

## SHORT COMMUNICATION

### A NEW OGRE-FACED SPIDER (*DEINOPIS*) FROM THE GAOLIGONG MOUNTAINS, YUNNAN, CHINA (ARANEAE, DEINOPIDAE)

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**ABSTRACT.** The present paper describes *Deinopis liukuensis* new species, from the Gaoligong Mountains, Yunnan Province, China. This is the first mature deinopid described from China.

**Keywords:** Araneae, Deinopidae, *Deinopis*, taxonomy, Gaoligong Mountains, Yunnan, China

The spider family Deinopidae was first recorded from China by Wang (1983), who reported a juvenile individual of *Deinopis* sp. from Jinghong, Yunnan Province. The present paper describes the first mature individual, a male, from China. The type specimen is deposited in the College of Life Science of Hunan Normal University. The specimen was collected by the second Sino-American expedition to the Gaoligong Mountains during June and July 2000.

Measurements are in mm. The following abbreviations are used: AER = anterior eye row; AL = abdomen length, ALE = anterior lateral eye, AME = anterior median eye, AME-AME = interval between AMEs, AME-ALE = interval between AME and ALE, AW = abdomen width, CL = carapace length, CH = clypeus height, Con = conductor, Cym = Cymbium, CW = carapace width, Em = embolus, Fem = femur, Metat = metatarsus, MOQ = median ocular quadrangle, MOQA = MOQ anterior, MOQP = MOQ posterior, Pat = Patella, PER = posterior eye row, PLE = posterior lateral eye, PME = posterior median eye, PME-PME = interval between PMEs, PME-PLE = interval between PME and PLE, Tar = tarsus, Tib = tibia, TL = total length.

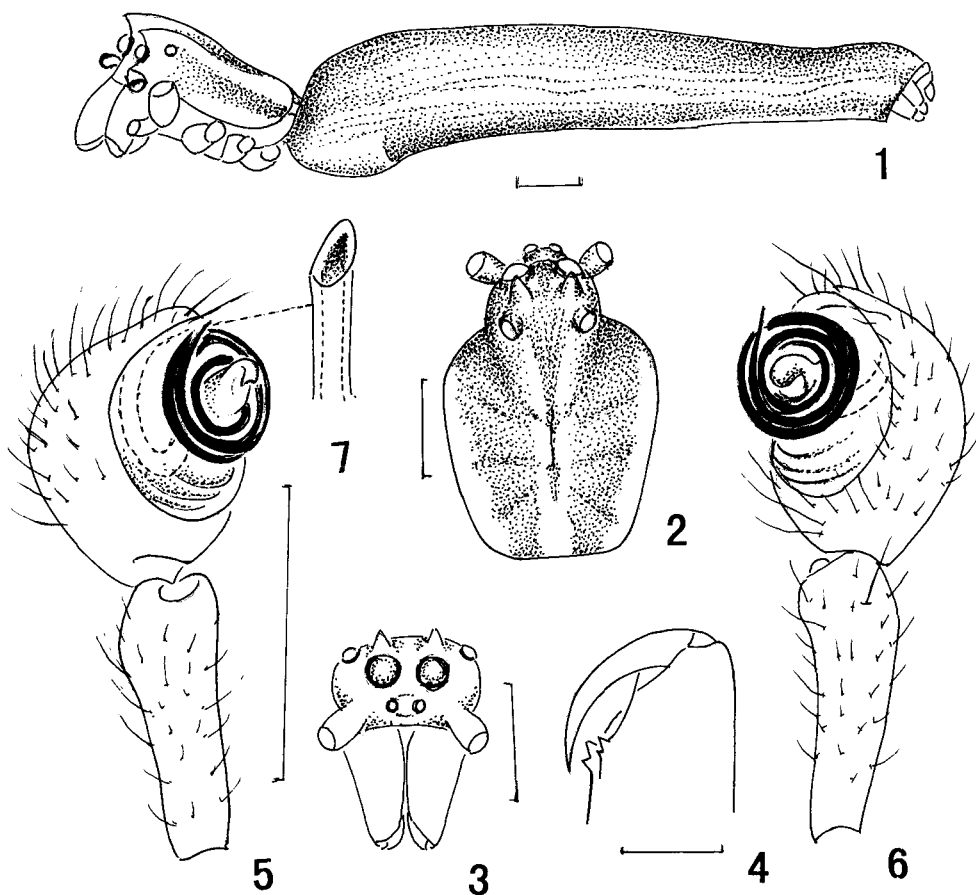
*Deinopis liukuensis* new species  
Figs. 1–7

**Material examined.**—Holotype male, Mt. Gaoligong, Liuku, Yunnan Province, P. R. China, 25.51337°N, 98.50992°E, elevation 800 m, 26 June

2000, Heng-Mei Yan, deposited in the College of Life Science of Hunan Normal University (Type no. 00-LK-1).

**Diagnosis.**—Deinopids have been described and illustrated by Chickering (1963), Chrysanthus (1967, figs. 47–51), Coddington (1990), Davies (1988, fig. 7), Kraus (1956), Lehtinen (1967, figs. 33–41), Schenkel (1953, fig. 8), Schiapelli & Gerschman de Pikelin (1957) and Wang (1983, figs. 1–3). We have compared the new species with those described in these references and find it is most similar to *Deinopis diabolica* Kraus 1956 from El Salvador, but can be separated by the following characteristics of *D. liukuensis* (vs. *D. diabolica*): length ratio of carapace: abdomen length 1:3.55 (1:1.76), ratio of AME:PME diameter 1:2.38 (1:4.12), horn-shaped processes on carapace smaller, shorter than that of *D. diabolica*, tip points forward (larger, longer, than that of *D. liukuensis*, tip points to anterolateral side), coiled embolus of left palpal organ, ventral view, ends at 12 o'clock (3 o'clock), and the shape of the embolic terminal transparent sheath cylindroid (Fig. 7) (rhomboid [Kraus, 1956: 169, fig. 5])

**Description.**—Male: Cephalic region pear-shaped, widest behind, narrower than the trapezoidal thoracic region (Figs. 1, 2), median band and lateral margins yellow grayish brown. Lateral longitudinal bands gray-black. AER strongly procurved; ALE situated on the top of a club-shaped stalk. PER strongly recurved, behind each PME an orange-brown horn-like process that is clothed with



Figures 1–7.—*Deinopis liukuensis* new species. 1. Body, lateral; 2. Carapace, dorsal; 3. Carapace, front; 4. Chelicera; 5. Palpal organ, prolateral; 6. Palpal organ, retrolateral; 7. Embolic terminal transparent sheath. Scale lines = 1.00 mm.

white scale hairs. Sternum elongate, triangular, median portion and lateral margin covered with silver scale hairs. Chelicera yellow-gray, both margins with 2 teeth (Fig. 4). Endite longer than wide, yellow-gray dotted with grayish black spots, its external edge medially concave, kidney-shaped, internal edge ornamented with brown scopulae. Labium as long as wide, white-gray, covered with small scale hairs. Legs slender, coxa and trochanters I and II grayish black, trochanters III and IV dotted with yellow-gray spots; distal segments yellow-gray to yellow-grayish brown. Three claws, the upper claws with 4 teeth. Abdomen clothed with white scale hairs, black short spines and fine hairs; with long band-like folium at the median, on its two sides yellow-gray striae alternating with black ones. Abdomen ventrally grayish black, middle darker than side.

Measurements: holotype male, TL 12.30, CL 2.70, CW 2.40 (widest)–1.00 (narrowest); AL 9.60, AW 1.60. Eye size and intervals: AME 0.16 (small-

est), ALE 0.22, PME 0.38 (largest), PLE 0.24; AME-AME 0.13, AME-ALE 0.47, PME-PME 0.16, PME-PLE 0.38; MOQ L 0.61, MOQA W 0.42, MOQP W 0.89; CH 0.06 < AME diameter, sternum L 1.80, W 1.10, labium L 0.50. Leg formula: 1243. Palp and leg lengths (Femur + Patella + Tibia + Metatarsus + Tarsus = Total): Palp: 2.50 + 0.40 + 1.20 + (absent) + 0.90 = 5.00; Leg I: 10.50 + 1.20 + 10.80 + 15.80 + 4.10 = 42.40; Leg II: 9.50 + 1.30 + 9.10 + 8.20 + 3.30 = 22.40; Leg III: 7.40 + 1.30 + 6.50 + 5.60 + 1.30 = 21.10; Leg IV: 7.50 + 1.30 + 6.60 + 5.70 + 1.10 = 22.20.

Female: Unknown.

**Etymology.**—The specific name is derived from the type locality.

**Distribution.**—At present, this species is known only from the type locality in Yunnan, China.

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#### LITERATURE CITED

- Chickering, A.M. 1963. A description of *Dinopis longipes* F. P.-Cambridge, 1902 (Araneae, Dinopidae). *Breviora* 192:1–6.
- Chrysanthus, P. 1967. Spiders from south New Guinea IX. *Tijdschrift voor Entomologie* 110: 89–105.
- Coddington, J.A. 1990. Ontogeny and homology in the male palpus of orb-weaving spiders and their relatives, with comments on phylogeny (Araneoclad: Araneoidea, Deinopoidea). *Smithsonian Contributions to Zoology* 496:1–52.
- Davies, V. T. 1988. An illustrated guide to the genera of orb-weaving spiders in Australia. *Memoirs of the Queensland Museum* 25:273–332.
- Kraus, O. 1956. Eine neue Deinopidae aus El Salvador. *Senckenbergiana Biologica* 37:167–170.
- Lehtinen, P.T. 1967. Classification of the cribellate spiders and some allied families, with notes on the evolution of suborder Araneomorpha. *Annales Zoologici Fennici* 4:305–306.
- Schenkel, E. 1953. Bericht über einige Spinnentiere aus Venezuela. *Verhandlungen der Naturforschenden Gesellschaft in Basel* 64:1–57.
- Schiapelli, R.D. & B.S. Gerschman de Pikelin. 1957. La familia Dinopidae en la Argentina y una nueva especie del genero *Dinopis* MacLeay 1839. *Revista de la Sociedad Entomologica de Argentina* 19:63–67.
- Wang, J.F. 1983. The first discovery of the spiders of family Deinopidae from China. *Journal of the Hunan Teacher's College (Natural Science Editions) (Supplement)*:50–51.

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