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Korean Spiders of Genus Coras (Araneae, Agelenidae)

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韓國産 깔때기거미屬(가게거미科)의 分類學的 硏究

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摘 要

깔때기거미屬(*Coras*)은 1898年에 E. Simon이 創設한 이래, 北美洲에서 約 15種, 極東地域에서 다음 3種이 記載되었다. 即

C. insidiosus(L. Koch, 1877) 日本
C. luctuosus(L. Koch, 1877) 日本·中國(?)
C. plancyi(Simon, 1880) 日本·中國

本屬은 *Coelotes* 屬과 매우 닮아서, 그 사이에 뚜렷한 區分을 지우기란 困難하며, 따라서 種의 所屬에도 적지않은 混亂을 招來하고 있다. 本屬은 종래에는 Agelenidae의 Ageleninae에 所屬시켜 왔으나 最近에 Lehtinen(1967)은 이것을 F.O. Pickard-Cambridge(1893)가 設定한 *Coelotinae*로 옮겼는데 이것은 매우 타당한 處事라 하겠다.

韓國産 *Coras* 屬에 對해서는 白(1942, 1962, 1967), 白·金(1956) 및 南宮(1964) 等이 日本과 共通種인 *Coras insidiosus*를 報告한바 있다. 그러나 이번 調査에서 이것은 *Coelotes songminjae* Paik et Yaginuma, 1969의 synonym으로 밝혀졌으므로 우리 나라의 spider fauna에서 除外하기로 했다. 한편 筆者 所藏의 標本을 整理한 結果 새로히 1韓國未記錄種과 1新種을 얻었기에 이에 記載하는 바이다.

韓國未記錄種 *Coras luctuosus*(L. Koch, 1877) 왜깔때기거미
新 種 *Coras vulgaris n. sp.* 한국깔때기거미

INTRODUCTION

Until now, one species, *Coras insidiosus* has been reported in Korea by Paik(1942, 1962, 1967), Paik & Kim(1956) and Namkung(1964). Present investigation, however, makes clear that the species reported in Korea as a *Coras insidiosus* by the above mentioned authors differs entirely from *C. insidiosus* of Japan.

The Korean species which was regarded as the same species as *C. insidiosus* of Japan will be treated as a synonym of *Coelotes songminjae* Paik et Yaginuma, 1969. Therefore, *C. insidiosus* is omitted here.

In this paper the author describes one new species and one species unrecorded up to the present in Korea. The type of the new species is deposited in the collection of Kyungpook National University, Taegu, Korea.

DESCRIPTION

Fam. ***Agelenidae***

Gen. ***Coras*** Simon, 1898

Hist. Nat. Ar., 11, p. 258

Type: *C. medicinalis* (Hentz)

Coras vulgaris n. sp.

(Figs. 1-2)

Korean name: Hangug-ggalddaegi-komi(한국깔때기거미)

Measurements: *Male holotype.* Total length (body length+chelicera) 17.62mm.; body length 16.02 mm.; carapace length 8.33 mm., carapace width 5.93 mm., carapace index 71; sternum length 4.13 mm., sternum width 3.25 mm., sternum index 79; labium length 1.31 mm., labium width 1.22 mm., labium index 93; endite length 2.47 mm., endite width 1.41 mm., endite index 57, endite converging index 59; head width 3.52 mm., cephalic width index 59; anterior eye row 1.59 mm., posterior eye row 1.88 mm., eye row index 85, eye area index 53. Abdomen length 8.65 mm., abdomen width 5.61 mm., abdomen index 65.

		Fem.	Pat.	Tib.	Meta.	Tar.	Total
Leg	I	6.25	2.72	5.61	5.93	3.52	23.71
	II	5.77	2.72	4.81	5.45	4.01	22.44
	III	5.45	2.56	4.33	5.45	3.04	20.43
	IV	6.41	2.72	5.77	7.21	3.52	25.15
Palp		2.81	1.31	1.63	—	4.56	9.57

Variations of male. Based on fifteen males, average listed first and the range of all follows: total length 15.16 mm., 12.49-17.62 mm.; body length 14.32 mm., 11.85-16.02 mm.; carapace length 7.60 mm., 6.41-8.49 mm.; carapace width 5.37 mm., 4.49-5.93 mm., carapace index 71, 65-82; head width 3.36 mm., 2.88-3.52 mm. cephalic width index 63, 59-63. Abdomen length 7.59 mm., 5.93-8.81 mm., abdomen width 4.92 mm., 4.24-5.93 mm., abodmen index 65, 58-81.

Female paratype. Total length 20.52 mm.; body length 18.75 mm.; carapace length 8.49 mm., carapace width 5.61 mm., carapace index 66; sternum length 4.04 mm., sternum width 3.24 mm., sternum index 80; labium length 1.44 mm., labium width 1.25 mm., labium index 87; endite length 2.56 mm., endite width 1.46 mm., endite index 57, endite converging index 58; head width 4.01 mm., cephalic width index 72; anterior eye row 1.78 mm., posterior eye row 2.06, eye row index 86, eye area index 51. Abdomen length 11.22 mm., abdomen width 8.01 mm., abdomen index 71.

		Fem.	Pat.	Tib.	Meta.	Tar.	Total
Leg	I	5.81	2.69	5.00	5.00	3.13	21.32
	II	5.56	2.69	4.38	4.69	2.81	19.82
	III	5.13	2.50	3.75	4.75	2.63	18.51
	IV	6.31	2.69	5.43	6.38	3.13	23.44
Palp		2.72	1.28	1.68	—	3.04	7.68

Variations of female. Based on sixteen females, average listed first and the range of all follows: total length 17.12 mm., 12.04-20.52 mm.; body length 15.35 mm., 11.53-19.87 mm.; carapace length 7.18 mm., 5.93-8.97mm., carapace width 4.96 mm., 4.01-5.93 mm., carapace index 69, 65-75; head width 3.47 mm., 2.72-4.17 mm.; cephalic width index 70, 68-72. Abdomen length 9.02 mm., 6.89-11.85 mm.; abdomen width 6.10 mm., 4.01-8.65 mm., abdomen index 68, 64-73.

Description: *Male holotype.* Carapace chestnut, darker on the cephalic part; longer than the width; covered with short black hairs. The

longitudinal median furrow reddish black; radial furrows and cervical grooves suffused with dark colour.

Both eye rows procurved. Anterior eye row shorter than the posterior eye row. The area occupying slightly more than half the width of head. Anterior median eye larger than anterior lateral eye. Eye ratio, AME>ALE=PLE>PME (13:11:11:10).

Anterior median eyes separated from each other by one-third and from lateral eye by one-fourth the diameter of anterior median eye. Posterior median eye separated from each other by 0.7 times their diameter and from lateral eye as long as the diameter of posterior median eye. Median ocular quadrangle; anterior and posterior margins subequal, slightly longer than the width in the ratio of 100:93. Clypeus slightly more than the diameter of anterior median eye (3:2).

Chelicerae dark reddish brown; robust and geniculated; armed with three teeth on both margins of fang furrow respectively. Lateral condyles distinct, light brown. Labium and endite dark reddish brown, with whitish yellow tips; moderately clothed with long black hairs. Labium longer than the width in the ratio of 4:3, and reaching beyond midpoint of the endite; basal articular notches about one-fifth its length. Endite longer than the width, slightly converging at anterior in the ratio of 100:59. Sternum reddish brown, margin somewhat dark; heart-shaped, longer than the width, widest at the second coxae; the end prominent, but not produced between hind coxae.

Legs brown, and are becoming darker towards apical segments; moderately clothed with black hairs. Leg formula 4, 1, 2, 3. The upper claw with 10 teeth and third claw of the fourth tarsus with 4 teeth. The spinations are as follows:

		Dorsal	Prolateral	Retrolateral	Ventral
Femur	I	1-1-0-1	0-1-1	1-0-1	0
	II	1-1-0-1	1-1-1	1-0-1	0
	III	1-1-0-1	1-1-1	1-0-1	0
	IV	1-1-0-1	1-0-1	0-0-1	0
Patella	I	0-(1)*	1	0	0
	II	1-1	1	0	0
	III	1-1	1	1	0
	IV	(1)-1	1	1	0
Tibia	I	(1)-0	0	0	2-2-2
	II	(1)-0	1-1	0	2-2-2
	III	(1)-0	1-1	1-1	2-2-2
	IV	(1)-0	1-1	1-1	2-2-2

*The parentheses indicate very delicate spines.

Abdomen dark gray, scattered numerous brownish yellow small spot. Spinnerets yellowish brown. Anterior spinnerets separated from each other by two-thirds their diameter. Posterior spinnerets longer than the anterior in the ratio of 2:1; apical segment longer than the basal one in the ratio of 100:79. Colulus with setose lobes laterlly, joined in middle by glabrous area.

Male palp: The terminal apophysis very well-developed; it loops nearly a cycle, and then is turned a half cycle in the opposite direction. The ratio of the longest diameter of the loop of terminal apophysis to that of the length of cymbium(a/cym.) is 100:53. The ratio of the length of the radix to that of the longest diameter of the loop of terminal apophysis(rad./a.) is 100:49. The patellal apophysis is simple, as shown in figure 6.

The measurements and the ratio of each part of the male organ are as follows (Text-fig. 1).

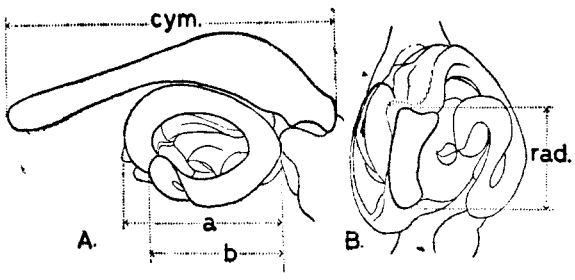

Fig. 1. Diagram of epigynum. A. Lateral view; B. Ventral view; —a. The longest diameter of the loop of terminal apophysis. —b. The longest diameter of the apical loop of terminal apophysis. —Cym. Length Cymbium. —rad. Length of radix.

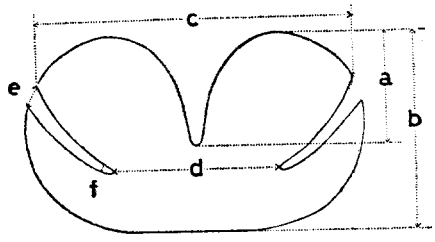

Fig. 2. Digagram of epigynum.
a. Length of guide. —b. Height of epigynum. —c. Distance between the proximal portion of of both horn-like projections. —d. Distance between the distal portion of both horn-like projections. —e. Width of proximal portion of the horn-like projections. —f. Width of apical portion of the horn-like projections.

Table 1. Measurements and ratio of each part of male organ

	Measurements (mm.)					Ratio				
Sp. No.	rad.	cym.	a.	b.	c.	rad/c.	rad/a.	b/a	a/cym	rad/cym
1.	1.19	4.56	2.44	2.38	0.56	0.26	0.49	0.97	0.53	0.26
2.	1.19	4.56	2.44	2.31	0.50	0.26	0.49	0.95	0.53	0.26
Average	1.19	4.56	2.44	2.35	0.53	0.26	0.49	0.96	0.53	0.26

Female paratype. Body length rather larger than the male. Eye ratio, AME>ALE=PME=PLE(13:11:11:11). The spination of legs same as male one, except the second femur has two dorsal spines.

Epigynum, as shown in figure 7. The guide is very long, the ratio of a/b.(Text-fig. 2) is 0.61. There are two horn-like projections on the both sides of the guide. The horn-like projection relatively wider than that of the *Coras luctuosus*; it arises anterior margin of the epigynum and slightly converging at the distal ends; slightly bent outwardly at the apex; the two-thirds of the basal part is white, the apical part is brown.

The measurements and the ratio of each part of epigynum are as follows (Text-fig. 2):

Table 2. Measurements and the ratio of each part of epigynum

	Measurements(mm.)							Ratio				
Sp. No.	a	b	c	d	e	f	g	a/b	d/c	g/e	a/f	e/f
1	0.78	1.28	0.83	0.58	0.33	0.88	0.13	0.61	0.70	0.39	0.89	0.38
2	0.70	1.20	0.83	0.58	0.45	0.88	0.10	0.58	0.70	0.22	0.80	0.51
3	0.80	1.30	1.03	0.75	0.48	0.88	0.18	0.62	0.73	0.38	0.91	0.54
4	0.78	1.20	0.75	0.55	0.30	0.95	0.13	0.65	0.73	0.43	0.82	0.32
5	0.70	1.18	0.83	0.60	0.35	0.92	0.11	0.59	0.72	0.31	0.76	0.38
Average	0.75	1.23	0.85	0.61	0.38	0.90	0.13	0.61	0.72	0.35	0.84	0.43

Biology: Present species is very common in Korea. They build a funnel web on a naked cliff or a stone wall and sometimes in a hollow or crack of a tree. However, they never build their webs on hedges.

Specimens examined. *Holotype*: ♂, Taegu, 15-Ⅳ-1956, Kap Yong Paik collector. *Paratype*: Taegu(1♂,18-Ⅳ-1955; 1♀, 1Y♀, 24Ⅶ-1955; 1♀, 2-XII-1955; 3♂♂, 15-Ⅳ-Ⅳ-1956; 14Y♀♀, 1♂, 25-Ⅵ-1956; 1♀, 2-Ⅶ-1956; 1♀, 18-Ⅸ-1956; 3♀♀, 23-1956; 1♀, 2-Ⅹ-1956; 1♂, lsubad, ♂, 20-Ⅳ-1957; 5♀♀, 2Y♀♀, 20-Ⅹ-1957; 31-Ⅶ-1958; 3♀♀, 1♂, 26-Ⅳ-1958; 4Y♀♀, 17-Ⅳ-1959; 5Y♀♀,23-Ⅸ-1965; 1♀, 15-Ⅶ-1966; Kap Yong Paik collector. -3♂♂, 3 subad.♂♂, 23-Ⅸ-1956; 3♂♂, 6Y♀♀, 18-Ⅸ-1956; 3♀♀, 28-X-1956; Eu In Paik collector; -1♀, 22-Ⅳ-1966, Min Ja Song collector.), Dongchon, vicinity of Taegu(2♀♀, 6-Ⅴ-1956, Eu In Paik collector.), Dongwha-sa, Mt. Pargong(1♀, 14-Ⅵ-1958, 1♀, 4 subad. ♂♂, 30-Ⅶ-1968; Kap Yong Paik collector. 2♂♂, 21-Ⅹ1958, Hi-Jong Lee collector.), Mt. Kasan, vicinity of Taegu(1♀, 2-Ⅹ-1958, Eu In Paik collector.), Kimcheon(1 subad. ♂, Ⅷ-1956; 5Y♀♀, Ⅷ-1963; Hang Sang Cheon collector. -1♂, subad. ♂, 15-XII-1962, Yong Ki Kim collector.-1 subad. ♂, Ⅷ-1963, Hi Jong Lee collector), Mt. Keum-o(1♀, 1-Ⅶ-1958, Ki Sun Kim collector. -1Y♀, lsubad. ♂, 26-Ⅶ-1961, Yong Ki Kim collector.), Chung-do(1subad. ♂, 3-Ⅷ-1956, Han Su Park collector.), Unmun-sa (1 ♂, 1-Ⅴ-1965, Kap Yong Paik collector.), Mt. Kaya(2♂♂, 11-Ⅶ-1959, Dal Won Chung collector.), Andong(5♀♀, Ⅲ-1959, Seuk Yeup Kim collector.), Chunyang(1♂, Ⅷ-1963, Jeung Sun Heo collector.), Sochun, Kyungpeok(1♀, 20-Ⅸ-1963, Yung Kyu Cheung collector; -2♀♀, 2Y♀♀, 15-Ⅶ-1964. Kap Yong Paik collector.), Yeung-yang, kyung-pook(Y♀♀, 5-Ⅷ-1964, Kap Yong Paik collector.), Mt. llwol(2 subad. ♂♂, 11-Ⅷ-1962. Eu-In Paik collector.), Joreung(1♂, 4-Ⅷ-1962, Joon Namkung collector; 1♀, 3Y♀♀, lsubad. ♂, 18-Ⅷ-1964, Kap Yong Paik collector.), Jukreung(1♀, 1Y♀, 7-Ⅵ-1964, Kap Yong Paik collector.), Mt. Sokkri (1Y♀, 24-Ⅶ-1961, Yung Ho Chung collector.), Chungjoo(1♂, 5-Ⅺ-1959; 1♀, 20-Ⅵ-1962, Joon Namkung collector.), Kwangreung(1Y♀, 4-Ⅸ-1964, Yong Ki Kim collector.), Keumwha(2♂♂, 16-Ⅴ-1962; 1♀, 1-Ⅴ-1962; 1 subad. ♂, 12-Ⅸ-1962; 2 ,20-Ⅴ-1962 1♂,10-Ⅵ-1963; 3 subad. ♂♂, 4-Ⅷ-1963; 1♀,1♂,20-Ⅳ-1964; Yong Ki Kim collector.), Mt. Ode(1♀, 5-Ⅷ-1964, Kap Yong Paik collector.), Mt. Sulakk (1Y♀, lsubad. ♂, 8-Ⅷ-1964, Kap Yong Paik collector.), Buyeo(1♀, 11-Ⅺ-1969, Kap Yong Paik collector), Whaam-sa, Mt. Jiri(2 subad. ♂♂, Sung Ho Pakk collector.) Kangjin, Jeunra-namdo(1♂, Ⅴ-1961, In Be Kim collector.) Kwaneum-sa, Quelpart Isl.,(1♀, 21-Ⅶ-1960, Yong Ki Kim collector.)

Diagnosis: The present new species very closely resembles *Coras luctuosus* L. Koch, 1877; but it is clearly distinguishable from the latter in the following points. 1. Present species is larger, stouter and darker than the latter in general appearances. 2. The guide of epigynum is very longer than in the latter. The ratio of a/b(Text-fig. 2) is 0.61 in the present species; but in the latter, it is no more than 0.33. (Tab. 2 & 3). 3. The horn-like projection is wider than in the latter. The ratio of e/f(Text-fig. 2) is 0.43 in the present species; but, it is no more than 0.28 in the latter. (Tab. 2 & 3) 4. The horn-like projection is slightly bent outwardly at the apex. 5. Both canals of spermathecae run nearly parallel each other. In the latter, they

run obliquely. 6. The spermatheca is much larger and more complicated than that of the latter. 7. The ratio of each part of epigynum in both species is as shown in the tables 2 and 3. 8. The ratio of b/a(Text-fig. 1) of male palp is 0.95-0.97. But it is no more than 0.75-0.77 in the latter. 9. The ratio of the length of radix to that of the longest diameter of the loop of terminal apophysis in the male organ(r/a) is only 0.49. But it is 0.58-0.60 in the latter (Tables 1 & 4:Text-fig. 1). 10. The patellal apophysis is simple.

In the latter, it is divided into two branches as the apex. 11. The terminal apophysis is wider than that of the latter. 12. The ratio of each part of male palp in both species is as shown in tables 1 and 4. And also, the present species very closely resembles *Coelotes laticeps* Schenkel, 1937; but it is easily distinguishable from the latter by the structure of male organ.

Notes: The author believes that the Chinese species, *Coras luctuosus* L. Koch, *var. schensiensis* Schenkel, 1963 (Schenkel 1963, pp. 293-294) corresponds present new species. The name given by Scherkel is not available under article 15 of the International Code of Zoological Nomenclature. Therefore, the author gives it a new name "*vulgaris*," to the effect that it is a very common species in Korea.

Coras luctuosus (L. Koch, 1877)

(Figs. 13-21)

Korean name: Oae-ggalddaegi-komi
(외깔때기 거미)

Caelotes lucutosus L. Koch, 1877, pp. 752-755, figs. 14-16.

Caelotes japonicus F. Karsch, 1879, pp. 97, pl. 1. fig. 16.

Tegenaria corasides: Saito, 1934, pp. 345-346; 1939, pp. 65-66, fig. 8(4); 1941, p.30, fig. 43; 1959, p. 44, pl. 3, fig. 18, pl. 4, fig. 18 & Text-fig. 17. Uyemura, 1937, pp. 62-63, fig. 9.

Coras corasides: Komatsu, 1942, pp. 1-6, pl. 1.

Coras luctuosus: Boesenberg and Strand, 1906, pp. 300-301, fig. 460; Yaginuma, 1956, p. 273; 1957, pp. 17-19; 1958, p. 14; 1960, p. 93, pl. 42, fig. 243 & Text-fig. 82(5); 1962, p. 93, pl. 42, fig. 243 & Text-fig. 82(5).

Measurements: *Female*. Total length(body length+chelicera) in two females 12.66-12.82 mm.; body length 12.02-12.34 mm.; carapace length 5.61-5.93 mm., carapace width 4.17-4.17 mm., carapace index 74-70; sternum length 2.88-2.91 mm., sternum width 2.50-2.31 mm., sternum index 87-79; labium length 1.04-1.00 mm., labium width 1.00-0.94 mm., labium index 96-94; endite length 1.96-1.92 mm., endite width 1.16-1.04 mm., endite index 59-54, endite converging index 58-58; head width 2.88-96 mm., cephalic width index 69-71; anterior eye row 1.49-1.53mm., posterior eye row 1.70-1.78mm., eye row index 88-86, eye area index 59-60. Abdomen length 6.89-7.05 mm., abdomen width 5.13-4.81 mm., abdomen index 75-68.

		Fem.	Pat.	Tib.	Meta.	Tar.	Total
Leg	I	4.13	1.94	3.63	3.56	2.06	15.01
	II	4.13	1.94	3.13	3.31	2.06	14.26
	III	3.56	1.75	2.69	3.25	1.68	12.68
	IV	4.38	1.88	3.75	4.31	2.00	16.07
Palp		1.94	0.88	1.13	—	2.13	5.85

Male. Total length in two males 12.66-12.66 mm.; body length 12.02-11.69 mm.; carapace length 5.77-6.25 mm., carapace width 4.33-4.49 mm., carapace index 75-72; sternum length 3.12-3.24 mm., sternum width 2.60-1.80 mm., ster-

num index 83-56; labium length 1.08-1.00mm., labium width 1.00-0.96 mm., labium index 93-96; endite length 2.00-1.96 mm., endite width 1.04-1.04 mm., endite index 52-53, endite converging index 78-62; head width 2.80-2.88mm., cephalic width index 65-64; anterior eye row 1.61-1.53mm., posterior eye row 1.84-1.78mm., eye row index 88-86, eye area index 61-62. Abdomen length 6.73-6.09 mm., abdomen width 4.16-4.17 mm., abdomen index 62-68.

		Fem.	Pat.	Tib.	Meta.	Tar.	Total
Leg	I	4.81	2.08	4.65	4.71	2.56	18.49
	II	4.65	2.38	4.00	4.39	2.24	17.68
	III	4.17	1.92	4.17	4.39	2.08	15.77
	IV	5.13	2.08	4.65	5.77	2.40	19.71
Palp		2.06	0.81	1.06	—	2.88	5.85

Description: *Female*. Carapace brown, darker on the cephalic part, and bordered narrowly with a yellowish white line on the thoracic part; covered with short black hairs. The longitudinal median furrow reddish black; radial furrow and cervical groove suffused with dark colour. Both eye rows procurved. Anterior eye row shorter than the posterior one. The eye row occupied three-fifths the width of head. Anterior median eye is the largest. Eye ratio, AME>ALE>PME =PLE(18:16:14:14).

Anterior median eyes separated from each other by one-third and from lateral eye by two-ninths the diameter of anterior median eye. Posterior median eye separated from each other slightly more than their diameter and from lateral eye by 1.2 times their diameter. Median ocular quadrangle wider behind than in front in the ratio of 100:95, longer than the width in the ratio of 100:95. The height of clypeus is 1.3 times the diameter of anterior median eye.

Chelicerae dark reddish brown; robust and geniculated; armed with three teeth on both margins of fang furrow respectively. Lateral condyles distinct, light brown. Labium and endite dark reddish brown, with whitish yellow tips; moderately clothed with long black hairs. Labium longer than the width, and reaching beyond midpoint of the endites; basal articular notches about one-fifth its length. Endite longer than the width, slightly converging in anterior. Sternum brown, with margins somewhat dark; longer than the width, widest in second coxae; the end prominent, but not produced between hind coxae; and moderately clothed with long black hairs. The fourth coxae separated from each other two-sixths their diameter. Legs brown, and becoming darker towards apical segments; the I and II darker than the III and IV; moderately clothed with black hairs. Leg formula 4, 1, 2, 3. The upper claw with 11 teeth and third claw with 4 teeth of the fourth tarsus.

The spinations are as follows:

		Dorsal	Prolateral	Retrolateral	Ventral
Femur	I	1-1-1	0-0-1-1	0-0-1	0
	II	1-1-1	1-1	1-1	0
	III	1-1-1	1-1	1-1	0
	IV	1-1-1	0-1-1	0-0-1	0
Patella	I	(1)-1	0	0	0
	II	1-1	1	0	0
	III	(1)-1	1	1	0
	IV	(1)-1	(1)	1	0
Tibia	I	0	1-0	0	2-2-2
	II	0	1-1	0	2-2-2
	III	0	1-1	1-1	2-2-2
	IV	0	1-1	1-1	2-2-2

Abdomen dark grayish brown on one specimen, and in the other one, there are cardiac pattern and some chevron on dorsum. Anterior

spinnerets brown; cylindrical, separated from each other three-fifths of their diameter; posterior spinnerets longer than the anterior ones in the ratio of 5:3; apical segments longer than the basal ones in the ratio 100:77. Colulus with setose lobes laterally, joined in middle by glabrous area.

Epigynum typical heart-shaped; the guide relatively short, the ratio of a/b(Text-fig. 2) is 0.34. The horn-like projection relatively slender than the *C. vulgaris*. The canals of spermathecae visible through the chitin as a reddish dark brown oblique line.

The measurements and the ratio of each part of epigynum are as follows (Text-fig. 2).

Table 3. Measurements and the ratio of each part of epigynum

	Measurements(mm.)							Ratio				
Sp. No.	a	b	c	d	e	f	g	a/b	d/c	g/e	a/f	e/f
1	0.20	0.65	0.95	0.53	0.13	0.40	0.05	0.31	0.56	0.38	0.50	0.33
2	0.25	0.73	0.80	0.55	0.10	0.45	0.05	0.34	0.69	0.50	0.56	0.22
Average	0.23	0.69	0.88	0.54	0.12	0.43	0.05	0.33	0.63	0.44	0.53	0.28

Male. Body size slightly smaller than the female. Eye ratio, AME>ALE=PLE>PME=(17:15:15:13). Anterior median eyes separated from each other by two-fifths and from lateral eye by slightly less than one-third the diameter of anterior median eye. Posterior median eyes separated from each other by their diameter, from lateral eye by 1.3 times their diameter. Median ocular quadrangle slightly wider front than in behind in the ratio of 100:98, longer than width in the ratio of 100:95.

The height of clypeus is slightly more than the diameter of anterior median eye.

The basal articular notches of labium about one-seventh its length. The endite more converging than the female at the anterior. The fourth coxae separated from each other one-third their diameter. Anterior spinnerets separated from each other slightly more than their radius. The posterior spinnerets are slightly more than twice the anterior ones in length; the apical segments longer than basal ones in the ratio of 100:68.

Male palp. The terminal apophysis well-developed; it loops nearly a cycle and then is turned a half cycle in the opposite direction. The ratio of the longest diameter of the loop of terminal apophysis to that of the length of cymbium(a/cym.) is 100:47-49. The ratio of the length of the radix to that of the longest diameter of the loop of terminal apophysis (rad/a) is 100:58-60. The patellal apophysis is divided into two branches at the apex as shown in figure 17.

The measurements and the ratio of each part of the male organ are as follows (Text-fig. 1).

Table 4. Measurements and ratio of each part of male organ

	Measurements (mm.)				
Sp. No.	rad.	cym.	a	b	c
1	1.31	4.56	2.25	1.69	0.44
2	1.31	4.63	2.19	1.69	0.49
Average	1.31	4.60	2.22	1.69	0.47

Ratio

rad/c	rad/a	b/a	a/cym.	rad/cym.
0.29	0.58	0.75	0.49	0.29
0.28	0.60	0.77	0.47	0.28
0.29	0.59	0.76	0.48	0.29

Specimens examined: Todong, Dagelet Isl., (1♀, 3-Ⅷ-1964; 1♀, 8-Ⅷ-1966, Yong Ki Kim collector. 2 subad. ♂♂, 16-Ⅷ-1958; 3Y♀♀, 3-Ⅷ-1960; 1Y♀, 10-Ⅷ-1960, Yung Kyu Cheung collector.), Namyang, Dagelet Isl.,(1Y♀, 19-Ⅷ-1954, Young Ki Kim collector), Mt. Seunginbong, Dagelet Isl.,(1♂, 15-Ⅳ-1967, Yong Ki Kim collector.), Mt. Kwanmo-bong (Dagelet Isl., (1♀, 1♂, 3-Ⅳ-1966, Yong Ki Kim collector.)

Distribution: Japan(Hokkaido, Honshyu, Shikoku, Kyushyu), New to Korea (Dagelet Isl.)

Note: *Coras vulgaris* is widely distributed in main parts of the Korean peninsula and the Quelpart Island which is a large island located in the southern extremity of the peninsula. Whereas, *Coras luctuosus*, which is a common species in Japan, is found only on Dagelet Island in the "East Sea"(so-called "Japanese Sea") in Korea.

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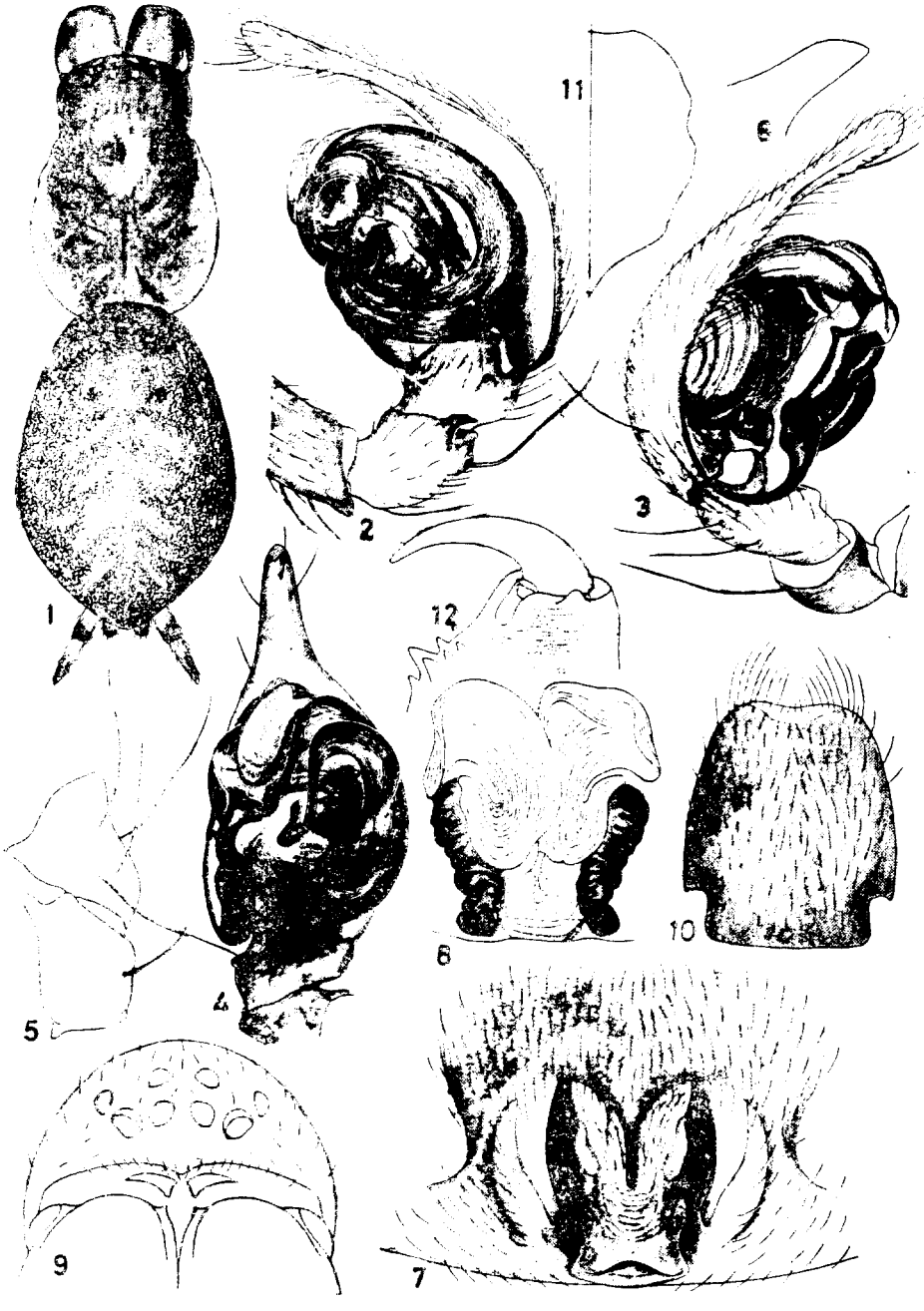
Explanation of Figures

Pl. 1. *Coras vulgaris* n. sp.

1. Female, dorsal view.
2. Male palp, left, ectal view.
3. Male palp, left, inner view.
4. Male palp, left, ventral view.
5. Tibia and patella of male palp, left, dorst, dorsal view.
6. Patellal apophysis of male palp, distal end.
7. Epigynum, ventral view.
8. Genitaria, inner view.
9. Face of female.
10. Labium of female.
11. Sternum of female.
12. Cheliceria, left, inner view.

Pl. 2. *Coras luctuosus*

13. Female, dorsal view.
14. Male palp, left, ectal view.
15. Male palp, left, inner view.
16. Male palp. left, ventral view.
17. Patellal apophysis of male palp.
18. Epigynum, ventral view.
19. Genitaria, inner view.
20. Genitaria, ventral view.
21. Chelicera, left, inner view.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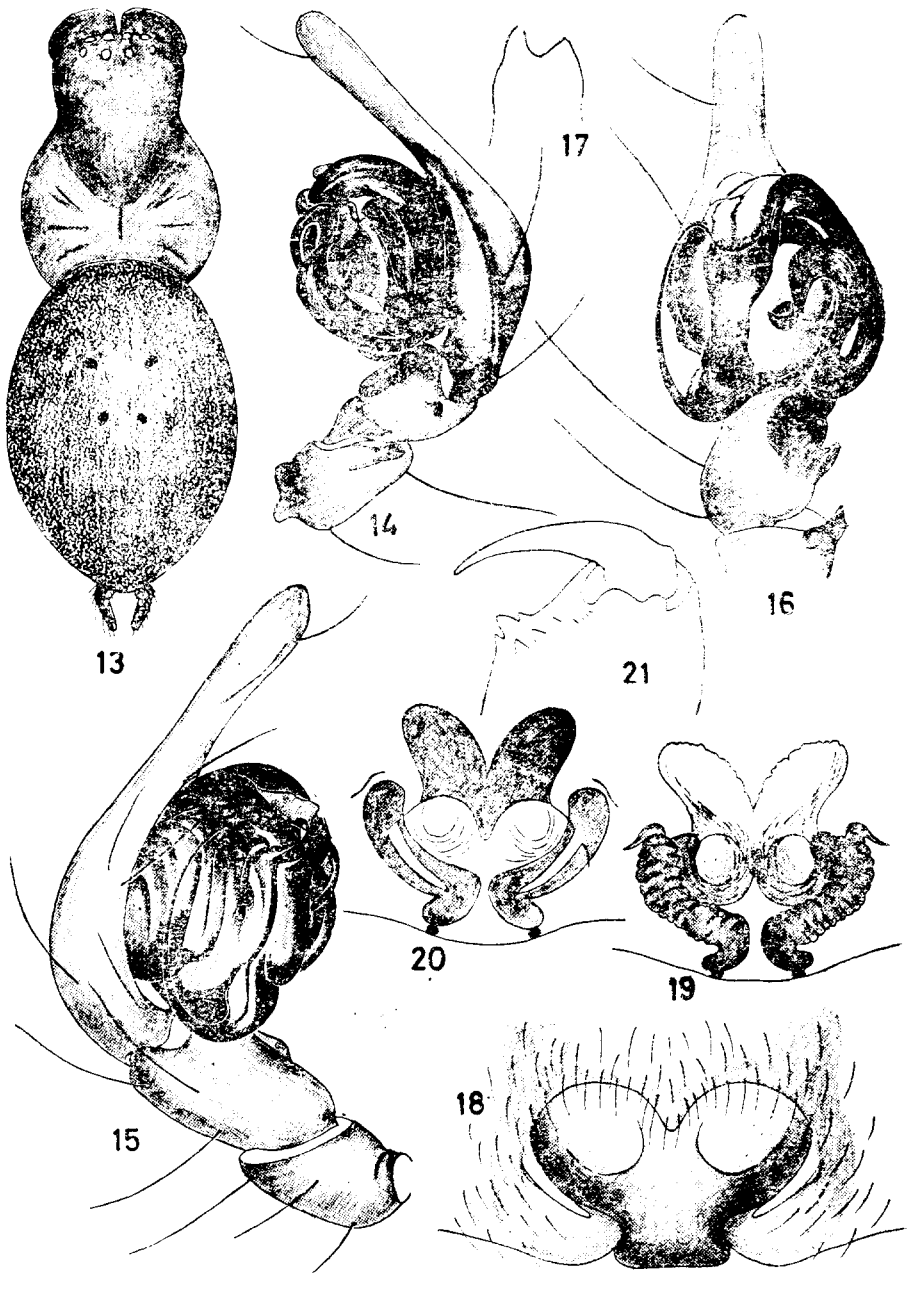
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