

**A STUDY OF THREE NEW SPECIES OF SPIDERS OF THE GENERA
CHORIZOPES CAMBRIDGE, *LARINIA* SIMON AND *NEOSCONA*
SIMON (ARANEAE : ARANEIDAE) FROM MADHYA PRADESH,
INDIA**

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INTRODUCTION

The spiders of the family Araneidae are well known for their extremely intricate and beautiful orb webs. While studying the spider collection, collected by the second author from different parts of Jabalpur, M. P., we came across three new species of the family Araneidae which are described here.

The genus *Chorizopes* was established by Cambridge, 1870, with the type-species *Chorizopes frontalis* Cambridge. Since the establishment of the genus, Tikader, 1982, redescribed and reillustrated four species of *Chorizopes* from different parts of India, in his *Fauna of India, Spiders* volume.

The genus *Larinia* was established by Simon in 1874 with the type-species *Larinia lineata* (Lucas). Patel (1975) described two new species of *Larinia* from Gujarat. Tikader (1982), reillustrated and redescribed, two more species of *Larinia* in *Fauna of India, Spiders* volume.

The genus *Neoscona* was established by Simon in 1864 with the type-species *Neoscona anabesca* (Walckenaer). Tikader (1982), reillustrated and redescribed seventeen species in *Fauna of India, Spiders*, volume. Patel & Reddy (1992) described one species from coastal Andhra Pradesh.

The type-specimens are deposited in the National Collection, Zoological Survey of India, Calcutta.

***Chorizopes tikaderi* sp. nov.**

General : Cephalothorax, legs and abdomen reddish-brown with black patches. Total length 4.30 mm. Carapace 1.60 mm. long, 1.80 mm. wide; abdomen 3.10 mm. long 3.00 mm. wide.

Cephalothorax : Wider than long, broadest posteriorly, narrowing anteriorly; clothed with fine pubescence and provided with a pair of black patches as in fig. 1. Cephalic region slightly elevated, convex. Ocular quad nearly squarer, eyes pearly white, both rows strongly recurved. Posterior medians encircled by black ring and larger than anterior medians, laterals closely situated. Sternum heart-shaped, pointed behind, blackish, clothed with grey pubescence. Labium wider than long,

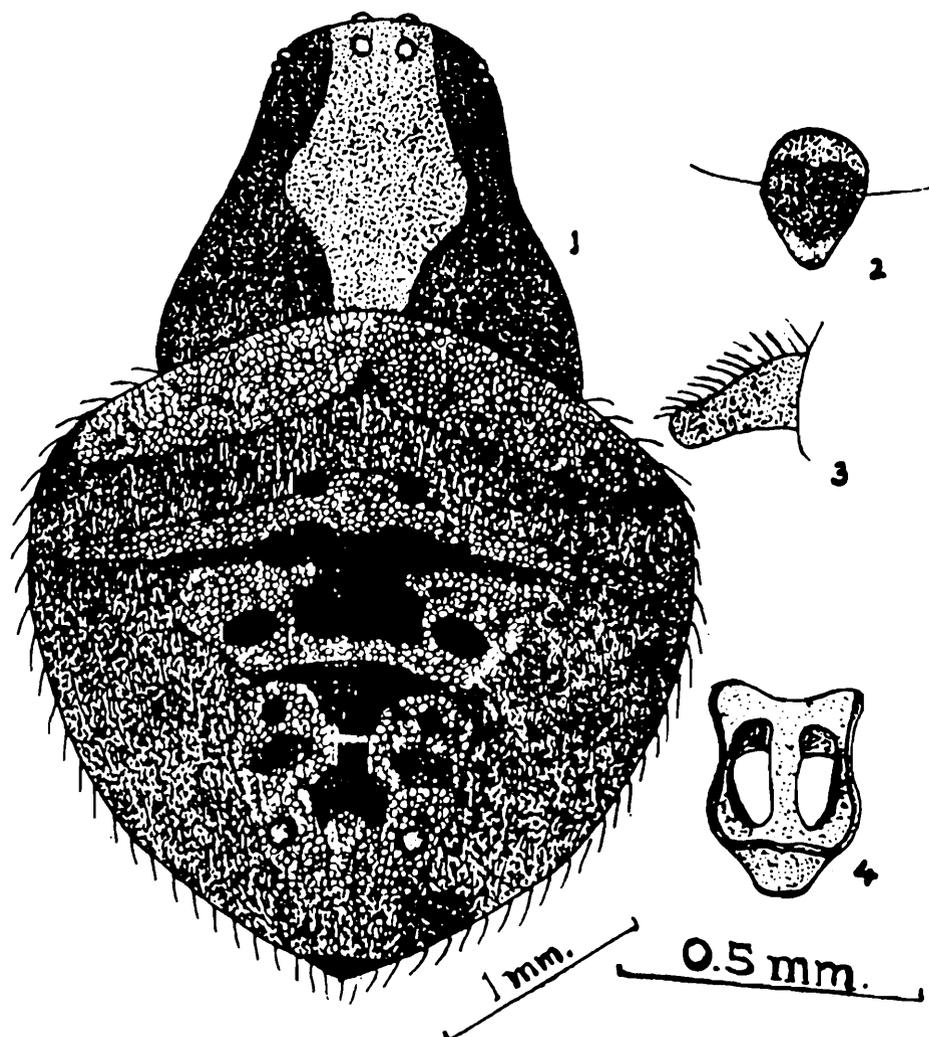
triangular, dark brown with pale distal margin. Maxillae broad, dark brown with pale inner margins, provided with distinct scopulae, Chelicerae strong and stout, deep brown. Legs relatively long and strong, clothed with hairs and spines, posterior region of each femur with a transverse blackish patch.

Abdomen : Slightly longer than wide, clothed with pubescence and provided with a beautiful design of blackish patches and sigilla as in fig. 1. Ventral side blackish with two big chalk white spots between the epigynal furrow and spinnerets. Epigyne having a short scape as in figs. 2 & 3. Internal genitalia as in fig. 4.

Type-specimen : *Holotype* : One female, in spirit, other details as above. (Reg. No. 5516/18)

Type-locality : Khandari, Jabalpur, M. P., India, Coll. Pawan Gajbe, 11.8.1998.

This species resembles with *Chorizopes bengalensis* Tikader but differs from it as follows : (i) Cephalothorax wider than long but in *C. bengalensis*, cephalothorax longer than wide. (ii) Abdomen reddish-brown with a beautiful design of blackish patches and sigilla but in *C. bengalensis*, abdomen brownish and provided with black and white patches. (iii) Epigyne and internal genitalia also structurally different.



Figs. 1-4. *Chorizopes tikaderi* sp. nov., 1. Dorsal view of female, legs omitted. 2. Epigyne, ventral view. 3. Epigyne, lateral view. 4. Internal genitalia.

Larinia bhadatae sp. nov.

General : Cephalothorax and legs yellow with blackish patches, abdomen brownish black. Total length 7.20 mm. Carapace 2.80 mm. long, 1.90 mm. wide; abdomen 4.70 mm. long, 1.80 mm. wide.

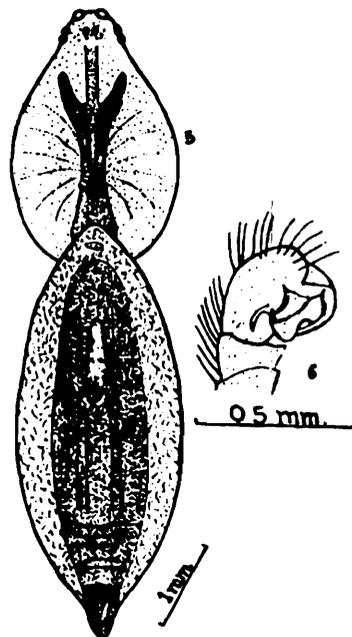
Cephalothorax : Nearly one and a half times longer than wide; narrowing in front, clothed with fine pubescence; provided with a mid-dorsal longitudinal blackish patch; double lines running just behind the posterior median eyes and end just before the longitudinal thoracic furrow. Ocular quad forming a trapezium, wider in front than behind; anterior medians larger than posterior medians; posterior medians closely situated; laterals subequal, close to each other and situated on distinct tubercles; both rows of eyes recurved but posterior row very narrowly recurved. Sternum much elongated, heart shaped, pointed behind, uniform pale yellow in colour. Labium as long as wide, brownish with pale distal border; maxillae longer than broad, yellowish, provided with distinct scopulae. Chelicerae strong and stout, yellowish, provided with distinct boss. Legs long and strong, clothed with hairs and spines, provided with black spots. Male palp as in fig. 6.

Abdomen : Longer than wide, pointed anteriorly over the carapace, clothed with hairs and pubescence, mid-dorsally provided with a blackish patch running the whole length of the abdomen as in fig. 5. Lateral sides lighter in colour. Ventral side pale yellow. Female unknown.

Type-specimen : *Holotype* : Male, in spirit, other details as above. (Reg. No. 5517/18)

Type-locality : Barela, Jabalpur, M. P., India, Coll. Pawan Gajbe, 28.9.1997.

This species resembles with *Larinia chloris* Audouin but differs from it as follows : (i) Cephalothorax provided with a mid-dorsal longitudinal blackish patch but in *L. chloris* such patch is absent. (ii) Male palp also structurally different.

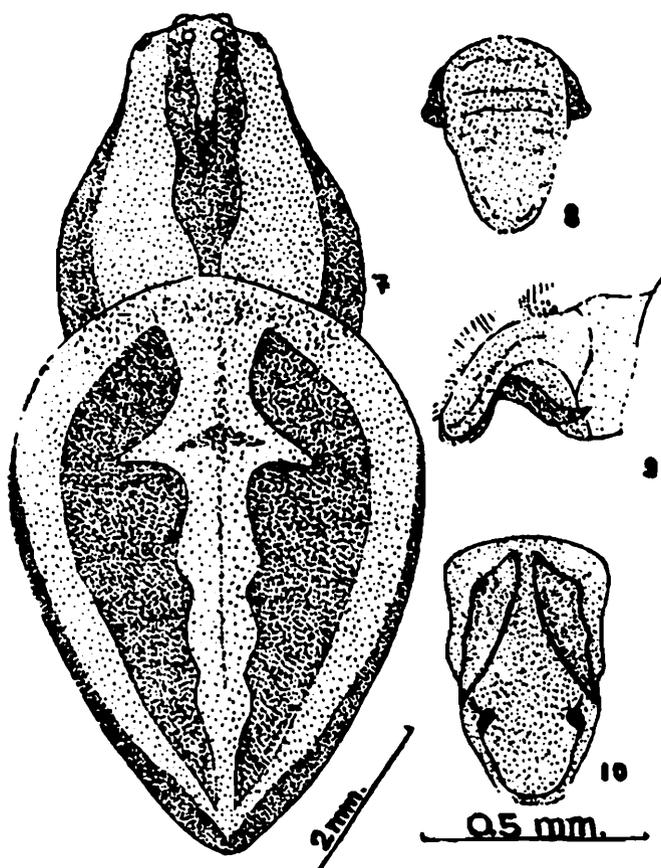


Figs. 5-6. *Larinia bhadatae* sp. nov., 5. Dorsal view of male, legs omitted. 6. Left male palp, ventral view.

Neoscona biswasi sp. nov.

General : Cephalothorax and legs greyish brown, abdomen dark brown. Total length 3.90 mm. Carapace 1.50 mm. long, 1.20 mm. wide; abdomen 2.70 mm. long, 1.80 mm. wide.

Cephalothorax : Longer than wide, narrowing in front, clothed with pubescence and hairs, provided with one mid-dorsal and two lateral brown bands as in fig. 7. Cephalic region slightly high, ocular quad nearly as long as wide and slightly wider in front than behind; anterior medians larger than posterior medians; posterior medians encircled by black ring; laterals close and situated on small tubercles; both eye rows recurved but posterior row only slightly recurved. Sternum heart-shaped, pointed behind, blackish-brown, provided with a mid-longitudinal greyish band. Labium wider than long, dark brown with pale distal margin. Maxillae broad, nearly as long as wide, proximal portion dark brown, distal portion pale yellow; provided with distinct scopulae. Chelicerae strong, dark brown, having moderate boss. Legs long and moderately strong, clothed with hairs and spines, distal ends of segments with transverse brown bands.



Figs. 7-10. *Neoscona biswasi* sp. nov., 7. Dorsal view of female, legs omitted. 8. Epigyne, ventral view. 9. Epigyne, lateral view. 10. Internal genitalia.

Abdomen : Nearly elliptical, longer than wide, clothed with pubescence and hairs, strongly overlapping on the cephalothorax; provided with two mid-dorsal and two lateral light brown patches along the whole length of the abdomen as in fig. 7. Ventral side dark brown; a big black patch present

between the epigastric furrow and spinnerets and is bordered by two dumbel-shaped light brown patches. Scape of the epigyne curved, long and thin with a broad, dirty white base as in figs. 8 & 9. Internal genitalia as in fig. 10.

Type-specimen : Holotype : Female, in spirit, other details as above (Reg. No. 5515/18).

Type-locality : Vijay Nagar, Jabalpur, M. P., India, Coll. Pawan Gajbe, 12.10.1997.

This species resembles with *Neoscona molemensis* Tikader & Bal but can be distinguished from it as follows : (i) Cephalothorax provided with one mid-dorsal and two lateral brown bands but in *N. molemensis*, only cephalic region provided with two lateral longitudinal brown patches (ii) Abdomen provided with longitudinal brown bands but in *N. molemensis*, abdomen with chalk white bands. (iii) Epigyne and internal genitalia also structurally different.

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