Short communication

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A New Record of *Disparia diluta* from Korea, with Note on *Disparia nihonica* (Lepidoptera: Notodontidae)

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ABSTRACT

A notodontid moth, *Disparia diluta* (Hampson, 1910) is reported for the first time from the Korean peninsula. At the same time, taxonomical note for *D. nihonica* (Wileman, 1911) is given. The male genitalia of *D. nihonica* (Wileman) were erroneously illustrated as those of *Neodrymonia delia* (Leech) by Tshisjakov and Kwon (1999), and Schintlmeister (2008) cited *D. nihonica* (Wileman) to be distributed in the Korean peninsula, based on the illustration.

Keywords: Notodontidae, *Disparia*, Lepidoptera, taxonomy, Korea

INTRODUCTION

Family Notodontidae (Notodontioidea) are medium to large sized moths, and comprises more than 2,500 species with a worldwide distribution (Schintlmeister, 2008). Since Tshistjakov and Kwon (1999) reviewed the family in Korea, Park et al. (2006) reported a subtropical species, *Dudusa nobilis* Walker from Is. Daecheong-do which is located at the NW of the Yellow Sea, but it is probably due to a temporal migration because no additional collection has been made from the same place and time. Choi (2008) reported *Odontosia patricia* Stichel for the first time from Korea, based on specimens collected in Mt. Jiri-san, South Korea, and at the same time Schintlmeister (2008) also reported this species from N. Korea.

Schintlmeister (2008) recently reported *Disparia diluta* (Hampson) and *D. nihonica* (Wileman, 1911) from the Korean peninsula. He noted that the male genitalia of *Neodrymonia delia* which was illustrated by Tshistjakov & Kwon (1999) is not that of the species, but obviously that of *D. nihonica* (Wileman). Authors confirmed that two specimens recently collected from Wando, Jeonnam Province and Mt. Unsekbong, Gyungnam Province are *D. nihonica*. Thus, parts of the previous reports on *N. delia* are probably based on misidentification of *D. nihonica*. With reports of these two species, the Korean Notodontidae is enumerated to 104 species belonging to 61 genera.

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SYSTEMATIC ACCOUNTS

***Disparia* Nagano, 1916**

=*Parafentonia* Roepke, 1944: 19. *Epifentonia* Kiriakoff, 1960: 3.

The genus was established with the type species, *Fentonia sordida* Wileman, 1911 (=*Stauropus diluta* Hampson, 1910) from Taiwan. This Oriental genus has the highest diversity in the SE China, comprising 10 species. It is a related genus to *Neodrymonia* Matsumura, especially in the structure of the male genitalia. In the Korean peninsula, *Disparia diluta* (Hampson) and *D. nihonica* (Wileman) are only known in the southern part.

[1]***Disparia diluta* (Hampson, 1910)**

Stauropus diluta Hampson, 1910: 92. TL: N India.
Pseudofentonia diversipectinata Bryk, 1949: 22, pl. 2:4.
Fentonia variegata sordida Wileman, 1910: 290.
Fentonia sordida, 1911: 286, pl. 30: 8.
Fentonia japonensis Tams, 1927: 53.
Disparia diluta: Schintlmeister, 2008: 253.

Diagnosis. Male (Fig. 1A). Wing expanse, 47-50 mm. Male antennae short pectinate, whereas long pectinate in the following species, *D. nihonica*. Forewing more grayish; basal

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Fig. 1. A. *Disparia diluta* (Wileman); B. *Disparia nihonica* Wileman.

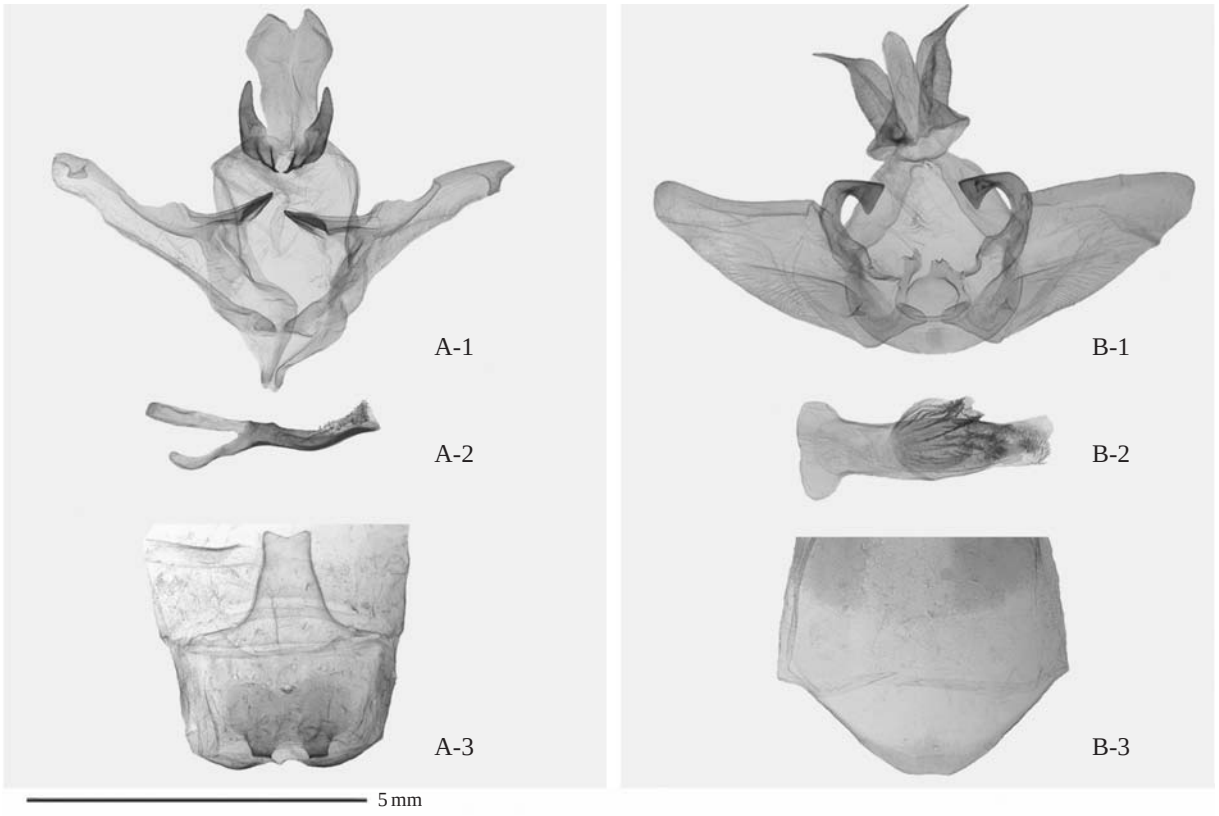

Fig. 2. Male genitalia; A. *Disparia diluta* (Wileman), 1. genitalia, 2. aedeagus, 3. 8th sternite of male; B, *Disparia nihonica* Wileman, 1. genitalia, 2. aedeagus, 3. 8th sternite of male.

area not prominantly pale grayish or whitish; antemedian line serrated, but nearly straight, oblique; area between subbasal and antemedian line dark brown; postmedian line strongly serrated, but not convex beyond cell; area between antemedian and post median line pale grayish white, or sometimes concolorous; discal spot invisible; costal fascia near apex not well presented; outer margin serrated, but not very strong. Hindwing brownish orange, without patterns.

Male genitalia (Fig. 2. A1-A3). See also Schintlmeister (2008: fig. 1185, 1188). Uncus robust, broadly expanded, slightly bilobed apically. Socii also robust, more or less horn-shaped, upturned. Tegumen massive. Valva narrow, with

heavily sclerotized basal process and short apical process; sacculus membraneous. Vincullum massive, band-like. Aedeagus about 3/5 as long as valva, with minute spinules in vesica. The 8th sternite with characteristic sclerites as shown in Fig. 2. A3.

Materials examined. Is. Wando, Jeonnam Province-1♂, 11 May 1998 (K.J. Won); 1♂, 3 Aug. 1998 (K.J. Won); 1♂, 23 Aug. 1998 (K.J. Won); 1♂, 23 Sep. 1998 (K.J. Won); 1♂, 17 Jun. 2001 (K.J. Won).

Distribution. Korea (South), Japan (from S Honshu to Okinawa), China, Taiwan, NW India, Nepal, Myanmar, Indochina, Japan.

Remarks. This species is reported for the first time from Korea. The collected locality, Isl. Wando which is located in the southern coast of the Korean peninsula, is the most northern border of the known distributional range of the species. Schintlmeister (2008) divided the species into seven subspecies: the nominate subspecies in NW India, Nepal, and Indochina, *abraama* in N Vietnam and China, *sumatrana* in Sumatra, *sudana* in Sudan, *borneensis* in Borneo, and *variegata* in Japan including Okinawa. The Korean subspecies is *variegata* Wileman, and known that larvae feed on *Eurya japonica* (Theaceae) (Sugi, 1987).

Distribution. Korea (South), Japan (from S Honshu to Okinawa), China, Taiwan, NW India, Nepal, Myanmar, Indochina, Japan.

[1]***Disparia nihonica* (Wileman, 1911)**

Fentonia nihonica Wileman, 1911: 286, pl. 30: 5. TL: Yamato Prov., Japan.

Drymonia eximina Gaede, 1912: 297.

Disparia nihonica: Schintlmeister, 2008: 258.

Diagnosis. Male (Fig. 1B). Wing expanse, 48-58 mm. The species can be distinguished from the other two known species from Japan by the larger size, the long-pectinate antennae of the male, and more brownish ground color of the forewing. The male genitalia (Fig. 2. B1-B3) are characterized by the undivided uncus, broad socii with acuted apex, and narrow, heavily sclerotized basal process of valva. The 8th abodominal sternite has not heavily sclerotized structure.

Materials examined. Is. Wando, Jeonnam Province-1♂, 20 Jun. 2004 (K.J. Won); 1♂, 21 Jul. 2004 (K.J. Won); 1♂, Mt. Ungseokbong, Sancheong, Gyungnam Province, 19 Jun. 2007 (B.W. Lee & S.Y. Park).

Distribution. Korea (South), Japan.

Remarks. Tshistjakov & Kwon (1999) erroneously illustrated the figure of the male genitalia of *D. nihonica* (Wileman) as those of *Neodrymonia delia*. Authors re-examined all specimens previously included in *Neodrymonia delia* and found three specimens collected from Isl. Wan-do and Sancheong which are obviously belonged to *D. nihonica* (Wileman). Larvae feed on *Stewarita* sp. (Theaceae) (Sugi, 1987).

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