

Notes on the genus *Hermenias* (Lepidoptera: Tortricidae) with a newly recorded species from China

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Abstract: In this paper the genus *Hermenias* Meyrick is reported for the first time from the Chinese mainland with *H. semicurva* (Meyrick, 1912). Photographs of the adults and genitalia of *H. semicurva* are provided. A key to the two regional species is given.

Key words: Tortricoidea; Eucosmini; Olethreutinae; taxonomy; key

中国释小卷蛾属 *Hermenias* 研究及一新纪录种记述 (鳞翅目: 卷蛾科)

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摘要: 首次报道释小卷蛾属 *Hermenias* Meyrick 在中国大陆的分布, 提供了中国新纪录种半弯释小卷蛾 *H. semicurva* (Meyrick, 1912) 成虫雌、雄性外生殖器图及中国种类的检索表。

关键词: 卷蛾总科; 花小卷蛾族; 新小卷蛾亚科; 分类; 检索表

Introduction

Meyrick (1911) proposed the genus *Hermenias* based on *Hermenias epidola* Meyrick as the type from Australia. To date the genus *Hermenias* includes seven species, i.e. *H. dnophera* Dianokoff, *H. epidola* Meyrick, *H. pachnitis* Meyrick, *H. pilushina* Razowski, *H. rivulifera* Turner, *H. semicurva* (Meyrick), and *H. zygodelta* Meyrick, distributed in Oriental and Australian regions (Gilligan *et al.* 2018). In China only *H. pilushina* Razowski has been recorded from Taiwan (Razowski 2000; Heppner 2012). During examination of specimens from Southwest China, the author found a newly recorded species of this genus. In the present paper, this species is described in detail, with illustration of adult and genitalia, and a key to the two Chinese species of *Hermenias* Meyrick is provided based on the characters of male genitalia.

Material and methods

This study is based on examination of specimens collected by light traps from forests and

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mountains in Guizhou and Yunnan Provinces, China. Genitalia dissection and mounting methods follow Li (2002). Descriptions of forewing pattern follow Brown and Powell (1991) as refined by Baixeras (2002).

Images of adults were taken with a Leica M205A Stereo microscope plus Leica Application Suite 4.2 software, and photographs of genitalia were prepared using a Leica DM750 Microscope provided with the same software.

All specimens examined are deposited in the Insect Collection, College of Life Sciences, Nankai University, Tianjin, China.

Abbreviations. BMNH — Natural History Museum, London, United Kingdom; CMNH — Carnegie Museum of National History, Pittsburgh, Pennsylvania, USA; TL — type locality; TD — type depository.

Taxonomy

Hermenias Meyrick, 1911

Hermenias Meyrick, 1911: 225.

Herminias Lower, 1896: 149. [nudum nomen]

Type species: *Hermenias epidola* Meyrick, 1911.

Distribution. Oriental and Australian Regions.

Key to Chinese species (♂)

1. Uncus bifurcated near termination; cucullus broad oval; valva with base narrower than cucullus *H. semicurva* (Meyrick)
- . Uncus bifurcated basally; cucullus nearly rectangular; valva with base broader than cucullus *H. pilushina* Razowski

1. *Hermenias semicurva* (Meyrick, 1912) (Figs. 1–3), new record to China

Eucosma semicurva Meyrick, 1912: 864; Clarke, 1958: 388. TL: India, Assam, Khasi Hills; TD: BMNH.

Spilonota semicurva: Kawabe, 1989: 52.

Hermenias semicurva: Razowski, 2009: 130.

Adult (Fig. 1). Vertex and frons with creamy white scales. Antenna light brown except creamy white scape. Labial palpus grayish brown, inner side creamy white; second segment with long scales, creamy white dorsally; third segment slender and porrect, with brown dorsally and creamy white ventrally. Thorax and tegula creamy white, with apical 1/3 black. Forewing length 8.5–10.0 mm, elongate triangular; ground color creamy white; base of costa with a semicircular patch; costal half with an inverse elongate triangular patch; costa with seven black spots, basal three at base, core of semicircular patch and before triangular patch respectively, other four between triangular patch and apex, adjacent two spots nearly equally distant; dorsum with three triangular black patches near base, middle and before tornus respectively, the one near base smallest; termen with a triangular black patch; cilia dark gray except grayish white on tornus. Hindwing and cilia dark gray. Foreleg and midleg grayish brown, tarsus with brown scales; hindleg gray, tarsus brown.

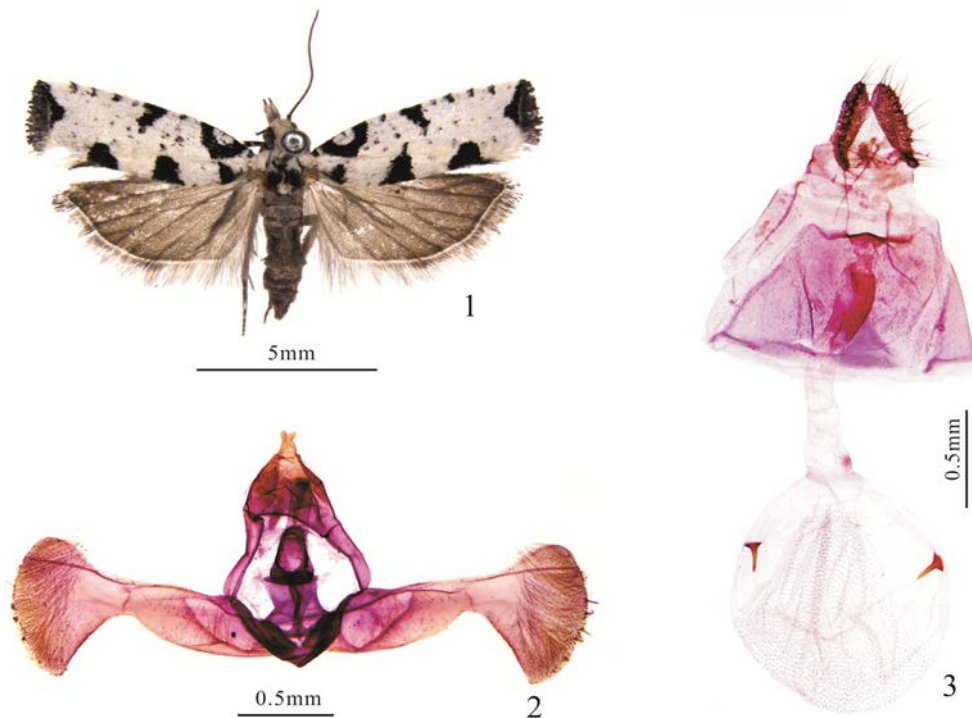
Male genitalia (Fig. 2). Uncus with narrow base, slightly narrowing medially and terminally, bifurcated near termination and produced into two projections; socius relatively

long, slender, hairy; valva slender; sacculus rounded caudally; neck of valva distinct; cucullus broad ovoid, with strong dorsal and ventral lobes and moderate marginal spines. Phallus moderate, narrowing to end.

Female genitalia (Fig. 3). Papillae anales large, setose. Apophyses posteriores nearly as long as apophyses anteriores. Sternite VII slightly sclerotized. Ostium bursae plate-shaped, located in an incision on posterior edge of sternite VII. Ductus bursae membranous except sclerotized from basal 1/6 to middle. Corpus bursae globular, with microtrichia on the inner surface, a little sclerotized at the entrance of corpus bursae; two signa stout spine-like, with cone-shaped base.

Specimens examined. 2♂, **China**, Guizhou Province, Jiangkou County, Huixiangping, 1700 m, 29-VII-2001, Houhun LI & Xinpu WANG; 2♂9♀, Yunnan Province, Longlin County, Xiaoheishan, 2300 m, 10-VIII-2005, Yingdang REN; 3♂6♀, Yunnan Province, Taiyanghe Reserve, 1450 m, 22-V-03-VI-2014, Zhenguo ZHANG; 10♂3♀, Yunnan Province, Baoshan, Nankang Management Station, 2009 m, 17–20-VII-2015, Kaijian TENG & Xia BAI; 2♀, Yunnan Province, Puer, Watchtower of Taiyanghe National Forest Park, 1626 m, 08-VII-2013, Shurong LIU, Yuqi WANG & Kaijian TENG; 3♂5♀, Yunnan Province, Longling County, Xiaoheishan, 1974–2009 m, 20–30-VII-2015, Kaijian TENG & Xia BAI; 1♂, Yunnan Province, Dali, Jizushan, 2228 m, 29-VII-2014, Kaijian TENG, Wei GUAN, Xiuchun WANG & Shurong LIU; 1♀, Yunnan Province, Baoshan, Gaoligongshan National Forest Park, 2157 m, 24-VII-2015, Kaijian TENG & Xia BAI.

Distribution. China (Guizhou, Yunnan); Thailand; India; Vietnam.



Figures 1–3. *Hermenias semicurva* (Meyrick). 1. Adult, ♀; 2. Male genitalia, slide no. ZAH07013; 3. Female genitalia, slide no. ZAH10011.

2. *Hermenias pilushina* Razowski, 2000

Hermenias pilushina Razowski, 2000: 326; Brown, 2005: 380; Heppner, 2012: 19. TL: China (Taiwan: Bilvxi, Taizhong); TD: CMNH.

Distribution. China (Taiwan).

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