

Korean Spiders of Genus *Tegenaria* (Araneae, Agelenidae)

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韓國產 집가게거미屬(가게거미科)의 分類學的 研究

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摘 要

韓國產 집가게거미屬(*Tegenaria*)의 1新種과 1既知種을 記載하였다. 即
新種 *Tegenaria secunda* n. sp. 가야집가게거미
既知種 *T. domestica* (Clerck, 1757) 참집가게거미

(Figs. 1-7)

Korean name: Cham-jibgage-komi

(참집가게거미)

INTRODUCTION

Of the Korean spiders which belong to the genus *Tegenaria* only one species, *T. domestica*, has been reported previously by Kishida(1927 & 1936), Kishida and Saito(1955), Namkung (1964), Paik and Kim(1956), and Paik(1967).

In the present paper, the author describes one new species, *T. secunda* and the known species, *T. domestica* from Korea. The type of new species is deposited in the collection of Kyungpook National University.

DESCRIPTION

Fam. Agelenidae

Gen. *Tegenaria* P.A. Latreille, 1804

Nouv. Dict. H. N., 24, p. 134

Type: *T. domestica*(Clerck, 1757)

Tegenaria domestica(Clerck, 1757)

Araneus domesticus Clerck, 1757, p. 76, pl. 2, fig. 9.

Tegenaria derharmi: Boesenberg and Strand, 1906, p. 301. -Comstock, 1940, p. 608, fig. 673. -Dahl, M., 1931, pp. 39-41, figs. 65-69. -Saito, 1959, p. 43, pls. 3-17, 4-17, fig. 16. -Schenkel, 1963, p. 13.

Tegenaria domestica: Kishida, 1927, p. 967, fig. 1856. -Kishida and Saito, 1957, p. 986, fig. 2801. -Locket and Millidge, 1953, pp. 15-16, figs. 11-12. -Namkung, 1964, p. 42. -Paik, 1967, p. 10. -Paik and Kim, 1956, p. 48. -Roewer, 1954, pp. 77-78. Roth, 1967 a, pp. 314-315, pl. 51, figs. 4-5; 1968, pp. 11-14, figs. 13-18. -Saito, 1936, pp. 55-56, pl. 28, text-fig. 18; 1939, pp. 66-67, text-figs. 8-5; 1941, pp. 32-33, fig. 45. -Yaginuma, 1960,

p. 92, fig. 241; 1962, p. 4.

For more complete synonym, see Roewer's *Katalog der Araneae*.

Female: Average length of eleven females, 9.10 mm; ranging from 7.94 mm to 11.25 mm. Carapace pale yellow or light brown with two gray stripes faintly indicated; longer than the width(100:75). Carapace/tibia-patella I ratio, 138.

The ratio of the width of head to that of thorax (h/t) is 0.59 in average of eleven females, varies from 0.50 to 0.67. Both eye rows pro-curved. Posterior eye row longer than anterior (100:83). AME slightly smaller than the rest. Eye ratio, AME < ALE = PME = PLE (15:16:16:16). Anterior median eyes separated from each other by two-fifths their diameter, from lateral eye by one-fifth their diameter. Posterior median eyes separated from each other by three-fourths their diameter, from lateral eye by five-eighths their diameter.

MOQ wider behind than in front in the ratio of 43:36, the height equals to width in behind. Clypeus as long as twice the diameter of anterior median eye.

Chelicerae dark brown; promargin with three teeth, retromargin with four, occasionally with three teeth. Labium and maxillae yellowish brown. Labium wider than the length(100:97), with shallow basal articular notches about in one-fourth its length. Endites longer than the width(100:56), moderately convergent(100:63). Sternum slightly longer than width(100:86); with broad, light, longitudinal streak, franked by three light spots on each side, in most cases very indistinct.

Leg formula, 4, 1, 2, 3. Ratio leg I/body-length is 1.7-1.8. Leg pale yellow or brownish yellow, in some specimens have distinct annulations on

femora, others have them faint or quite absent. Spination: Femora I-IV, dorsal 1-1-0, prolateral 0-1-1, retrolateral 0-1-1. Paterae I-IV, dorsal 1-1. Tibia I, dorsal 1-1, prolateral 1-1, ventral 2-2-1~2; II, dorsal 1-1, prolateral 1-1, ventral 1~2-1 2-2; III-IV, dorsal 1-1, prolateral 1-1, retrolateral 1-1, ventral 1~2-0~1-2.

Measurements(mm). Female

	length	width
Body	7.94	—
Carapace	3.56	2.75
Abdomen	4.75	3.13
Sternum	1.88	1.60
Labium	0.60	0.63
Maxillae	1.18	0.60
Head	—	1.63

	Fem.	Pat.	Tib.	Meta.	Tar.	Total
Leg I	3.63	1.28	3.63	3.63	2.19	14.11
II	3.38	1.25	3.19	3.31	1.94	12.82
III	3.19	1.16	2.75	3.25	1.56	11.72
IV	4.00	1.25	3.81	4.56	1.94	15.31
Palp	1.50	0.63	1.00	—	1.56	4.63

Abdomen pale yellow, with grayish pattern as shown in fig. 1, which is sometimes quite indiscernible. Spinnerets pale. Anterior spinnerets stout, cylindrical, separated from each other by their radius, terminal segment very small. Posterior spinnerets more slender than the anterior; basal segment longer than the distal segment(40:30). Colulus with many setae. Epigynum transverse; narrow, sclerotized transverse stripe expanded at lateral edges situated along posterior border of epigynum.

Male: Average length of twelve males, 7.98 mm; ranging from 6.81 mm to 8.88 mm. Carapace/tibia-patella I ratio, 143. The ratio of

the width of head to that of thorax(h/t) is 0.54 in average of twelve males, varies from 0.51 to 0.54.

Carapace is deeper brown than the female; the two gray stripes very indistinct in most cases. Anterior median eye separated from each other by one-fourth their diameter, from lateral eye by one-seventh their diameter. Posterior median eye separated from each other by two-thirds their diameter, from lateral eye by one-third their diameter.

Clypeus slightly shorter than twice of the diameter of anterior median eye. Sternum and legs are deeper brown than the female. Leg spination: Femora I-III, dorsal 1-1-0, prolateral 0-1-1, retrolateral 0-1-1; IV, dorsal 1-0-0, prolateral 0-1-1, retrolateral 0-0-1, patellae I-IV, dorsal 1-1, tibiae I, dorsal and prolateral 1-1, retrolateral 1-0, ventral 2-2-2; II, dorsal, prolateral and retrolateral 1-1, ventral 1~2-1-2; III, dorsal, prolateral and retrolateral 1-1, ventral 1-0-2; IV, dorsal, prolateral and retrolateral 1-1, ventral 2-1-2. Leg I/body-length is 2.0-2.2.

Male palp: Carapace/palp ratio, 129. Tibia with two distal apophysis.

Measurements(mm). Male

	Length	Width
Body	7.38	—
Carapace	3.63	2.81
Abdomen	3.75	2.31
Sternum	1.94	1.69
Labium	0.55	0.60
Maxillae	1.10	0.55
Head	—	1.44

	Fem.	Pat.	Tib.	Meta.	Tar.	Total
Leg I	4.00	1.38	3.81	4.06	2.38	15.32
II	3.88	1.34	3.44	3.81	2.00	14.16
III	3.75	1.25	3.13	3.75	1.69	13.26
IV	4.44	1.31	4.06	5.00	2.00	15.56
Palp	1.92	0.64	0.88	—	1.32	4.68

Localities: Taegu(1♂, 26-IX-1956; 1♀, 25-VI-1956; 2♀♀, 21-VIII-1956; K.Y. Paik: 1♀, 1♂, 26-IX-1956; 1♂, 14-VII-1957; E. I. Paik), Mt. Kasan, Chilgok-gun(1♀, 2-X-1958, E. I. Paik), Kyung-san(1♂, 10-VI-1956, E.I. Paik), Kimcheon(5♀♀, 2♂♂, Subad. ♂♂, 15-VIII-1963, H.S. Jeon; 1♀, 1 Young ♀, 1 Subad. ♂, H.J. Lee; 1 Young ♀, 1♂, 10-X-1956, Seung Dal Kim), Cheung-do (1♀, 11 Young ♀♀, 1, 3-VIII-1956 Han Su Park), Puseok-sa, Yeongjoo-gun(1♀, 30-VI-1960, J. Namkung), Sangjoo(1♂, 10-VIII-1956; 3♀♀, 3Young ♀♀, 25-VIII-1956, I.H. Son; 1♀, 1 Young ♀, 1♂, S.M. Lee), Yeong-deuk(2♀♀, 3 Young ♀♀, 5-VIII-1956, D.S. Park; 3♀♀, 1♂, 10-VIII-1956, K.Y. Lee; 3♀♀, 1 Young ♀, 20-VIII-1962, Y. W. Lee). Chungjoo(1♀, 10-VI-1962; 1♂, 25-VI-1962, J. Namkung), Seoul(1 Young ♀, 20-IX-1962, J. Namkung), Cheung-rang-ri(1♀, 3-IX-1960, I.H. Yoo), Do-dong, Dagelet Isl. (1♂, 8-VII-1966, Y.K. Kim; 1♀, 13-VIII-1966, Y.K. Cheong), Wadal-ri, Dagelet Isl., (1♂, 7-V-1966, Y.K. Kim), Namyang, Dagelet Isl.(2♀♀, 2♂♂, 28-VII-1960, S.S. Eum), Yong-gul Cave, Dagelet Isl.,(5♀♀, 1♂, 8-V-1966, Y. K. Kim), Dagelet Isl.(2♀♀, 10 Young ♀♀, 1 Young ♂, 20~23-VIII-1952, M.C. Lee; 1♂, 22-VII-1962, M.J. Hong), Cheju city, Quelpart Isl.(1♀, 24-VI-1968, 1♀, 28-VI-1961, K.Y. Paik), Namseung-De, Quelpart Isl.,(3 Subad. ♀, 8-VIII-1958, Y.K. Kim).

Distribution: Korea, Dagelet Isl., Quelpart Isl., Japan(Hokkaido, Honshu, Shikoku, Kyushu), Manchuria, China, Okinawa, Formosa.—Cosmopolitan.

Tegenaria secunda n. sp.

(Figs. 8-13)

Korean name: Kaya-jibgage-komi

(가야집가게거미)

Male holotype: Carapace brownish yellow; longer than width(100:71), cervical grooves, radial furrows and longitudinal median furrow evident; sparsely clothing with dark hairs. Carapace/tibia-patella I ratio, 155. Head with parallel sides, the ratio of the width of head to that of thorax is 0.55. Both eye rows procurved. AER shorter than the PER in ratio of 85:100. Eye ratio, AME=PME<PLE<ALE(14:14:15:17). Anterior median eyes separated from each other by their radius, from lateral eye by two-sevenths of their diameter. Posterior median eyes separated five-sevenths of their diameter, from lateral eye by six-sevenths of their diameter. MOQ wider behind than in front(38:32), longer than the width(43:38). All eyes on black spots. Clypeus higher than the diameter of AME (20:14). Chelicerae brown; both margins with three teeth. The articular socket of the chelicerae on the face are sclerotized and reddish brown in colour. Labium and maxillae yellowish brown. Labium longer than width in the ratio of 100:93, and beyond the midpoint of endite, basal articular notches about one-fourth its length.

Endites longer than width(100:47), moderately convergent(25/11)¹⁾. Sternum brownish yellow, with light brown margin; longer than

width(100:86). Maxillae, labium, sternum and legs sparsely clothing with dark hairs. Leg uniformly brownish yellow; paired claws of 4th tarsus with ten teeth, third claw with four. Fourth tarsus with ten trichobothria. Leg formula, 1, 4, 2, 3. Ratio leg I/body-length is 2.4.

Spinination as follows: Femora I, dorsal 1-1-1, prolateral and retrolateral 1-1; II and III, dorsal 1-1-1, prolateral 1-1-1, retrolateral 1-1; IV, dorsal 1-1-1, prolateral 1-1-1, retrolateral 1. patellae I, dorsal 1-1; II-IV, dorsal 1-1, prolateral and retrolateral 1. Tibiae I, dorsal 1-1, prolateral 1-1-1, ventral 2-2-2; II, dorsal and prolateral 1-1, ventral 2-2-2; III, dorsal, prolateral and retrolateral 1-1-1, ventral 2-2-2; IV, dorsal, prolateral and retrolateral 1-1-1, ventral 2-1-2-2.

Measurements(mm). Male

	Length	Width
Body	8.06	—
Carapace	4.13	2.94
Abdomen	4.25	2.31
Sternum	1.38	1.18
Labium	0.69	0.64
Maxillae	1.38	0.65
Head	—	1.63

	Fem.	Pat.	Tib.	Meta.	Tar.	Total
Leg I	4.75	1.56	4.88	5.31	2.94	19.25
II	4.44	1.56	4.31	4.75	2.75	17.62
III	3.94	1.44	3.44	4.44	2.25	15.32
IV	4.81	1.50	4.68	5.88	2.63	19.25
Palp	2.31	1.13	0.75	—	1.81	5.44

Abdomen ovoid; grayish yellow, with indistinct dark patches as shown in fig. 8. Anterior spinnerets stout, cylindrical, separated by 0.6 times their diameter, terminal segment incon-

1) Roth, V.D., 1967 a, p. 301.

spicuous. Posterior spinnerets more slender than the anterior; basal segment longer than terminal segment(35:22). Colulus with a few setae.

Male palp long, slender. Femur with four dorsal spines, longer than the patella+tibia. Patella with ectal terminal apophysis and three dorsal spines. Tibia with many long ventral hairs, with a apophysis and a dull protuberance.

Carapace/palp ratio, 132.

Holotype: 1♂, 9-X-1959, Mt. Kaya(At 700 meter above the sea level), collected by Kap Yong Paik.

Diagnosis: The present new species is readily separated from other species by the structure of the male organ.

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Explanation of Figures

1. *Tegenaria domestica*; Female, dorsal view.
2. Same; Male palp, left, ectal view.
3. Same; Male palp, inner view.
4. Same; Male palp, ventral view.
5. Same; Epigynum, ventral view.
6. Same; Genitalia.
7. Same; Sternum of female.
8. *Tegenaria secunda* n. sp.; Male, dorsal view.
9. Same; Chelicera of male, left, inner view.
10. Same; Face of male,
11. Same; Male palp, right, ventral view.
12. Same; Male palp, right, inner view.
13. Same; Male palp, right, ectal view.



