

HANDBOOK INDIAN SPIDERS

A Manual for the study of the Spiders and their relatives—The Scorpions, Pseudoscorpions, Whip scorpions, Harvestmen and all members of the Class Arachnida found in India with analytical keys for their classification and biology.

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FAMILY 2. HOMALONYCHIDAE

Fig. 137

This is a small family of spiders with smooth, tarsal claws and completely lacking denticles. The tarsi are provided with a brush of terminal tenent hairs (claw tufts) and a pair of spurious claws. The chelicerae lack teeth on the margins. Eyes are eight in number and are placed in two rows, of which posterior row is strongly recurved. Previously, the genus *Homalonychus* was included in the family—Zodariidae but recently it is placed in a family of its own.

Distribution : North America (Arizona to California), British Guiana, India.

In India only a single species of this family is reported so far.

2. *Homalonychus joyaus* Tikader

FAMILY 3. THERAPHOSIDAE

(Tarantulas)

Fig. 138

These are our largest spiders, and because of their big sizes and their hairiness, they often attract attention and frighten us. Most of the species are fossorial, but they never close the aperture of the burrow with a movable lid. Other species live under stones, in hollow trees, or take shelter in any natural crevice. The spiders are nocturnal, hiding during the day inside natural cavities in the ground, in abandoned rodent tunnels or similar places, the upper portions of which is lined with silk. Theraphosidae differs from the Barychelidae in having the apical segment of the posterior spinnerets cylindrical and at least as long as the 2nd segment, and in the absence of the rastellum. Eyes are always aggregated on a distinct tubercle.

Distribution : Temperate and tropical countries of the world, but apparently absent from New Zealand.

The Indian genera of this family are referable to the following four sub-families, according to the key.

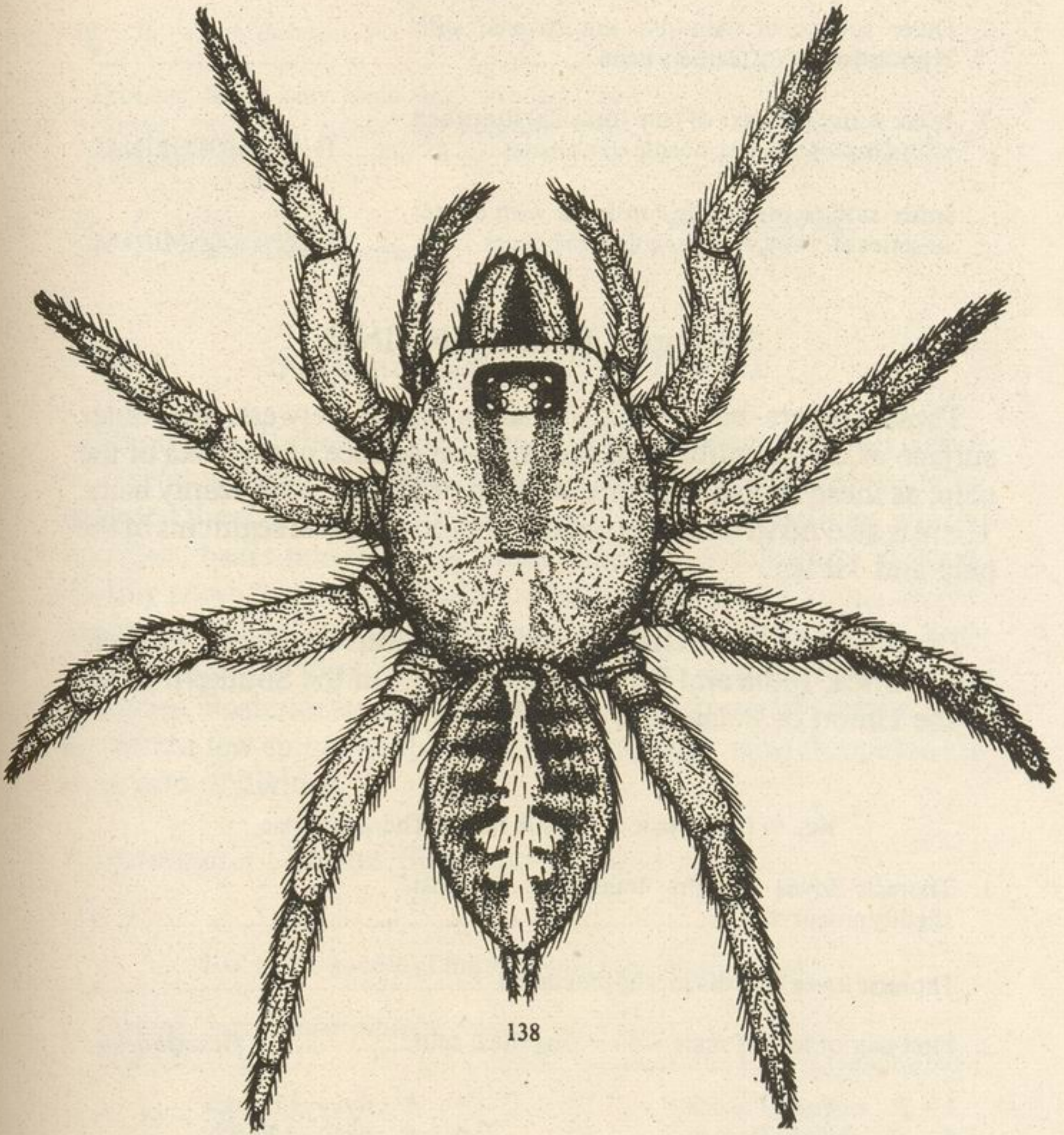


Fig. 138. Dorsal view of female *Ornithoctonus gadgili* Tikader of the family Theraphosidae.

- 1. No stridulating organ between the outer surface of the mandible and the inner surface of the coxa of the palp.....THERAPHOSINAE
- A stridulating organ between the mandible and coxa of palp.....2
- 2. Outer surface of mandible covered with scopula or a pad of feathery hairs.....ORNITHOCTONINAE

Outer surface of mandible not covered with scopulae or pad of feathery hairs.....3

3. Inner surface of coxa of palp (maxilla) furnished with simple scattered, needle-like bristles.....THRIGMOPOEINAE

Inner surface of maxilla furnished with cluster or series of claviform or bacilliform bristles.....SELENOCOSMIINAE

Sub-family THERAPHOSINAE

These spiders have no stridulating organ between the outer surface of the mandible and the adjacent surface of the coxa of the palp, as these two surfaces are smooth or at most with scanty hairs. There is also no stridulating organ between the basal segments of the palp and 1st leg.

Distribution : Mediterranean area of Palaearctic region; Tropical West Africa; India and Burma; America, from the Southern States of the Union of Patagonia.

Key to the genera of the sub-family Theraphosinae

1. Thoracic fovea straight, transverse, at most slightly procurved.....2

Thoracic fovea with distinct by procurved.....3

2. First pair of legs of male with strong tibial spur.....*Plesiophrictus*

3. *P. millardi* Pocock

4. *P. sericeus* Pocock

5. *P. collinus* Pocock

6. *P. tenuipes* Pocock

7. *P. fabrei* (Simon)

8. *P. bhorii* Gravely

9. *P. blatteri* Gravely

10. *P. linteatus* (Simon)

11. *P. madraspatanus* Gravely

12. *P. raja* Gravely

13. *P. sataraisensis* Gravely

14. *P. meghalayensis* Tikader

15. *P. mahabaleshwari* Tikader

First pair of legs of male without tibial spur.....*Ischnocolus*

16. *I. decoratus* Tikader

17. *I. khasiensis* Tikader

3. Thoracic fovea shallow, sublinear; posterior sigilla of sternum wide apart and small.....*Heterophrictus*

18. *H. milleti* Pocock

Thoracic fovea very deep and strongly procurved, posterior sigilla of sternum large, submedian.....*Phlogiodes*

19. *P. validus* Pocock20. *P. robustus* Pocock21. *P. himalayensis* Tikader

Sub-family ORNITHOCTONINAE

Mandibles of these spiders are furnished externally with dense pad (scopula) which are composed of short, close set plumose hairs. Between the scopula and the oral fringe, there is a naked area, which, however, bears posteriorly a small number (about four) of large, slightly curved, plumose bristles springing from the scopula above. Inner surface of maxillae are sparsely hairy, but furnished both above and below the suture with a small number of black tooth-like tubercles. Posterior sternal sigillae are remote from the margin. Legs are with a few spines at apex of tibiae and tarsi, tarsal scopulae are thick and undivided.

Distribution : Burma, Siam and India.

Key to the genera of the sub-family Ornithoctoninae

1. Carapace low, ocular tubercle close to edge of clypeus.....*Cyriopagopus*

22. *C. paganus* Simon

Carapace elevated in the cephalic region; ocular tubercle some distance behind edge of clypeus.....2

2. Legs strong and short, thoracic fovea large and scarcely procurved.....*Ornithoctonus*

23. *O. andersoni* Pocock24. *O. gadgili* Tikader

Legs slender and long; thoracic fovea small and concentric.....*Melopoeus*

25. *M. minax* Thorell

Sub-family THRIGMOPOEINAE

These spiders have stridulating organ between the mandible and the basal segment of the palp (maxilla). On the mandible some of the hairs which form the posterior portion of the oral fringe are modified to form a small cluster of vibratile bristles and on the adjacent surface of the maxillae there are regularly or irregularly arranged stiff aciculate bristles which scrape against those on the mandible when the maxilla is moved up and down.

Distribution : South India.

Key to the genera of the sub-family Thrigmopoeinae

1. Stridulating bristles on maxilla irregularly scattered.....*Haploclastus*

26. *H. cervinus* Simon

27. *H. nilgirinus* Pocock

28. *H. kayi* Gravely

29. *H. tenebrosus* Gravely

Stridulating bristles on maxilla arranged in a definite curved series.....*Thrigmopaeus*

30. *T. insignis* Pocock

31. *T. truculentus* Pocock

Sub-family SELENOCOSMIINAE

These spiders have stridulating organ between the mandible and maxilla, consisting of a row or cluster of vibratile bacilliform bristles on the maxilla and of spines of spiniform bristles upon the lower portion of the outer surface of the mandible. Legs are without spines or with a few only at the extremity of the tarsi. Tibia of anterior leg in male is not spurred. Posterior sternal sigilla is remote from the margin.

Distribution : Ranging from India and Sri Lanka to Australia.

Key to the genera of the sub-family Selenocosmiinae

1. Legs of 4th pair much thicker than those of 1st pair with the tarsal scopula entire and extending

