

**Another synonym of *Lopaphus sphalerus* (Redtenbacher, 1908)
due to the similarity between the specific epithets,
with additional distribution notes**

(Phasmatodea: Lonchodidae)

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By examining type specimens held in the collection at Beijing Forestry University, China (BJFU), we have proposed a junior synonym for *Lopaphus sphalerus* (Redtenbacher, 1908). This indicates that the species does not represent a new record for China. In addition to this, we have extended the distribution of this species in China and clarified that the genus *Lopaphus* is entirely endemic to the Oriental and is not associated with the Palearctic.

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Introduction

The species *Lopaphus sphalerus* (Redtenbacher, 1908) belongs to the family Lonchodidae Brunner von Wattenwyl, 1893, subfamily Necrosiinae Brunner von Wattenwyl, 1893, tribe Necrosiini Brunner von Wattenwyl, 1893 (Brock & Büscher 2022). Recent phylogenetic analyses indicate that it is closely related to the genera *Otraleus* Günther, 1935 and *Hemiplasta* Redtenbacher, 1908 (Bank & Bradler 2022, Wang et al. 2025). When this species was described by Redtenbacher (1908), collected by the well-known explorer Hans Fruhstorfer (Lamas 2005), he failed to match the male and female specimens correctly and consequently published the valid name as well as the first synonym in the same monograph, highlighting indirectly the distinct sexual dimorphism in this species. During the Tonkin trip of Fruhstorfer, specimens of this species were collected at “Than-Moi”, a locality that was later regarded as corresponding to the area

between Bac Giang and Lang Son in northern Vietnam, which lies very close to the China–Vietnam border (Schileyko 2011, Bresseel & Constant 2021). Some other phasmid species that were discovered in this region have subsequently also been recorded from China (Qin et al. 2025a). Unsurprisingly, *L. sphalerus* has recently been recorded from Guangxi Province in southern China later on (Qin et al. 2025b).

However, during our field surveys, this species proved to be far from being rare, which raises the question why it has never been recorded from China so far. Our attention was drawn to the specific epithet of its synonym, “*caesi*us” (Redtenbacher 1908, Hennemann 1999), which in Latin means “greyish blue” or “pale bluish green”. In the Chinese fauna (Chen & He 1999, 2008, Hennemann et al. 2008), there is likewise a species of the genus *Asceles* with the specific epithet “*caeci*us”, namely *A. caeci*us Chen & He, 1999.

This motivated us to re-examine the type material of *A. caeci*us located in the collection of Beijing



Fig. 1. Holotype of *Asceles caecius* syn. nov. in BJFU.

Forestry University, Beijing, China (BJFU). In the present study, we demonstrate that *A. caecius* syn. nov. represents an additional synonym of *L. sphalerus* (Redtenbacher, 1908). Consequently, *L. sphalerus* is not in fact newly recorded from China, but has been documented in the country 26 years ago. Furthermore, based on material deposited in Yunnan Agricultural University, China (YNAU), we extend the known distribution of this species in China to three autonomous prefectures or cities in Yunnan Province and one city in Guizhou Province.

Material and methods

All additional specimens were taken by hand from plants during the night trip with the help of torches. Photographs of specimens were taken by Sony Alpha 6300 with Sony 30mm F3.5 and LAOWA 60mm F2.8 Marco with the help of two-head flashing light. Photos were improved by Adobe Photoshop 2020 and Adobe Lightroom Classic. Exact label data are cited for the type material. Authors' remarks are in square brackets, separate label lines are indicated by a slash (/), separate labels by a double slash (//). The specimens included in this study are deposited in the following collections:

BJFU	Beijing Forestry University, Beijing, China
YNAU	Yunnan Agricultural University, Kunming, China
NMW	Naturhistorisches Museum Wien, Vienna, Austria
YZ	Yu Zeng's private collections, Sichuan, China

Taxonomy

Lopaphus sphalerus (Redtenbacher, 1908)

Figs 1–3

Hennemann, 1999: 19 (Confirmation of valid names); Whiting et al., 2003: 265 (Evolution of wings); Yamada et al., 2021: 269 (Ants and egg association); Qin et al., 2025b: 729–740 (In China).

Asceles caecius Chen & He, 1999: 86 (Description); Chen & He, 2008: 116 (Catalogue); syn. nov.

Asceles caesius Hennemann et al., 2008: 8 (Catalogue; misspelling).

Candaules caesius Redtenbacher, 1908: 539 (Type-locality: “Than-Moi”, Tonkin); Brock, 1998: 20 (Type data); Hennemann et al., 1998: 198 (Egg morphology); Sellick, 1998: 211 (Phylogeny by egg morphology); Baxter, 2002: 11, 68 (Biology).

Cercophylla sphalera Redtenbacher, 1908: 531 (Type-locality: “Than-Moi”, Tonkin); Brock, 1998: 539 (Type data).

Lopaphus caesius Hennemann, Conle & Seiler, 1998: 198 (Egg).

Type material. *Asceles caecius* (Fig. 1). “Holotype” ♂ (BJFU), labelled: “HOLOTYPE [printed, red label] // (BJFC) HE20210014 // 广西环江木伦 (Mulun, Huanjiang County, Guangxi).

Additional material examined. **CHINA:** **Guangxi:** 1♀, Fulong, Fangchenggang City, 14.viii.2025, Nian-Qiu Zhang leg. (YNAU); 1♀, 1♂, Gaotao village, Qinzhou City, vii.2020, Qi-Ming Wang leg. (YNAU). **Guizhou:** 1♀, Maolan National Nature Reserve, Libo County, Qiannan Buyi and Miao Autonomous Prefecture, vii.2020, local villagers (YNAU). **Yunnan:** 2♀, Taiyanghe Forest Park, Simao District, Pu'er City, 22°36'02"N,

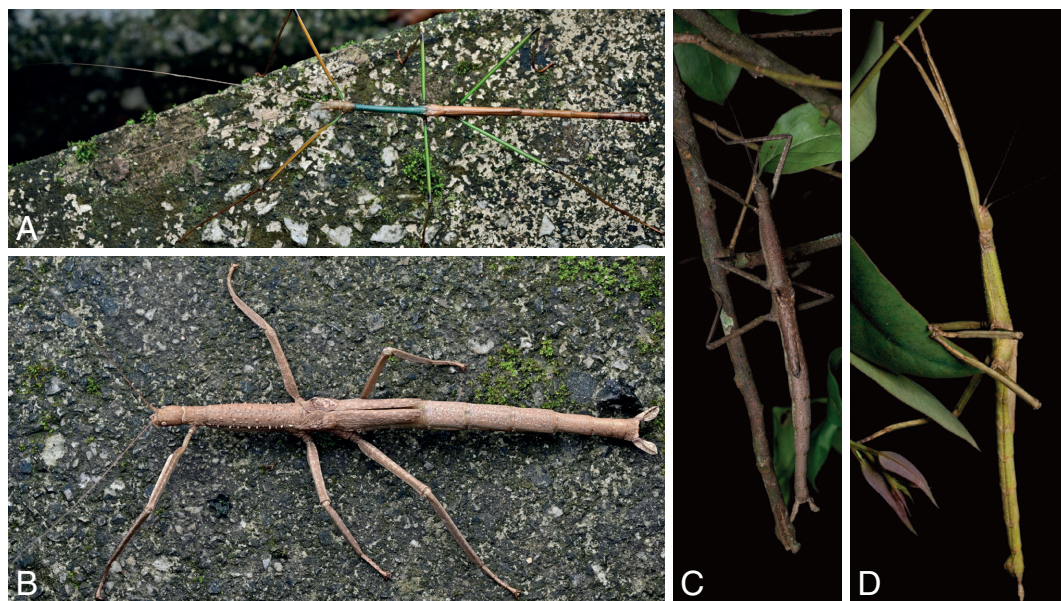


Fig. 2. *Lopaphus sphalerus* (Redtenbacher, 1908) in China, living photos. **A.** Adult male; **B.** adult female; **A-B.** from Maolan, Guizhou (©Fan Gao); **C.** adult female, from Pu'er, Yunnan; **D.** adult female, from Xishuangbanna, Yunnan (©Yu Zeng).

101°05'56"E, alt. 2211 m, 16.viii.2025, H.R. Gao, W.F. Xu & H. Xun leg. (YNAU); 1♀, Yaowanggu, Laoshan, Tianbao Town, Malipo County, Wenshan Autonomous Prefecture, 23°0'32"N, 104°49'31"E, 19.ix.2025, H. Xun leg. (YNAU); 1♀, "55 km", Mengla County, Xishuangbanna Dai Autonomous Prefecture, 4.vii.2011, Y. Zeng leg. (YZ).

Diagnosis. By comparing male type specimens held at BJFU (*Asceles caecius*) and NMW (*Candaules caecius*), they share the following common characteristics: similar body length measurements; median carina of mesothorax distinct; blue coloration mesothorax with sparse black granules; dark base and apex of the meso- and metafemora; apex of hindwings extending to tergum III; cylindrical cercus extending the end of anal segment.

Remark. Qin et al. (2025b) compared this species with *Acrophylla sichuanensis* Chen & He, 2001, which is clearly a member of the Phasmatidae Leach, 1815 (sensu Lanceocercata Bradler, 2001). The examination of the type specimens in BJFU confirms that *Ac. sichuanensis* is more closely related to the genus *Ctenomorpha* Gray, 1833, a genus found primarily in Australia. It is most likely that the specimen found its way into China for historical reasons and was consequently misidentified by early researchers in China as a local Chinese species and described (Chen & He 2001, Hennemann et al. 2008).

Host plant. *Vaccinium exaristatum* (Ericaceae) in Pu'er, Yunnan.

Distribution. China (Guangxi, Guizhou & Yunnan); Vietnam (Fig. 3).

Discussion

When Redtenbacher (1908) first examined the male specimen of this species, he was undoubtedly attracted by its remarkable blue thorax, hence naming it "*caecius*". Some ninety years later, when Chen & He (1999) examined the male specimen of this species, they gave the specimen the same species epithet. This nomenclatural convergence, occurring independently nearly a century apart, eventually facilitated the current taxonomic revision.

As consequence and considering the principle of historical priority, the new record recently reported by Qin et al. (2025b) does not represent the first record of this species in China. This example reminds us once again of the importance of examining type specimens and a correct use of nomenclature.

Finally, Qin et al. (2025b) discussed the faunal distribution of *Lopaphus* species in China, noting that three species found in Xizang (Tibet) are classified as Palearctic species. However, these three species are distributed across Mêdog, Bomi and Zayu Coun-

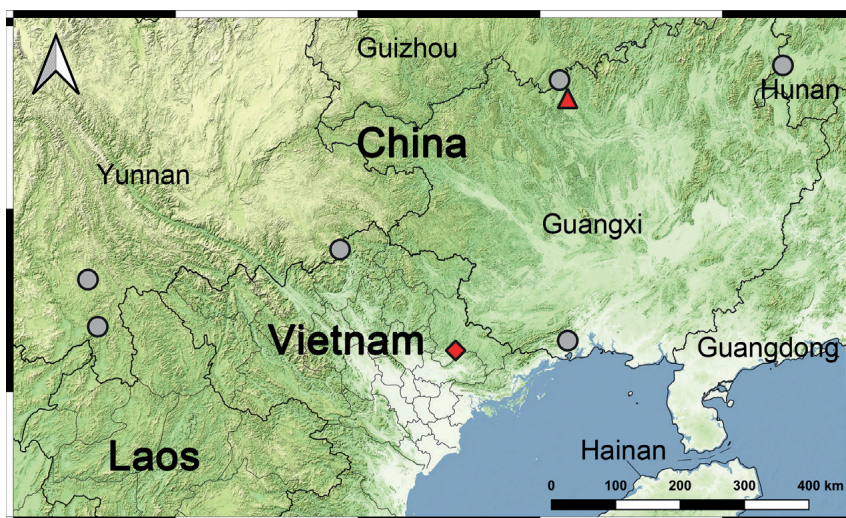


Fig. 3. Distribution map of *Lopaphus sphalerus*. The red diamond indicates the type locality of *Lopaphus sphalerus*; the grey circles indicate the locations of known specimens or observations. The red triangle indicates the name-bearing type of *Asceles caecius* syn. nov. described by Chen & He, 1999.

ties on the southern foothill of the Himalayas, and numerous studies have highlighted that the region exhibits a significant Oriental component in both vertebrates and insects (Liang 2003, Holt et al. 2013, Wen et al. 2014, Liao et al. 2015). We therefore reiterate here that the genus *Lopaphus* is an Oriental genus; it did not cross the Himalayas and is not distributed within the Palearctic region.

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