

**DESCRIPTION OF FOUR NEW SPECIES OF SPIDERS OF THE FAMILIES
ULOBORIDAE, PHILODROOMIDAE, GNAPHOSIDAE AND LYCOSIDAE
(ARACHNIDA : ARANEA) FROM MADHYA PRADESH, INDIA**

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INTRODUCTION

While studying the spider collection, collected by the second author from different areas of Jabalpur, M. P., we came across a new species each of the genera *Uloborus* Latreille, *Thanatus* Koch, *Sosticus* Chamberlin and *Lycosa* Latreille which are described here.

The genus *Uloborus* was established by Latreille in 1906 with the type-species *Uloborus walckenaerius* Latreille. Since the establishment of the genus, Tikader (1969, 1970) described two and one species each of the genus *Uloborus*.

The genus *Thanatus* was established by Koch in 1837 with the type-species *Thanatus formicinus* (Clerck). Tikader (1980) and Gajbe & Gajbe (1999) described four and one species respectively of the genus *Thanatus* from different parts of India.

The genus *Sosticus* was established by Chamberlin in 1922 with the type-species *Sosticus insularis* (Banks). Since the establishment of the genus, Gajbe, 1979 & 1992, described four and one species respectively from different parts of India. Tikader, 1982 reillustrated and redescribed all the species in *Fauna of India, Spiders* volume with one new species.

The genus *Lycosa* was established by Latreille in the year 1804 with the type-species *Lycosa tarantula* (Rossi). Since the establishment of the genus only 28 species are known from India. Tikader & Malhotra, 1980, reillustrated and redescribed all the species in *Fauna of India, Spiders* volume with six new species.

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

Uloborus jabalpurensis sp. nov.

General : Cephalothorax, legs and abdomen dirty white. Total length 5.10 mm. Carpace 1.50 mm. long, 1.50 mm. wide; abdomen 3.60 mm long, 1.80 mm. wide.

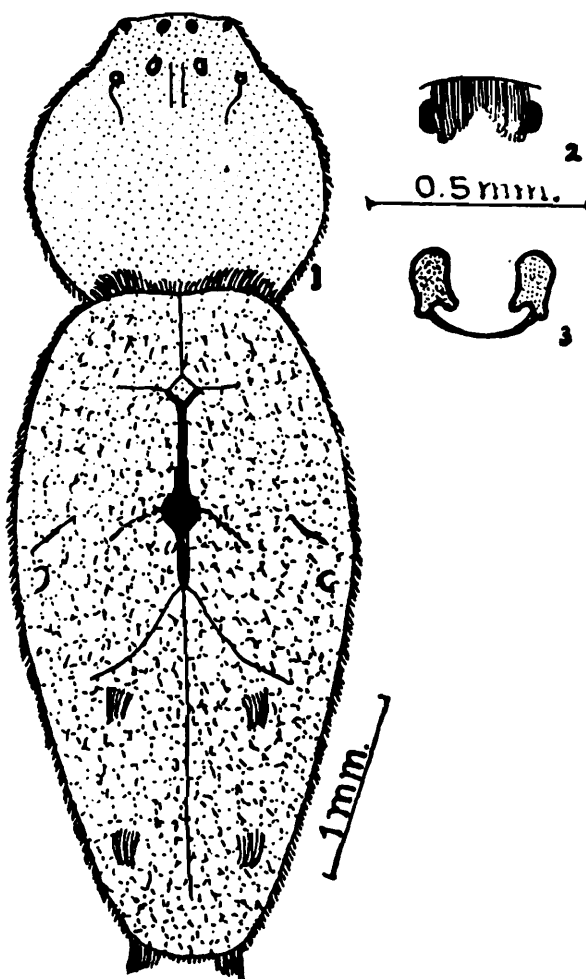
Cephalothorax : Nearly as long as wide, narrowing anteriorly, extremely hairy, densely clothed with fine whitish hairs. Eyes on black tubercles; two rows, anterior row straight and posterior row slightly recurved. Anterior medians nearer to each other than adjacent laterals; posterior medians slightly nearer to adjacent laterals than to each other. Sternum longer than wide, triangular, pointed behind, yellowish-white and densely clothed with hairs. Legs moderately long and slender, densely clothed with whitish hairs.

Abdomen : Longer than wide, high and broad in front, densely clothed with fine hairs and decorated with fine net-like patterns. Anterior dorsal side of abdomen provided with a hump, mid-dorsal region provided with a conspicuous blackish marking and posterior region provided with six tufts of white hairs as in fig. 1. Ventral side with chalk-white spots. Epigyne as in fig. 2 Internal genitalia as in fig. 3.

Type-specimen : *Holotype* : Female, in spirit, other details as above (Reg. No. 5520/18).

Type-locality : Pachpedi, Jabalpur, M. P., India, Coll. Pawan Gajbe, 29.8.1998.

This species resembles with *Uloborus danolius* Tikader but differs from it as follows :
(i) Cephalothorax without any coloured patches but in *U. danolius*, cephalothorax provided with



Figs. 1-3. *Uloborus jabalpurensis* sp. nov.; 1. Dorsal view of female, legs omitted; 2. Epigyne; 3. Internal genitalia.

two conspicuous longitudinal deep brown broad patches. (ii) Abdomen mid-dorsally provided with a conspicuous blackish marking but in *U. danolius*, such a marking is absent. (iii) Epigyne and internal genitalia also structurally different.

Thanatus ketani sp. nov.

General : Cephalothorax and legs brownish grey, abdomen darkish brown. Total length 6.70 mm., Carapace 2.60 mm. long, 2.50 mm. wide; abdomen 4.20 mm. long, 2.50 mm. wide.

Cephalothorax : Longer than wide, broadest behind, narrow in front, lateral sides provided with conspicuous longitudinal deep brown patches. Eyes black, eight in two rows, both rows recurved but the posterior row longer and more recurved than the anterior row; posterior-lateral eyes larger than others, both rows of eyes form together a crescent shaped area. Ocular quad longer than wide and narrowing in front. Clypeus long, margin of clypeus with seven spines directed forward. Sternum heart shaped, pointed behind, clothed with fine hairs. Legs long and stout, provided with spines and brownish dots. Metatarsus I with twelve strong spines, tarsi I and II with seven spines each.

Abdomen : Longer than wide, widest in the middle and the end tapering, clothed with hairs and few spines and brown pigmented dots, mid-dorsally provided with dark brown bands reaching upto the lateral sides as in fig. 4. Ventral side lighter in colour and provided with few brown dots. Epigyne as in fig. 5. Internal genitalia as in fig. 6.

Type-specimen : *Holotype* : Female, in spirit, other details as above (Reg. No. 5518/18).

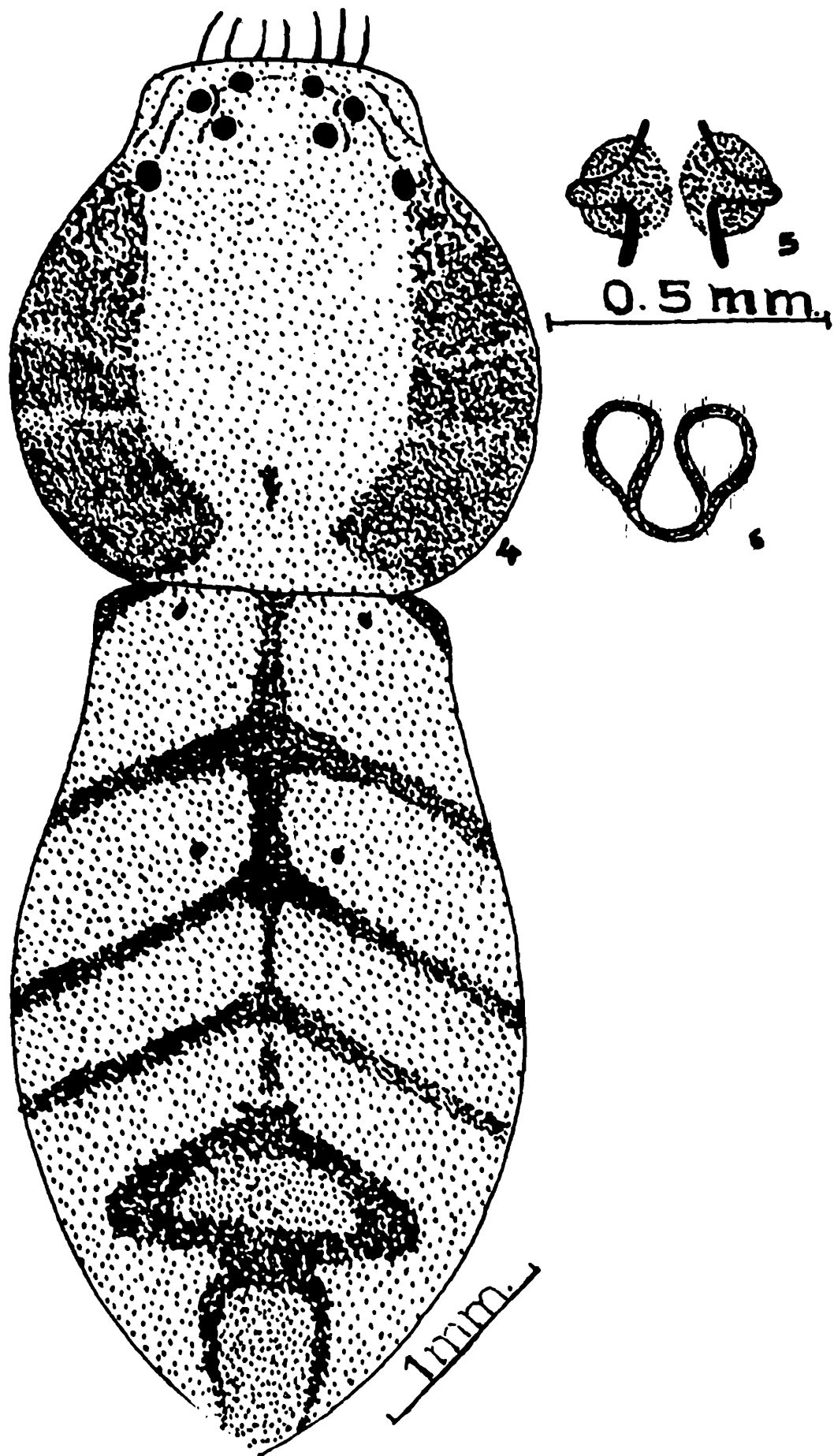
Type-locality : Lamhetaghat, Jabalpur, M. P., India, Coll. Pawan Gajbe, 25.7.1998.

This species resembles *Thanatus mandali* Tikader but can be distinguished from it as follows : (i) Abdomen mid-dorsally provided with dark brown bands reaching upto the lateral sides but in *T. mandali* a lens-shaped deep brown patch is present. (ii) Epigyne and internal genitalia also structurally different.

Sosticus jabalpurensis sp. nov.

General : Cephalothorax and legs deep brown, abdomen black. Total length 6.50 mm., Carapace 2.50 mm., long 2.10 mm. wide; abdomen 3.90 mm. long, 2.10 mm. wide.

Cephalothorax : Longer than wide, oval, convex, clothed with pubescence, posterior middle of cephalothorax provided with an inconspicuous short fovea. Radiating blackish streaks diverge from around short fovea to the lateral sides of cephalothorax as in fig. 7. Eye rows distinctly separated, pearly white except anterior medians, posterior row of eyes slightly longer than the anterior row. Anterior row of eyes slightly recurved, medians closer to the adjacent laterals than to each other. Posterior row of eyes straight, posterior medians irregular in shape and slightly larger than the posterior laterals; the posterior medians and laterals equidistant to each other. Ocular quad longer



Figs. 4-6. *Thanatus ketani* sp. nov.; 4. Dorsal view of female, legs omitted; 5. Epigyne; 6. Internal genitalia.

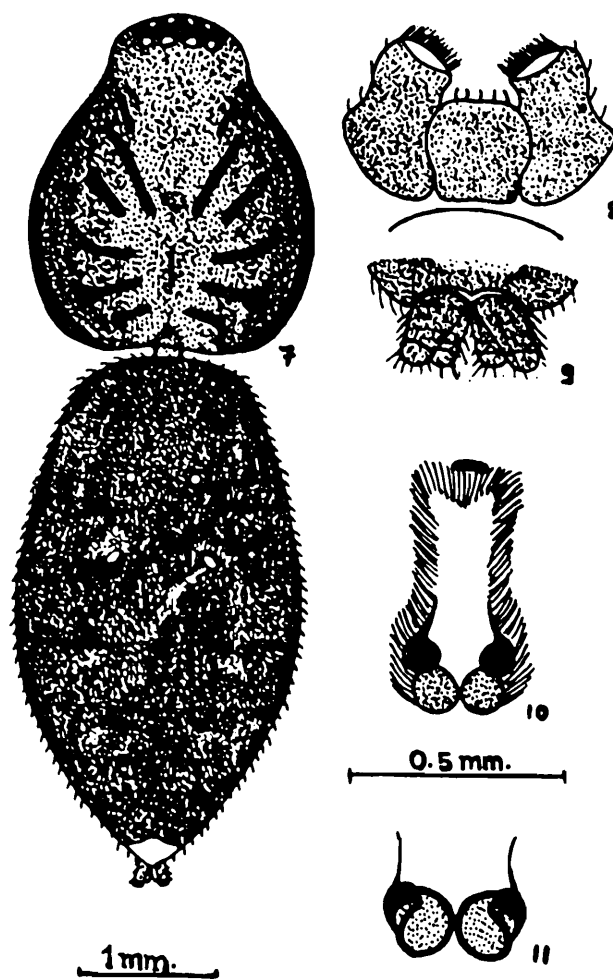
than broad. Sternum heart-shaped, pointed behind, brown in colour and clothed with black hairs. Labium and maxillae as in fig. 8. Chelicerae moderately strong, vertical, margins provided with hairs. Legs relatively long, thin, clothed with hairs and spines. Femora I with two dorsal spines. Tibiae III with three pairs of ventral spines.

Abdomen : Longer than wide, nearly elliptical, clothed with thick pubescence. Abdomen dorsally provided with four light brown dots and six dark brown patches, posterior end provided with a chalk white patch as in fig. 7. Epigyne as in fig. 10. Internal genitalia as in fig. 11. Spinnerets prominent, posterior spinnerets longer than others as in fig. 9.

Type-specimen : *Holotype* : female, in spirit, other details as above (Reg. No. 5519/18).

Type-locality : Tilwaraghat, Jabalpur, M. P., India, Coll. Pawan Gajbe, 22.8.1998.

This species resembles *Sosticus poonaensis* Tikader but can be distinguished from it as follows : (i) Arrangement of blackish streaks on cephalothorax different from *S. poonaensis*. (ii) Abdomen dorsally provided with four light brown dots, six deep brown patches and a chalk white patch at the posterior end but in *S. poonaensis*, five white spots are present. (iii) Epigyne and internal genitalia also structurally different.



Figs. 7-11. *Sosticus jabalpurensis* sp. nov.; 7. Dorsal view of female, legs omitted; 8. Labium and maxillae; 9. Spinnerets; 10. Epigyne; 11. Internal genitalia.

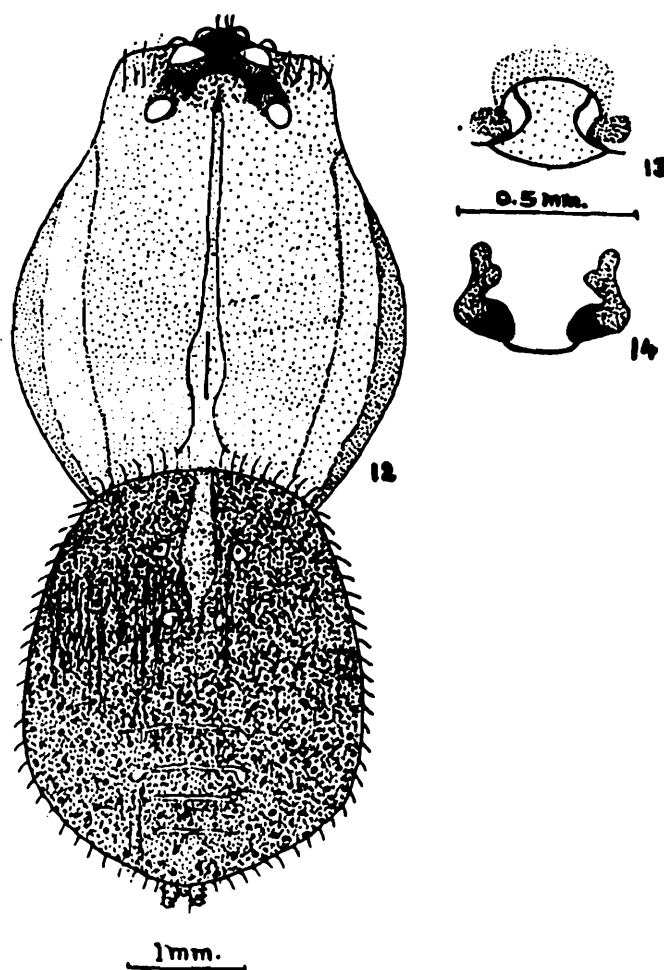
Lycosa shaktae sp. nov.

General : Cephalothorax and legs dark brown, abdomen black, Total length 7.70 mm. Carapace 4.10 mm. long, 3.40 mm. wide; abdomen 3.80 mm. long, 2.90 mm. wide.

Cephalothorax : Longer than broad, broadest in the middle, narrowing anteriorly, clothed with hairs and few spines; provided with two wide, longitudinal dark patches starting below the ocular area and two dark patches along the lateral margin as in fig. 12. Ocular area black; anterior row of eyes slightly recurved and as long as the second row; anterior medians larger than anterior laterals; posterior medians largest of all eyes and less widely separated than posterior laterals. Sternum brown, heart-shaped, pointed behind, clothed with pubescence and hairs. Labium longer than wide, dark brown with pale distal margin. Maxillae longer than wide, brown, provided with distinct scopulae. Legs long, strong and stout, clothed with hairs and spines.

Abdomen : Longer than wide, elliptical, narrowing anteriorly, clothed with thick pubescence and hairs; provided with a spear shaped brown mark on the dorsum and brown dots and lines over the entire dorsal surface as in fig. 12. Ventral side lighter in colour. Epigyne as in fig. 13. Internal genitalia as in fig. 14.

Type-specimen : *Holotype* : female, in spirit, other details as above (Reg. No. 5521/18).



Figs. 12-14. *Lycosa shaktae* sp. nov.; 12. Dorsal view of female, legs omitted; 13. Epigyne; 14. Internal genitalia.

Type-locality : Pachpedi, Jabalpur, M. P., India, Coll. Pawan Gajbe, 23.10.1997.

This species resembles with *Lycosa tista* Tikader but differs from it as follows : (i) Cephalothorax with two wide, longitudinal dark patches starting below the ocular area and two dark patches along the lateral margins but in *L. tista*, brown bands extending from fovea to the lateral sides. (ii) Epigyne and internal genitalia also structurally different.

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