

A New Species of the Genus *Chorizopes* (Araneae: Araneidae) From Punjab, Pakistan

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Abstract.- In the present study Genus *Chorizopes* (Araneae: Araneidae) is recorded for the first time from Punjab, Pakistan and represented by only a single species new to science (*Chorizopes rajanpurensis* n.sp.). Drawings of the important body parts are given in the paper.

Key words: *Chorizopes rajanpurensis* new species, Araneidae, new record, Pakistan.

INTRODUCTION

Chorizopes is a small araneid genus comprising 23 species, distributed mainly in Asia (Platnick, 2012) and most of these species are found in India and China. The genus is a new record to Pakistan and during the present study it is represented by only a single species, *Chorizopes rajanpurensis* new species. The pioneer workers who studied the genus *Chorizopes* from India, Sri Lanka, Sumatra and Vietnam were O. P.-Cambridge (1870, 1885), and Simon (1895, 1909). After these, Schenkel (1963), Levi (1964) and Tikader (1965) also added some information on taxonomy of this genus from China, India and some other parts of Asia. Later on, significant contribution to the knowledge of the genus has been done by few workers from India (Sadana and Kaur, 1974; Tikader, 1982; Reddy and Patel, 1993; Bhandari and Gajbe, 2001; Patel, 2003; Gajbe, 2004; Gajbe and Gajbe, 2004; Siliwal *et al.*, 2005; Sebastian and Peter, 2009), China (Chikuni, 1989; Yin *et al.*, 1990, 1994a, b, 1997; Zhu *et al.*, 1994; Song *et al.*, 1999), Korea (Namkung, 2002, 2003; Kim and Kim, 2002) and Japan (Yaginuma, 1986; Tanikawa, 2007, 2009). Outside Asia, *Chorizopes* is only reported by Emerit (1997) from Madagascar, Africa.

MATERIALS AND METHODS

One specimen was collected by jarring method and preserved in 95% ethyl alcohol with little

amount of glycerine. Stereomicroscope was used for detail study. Measurements (in millimeters) were done by using ocular micrometer; the measurements of legs were given in the following sequence: total (femur, patella + tibia, metatarsus, tarsus). The drawings of various body parts including epigyne were made with the help of ocular grid. Slide of epigyne was prepared following Mukhtar and Mushtaq (2005). Identification was done on the basis of morphological characters and the literature mentioned in the introduction was consulted for this purpose.

The following abbreviations have been used in this paper: AER, anterior eye row; AL, abdomen length; ALE, anterior lateral eyes; AME, anterior median eyes; AW, abdomen width; CL, carapace length; CW, carapace width; LL, leg length; MOQ, median ocular quadrangle; PER, posterior eye row; PLE, posterior lateral eyes; PME, posterior median eyes; TL, total length. The specimen and slide was housed in the Museum, Department of Zoology and Fisheries, University of Agriculture, Faisalabad.

Genus *CHORIZOPES* O. P.-Cambridge, 1870

- 1870. *Chorizoopes* O. P.-Cambridge, *Proc. zool. Soc. London*: 737.
- 1873. *Chorizopes* Thorell, *Remarks on synonyms of European spiders*. Part IV. Uppsala: 600.
- 1895. *Chorizopes* Simon, *Hist. Nat. Araign.*, 1: 922.
- 1960. *Chorizopes* Yaginuma, *Spiders of Japan in Colour*: 68.
- 1962. *Chorizopes* Levi & Levi, *Bull. Mus. Comp. Zool. Harvard*, 127: 18.

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Diagnosis

Carapace often broad anteriorly with highly convex and rounded cephalic region, thoracic region descending sharply behind and low. MOQ forms a trapezium slightly wider behind than in front or square. Labium transversely triangular. Maxillae short, broad, converging anteriorly, with distinct scopulae. Sternum triangular, tapering posteriorly, tip blunt, coxae IV sub contiguous. Legs short and slender. Abdomen overlapping anteriorly on carapace and provided with few paired or unpaired conical or blunt tubercles. Epigyne with or without a short blunt scape.

Type species

Chorizopes frontalis O. P.-Cambridge, 1870

Distribution

Asia and Madagascar, Africa.

Chorizopes rajanpurensis, new species

(Fig. 1)

Type material

Holotype ♀, found on *Gossypium hirsutum*, 8.10.98, Fazilpur, Rajanpur.

Description of female

T L 4.2, CL 1.4, CW 1.3, AL 3.1, AW 3.5. LL I = 4.9 (1.7 + 1.8 + 0.9 + 0.5), II = 3.9 (1.4 + 1.4 + 0.7 + 0.4), III = 2.8 (1.1 + 0.9 + 0.4 + 0.4), IV = 4.1 (1.6 + 1.3 + 0.8 + 0.4).

Cephalothorax scarcely longer than wide; cephalic region narrow in front, gradually broadens posteriorly, much elevated than thoracic region, descending sharply behind, with few yellow anterior setae, orange brown with pair of longitudinal orange lines behind PME and few dark brown patches; thoracic region blackish brown with medium longitudinal chalk brown area having anterior lateral arms. Eight eyes in two transverse rows, with black rings. AME and ALE are slightly smaller than PME and PLE, respectively. AER nearly straight, medians closer to each other than to laterals. PER strongly procurved, medians closer to each other than to laterals; both laterals very close to each other. MOQ nearly rectangular, longer than wide. Clypeus height more than AME diameter.

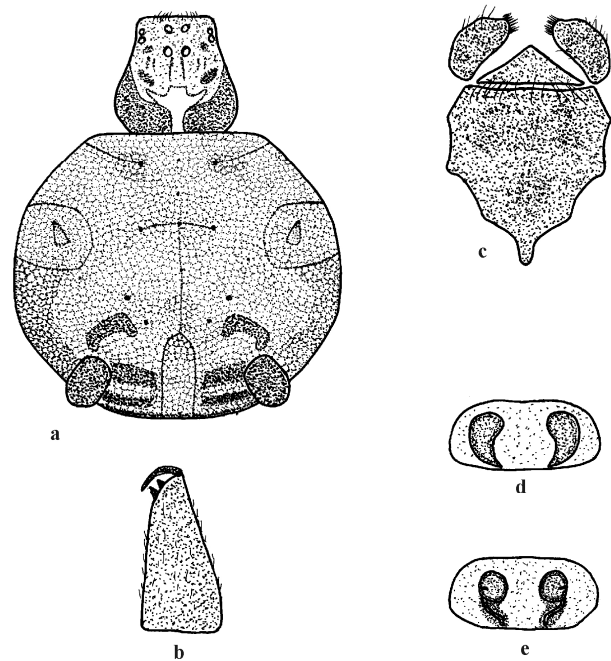


Fig. 1. *Chorizopes rajanpurensis* new species. a. Body dorsal view 9x; b. Chelicera ventrolateral view 24x; c. Labium, maxillae and sternum ventral view 24x; d. Epigyne ventral view 50x; e. Vulva dorsal view.

Chelicerae strong and stout, dark brown, broad basally, gradually narrow anteriorly, promargin with two teeth, retromargin without teeth; fangs short and strongly curved, dark brown. Labium dark brown, distinctly wider than long, transversely triangular, pointed anteriorly. Maxillae broad, converging anteriorly, blackish brown, having yellow erect setae on outer lateral margin, with distinct black scopulae (hair tufts). Sternum dark brown, heart shaped, wider anteriorly with few yellow erect setae, tapering posteriorly. Legs short and slender, clothed with hairs, yellowish except dark brown coxae and patellae, all segments with dark brown transverse bands except tarsi. Tarsi three clawed. Leg formula 1423.

Abdomen sub globular, truncate anteriorly, overlapping on carapace, slight wider than long; with two pairs of prominent tubercles, anteriolateral pair conical and chalk white, caudal pair blunt and dark brown. Dorsum chalk white with four pairs of mid longitudinally arranged dark brown sigella, few dark brown patches on posterior half, median single

dark brown streak bifurcates posteriorly, with three pairs of diagonal dark brown lines originating from lateral margins. Ventral side with median longitudinal broad dirty brown patch having three paired lateral projections, extending from epigastric furrow to posterior end, lateral sides dark brown in anterior half, chalk white with few dark brown lines in posterior half. Spinnerts beneath abdomen, dark brown, anterior pair contiguous and converging, posterior pair separated and converging. Epigyne without scape, epigynal plate nearly rectangular; spermathecal sacs globular, spermathecal ducts short, curved inward and downward; epigynal orifices small, oval, at posterior margin.

Male

Unknown

Etymology

Named after type locality, Rajanpur.

Diagnosis

Chorizopes rajanpurensis new species is somewhat close to *Chorizopes ajanes* Tikader but differs from this and other congeners due to the following characters. Cephalothorax scarcely longer than wide, narrow anteriorly, thoracic region with median chalk brown patch having lateral projections. Abdomen slightly wider than long, sub globular, truncate anteriorly, with four pairs of mid longitudinally arranged dark brown sigella. Epigynal plate rectangular, internal genitalia also differs.

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