A new species of the genus *Empalactis* Meyrick, 1925 (Lepidoptera, Gelechiidae) from Japan

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Abstract  A new dichomeridine gelechiid species *Empalactis (Empalactis) hiranoi* sp. n. is described from Japan with figures of adults and male genitalia.

Key words  Dichomeridinae, male genitalia, taxonomy, wing venation.

Introduction

The genus *Empalactis* Meyrick, 1925 (= *Dendrophilia* Ponomarenko, 1993) contains more than 20 species, mainly distributed in East Asia (Park and Ponomarenko, 2007; Ponomarenko, 2009; Ueda, 2013). The genus *Empalactis* is characterized by the beak-like uncus and long saccus in the male genitalia (Ueda, 2013). Two subgenera, viz. *Empalactis* and *Microdendrophilia* are recognized in the genus by Ponomarenko (2009). In Japan, 5 species of this genus, viz. *E. (E.) albidella*, *E. (E.) neotaphronoma*, *E. (E.) ponomarenkoae*, *E. (M.) mediofasciana* and *E. (M.) petrinopis*, were recorded by Ueda (2013).

In this paper, I describe a new *Empalactis* species from Japan with figures of the adults, wing venation and male genitalia. The terminology for the genitalia is mainly derived from Ueda (2005). The examined materials are deposited in the collection of the Entomological Laboratory, Graduate School of Life and Environmental Science, Osaka Prefecture University, Sakai (OPU).

Description

*Empalactis (Empalactis) hiranoi* sp. n. (Figs 1–5)

[Japanese name: hirano-usuki-kibaga]

Forewing length: ♂, 5.6-5.9 mm.

Male. Head pale fuscous, irrorated with pale ochrous. Antenna pale fuscous, with fuscous annulation; scape ochrous, mixed with fuscous. Labial palpus with dense trapezoidal scale tuft on under surface of 2nd segment; 2nd segment blackish, scattered with whitish gray, with ochrous basal stripe; 3rd slightly longer than 2nd, with scale projection on dorsal margin, blackish, with 3 pale ochrous rings: 1st at base, 2nd at middle, 3rd at apex.

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Fig. 3. Wing venation of *Empalactis (Empalactis) hiranoi* sp. n.

Figs. 4-5. Male genitalia of *Empalactis (Empalactis) hiranoi* sp. n. 4. Whole genitalia except for aedeagus of holotype, ventral view. 5. Aedeagus of holotype, lateral view.
Thorax pale fuscous, irrorated with whitish gray, with a blackish dot on each lateral side at middle; tegula pale fuscous, scattered with ochrous. Legs blackish, scattered with ochrous; fore tibia with a pale ochrous ring at middle; fore tarsus with pale ochrous apical ring on each segment; mid tibia suffused dorsally with ochrous on basal 1/4, with 2 pale ochrous rings at middle and apex; mid tarsus with ochrous apical ring on each segment; hind tibia suffused dorsally with pale ochrous hairs, with pale ochrous median and apical rings; hind tarsus with 1st segment suffused dorsally with pale ochrous, remainder with pale ochrous apical ring on each segment. Forewing elongate, 12 veins; R4 and R5 stalked, M1 free from R4+5, R5 to costa, M1 to termen, M3 and CuA1 parallel; pale orange, irrorated with pale ochrous, scattered with blackish scales; basal half suffused with pale fuscous; costa edged with fuscous from base to 3/5; 2 scale tufts on costa at 1/4 and before middle; a fuscous oblong discal mark at just beyond middle, surrounded with blackish line; a rather rectangular blackish mark on plical fold at middle; a series of obscure fuscous marks on costa from just beyond 3/5 to 3/4; termen edged with fuscous; cilia pale fuscous, with 2 pale ochrous shades at base and middle. Hindwing trapezoidal, 8 veins; R1 present, Rs and M1 stalked; brownish gray; cilia pale brownish gray with ochrous base.

Male genitalia. Eighth sternite with posterior margin slightly concave. Uncus short, with rounded posterior margin; ventral surface produced ventrally into a beak-like process. Gnathos moderate in length. Valva narrow, strongly curved at basal 1/3, with rounded posterior margin; apical 1/3 dilated. Valvella very short, broad, with rounded apical margin. Juxta lobe sclerotized, digitate. Saccus long, laterally reinforced by long sclerites. Aedeagus long with inflated basal 1/3, slightly S-shaped; apex with a small process on dorsal margin, with rounded apical margin.

Female. Unknown.


Distribution. Japan (Honshu, Nagano Pref.).

Biology. Host plant and immature stage are unknown. The adults were collected by light trap in summer.

Remarks. Empalactis (Empalactis) hiranoi sp. n. is easily distinguishable from other Japanese Empalactis species by the pale orange ground color of the forewing and the presence of an oblong fuscous discal mark surrounded with a blackish line and a rather rectangular blackish mark on the plical fold in the forewing. The male genitalia are similar to those of E. (E.) saxigera (Meyrick, 1931), but E. (E.) hiranoi is distinguishable from the latter by the presence of a small dorsoapical process of the aedeagus.

Etymology. The specific name is dedicated to Mr N. Hirano who collected the specimens of this new species.

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References


摘 要

日本産Empalactis属の1新種（鱗翅目，キバ科）（上田達也）

日本産Empalactis属に1新種を認め，成虫，翅脈相，雄尾器を図示するとともに，記載を行った。

Empalactis (Empalactis) hiranoi sp. n. ヒラノウスキバガ（新称）（Fig1-5）

♂ 前翅長5.6-5.9mm。頭部は淡褐色鱗に淡黄色色が混じる。ラピアル・ハルプスの第2節は台形の黒色毛束を生じ，基部に黄土色の横帯を持つとともに，全体に白色鱗を散布する。ラピアル・ハルプスの第3節も黑褐色で基部，中央，先端部に黄土色の細条と背緣に鱗粉隆起を持つ，胸部は淡褐色に灰色白色鱗を散布し，側缘中央部に一対の黒色帯を持つ。前翅は淡い橙色の地色に淡黄色色や黄色鱗を散布し，基部から3/5は淡褐色鱗に覆われる。前翅中央付近の中辺に黒色に線をはいた褐色の長方形紋を持ち，前翅中央部の上に黒色の長方形鱗を帯びる。前翅前縁は基部から3/5まで褐色に線をはい，3/5から前
翅頂にかけて不明瞭な褐色斑を持つ。♂交尾器のvalvaは基部から1/3で強く曲がり、先端は膨らむ。Aedeagusは長く、先端に小突起を備える。日本産のEmpalactis属の他種からは前翅地色が淡いオレンジであること、前翅の中室に黒色に縁どられた褐色の長楕円斑と観上に黒色の長方形斑を持つことで容易に区別できる。分布：本州（長野県）。寄主植物：不明。

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