Apamea yunnana sp. n. (Lepidoptera, Noctuidae) from northern Yunnan, China

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A new noctuid species, *Apamea yunnana* sp. n. is described from the Yunnan Province, S China. The moth is superficially similar to *A. ferrago* (Eversmann) and to the recently described *A. nekrasovi* Mikkola, Varga & Guylai but differs from these in the details of the forewing pattern and more so in the structure of genitalia. The adult and the male genitalia of the new species are illustrated.

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The genus *Apamea* Ochsenheimer, 1816 is one of the largest genera of the subfamily Ipimorphinae, supposedly about 150 species worldwide. It shows holarctic distribution with roughly similar species numbers in the Nearctic and Palaearctic Regions; there are a few species known from the Oriental and African Regions. The genus is most diverse in open steppe and mountain landscapes in the southern parts of the temperate zone. Most species are connected with grassland landscapes with dense growths of Poaceae, host plants of larvae of many *Apamea* species.

The genus is represented in the Palaearctic by more than 50 described species. In the southeastern parts of the Palaearctic, especially in the Sino–Himalayan region, the fauna contains many peculiar endemic elements, several still undescribed.

The present paper contains the description of a new species of *Apamea* from China. It was collected in 1934 by the well-known German collector H. Höne. A male was found among unsorted material in the Zoologisches Forschungsinstitut und

Museum Alexander Koenig, where one of the largest collections of Chinese Lepidoptera is deposited.

Apamea yunnana sp. n. (Figs. 1-3)

Type material. Holotype: ♂, China, Prov. North Yunnan, Li-kiang, 9.IX.1934 H. Höne leg. Micropreparat ZMF, Nr. 1637. The holotype is deposited in Zoologisches Museum und Forschungsinstitut Alexander Koenig, Bonn, Germany.

Etymology. From the collecting area of the holotype.

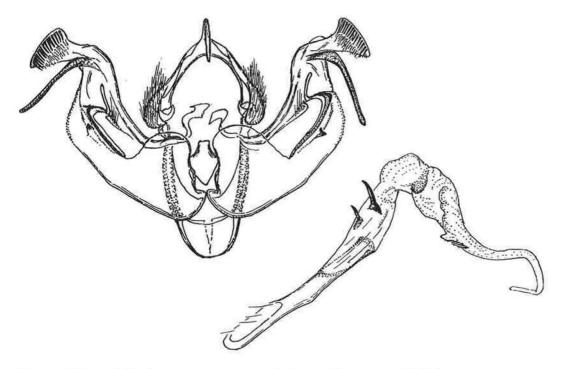
Diagnosis. This is a further pale sandy brown species of Apamea from the southern parts of Asia, externally looking intermediate between Apamea ferrago (Eversmann) and A. nekrasovi Mikkola, Varga & Gyulai, 1995, distinguished from these by the oblique and narrow orbicular stigma and by the relatively straight submarginal line. The structure of genitalia, particularly the very long digitus and reduced valva, suggests an isolated, derived position in the genus.



Fig. 1. Apamea yunnana sp. n., male holotype.

Description (Fig. 1). Wing expanse 39 mm, forewing length 19 mm. Antennae of male filiform with short cilia on each segment. Head and thorax covered by pale sandy-grey hair-like scales. Head with tuft of hair-like scales. Eyes round, surrounded by dark brown hair-like scales. Palpi laterally covered by dark brown scales, relatively short and flat; 3rd segment one third of 2nd. Ground colour of forewing pale sandy-brown, median and marginal fields with more brownish tint, costal margin pale greyish. Veins pale, lighter than ground colour. Wing pattern obscure, pale. Basal and antemedian lines hardly visible, lighter than ground colour; postmedian line dark medially, marginally bordered by pale line. Stigmata with pale outline, orbicular oblique, elongate, reniform with normal shape, with dark nucleus in hind corner. Subterminal line relatively straight. Terminal line expressed as dark dots between veins. Cilia pale brown, terminally darker. Hindwing evenly dark fuscous, fringe pale, underside with discal spot and medial fascia.

Male genitalia (Figs. 2-3). Uncus simple, narrow, pointed. Tegumen with moderate peniculus thickly covered with hairs. Juxta like arrow-tip. Valva narrow and curved at distal third. Sacculus with large basal lobe. Costa well developed with abnormally large (about 1/3 length of valva), well sclerotized costal process (digitus), directed ventrally. Cucullus reduced, trigonate, with relatively long neck; corona well developed with moderate number of spines of equal size. Ampulla weak. Clasper ridge-like, sclerotized. Short trigonate process on valva near middle part of clasper. Aedeagus relatively thin, straight. Vesica tube-like, curving to left, with two diverticula, medially and apically, basally with two strong spine-like cornuti and apically with field of short spinose cornuti.



Figs. 2–3. Male genitalia of *Apamea yunnana* sp. n., holotype. Micropreparate ZMFAK Nr. 1637. — 2. Genital armature. — 3. Aedeagus with vesica everted.

Female. Unknown.

Remarks. The structure of genitalia, with reduced, narrow-necked cucullus and with exceedingly long digitus, both directed ventrally, indicate that the species is strongly autapomorphic. It is extremely difficult to say anything about the relationships of the species inside the genus. It does not have anything to do with the superficially similar species Apamea ferrago and A. nekrasovi (see Mikkola et al. 1995). The taxon may belong to an undescribed subgenus within Apamea.

Distribution. The species was discovered in the southwestern part of China, northern part of

the Yunnan Province.

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References

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