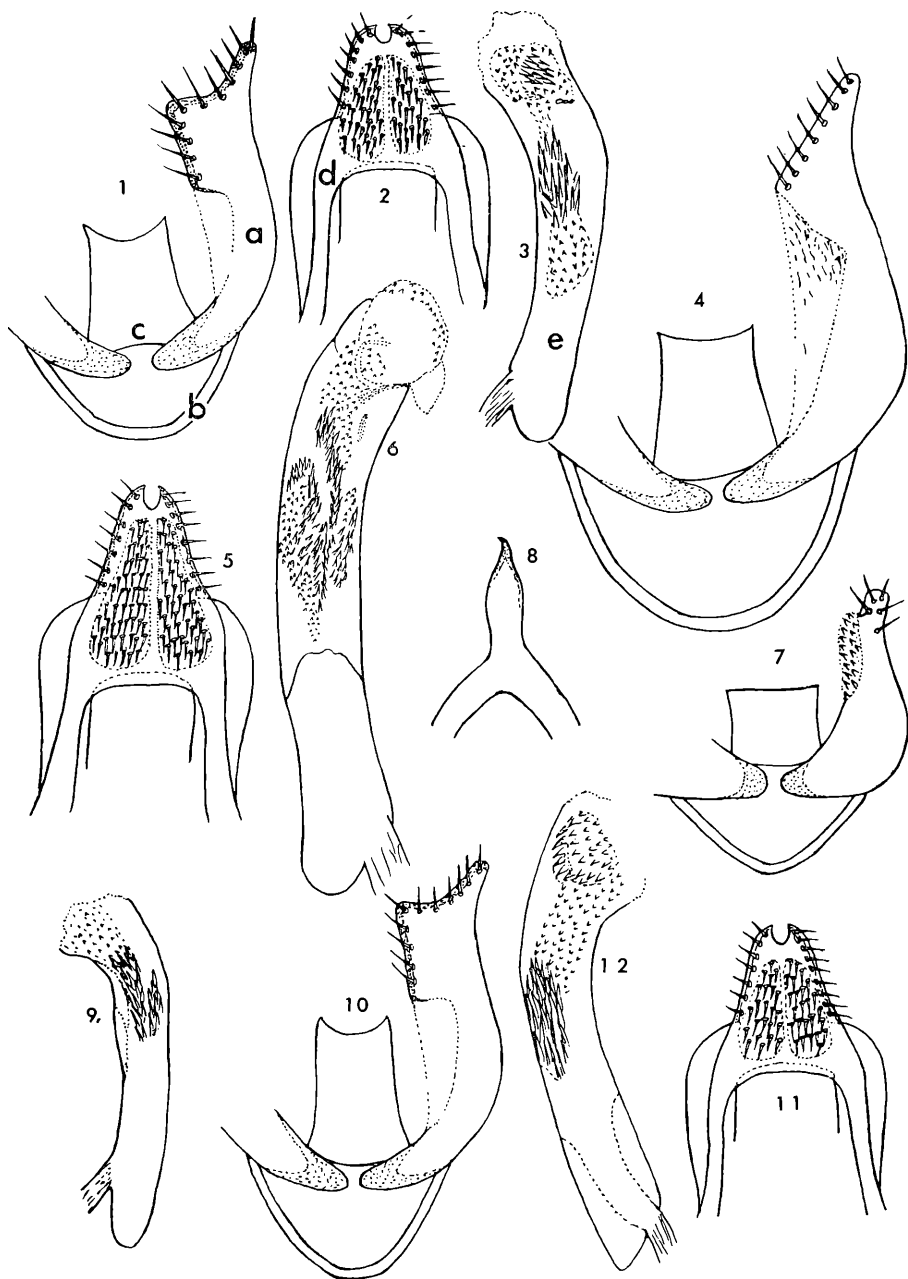
Male genitalia

A. albistriga (WALKER) (Figs. 1,2,3) Valvae simple, broad and produced into a long apical process, the basal half of the costal margin is overlapped whereas the distal half is thickened; vinculum U-shaped; annellus one and a half times longer than broad; uncus bifid and flat; aedeagus with cornuti chitinized.

A. lactinea (CRAMER) (Figs. 4, 5, 6): Valvae simple and broader than *A. moorei* (BUTLER), the basal half of the costal margin with minute spines, is overlapped whereas the distal half is straight and not thickened; vinculum V-shaped; annellus as broad as long; uncus bifid and flat; aedeagus with cornuti much more developed.

A. lineola (FABRICIUS) (Figs. 7, 8, 9): Valvae simple and produced into a short apical process, near the apical process on the costal margin there is a crown of well chitinized spines; vinculum V-shaped; annellus as broad as long; uncus undivided and pointed; aedeagus with cornuti less chitinized.

A. moorei (BUTLER) (Figs. 10, 11, 12): Valvae simple and broad and produced into a long apical process, the basal half of the costal margin is overlapped whereas the distal half is thickened; vinculum U-shaped; annellus one and a half times longer than broad; uncus bifid and flat; aedeagus with cornuti well developed.



Figs. 1–12. (Explanation see text)

a: Valvae — b: Vinculum — c: Anellus — d: Uncus — e: Aedeagus

Key (on the basis of male genitalia)

- | | | |
|---|---|---------------------------|
| 1 | Uncus bifid and flat. | 2 |
| — | Uncus undivided and pointed. | lineola (FABR.) |
| 2 | Distal half of the costal margin of valvae thickened. | 3 |
| — | Distal half of the costal margin of valvae not thickened. | lactinea (CRAM.) |
| 3 | Aedeagal cornuti less developed. | albistriga (WALK.) |
| — | Aedeagal cornuti well developed. | moorei (BUTL.) |

A c k n o w l e d g e m e n t

The author is thankful to the Head of the Division of Entomology, I. A. R. I., New Delhi, for allowing him to examine the specimens present in National Pusa Collection of the Division, in addition to, made by the author.

References

- HAMPSON, Sir G. F., 1901: Cat. Lep. Phal. Brit. Mus. **3**: 322–331.
 STRAND, E., 1919: Lep. Cat. Part 22: 237–244.

Address of author:

S. L. Gupta, Division of Entomology, I. A. R. I., New Delhi — 110012; India

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Reichenbachia](#)

Jahr/Year: 1981

Band/Volume: [19](#)

Autor(en)/Author(s): Gupta S. L.

Artikel/Article: [Male Genitalic Studies of Some Indian Species of Genus Amsacta WALKER \(Lepidoptera, Arctiidae\) 23-25](#)