

The genus *Bornethosea* Holloway (Lepidoptera: Limacodidae) from China with the descriptions of a new species

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Abstract: The genus *Bornethosea* Holloway, 1986 was recorded from China for the first time with a new species *Bornethosea jiuwanshanensis* sp. nov. (Lepidoptera: Limacodidae) which was described and illustrated from Guangxi province, China. This new species is the last related species *Bornethosea nigrina* Holloway, 1986 from Borneo by the wing markings and genitalia. The type specimens are deposited in Academy of Hunan Agricultural Sciences.

Key words: Lepidoptera; Limacodidae; *Bornethosea*; new species; China

中国刺蛾科(Limacodidae)一新记录属及一新种

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摘 要: 记述中国刺蛾科(Limacodidae)1 新记录属: 婆罗刺蛾属 *Bornethosea* Holloway, 1986 及 1 新种: 九万山婆罗刺蛾 *Bornethosea jiuwanshanensis* sp. nov., 该新种的前翅中室顶部具一明显黑色斑点, 雄性外生殖器的抱器末端宽大, 阳茎直而无刺突等特征, 与 *Birthama nigrina* 明显区分, 并给出了成虫和雄性外生殖器照片。所有标本材料均保存在湖南省农业科学研究院植物保护研究所昆虫标本馆。

关 键 词: 鳞翅目; 刺蛾科; 婆罗刺蛾属; 新种; 中国

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The genus *Bornethosea* was established by Holloway in 1986 with *Bornethosea nigrina* Holloway, 1986 as its type species. So far, only one species have been reported in the world: *Bornethosea nigrina* Holloway, 1986 from Borneo. Recently, some limacodid moths were collected from Jiuwanshan Nature Reserve, Guangxi province. It was found that one species of the genus *Bornethosea* is confirmed as new to science, and the genus *Bornethosea* is the first record from China^[1-4]. Its descriptions are summarized as follows.

Bornethosea Holloway, 1986 New Record to China.

Bornethosea Holloway, 1986, Malay. Nat. J. 1986, 40: 132, plate 8-36, figs. 234, 235. Type species: *Bornethosea nigrina* Holloway, 1986 *Diagnosis.* The male has brownish black forewings and blackish paler hindwings. The forewings have the veins picked out darker with M₁ arising from the base of R₅ at the cell; the oblique medial bar is broad, diffuse, indistinct; the veins are darkened in the both sexes. The male genitalia are distinguished by two hook-like spines at

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the apex of the aedeagus.

Distribution. China (Guangxi), Borneo.

Remarks. The genus was established mainly based on the vein M_1 arises from the base of R_5 at the cell rather than well separated from it. Up to present, only one species was concluded in it. The species of the genus fly in lowland rainforest particularly swamp forest. The type species is the most likely contender for the Bornean *Birhama nigrina* Hering and is therefore given the same name with the type specimens deposited in BMNH (The National History Museum, London).

Bornethosea jiuwanshanensis sp. nov.

♂ Expanse 28—29 mm, length of forewing 13—14 mm, antenna length 8—9 mm (Fig. 1, Fig. 2).

Antenna bipectinate, basally narrower and taper away evenly towards the apex. Forehead and body covered with dense grey-black scales. Labipalps developed, directed upwards with dense grey-black longer scales; Forewing nearly rectangle without distinct anal angle, ground color black with a dark black longer belt-shaped spot in the median cell expanding to near the termen; Vein M_1 arises from the base of R_5 at the cell in the forewing; Hindwing ground black, nearly equilateral triangle shaped.

Male genitalia: Uncus developed, with a small hook at the end; Gnathos sclerotized, longer and straight; Valva larger with truncated distal end. Costa with a thin, sclerotized process at the base; Saccus broad and flattened at the base. Aedeagus slender without cornuti and with a littler curved in the middle.

Females are unknown.



Fig.1 Adult of *Bornethosea jiuwanshanensis* sp. n. (Male, holotype, upperside)

图1 九万山婆罗刺蛾(成虫, 正模, 正面)



Fig.2 Male genitalia of *Bornethosea jiuwanshanensis* sp. n. (holotype)

图2 九万山婆罗刺蛾雄性生殖器(正模)

Holotype ♂, Jiuwandashan Provincial Nature Reserve, 400 m altitude, 25°10'N, 108°40'E, Secondary forest, Loucheng county, Guangxi province, China, July 28, 2003, Chen L.S. & Lin H. leg.

Paratypes 2♂♂, Same locality as in the holotype.

Distribution: China (Guangxi).

Remarks. The new species is closely allied to *Bornethosea nigrina* Holloway, but easily differs from the latter by the following points: forewing with distinct a dark black belt-shaped spot at the cell; valva more broader at the end; Aedeagus more straight without cornuti.

The new species is also similar shape and general colour to *Scopelodes contracta* Walker in appearance which extends from the Himalaya through southern China to Japan^[2, 5-6], but the labial palps appear too uniformly black rather than being greyer just subapically, with a black apex. The new species maybe the related species to the genus *Bornethosea* Holloway, 1986 and the genus *Scopelodes* Westwood, 1841.

Habitat. The species was collected in lowland forest in subtropical secondary forest near the river at the foot of the mountains,

Etymology. The name of the species is derived from the type locality.

Variability. Variable only in the abdomen: abdomen upper black but some individual with deep yellow scales in the tergites 2, 4, 6, 8 and 10.

Discussion. The genus *Bornethosea* Holloway is similar to *Birhama* Walker, *Allothosea* Hering, *Cheromettia* Walker and *Scopelodes/Hyphorma*

generic group based on the male genitalia, but easily differs from the forewing shape and the viens characters of the forewing. The relations in those genra will be studied in the following works.

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