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Original article

Two species of genus *Ypsolopha* Latreille (Lepidoptera: Ypsolophidae) from Korea, with first description of female of *Ypsolopha fujimotoi* Moriuti



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ABSTRACT

Japanese species, *Ypsolopha fujimotoi* Moriuti, 1964 is reported from Korea for the first time. Additionally, the female of *Ypsolopha fujimotoi* Moriuti is newly described. Illustrations of adults and photographs of genitalia, diagnosis, distribution, and host plants are provided, as well as a discussion of *Y. fujimotoi* Moriuti and *Ypsolopha longa* Moriuti.

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Introduction

The genus Ypsolopha Latreille, 1796, belongs to the family Ypsolophidae, with about 160 described species worldwide (Jin et al 2013). Among them, about 70 species are distributed in East Asia (Jin et al 2013; Park et al 2014; Ponomarenko and Zinchenko 2013; Sohn et al 2010). Ypsolopha species can be recognized by the following characters: forewing elongate with round or falcate at apex; labial palpus with well tuft on ventral surface of second segment. Ypsolopha fujimotoi Moriuti and Ypsolopha longa Moriuti were described together in 1964. Also, Y. fujimotoi Moriuti is similar to Y. longa Moriuti in the superficial characteristics, but diagnostic characters of these two species are short in the original description. Y. fujimotoi Moriuti was described from only one male. The female genitalia are still undescribed, and additional specimens have not been collected after the original description in Japan. Y. longa Moriuti was first reported by Jeong et al (1995) from Korea without taxonomic notes of this species from Korea.

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In the present study, we report a species *Y. fujimotoi* Moriuti, 1964 from Korea for the first time, as well as provide a discussion of *Y. longa*. Additionally, a female of *Y. fujimotoi* Moriuti, 1964 is described for the first time. Illustrations of adults and genitalia, diagnosis, description of adults and genitalia, host plants, and distribution are provided.

Materials and methods

Specimens examined are based on the materials collected from Korea. The specimens were mostly collected using light traps with a mercury vapor lamp (200 V/200 W, Dongseong Co., Korea) and four lamps (20W, FL20SbL/18, Kumho Co., Korea). Genitalia were dissected and examined under a Leica EZ4 stereomicroscope (Leica Microsystems, CMS GmbH, Wetzlar, Germany). Images of adults and genitalia were taken with a Nikon D700 digital camera attached to a Nikon AF-S VR Micro-Nikkor 105mm f/2.8G IF-ED lens (Nikon Co., Japan) and a Leica DM 2500 microscope (Leica Microsystems, CMS GmbH, Wetzlar, Germany). Voucher specimens are deposited in the Animal Diversity Laboratory, College of Life Sciences, Incheon National University, Incheon, Korea. Abbreviations used herein are as follows; TL, type locality; GG, Gyeonggi Province; GW, Gwangwon Province; JB, Jeollabuk Province; JN, Jeollanam Province; and INU, Incheon National University.

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Systematic accounts

Family Ypsolophidae Guenée, 1845 Subfamily Ypsolophinae Guenée, 1845 Genus *Ypsolopha* Latreille, 1796

Ypsolopha fujimotoi Moriuti, 1964

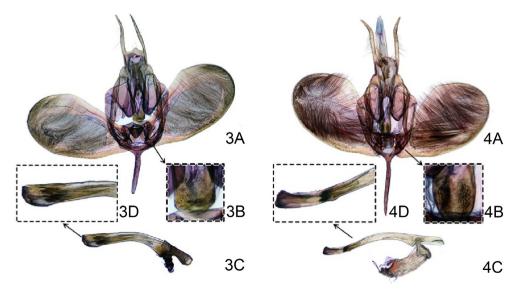
(Figures 1A–1C, 3A–3D, 5A, 5B)

Ypsolophus fujimotoi Moriuti, 1964: 209. TL: Japan (Kyushu). Ypsolopha fujimotoi Moriuti, 1977: 106; Moriuti, 1982: 211; Yamauchi and Hirowatari, 2013: 174.

Adult (Figures 1A–1C). Wingspan, 23–30 mm. Vertex rough, with reddish brown or brown, elongate narrow scales, frons smoothly pale brown, dark gray around compound eye; ocellus present. Antenna filiform; scape and flagellum reddish brown or brown. Labial palpus porrect, pointed terminally; tuft on ventral surface of second segment blackish pale brown outside and creamy white inside. Thorax reddish brown; tegula reddish brown or whitish purple inwardly, reddish brown outwardly. Fore- and midleg femur to tibia grayish white and tarsus brown; hindleg femur to tibia pale brown, tarsus mixed with black and pale brown. Forewing with apex acutely expanded outwardly, ground color reddish brown or brown with black scales scattered; a small black



Figures 1–2. Adults of *Ypsolopha* spp: 1, *Ypsolopha fujimotoi* Moriuti, ♀; 2, *Y. longa* Moriuti, ♂.



Figures 3-4. Male genitalia of Ypsolopha spp: 3, Ypsolopha fujimotoi Moriuti, gen. slide no. INU-4570; 4, Y. longa Moriuti, gen. slide no. INU-4567.

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