Short communication

Korean J. Syst. Zool. Vol. 26, No. 2: 171-172, July 2010

First Report of *Heterocnephes apicipicta* (Lepidoptera: Crambidae) in Korea

Sei-Woong Choi*

Department of Environmental Education, Mokpo National University,
Muan, Jeonnam 534-729, Korea

ABSTRACT

A crambid species, *Heterocnephes apicipicta* Inoue, is reported for the first time in Korea. Three females of *Heterocnephes apicipicta* were collected from two islands in the Southern Sea of Korea. Diagnosis of the species is provided with a brief description of adult, including female genitalia.

Keywords: *Heterocnephes apicipicta*, Crambidae, Korea, new record

INTRODUCTION

The superfamily Pyraloidea is comprised of two families, the Pyralidae and the Crambidae: the Crambidae are distinguished from Pyralidae by many morphological features: a forewing vein with R_5 free, a forewing with oval sclerotization costad of base of vein A_{1+2}, a tympanal chamber with an open cephalad, tympanum and conjunctivum that lie at an obtuse angle, the presence of a lobulus, the presence of a praecinctorium, an accessory tympana present in the metathorax, male genitalia without uncus arms, and an A8 larval segment without a sclerotized ring around the base of seta SD1 (Nuss and Speidel, 2005). The family Crambidae currently comprises approximately 1900 species around the world, with 135 species in Korea (Bae et al., 2008).

The primary purpose of this study is to describe a species of *Heterocnephes* that has been found for the first time in Korea. Recently Bae et al. (2008) reviewed a total of 349 species of Pyraloidea found in Korea, but *Heterocnephes apicipicta* Inoue was not included in the list. The genus *Heterocnephes* Lederer 1863 was established with the type species *Heterocnephes scapulalis* Lederer. It now includes 7 species from around the world (Beccaloni et al., 2003). Three females of *Heterocnephes apicipicta* were collected on two islands in the South Sea, Gageo-do (Sinan-gun) and Bogil-do (Wando-gun), in the Jeonnam province. These moths were externally examined and dissected for genitalia examination. The nomenclature used for adult morphology and genitalia follows Goater et al. (2005). The material examined is preserved at Mokpo National University, Jeonnam, Korea (M.N.U.). Abbreviations used in the text are as follows: TL. Type locality; and [JN] Jeollanam-do (=Jeonnam).

*To whom correspondence should be addressed
Tel: 82-61-450-2783, Fax: 82-61-450-2789
E-mail: choisw@mokpo.ac.kr

SYSTEMATIC ACCOUNTS

Order Lepidoptera Linnaeus, 1758
Family Crambidae Latreille, 1810
Subfamily Pyraustinae Meyrick, 1890
Genus *Heterocnephes* Lederer, 1863

***Heterocnephes* Lederer, 1863: 402.** Type species: *Heterocnephes scapulalis* Lederer, 1863, ibidem 7: 402, pl. 14, fig. 5. TL: [INDONESIA] Amboina, [SOLOMONS] Solomons islands.

=*Charitoprepes* Warren, 1896: 136. Type species: *Charitoprepes lubricosa* Warren, TL: [INDIA] Khasia Hills.

Fig. 1. A *Heterocnephes apicipicta* Inoue adult.

Fig. 2. Female genitalia of *Heterocnephes apicipicta* Inoue.

[1]***Heterocnephes apicipicta* Inoue (Figs. 1-2)**

Heterocnephes apicipicta Inoue, 1963: 109, figs 2, 8. TL: [JAPAN].

Material examined. [JN] 2♀ Is. Bogil-do, JN: Wando, N 34° 08′46″ E 126° 32′40″, 85 m, 22 Aug. 2008 (M.N.U.); 1♀ Is. Gageo-do, JN: Sinan, N 34° 04′20″ E 125° 06′50″, 446 m, 16 Aug. 2009 (M.N.U.).

Diagnosis. This species is distinguished by a large dark brown apical dot and a dark brown discoidal dot on the forewing, and a dark brownish discoidal dot on hindwing. The body and legs are covered with white hairs. The female genitalia are distinguished by large round papillae anales, a simple antrum, long ductus bursae with a colliculum, and large ovate corpus bursae with a pair of patch-like signa.

Description (Fig. 1). Wingspan 21-24 mm. Female antennae filiform; frons covered with brownish hairs; labial palpi upturned, densely covered with long brownish hairs. Body and legs whitish. Forewing slender, apically projected; ground color dark brown; discoidal dot large dark brown; apical dot large dark brown. Hindwing ground color brown; discoidal dot dark brown. *Female genitalia* (Fig. 2). Papillae anales rounded, consisting of a thin layer and surface with minutely dentate, dorsally containing a pair of large tongue-shaped processes. Apophyses anteriores are the same length as apophyses posteriores. Antrum simple, membranous. Ductus bursae long, membranous, with a colliculum. Corpus bursae large, ovate with a pair of long patch-like signa.

Biology. In Japan this species is bivoltine from May to June and from August to September (Inoue, 1982). We surveyed the islands of Bogil-do and Gageo-do from May to October, but the spring generation was not found.

Distribution. Japan, China, Korea.

ACKNOWLEDGEMENTS

I would like to thank Miss Marana Park, Mr. Jeong-Seop An, Mr. Sang-Duck Na and Mr. Chul-Gee Lee for sampling moths. This study was carried out by the bioinventory project of Is. Gageo-do from National Institute of Environmental Research, Korea.

REFERENCES

Bae, Y.S., B.K. Byun and M.K. Paek, 2008. Pyralid moths of Korea (Lepidoptera: Pyraloidea). Korea National Arboretum, Samsungad.com, Seoul, 426pp.

Beccaloni, G.W., M.J. Scoble, G.S. Robinson and B. Pitkin (Eds), 2003. The Global Lepidoptera Names Index (LepIndex). World Wide Web electronic publication. http://www.nhm.ac.uk/entomology/lepindex [accessed 30 May 2010].

Goater, B., M. Nuss and W. Speidel, 2005. Microlepidoptera of Europe, Volume 4, Pyraloidea I. Apollo Books, Stenstrup, 304 pp.

Inoue, H., 1963. Descriptions and records of some Pyralidae from Japan (VI) (Lepidoptera). Kontyu, 31: 107-112.

Inoue, H., 1982. Pyralidae. Moths of Japan. Vol 1. p. 332, Kodansha, Tokyo.

Lederer, J., 1863. Beitrag zur Kenntniss der Pyralidinen. Wien. Ent. Monatschr., 7: 331-504.

Nuss, M and W. Speidel, 2005. Introduction. *In*: Microlepidoptera of Europe, Volume 4, Pyraloidea I (Eds., B. Goater, M. Nuss and W. Speidel). pp. 7-20. Apollo Books, Stenstrup.

Warren, W., 1896. New genera and species of Pyralidae, Thyrididae, and Epiplemidae. Ann. Mag. nat. Hist., 17: 131-150, 202-216.

Received June 14, 2010
Accepted July 8, 2010

[1]*남방끝점들명나방 (신칭)