# Description of the Male of Chrysso lativentris (Araneae, Theridiidae)

#### Bo Keun Seo\*

(Department of Biology, Keimyung University, Daegu 704-701, Korea)

#### **ABSTRACT**

The male of *Chrysso lativentris* is newly described with illustrations. Male differs from female in leg formula, and has a smaller posterior extremity protuberance than that of female. The median apophysis of palp has a peculiar structure.

Key words: Theridiidae, Chrysso, Korea

## INTRODUCTION

The posterior extremity drawn out into an obtuse point is characteristic of *Chrysso* spiders belonging to the family Theridiidae. This genus is nearly allied to *Argyrodes*, appearing to form a connecting link between it and *Theridion* (Cambridge, 1882). The genus is distinguished from *Achaearanea* by having a radix and free median apophysis in the palpus, and usually also by the shape of the abdomen, and separated from *Coleosoma* by lacking the anterior sclerotized ring around the male abdomen (Levi and Levi, 1962).

Sixty three species in this genus have been recorded up to date all over the world, among them thirty three species (about 52%) are in Neotropical region, and twenty two species (about 35%) are in Palaearctic region (Platnick, 2002).

Four species of Chrysso spiders, C. lativentris, C. punctifera, C. rapulum and C. venusta, are found in the Korean spider fauna (Paik and Kim, 1994). Among them C. lativentris was reported as a new species from South Korea and Taiwan based upon only female specimen (Yoshida, 1993). Recently the author identified male and female of C. lativentris, and newly described the male with illustrations in this paper.

<sup>\*</sup> Tel: 053-580-5209, Fax: 053-580-5164, E-mail: bkseo@kmu.ac.kr,

### DESCRIPTION

Family Theridiidae (Sundevall, 1833)

Genus Chrysso O. P. Cambridge, 1882

Chrysso lativentris Yoshida, 1993 조령연두꼬마거미 (Figs. 1A-F)

Chrysso lativentris Yoshida, 1993, p. 27, figs. 1-5; Zhu, 1998, p. 48, figs. 22A-C; Song, Zhu and Chen, 1999, p. 103, figs. 49C-D.

**Material examined.** 6 males, Mt. Geumo, Gyeongsangbuk-do, 29 May 1994, M. W. Kim. All specimens examined are deposited in the collection of Department of Biology, Keimyung University.

**Male.** Carapace light brown with the index 83, longer than width; a pair of long hairs just behind anterior median eyes, and area around them more black than that of the others. Cephalic region slightly raised. Cervical groove distint and median furrow with a deep and large depression (Fig. 1A). Cephalic width index 62. Clypeus height 6.5 times of the radius of anterior median eyes. In dorsal view anterior eye row recurved, and posterior eye row also slightly recurved. Eye row index 92. Eye area index 91. Eye ratio, anterior median eye > posterior median eye = posterior lateral eye = anterior lateral eye (4 : 6). Anterior median eyes separated by their diameter, about 1.5 times of their radius from the laterals. Posterior median eyes their radius apart, from the laterals by 0.8 times of their diameter. Anterior and posterior lateral eyes contiguous. Anterior and posterior median eyes separated by the radius of posterior median eyes. Median ocular quadrangle, posterior side > height (13:12.5:12).

Chelicerae brown with two small promarginal teeth (Fig. 1F). Sternum reverse triangle shape, and fused with labium; both regions dark brown except top margin of labium. Sternum index 105. Labium index 164.

Legs yellowish brown, long and slender; furnished with hairs only. Leg formula 1243. Leg formular index 100: 65: 37: 60. Leg I/c 7.34. Fem. I/c 2.31. Tib I/c 1.75. Met I/c 1.94. Met. I/tib. I 1.11. Met. IV/tib. IV 1.05. Fem. I I/d 14.00. Tib. I I/d 15.92. Pat. I+tib. I/c 2.18.

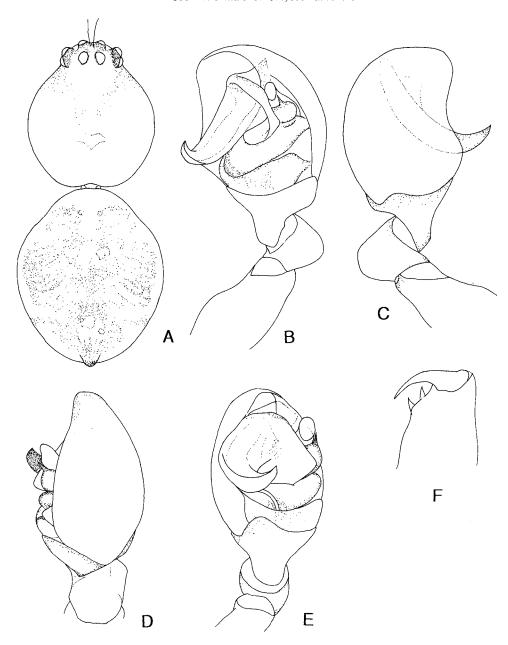
Abdomen oval in the index 89; dorsum with a small protuberance at the posterior extremity (Fig. 1A) and a black color pattern on the ground of silver patches and a small black spot right above the anal protuberance; venter with a large black spot below epigastric furrow.

Palpal organ shown in figures 1B-E; median apophysis on the mesal side of tegulum thick and strongly curved, and with a round radix; small embolus sclerotized, with a short tip; unsclerotized conductor beside embolus.

**Measurements (mm).** Male: Body length 2.42; carapace length 1.09, width 0.91; cephalic width 0.56; sternum length 0.60, width 0.63; labium length 0.14, width 0.23; anterior eye row 0.47; posterior eye row 0.51; abdomen length 1.33, width 1.19.

Leg I 8.00 (2.52, 0.47, 1.91, 2.12, 0.98), II 5.16 (1.75, 0.40, 1.10, 1.21, 0.70), III 2.95 (1.00, 0.30, 0.60, 0.63, 0.42), IV 4.81 (1.66, 0.35, 1.07, 1.12, 0.61). Palp 0.99 (0.33, 0.16, 0.04, 0.46).

**Remarks.** Male differs from female in leg formula. The female abdomen has rather long posterior extremity drawn out into an obtuse point and lateral humps, while the male abdomen has the



**Fig. 1.** Male of *Chrysso lativentris* Yoshida, 1993. A, dorsal view. B, left palp, ectal view. C, ditto, inner view. D, ditto, dorsal view. E, ditto ventral view. F, left chelicera, inner view.

posterior extremity only slightly and very obtusely produced and no lateral hump. The coloration of carapace and sternum, and color depth of dorsum pattern are very variable in both gender, so they cannot be used as key characters.

Distribution. Korea. Taiwan.

## **REFERENCES**

Cambridge, O. P., 1882. On new genera and species of Araneidea. Proc. zool. Soc. Lond., 1882: 423-442.

Levi, H. W. and L. R. Levi, 1962. The genera of the spider family Theridiidae. Bull. Mus. comp. Zool Harv., 127:1-71.

Paik, K. Y. and J. P. Kim, 1994. A List of Korean Spiders (rev. in 1993). Kor. Arachnol., 10(1/2): 107-156.

Platnick, N. I., 2002. The world spider catalog, version 2.5. American Museum of Natural History, online at (http://research.amnh.org/entomology/spiders/catalog 81-87/index.html)

Song, D. X., M. S. Zhu and J. Chen, 1999. The Spiders of China. Hebei Sci. Technol. Publ. House, Shijiazhuang, 640 pp.

Yoshida, H., 1993. East Asian species of the genus Chrysso (Araneae: Theridiidae). Acta arachnol., 42: 27-34.

Zhu, M. S., 1998. Fauna Sinica: Arachnida: Araneae: Theridiidae. Science Press, Beijing, xi+436 pp.

RECEIVED: 28 February 2002 ACCEPTED: 16 March 2002

조령연두꼬마거미(거미목, 꼬마거미과) 수컷의 기재

서 보 근 (계명대학교 생물학과)

요 약

조령연두꼬마거미(*Chrysso lativentris*)의 수컷이 그림과 함께 최초로 기재된다. 수컷은 다리식이 암컷과 다르며, 복부 후단의 돌기물이 암컷보다 더 작다. 촉지의 중부돌기의 구조가 독특하다.