

## Male Genitalic Studies of *Anambulyx elwesi* (Druce) from India (Lepidoptera : Sphingidae)

AMRITPAL SINGH KALEKA, DEVINDER SINGH and PARMINDER KAUR

Department of Zoology & Environmental Sciences,  
Punjabi University, Patiala-147002 (Punjab).

E-mail: apskaleka@gmail.com

While revising the Sphingidae of world, Rothschild & Jordan (1903) described a new monotypic genus *Anambulyx* with *elwesi* Druce as its type species, which is known from northern Pakistan, northern India, Nepal, south-western China, northern Thailand and northern Vietnam. Bell & Scott (1937), D'Abrera (1987), Allen (1993), Kitching & Pittaway (2000) and Rafi et al. (2014), have used the same nomenclature. Smetacek (2004) described the population of *A. elwesi* in Uttarakhand, India, as a separate subspecies, namely *Anambulyx elwesi* subsp. *kitchingi*, but Rafi et al. (2014) have synonymised it.

In the present study, the male genitalia of this species has been studied in detail. The terminology for naming various parts of genitalia has been followed after Klots (1970).  
**Genus *Anambulyx* Rothschild & Jordan**  
Rothschild & Jordan, 1903, *Novit. Zool.*, 9: 307; Bell & Scott, 1937, *Fauna British India, Moths*, 5: 228-229.

Type species: *elwesi* (Druce).

Distribution: Oriental and Palaearctic regions.

### *Anambulyx elwesi* (Druce)

*Anambulyx elwesi*, Druce: Rothschild & Jordan, 1903, *Novit. Zool.*, 9: 312; Seitz, 1928, In *Seitz's Macrolep.*, 10: 543; Bell & Scott, 1937, *Fauna British India, Moths*, 5: 232. *Ambulyx elwesi* Druce, 1882, *Ent. Mon. Mag.*, 19: 17; Hampson, 1892, *Moths India*, 1: 79.

Type locality: Darjeeling (West Bengal, India).

Male genitalia: Uncus of moderate size, broad, ventrally setosed, well sclerotized; distal end narrow, laterally compressed with blunt apex; gnathos reduced, well sclerotized with rounded distal ends; tegumen broad at base of uncus, inverted U-shaped, slightly sclerotized, almost 2X length of vinculum; vinculum short, semi sclerotized ending into quite long saccus with clavate endings; juxta U-shaped, well sclerotized; transtilla narrow, bar-like. Valva with costa narrow, sides sclerotized; sacculus broad, moderately sclerotized; saccular projection broad, distal end bifid, both arms well sclerotized with blunt apices; distal half of valva broad, globular, semi sclerotized armed with short spines. Aedeagus narrow, quite long, well sclerotized; distal end with two pointed spines; vesica without any armature. (Figs. 1-6)

Wing Expanse: Male: 86 mm; Female: Not examined.

Material examined: Assam: North Cachar Hills, Jatinga 4.ix.1991, 1♂. Himachal Pradesh: Palampur, 25.vi.1999, 1♂.

Distribution: India: Western Himalaya. The reporting of this species from Jatinga (Assam) is its first record from North-East India. Elsewhere: China, Myanmar, Nepal, Thailand and Vietnam.

Remarks : This species is superficially similar to *Callambulyx rubricosa* (Walker) but can be distinguished with respect to origin of veins  $M_1$  in forewing;  $M_1$  and Rs in hindwing and characteristic long saccus and aedeagus in male genitalia. The other features which make it distinct are absence of retinaculum and subapical pair of hindtibial spurs.

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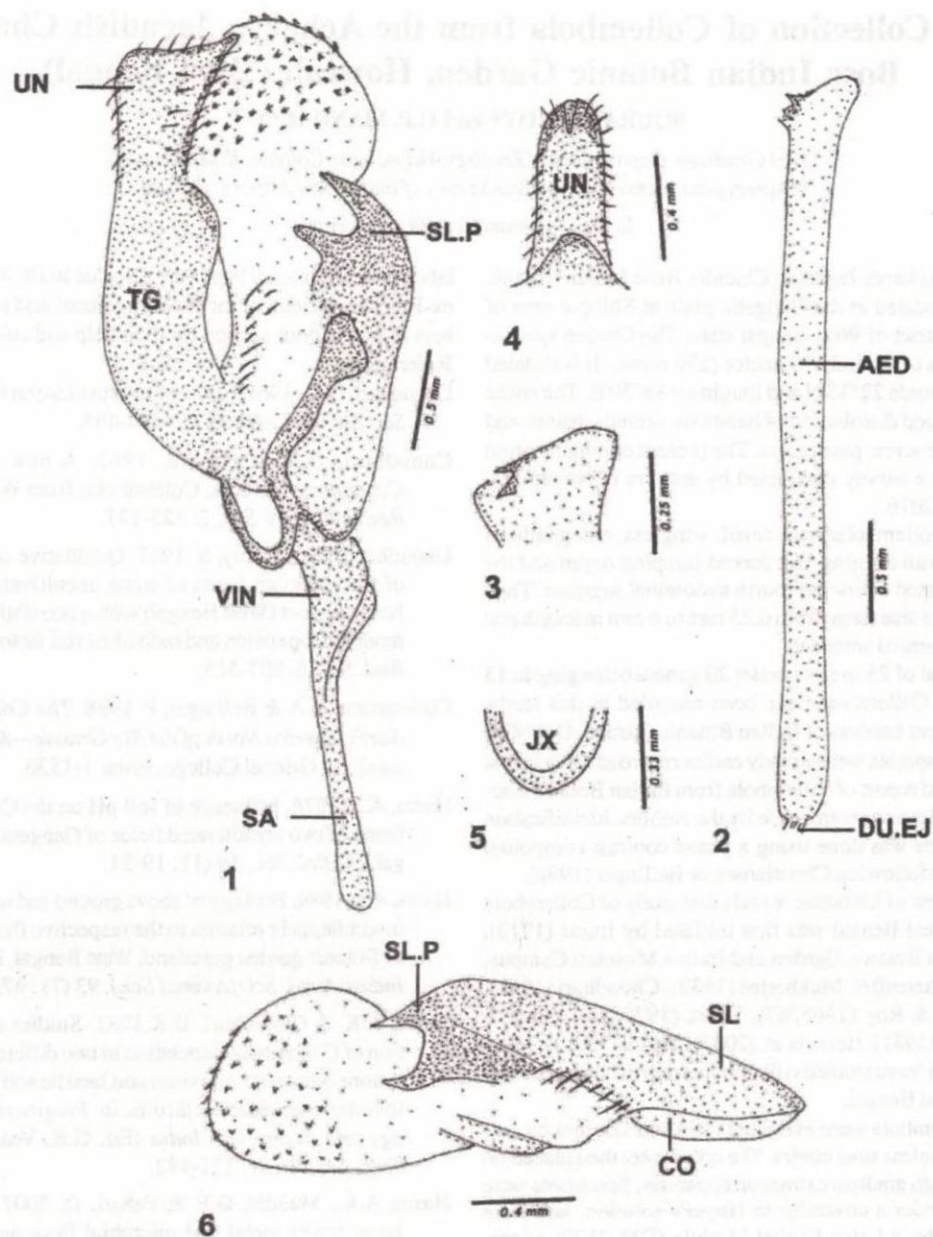


Fig. 1-6. *Anambulyx elwesi* (Druce) : 1. Male genitalia - lateral view; 2. Aedeagus; 3. Aedeagus - distal end (enlarged); 4. Uncus - Ventral view; 5. Juxta - Ventral view; 6. Valva - Ventral view.  
 Abbreviations—AED: Aedeagus; CO: Costa; CRP. BU: DU. EJ: Ductus ejaculatoris; JX: Juxta; SA: Saccus; SL: Sacculus; SLP: Saccular Projection; TG: Tegumen; UN: Uncus; VLA: Valva; VIN: Vinculum.