

## **A New Species of *Dolichovespula* (Insecta: Hymenoptera: Vespidae) from Korea**

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### **ABSTRACT**

A new species of the genus *Dolichovespula* Rohwer, 1916, *Dolichovespula kuami*, is described with its diagnostic characteristics and figures from Korea.

Key words: New species, *Dolichovespula*, Vespidae, Hymenoptera, Korea

### **INTRODUCTION**

The members of the genus *Dolichovespula* are easily discerned by the short vertex, long malar space (as long as or longer than the apical diameter of antennal scape) and well developed pronotal carina (Fig. 1) compared with one of the other vespine genera. The new species presented here is well characterized by the presence of pronotal rugae, its orientation and colour patterns.

### **DESCRIPTION**

#### ***Dolichovespula kuami* n. sp. 구암중땅벌 (Figs. 1 and 2)**

**Description.** Body length 17 mm in queen (♀) and 12 mm in worker (♀). wing length 15 mm in queen and 11 mm in worker.

Oculo-malar space long (head width/the length of oculo malar space: ♀, 8.85; ♂, 8.75). Pronotal carina well developed throughout whole parts. Pronotum with distinct rugae originated from pronotal carina laterally and with fine striae latero-posteriorly (Fig. 1).

Long body hairs of frons, vertex, pronotum, mesonotum, scutellum black and especially those of frons and vertex dense. Posterior marginal parts of gena, mesepisternum, propodeum, area of wing



**Fig. 1.** *Dolichovespula kuami* n. sp., lateral rugae of pronotum. LPN, lateral part of pronotum; PC, pronotal carina.

base, coxa, femur and abdominal segment 1 with pale yellowish hairs.

**Queen.** Body black and maculation orange to yellow. Head with orange markings as follows; ocular sinus, mandible, corona, almost all clypeus except central small round dark brown spot (larger in paratype specimen), below the antenna and whole gena except posterior marginally black. Thorax largely black and orange yellow as follows; marginal line and uppermost part of vertical face of pronotum, tegula, scutellum, a pair of metanotal spot and almost all of propodeum. All tarsus bright yellow and almost all fore tibia yellow.

Abdomen mainly black except the 1st-4th tergal narrow yellow band apically (the 4th tergal band not conspicuous). Abdominal coloration brighter than other parts.

**Worker.** Very similar to queen except for the followings; black part of clypeus very large, limit the yellow to the marginal line (Fig. 2-c). The 4th tergal band distinct and the 2nd and 3rd sternal band distinct. Fore femur and tibial apex yellow, not almost all part.

**Material Examined.** Holotype, ♀, Korea: Chungcheongbuk-do Province, Sokrisan, 29 July 1959. (no record for collector) (Korean Entomological Institute, Korea Univ., Korea).

Paratypes, 1 ♀, 1 ♂, Korea: Kyeonggi-do Province, Kwangneung, 20 Aug. 1956. (no record for collector) (Korean Entomological Institute, Korea Univ., Korea).

**Remarks.** Of the known species of the genus *Dolichovespula*, only two species, *D. media* and *D. flora*, have lateral rugae on pronotum. Above two species and the new species here can be separated from the other species of *Dolichovespula* by the presence of the rugae on the pronotum (Fig. 1) and the new species can be easily discerned by the orientation of pronotal rugae and colour patterns (Fig. 2) from the above two species, *D. media* and *D. flora*.

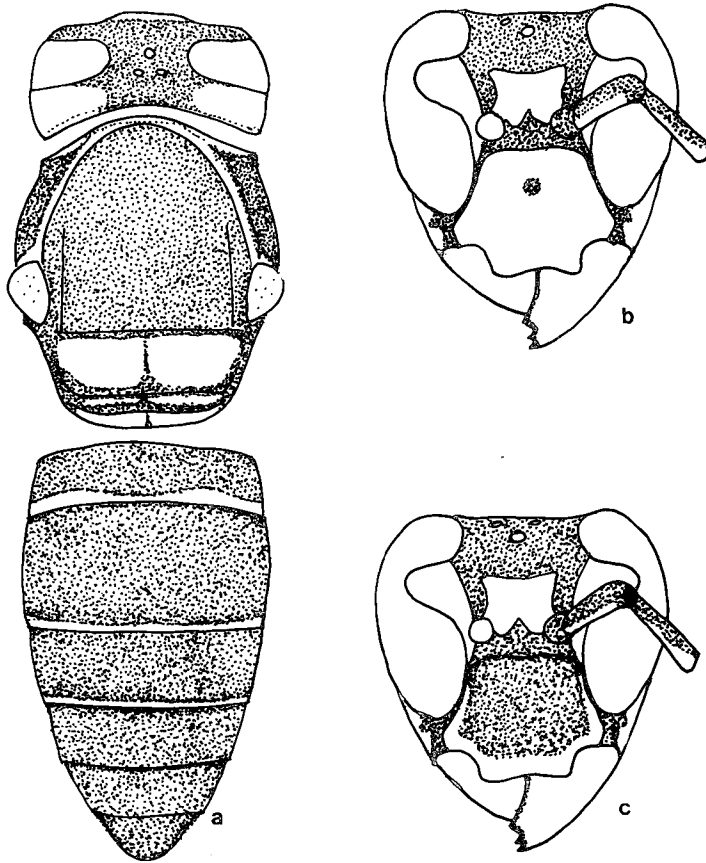


Fig. 2. Color patterns of *Dolichovespula kuami* n. sp.: a, whole body; b, head (queen); c, head (worker).

## REFERENCES

- Archer, M.E., 1980. A new species of *Dolichovespula* and subspecies of *D. pacifica* (Hym. Vespidae) from China. *Entomol.*, 5: 341-344.
- Archer, M.E., 1987. Three new species of *Dolichovespula* (Hym. Vespidae) from China. *Ent Mon. Mag.*, 123: 27-31.
- Archer, M.E., 1989. A key to the world species of the Vespinae (Hymenoptera) Par. I. Research monograph of the college of Ripon & York St. John. 44 pp.
- Archer, M.E., 1989. A key to the world species of the Vespinae (Hymenoptera) Par. II. Research monograph of the college of Ripon & York St. John. 44 pp.
- Das, B.P. and V.K. Gupta, 1989. The social wasps of India and the adjacent countries (Hymenoptera: Vespidae). *Oriental Insects Monograph* 11, 292 pp.
- Kim, C.W., 1970. *Illustrated encyclopedia of fauna and flora of Korea* Vol. 11 Insecta (III). pp. 545-554.
- Yamane, Sk., 1975. Taxonomic notes on the subgenus *Borneovespula* Blüthgen (Hymenoptera, Vespidae) of Japan, with notes on specimens from Sakhalin. *Kontyu, Tokyu*, 43(3): 55-59.
- Yamane, Sk., 1982. A new subspecies of *Dolichovespula adulterina* Buysson from Japan, with a brief note on

its host (Hymenoptera, Vespidae). Trans. Shikoku. Ent. Soc., 16(1-2): 109-115.

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적 요

말벌科 중땅벌屬에 속하는 1新種, *Dolichovespula kuami* 구암중땅벌을 보고한다.