

Rec. zool. Surv. India, 111(Part-4) : 97-98, 2011

Short Communication

FIRST REPORT OF *EPISINUS AFFINIS* (ARANEAE : THERIDIIDAE) FROM INDIA

INTRODUCTION

Genus *Episinus*, Latreille 1809, has a world wide distribution, with 80 described species (Platnick, 2010). Spiders belonging to this genus can be easily identified from the peculiar triangular shape of their abdomen with two horny projections at the posterior end of the abdomen. They are often found on bare twigs under bushes (Murphy, 2000). Usually dusty in colour from dirty grey to pale brown. Carapace is usually oval and slightly longer than wide. Clypeus is usually projecting. Eyes eight, arranged on tubercles with distinct black markings around them. Eyes region roundly elevated or projected anteriorly. Chelicerae usually small, anterior margin of fang furrow with or without tooth while the posterior margin is always without tooth (Okuma, 1994). Colulus replaced by two setae (Yoshida, 1983). Legs formula 4123.

METHODOLOGY

Specimens were collected from Govindghat, Nanda Devi Biosphere Reserve, Uttarakhand. The collected specimens were preserved in 70% ethanol. One mature female was dissected and the epigynum was removed and kept overnight in a solution of Potassium hydroxide (KOH). This helped in removing the extra tissue attached to the epigynum (Figure. 1C) and also made the internal genitalia more prominent. Voucher specimens are deposited at Wildlife Institute of India, Dehradun, Uttarakhand, India.

ABBREVIATIONS

L = Length, W = width, AME = Anterior median eyes, ALE = Anterior lateral eyes, PME = Posterior median eyes, PLE = Posterior lateral eyes. NDBR = Nanda Devi Biosphere Reserve.

OBSERVATIONS AND DISCUSSIONS

Episinus affinis, Bösenberg et Strand, 1906

Description : Female : Long and slender in appearance. Cephalothorax oval and abdomen triangular

in shape. Pale yellow to dirty brown in colour. Legs robust and long.

Cephalothorax : Slightly longer than broad, oval; dirty grey to pale yellowish; margined with a black lining around it. **Cephalic region** darker and semicircular. **Clypeus** slightly high and projecting. Prominent **thoracic groove** in the middle. **Chelicerae** with a very small tooth on anterior margin, without tooth on posterior margin. **Maxillae** longer than broad, pale yellow with black patches in the middle. Distal end truncated; tuft of hairs present on the distal end. Few hairs and spines scattered on the surface of the maxillae. **Labium** small about one third of the maxillae; as long as wide; pale yellow and provided with small hairs. **Sternum** longer than wide, dark brown and oval; with a pale grey band in the middle. **Eyes**: Both row of eyes procurved; anterior row of eyes more procurved than posterior row of eyes. AME very small while PME are largest. Eyes placed on raised tubercles, bordered with confluent black margins. **Fovea** prominent and deep. **Legs** robust and long; pale yellow with black patches or markings. Legs formula 4132. Femur with long dorsal hairs. Few dorsal spines present on patella and tibia. Pedipalps thin; similar to the legs in shape and colour.

Abdomen : Triangular, longer than wide; widest in the posterior end. Dorsum pale greyish brown and ventrum pale yellow with a mid-ventral grey band and lateral black patches. Posterior end of abdomen with two horny projections, spinnerets arranged in a circular manner. Epigyne with a broad median opening outside and with a pair of swollen seminal receptacles inside (Fig. 1).

Measurements (in mm) : Total length L = 5.0; carapace L = 2.0, W = 1.5; abdomen L = 3.0, W = 2.5.

Specimens examined : 2 ♀, 1 ♂ (Juvenile) Govindghat, NDBR, Uttarakhand, India, (30°39'59.8"N, Altitude 2415m), 20 September 2009, from dry vegetation and bushes of *Prencipia utilis*. Coll. Shazia Quasin.

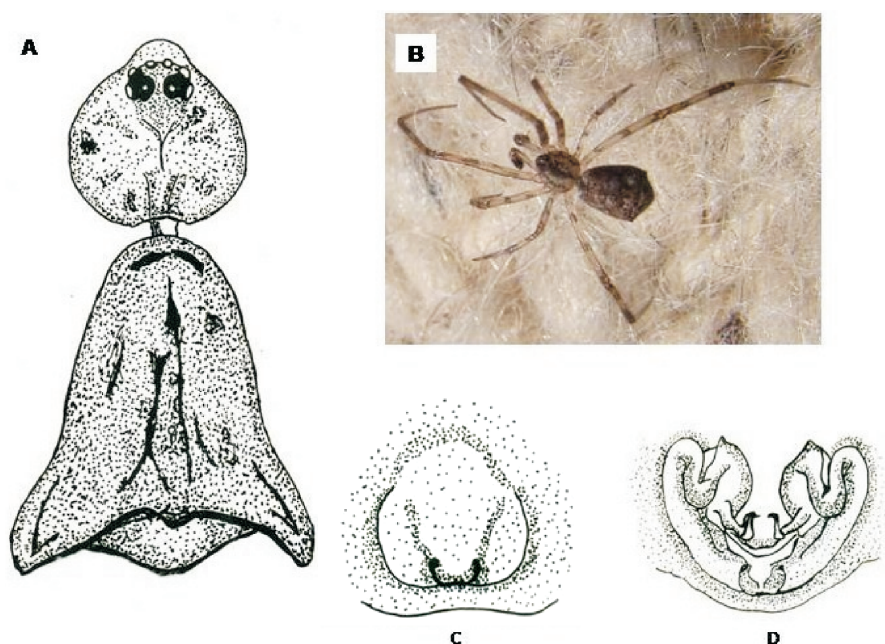


Fig. 1. A & B. Dorsal view of *Episinus affinis*; C. Epigynum; D. Internal genitalia.

Distribution : India (New record), Russia, Korea, Taiwan, Japan, Ryukyu Is.

Habitat : Specimens were collected from web built among dry vegetation and bushes. The legs were folded forming four bands while at rest. The specimens were collected by aerial hand collection method.

ACKNOWLEDGEMENTS

We are thankful to Director and Dean, Wildlife Institute of India for providing necessary facilities. Thanks to the Department of Science and Technology (DST) for providing financial assistance. Uttarakhand Forest Department is also thanked for providing necessary permissions and logistic support.

Table-1 : Measurements of the leg segments of *Episinus affinis*, Bösenberg et Strand, 1906 (♀) (in mm).

Legs	Femur	Patella+Tibia	Metatarsus	Tarsus	Total
I	2.85	3.05	2.95	0.50	9.35
II	1.75	1.65	1.45	0.35	5.20
III	1.30	1.15	1.10	0.30	3.75
IV	2.85	2.70	2.80	0.70	9.0

REFERENCES

- Murphy, E and John M., 2000. Spiders of Southeast Asia. Malaysian Nature Society, Singapore. 624pp.
 Okuma, C., 1994. Spiders of the genera *Episinus* and *Moneta* from Japan and Taiwan, with Descriptions of Two new species of *Episinus* (Araneae : Theridiidae). *Acta Arachnol.*, **43**(1) 5-25.
 Platnick, N.I., 2010. The world spider catalog, version 10.5. American Museum of Natural History. <http://research.amnh.org/iz/spiders/catalog/INTRO3.html>.
 Yoshida, H., 1983. Spiders from Taiwan IV. The genus *Episinus* (Araneae: Theridiidae). *Acta Arachnol.*, XXX1 (2).

QUASIN, S¹, V.P. UNİYAL¹

& SUNIL JOSE K²

¹Wildlife Institute of India, Post Box #18, Chandrabani Dehradun, Uttarakhand, India-248001

²Department of Zoology, Deva Matha College, Kuravilangad, Kottayam District, Kerala, India-686633

Corresponding author : uniyalvp@wii.gov.in