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A new record of *Haplodrassus nojimai* Kamura, 2007 (Araneae, Gnaphosidae) from Korea

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Abstract: *Haplodrassus nojimai* Kamura, 2007 of Gnaphosidae, which is only known in Japan was newly described in Korea with measurements and morphological illustrations. A female was collected from the levee of rice fields using a pitfall trap. The female epigynum has thick and remarkable transverse wrinkles and is densely covered with long blackish-gray hairs. The anterior hood was slightly rounded and the lateral margins were relatively short. The median septum was V-shaped with a broad base on the median part, and a pair of spermathecae was visible. The male is still unknown.

Keywords: description, Gnaphodidae, *Haplodrassus nojimai*, Korea

INTRODUCTION

Spider fauna of rice field was surveyed for five years, 2016–2020. During a survey, one female of *Haplodrassus nojimai* Kamura, 2007 belonging to Gnaphosidae was collected on the levee with a pitfall trap. *H. nojimai* is formerly only known in Japan and nine species of the genus *Haplodrassus* Chamberlin, 1922 have been reported form Korea (National Institute of Biological Resources 2019; World Spider Catalog 2020). The genus *Haplodrassus* was erected with *Drassus hiemalis* Emerton, 1909 as the type species (Chamberlin 1922). Male palp of the genus has thick embolus, hook-like median apophysis, developed terminal apophysis and characteristically flattened retrolateral tibial apophysis, and female epigynum has an anterior hood and lateral margins (Kamura 2007). The present study described a newly recorded spiders, *H. nojimai* with measurements, morphological illustrations from Korea.

MATERIALS AND METHODS

The external morphology was examined using a stereoscopic dissecting microscope (S8APO; LEICA, Singapore) and illustrated. Photographs of the body were taken with a CANON 650D with 60 mm macro-lens. Measurements of each part of the body were taken with an ocular micrometer scale and are recorded in millimeters. Leg and palp measurements (left) are given as leg number, total length (femur, patella + tibia, metatarsus, tarsus). The internal genitalia was prepared with 10% of KOH solution for six hours, and after examination, tissue pieces around it were removed with brushes and needles. Abbreviations used are as follows: ALE = anterior lateral eye, AME = anterior median eye, PLE = posterior lateral eye, PME = posterior median eye, AER = anterior eye row, PER = posterior eye row in eye region; d = dorsal surface, p = prolateral surface, r = retrolateral surface, v = ventral surface in leg spination. The examined specimen of this study was deposited in the

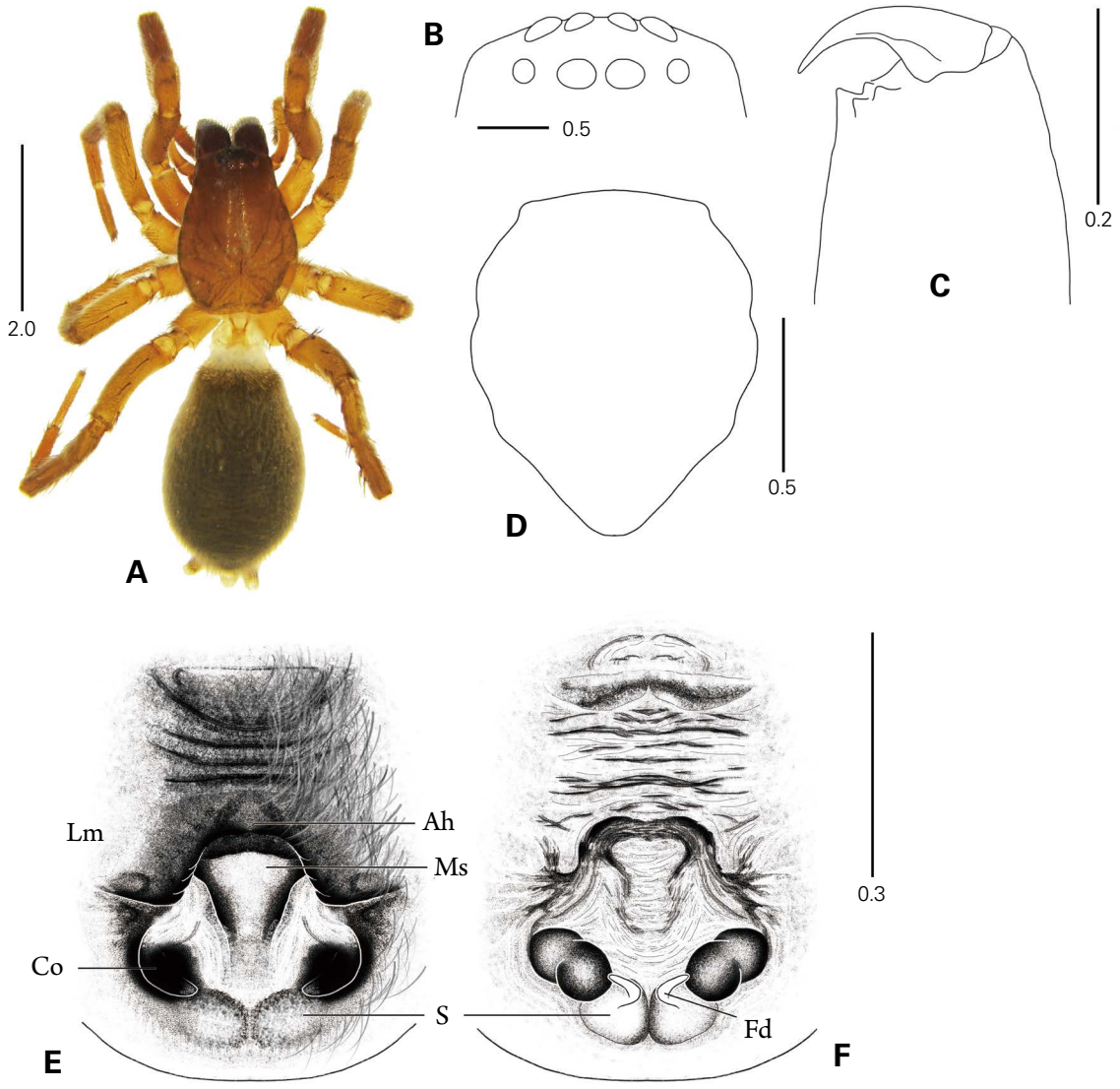

Fig. 1. *Haplodrassus nojimai* Kamura, 2007, female: A. Body, habitus (specimen); B. Eye region from above; C. Chelicera, retrolateral view; D. Sternum; E. Epiginum, ventral view; F. Internal genitalia, dorsal view. Scale bars in mm. Ah, anterior hood; Co, copulatory opening; Fd, fertilization duct; Lm, lateral margin; Ms, median septum; S, spermatheca.

collection of the National Institute of Biological resources (NIBR), Korea.

TAXONOMIC ACCOUNTS

Family Gnaphosidae Pocock, 1898
Genus *Haplodrassus* Chamberlin, 1922

***Haplodrassus nojimai* Kamura, 2007**
주름새매거미(신칭) (Fig. 1)

Haplodrassus nojimai Kamura, 2007: p. 102, f. 32, 33; Kamura, 2009: p. 487, f. 46.

Material examined. Female, 10 July 2020, Jikdong-ri, sangnam-myeon, Eonyang-eup, Ulsan Metropolitan City, Korea (35°34′86.0″N, 129°07′91.1″E), leg. S.T. Kim.
Description. Female. Total length 5.80 (habitus). Carapace: 2.08 long/1.52 wide, blackish brown, head region darker than thoracic region, suboval, cervical and radial furrows distinct, longitudinal fovea needle-shaped, head region slightly elevated (Fig. 1A). Eyes: AER 0.50/PER 0.55,

all eyes on slightly raised eye tubercles, eye region infuscate, eight eyes in two rows, AER slightly recurved and PER weakly procurved from above (Fig. 1B). Chelicera: 0.70 long/0.41 wide, thick blackish brown with 2 promarginal teeth and 2 retromarginal teeth, lateral condyle present, fang short (Fig. 1C). Endite: 0.61 long/0.30 wide, light blackish brown. Labium: 0.50 long/0.35 wide, thick blackish brown. Sternum: 1.22 long/0.98 wide, light blackish brown, subcordate, convex (Fig. 1D). Legs: I 4.95 (1.47, 1.93, 0.84, 0.70)/II 4.25 (1.25, 1.58, 0.76, 0.66)/III 3.76 (1.11, 1.27, 0.80, 0.58)/IV 5.61 (1.57, 2.03, 1.27, 0.74), leg formula IV-I-II-III, light blackish brown, robust and strongly developed, no annulus, leg spination; I (femur 1-1-1d), II (femur 1-1-0d, metatarsus 2-0v), III (femur 1-1-2d, tibia 0-1-1p/0-1-1r/2-2-2v, metatarsus 1-1p/1-1r/2-0-2v), IV (femur 1-1-2d, tibia 1-0-1p/1-0-1r/2-2-2v, metatarsus 0-1-1p/0-1-1r/2-1-2v) (Fig. 1). Abdomen: 2.97 long/1.80 wide, dark blackish gray, elongated oval, no particular pattern, clothed densely with short hairs (Fig. 1A). Palp: 3.20 (1.40, 0.68, – , 1.12). Epigynum: upper part of epigynum with thick and remarkable transverse wrinkles, clothed densely with long blackish gray hairs, anterior hood slightly round, lateral margins relatively short, V-shaped median septum with broad base on median part, a pair of spermathecae visible (Fig. 1E, F).

Male unknown.

Distribution. Korea (New record), Japan.

Remarks. Present species was collected on the levee of rice fields with a pitfall trap. This species is considered to be a rare species with very low abundance as it has been described as only two females from Tottori pref. in Japan. There are no informative biological and ecological records of this species to date.

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