The Ocular Anomaly in a Ground Spider (Araneae: Gnaphosidae) from Japan

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単眼の奇形

Abstract The ocular anomaly in a Japanese ground spider is reported. The spider is identified with *Gnaphosa primorica* OVTSHARENKO, PLATNICK et SONG, 1992, described from the Russian Far East. It is recorded for the first time in Japan. The anomalous individual has only two eyes; these are regarded as the right anterior lateral and posterior lateral eyes.

Though the deformities of external features are rarely found in spiders, those of eyes occupy a majority in all the teratological cases reported. The ocular anomalies were examined in spiders of various families, that is, Ctenizidae, Atypidae, Theraphosidae, Amaurobiidae, Uloboridae, Theridiidae, Linyphiidae, Mimetidae, Araneidae, Tetragnathidae, Agelenidae, Hahniidae, Lycosidae, Oxyopidae, Clubionidae, Heteropodidae, Thomisidae and Prodidomidae (SAVORY, 1928; DENIS, 1939; OHSHIMO, 1953; KASTON, 1962, 1982; KAGEYAMA, 1966; and others). With the exception of the reduction of eyes in some cave spiders, only a few cases of ocular anomalies were reported by OHSHIMO (1953) and KAGEYAMA (1966) in Japan based on the following species: *Ummidia fragaria* (DÖNITZ, 1887)(Ctenizidae), *Atypus karschi* DÖNITZ, 1887 (Atypidae), *Hyptiotes affinis* BÖSENBERG et STRAND, 1906 (Uloboridae), *Mimetus japonicus* UYEMURA, 1938 (Mimetidae), and *Clubiona jucunda* (KARSCH, 1879) (Clubionidae).

The second author of the present short report (KUDO) collected an ocular-anomalous immature male of a gnaphosid spider on the ground covered with reeds along the shore of Teganuma Lake in Chiba Prefecture, Honshu, Japan, in March, 1994 and reared it into the adult. The spider was identified by the first author (ONO) with *Gnaphosa primorica* OVTSHARENKO, PLATNICK et SONG, 1992, recently described from Primorskii in the Russian Far East only with the male holotype. This is a new record of the species from Japan as well as the second one in the world. Besides, the ocular anomaly in ground spiders of the family Gnaphosidae may be reported herein for the first time. The interesting spider will be reported and illustrated in the following pages.

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Figs. 1-6. *Gnaphosa primorica* OVTSHARENKO, PLATNICK et SONG, 1992, male. —1, Carapace, dorsal view; 2, head, frontal view; 3, palp, ventral view; 4, palp, retrolateral view; 5, median apophysis, prolateral view; 6, palpal tibia, dorsal view. (Scales: 1-2, 0.25 mm; 3-6, 0.1 mm.)

***Gnaphosa primorica* OVTSHARENKO, PLATNICK et SONG, 1992**

(Figs. 1-6)

Gnaphosa primorica OVTSHARENKO, PLATNICK et SONG, 1992, p. 78, figs. 289-290 (male holotype from Dmitrievka, Chernigovsk area, Primorskii, Russia, 2-VII-1989, A. A. BOROK leg., in the Academy of Science, St. Petersburg, not examined).

Specimen examined. 1 ♂, Kashiwa-shi, the shore of Teganuma Lake, Chiba Pref., Honshu, Japan, 25-III-1994 as immature, matured 7-IV-1994, Y. KUDO leg. (NSMT-Ar 3380). The specimen is deposited in the Department of Zoology, National Science Museum, Tokyo.

Description. Measurements. Body length 5.85 mm, prosoma length 2.44 mm, width 1.70 mm, opisthosoma length 3.11 mm, width 1.48 mm. Coloration and markings. Prosoma light grey with black markings (Fig. 1), chelicerae reddish yellow, maxillae, labium, palps and legs dull yellow, sternum light grey; opisthosoma grey without any marking, ventrally lighter. Colour in life much darker. Palp: Retrolateral tibial apophysis small (Figs. 4, 6); embolus simple and long (Fig. 3), median apophysis digitiform (Fig. 5). The condition of the tip of median apophysis of the Japanese specimen slightly differs from that of the original figure.

Teratological notes. Cephalic region relatively distorted, six eyes absent, the left side without eyes and hairs; the right side covered with several strong hairs irregularly arranged (Figs. 1-2). Two eyes are regarded as the anterior lateral and posterior lateral ones; consequently, both the direct eyes and four indirect eyes, namely the anterior median and the posterior median eyes, the left anterior lateral and the left posterior lateral eyes are missing. Comparison between this anomalous individual and the normal one was not preparable.

摘 要

日本産のワシグモ科の1種にみられた単眼の奇形について報告した。このクモはロシア極東地域から記載された *Gnaphosa primorica* OVTSHARENKO, PLATNICK et SONG, 1992 (日本初記録; アシハラメキリグモ, 新称) と同定された。この奇形の個体には眼が2個しかなく、それらは右の前側眼と後側眼とみなされる。

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