

Description of *Haplodrassus mayumiae* Kamura, 2007 and *Mangora crescopicata* Yin et al., 1990 (Arachnida: Araneae) New to Korean Spider Fauna

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한국산 미기록종 황갈새매거미(*Haplodrassus mayumiae* Kamura, 2007)와 무당귀털거미(*Mangora crescopicata* Yin et al., 1990) [거미강: 거미목]의 기재

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ABSTRACT: *Haplodrassus mayumiae* Kamura, 2007 of Gnaphosidae and *Mangora crescopicata* Yin et al., 1990 of Araneidae were newly described and illustrated from Korea.

Key words: *Haplodrassus mayumiae*, *Mangora crescopicata*, Gnaphosidae, Araneidae, Description, Korea

초 록: 황갈새매거미(*Haplodrassus mayumiae* Kamura, 2007)와 무당귀털거미(*Mangora crescopicata* Yin et al., 1990)를 한국에서 처음으로 기재한다.

검색어: 황갈새매거미(*Haplodrassus mayumiae*), 무당귀털거미(*Mangora crescopicata*), 수리거미과, 왕거미과, 기재, 한국

The spider genus *Haplodrassus* of Gnaphosidae in Korea comprises 5 species to date (Namkung et al., 2009); *Haplodrassus kulczynskii* Lohmander, 1942, *Haplodrassus montanus* Paik and Sohn, 1984, *Haplodrassus pargongsanensis* Paik, 1992, *Haplodrassus signifer* (C. L. Koch, 1839), and *Haplodrassus taepaikensis* Paik, 1992. One male of *H. mayumiae* was collected during the intensive survey of spider fauna of agricultural landscape by using pitfall trap. This species is formerly only known to be found in Japan. The spider genus *Mangora* of

Araneidae in Korea comprises only one species, *Mangora herbeoides* (Bösenberg and Strand, 1906). This species is formerly only known to be found in China. One female of *M. crescopicata* was collected in mountainous region by using sweep net. In the present paper, *H. mayumiae* and *M. crescopicata* were described with illustrations of taxonomic characters.

Materials and Methods

The external morphology of *H. mayumiae* and *M. crescopicata* were examined and the taxonomic characters of each species were illustrated using a stereoscopic dissecting microscope (Olympus SZ60). Measurements were made with an ocular

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micrometer and are recorded in millimeters. Leg measurements are given as “leg number, total length (femur, patella + tibia, metatarsus, and tarsus).” Pedipalp measurements are listed as “total length (femur, patella + tibia, and tarsus).” The following abbreviations are used in the description: AME, anterior median eye; ALE, anterior lateral eye; PME, posterior median eye; PLE, posterior lateral eye; AER, anterior eye row; PER, posterior eye row; d, dorsal surface, p, prolateral surface, r, retrolateral surface and v, ventral surface in leg spiniformation. Specimens examined in this study are lodged in the collection of National Institute of Biological Resources (NIBR), Korea.

Taxonomic Accounts

Order Araneae Clerck, 1757

Family Gnaphosidae Pocock, 1898

Genus *Haplodrassus* Chamberlin, 1922

Haplodrassus mayumiae Kamura, 2007 황갈새매거미(신칭)
(Fig. 1 A-F)

Haplodrassus mayumiae Kamura, 2007: 98, 2009: 485.

Measurements Male: Body length 5.93, Carapace length 2.68, width 2.08; Head width 1.27; Abdomen length 3.25, width 1.63; Chelicera length 1.13, width 0.51; Endite length

0.88, width 0.48; Labium length 0.50, width 0.38; Sternum length 1.38, width 1.23; AER 0.75; PER 0.88; Legs : I 5.74 (1.23, 2.34, 1.25, 0.92), II 5.18 (1.14, 2.16, 1.10, 0.78), III 5.00 (1.55, 1.80, 0.90, 0.75), IV 8.19 (2.30, 2.91, 1.90, 1.08); Pedipalp 3.09 (1.08, 0.93, -, 1.08).

Description Male: Caparace yellowish brown, oval, longer than wide, margined with dark yellowish brown, anterior part of head region infusate, covered with blackish brown hairs, fovea blackish brown and spiniform, cervical and radial grooves dark yellowish brown and distinct (Fig. 1A). Eight eyes, PMEs oval and largest, distance between AMEs > PMEs, anterior median eyes and anterior lateral eyes almost contiguous, AER slightly recurved and PER procurved from the above, all eyes except PLEs encircled with black (Fig. 1B). Chelicerae dark yellowish brown and long, blackish brown spines along prolateral sides, black line along the border of promargin and retromargin, 2 teeth on promargin and 3 teeth on retromargin (Fig. 1C). Endite dark yellowish brown, anterior and posterior parts lighter, margined with black. Labium dark yellowish brown, margined with dark blackish brown. Sternum dark yellowish brown, shield shaped, covered with blackish brown hairs, margined (Fig. 1D). Legs pale yellowish brown without patterns and annulations, covered densely with blackish brown hairs, leg spiniformation; I (femur 1-1-1d), II (femur 1-1-1d, metatarsus 1v), III (femur 1-2-1-2d, tibia 1-1p, 1-1r, 1-1-2v, metatarsus 1-2p, 2-2r, 2-2v), IV (femur 1-1d, tibia 1-1p, 1r,

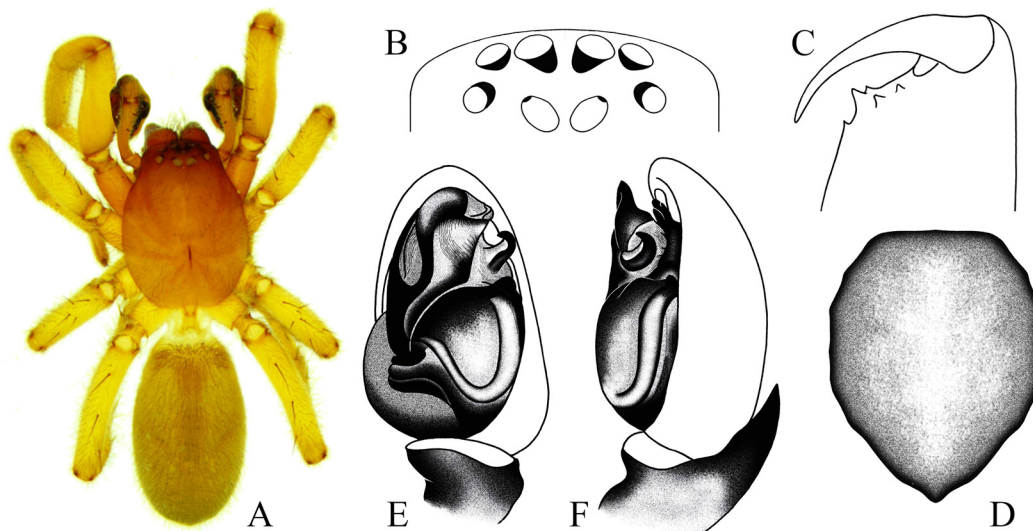


Fig. 1. *Haplodrassus mayumiae* Kamura, 2007 (A. male body; specimen, B. eye region, C. Chelicera; left, D. sternum, E. male palp; inner view, F. male palp; retrolateral view).

1-2-2v, metatarsus 1-2p, 1-2r, 2-1-2v), leg formula 4-1-2-3. Abdomen dull yellowish brown and mottled, cylindrical, longer than wide, covered with densely blackish brown hairs, patterns and muscle impressions invisible. Posterior spinnerets dull yellowish brown and longest, separated, anterior and median spinnerets dull and dark yellowish brown, contiguous. Palp yellowish brown, retrolateral tibial apophysis large, thumb shaped with pointed tip, median apophysis hook shaped, terminal apophysis large, extended and arched (Fig 1 E-F).

Specimen examined 1 male, 06-VI-1999, Singilcheon, Singildong, Ansan-si, Gyeonggi-do, ST Kim leg.

Ecological remarks This species collected with pitfall traps around stream sides.

Distribution Korea (newly recorded), Japan

Family Araneidae Clerck, 1757

Genus Mangora O. P.-Cambridge, 1889

***Mangora crescopicta* Yin et al., 1990 무당귀털거미(신칭) (Fig. 2 A-G)**

Mnagora crescopicta Yin et al., 1990: 95, Yin et al., 1997: 333, Song, Zhu and Chen, 1999: 293, 2001: 213, Yin et al., 2012: 714.

Measurements Body length 7.72, Carapace length 2.70, width 2.35; Head width 1.12; Abdomen length 5.02, width 3.13; Chelicera length 0.95, width 0.43; Endite length 0.38, width 0.43; Labium length 0.13, width 0.42; Sternum length 1.10, width 1.15; AER 0.85; PER 0.90; Legs : I 9.70 (2.85, 3.18, 2.55, 1.12), II 7.85 (2.60, 1.89, 2.45, 0.91), III 5.47 (1.75, 1.95, 1.10, 0.67), IV 9.49 (3.32, 3.05, 2.32, 0.80); Pedipalp 2.55 (0.75, 0.78, -, 1.02).

Description Female: Carapace pale yellowish brown, head region narrow, thoracic region steeply sloped, blackish brown broad band stretched from posterior median eyes to fovea. Fovea blackish brown, spiniform, cervical and radial grooves indistinct (Fig 2A). Eight eyes small, encircled with black, length of AER slightly shorter than PER, AER strongly retrocurved and PER slightly retrocurved, PLEs the largest, distances between eyes; AME-AME 0.04, AME-ALE 0.19, PME-PME 0.05, PME-PLE 0.21, AME-PME 0.05, ALE-PLE almost contiguous (Fig 2B). Chelicerae yellow with yellowish brown markings on dorsum, covered sparsely with long black hairs, fang short, boss indistinct, 4 teeth on promargin, 3 teeth and 2 denticles on retromargin, 5-7 denticles at border of both margins (Fig 2C). Endite yellowish gray, blackish brown posteriolaterally. Labium blackish brown, fused with endite.

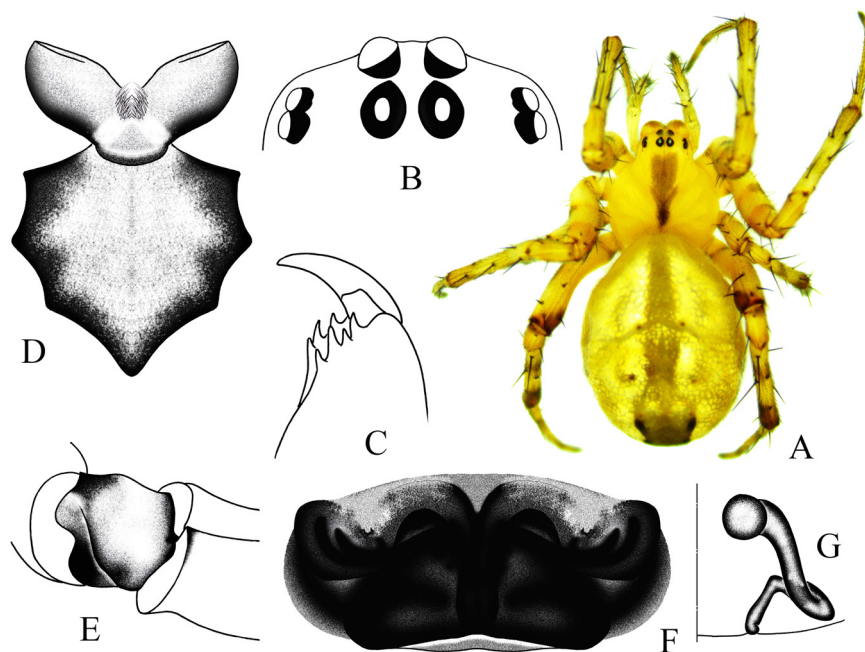


Fig. 2. *Mnagora crescopicta* Yin et al., 1990 (A. female body; specimen, B. eye region, C. Chelicera; left, D. Endite, labium and sternum, E. trochanter, F. female epigynum, G. genitalia; ventral view, right half).

Sternum yellow, lighter at middle, margin blackish brown, shield shaped, covered sparsely with long black hairs (Fig 2D). Legs pale yellowish brown, covered with black spines and short and long black hairs, distal ends of each segment darker, femora, tibiae and metatarsi with annulations, leg III with many trichobothria on femur, basal part of trochanters depressed (Fig 2E), leg formula 1-4-2-3. Palp dull blackish brown except femora, femora pale yellowish white. Abdomen dull yellowish white and reticulated, ovoid, anterior part protruded covering 1/3 of carapace, covered with short blackish brown hairs, 3 pairs of muscle impressions distinct, dull blackish brown broad longitudinal band at middle with darker posterior part accompanied with 3 black markings laterally, posterior part with 4-5 wrinkles. Venter dull yellowish brown and reticulated, a pair of dull blackish brown rectangular patterns at middle and a pair of broad slash patterns at side. Spinnerets brown, encircled with 5 black spots, colulus blackish brown. Female epigynum wider than long, highly sclerotized, dark blackish brown, detail border indistinct (Fig 2F); genitalia simple, round spermatheca with its appendicular tube (Fig. 2G).

Specimen examined 1 female, 30-V-2013, Mt. Naejang, Jeollabuk-do, ST Kim, SY Lee and JK Jeong Leg.

Ecological remarks This species collected with sweep net on the shrubs in mountainous region. It's general appearance is very similar to juvenile of *Nephila clavata* in Nephilidae.

Distribution Korea (newly recorded), China

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