



***Teratoglaea hohuanshanensis* sp. nov., a new Xylenini moth endemic to Taiwan (Lepidoptera, Noctuidae, Noctuinae)**

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Teratoglaea Sugi, 1958 is a peculiar noctuid genus and has long been considered to contain only one rare species, *pacifica* Sugi, 1958, ranging through the Manchurian-Pacific area of the north-eastern Palaearctic region (Japan, Korea, N. E. China, South of Russian Far East)(Sugi 1958; 1982; Kononenko *et al.* 1998; Chen, 1999; Kononenko 2005; Eda and Shikata 2011) and subtropical alpine Taiwan (Hreblay and Ronkay 1997). The peculiar large scale tufts on the metathorax and incised forewing costal margin at 3/4 of the length from the base have defined its unique generic status (Sugi 1958). According to the biology and genital structures (i.e. the late autumnal appearance of adults, overwintering then flying again in spring) and the armature of vesica with one long cornutus situated on the apical part of the vesica, Fibiger and Hacker (2007) placed this genus into Xylenini, Xyleninae (currently Noctuinae sensu Zahiri *et al.* 2013) and embedded this genus in subtribe Xylenina; however the absence of the digitus is discordant with most of the other included genera.

When examining the genital structures of both sexes of *Teratoglaea* specimens from Japan (type locality of *T. pacifica*) and Alpine Taiwan, the two geographically separated populations represent two distinct morphological types. Therefore, *T. hohuanshanensis* sp. nov. has been described in the present study. According to the male genitalia, the tapering valval apex of *T. hohuanshanensis*, compared with anti-trapezoidal valval apex of *T. pacifica*, provides an argument to reassess the systematic placement of *Teratoglaea* in subtribe Xylenina of Xylenini (Fibiger and Hacker 2007). The similar valval structure also is present in some species of the *Agrochola-Conistra* generic complex sensu Ronkay *et al.* (2001), especially genus *Conistra* Hübner, 1821. This generic complex was also placed into Xylenina by Fibiger and Hacker (2007). The third segment of labial palpi is long in *Agrochola* and *Conistra* but short in *Teratoglaea*. However, this character can be variable in different species within the same genus of Xylenini. For instance, in *Hyalobole* Warren, 1911, the taxa of two species groups (i.e. *H. phaeosoma* group and *H. changae* group) can be distinguished by the length and colour of the third segment of palpi (Hreblay and Ronkay 1998). The female genitalia of *Teratoglaea* and *Conistra* share similar structures as both ostium bursae and appendix bursae are heavily sclerotized. Although the absence of the digitus in *Conistra* is not concordant with the diagnosis of subtribe Xylenina in Fibiger and Hacker (2007), its larval narrow tubular spinneret is regarded as a subtribal autapomorphic character in Fibiger and Hacker's study. Further molecular study may help clarify the phylogenetic relationships among these genera. Institutional acronyms are as follows: ESRI, Taiwan Endemic Species Research Institute, Nantou; HNHM, Hungarian Natural History Museum, Budapest; NSMT, National Museum of Nature and Science, Tsukuba; TFB, Taiwan Forestry Bureau, Taipei; TFRI, Insect collection of Taiwan Forestry Research Institute, Taipei.

***Teratoglaea hohuanshanensis* Wu, sp. nov.**

(Figs 5–8,10,12)

Teratoglaea pacifica: Hreblay & Ronkay, 1997, *Acta Zool. Acad. Sci. Hung.* 43 (1): 53, fig. 161, nec Sugi, 1958.

Type material. Holotype. Male, TAIWAN, Hualien County, Guanyuan, 2400m, 7.II.2013, leg. S. Wu (coll. TFRI); paratypes. 1male, TAIWAN, same collecting locality as holotype, 12.III.2013, leg. S. Wu; 1male, Hualien County, Ci'en, 2039m, 14.II.2010, leg. L. C. Shih (coll. ESRI); 1 male, Ci'en, 1950m, 16.IV.2013, leg. S. Wu, slide TFRI00143094 (TFRI); 1 female, Nantou County, Yuanfeng, SW to Hohuan Mountain, at the Road No. 14, 2760 m, 24°07'24"N, 121°14'55"E, 29.XI.1999, leg. A. Kun, L. Peregovits & L. Ronkay (coll. G. Ronkay, Budapest); 1 female, Nantou