

ON TWO NEW SPECIES OF THE GENERA
SCOTOPHAEUS SIMON AND *EHEMUS*
SIMON FROM INDIA (ARANEAE ;
GNAPHOSIDAE)

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INTRODUCTION

Practically there was no work in the past on the spiders of the family Gnaphosidae from India, although gnaphosidae spiders are abundant throughout the country, even the representative work by Pocock (1900) on Indian spiders contains no reference to this family. The spiders of the genus *Scotophaeus* are very little known. Very recently Tikader (1962, 1966, 1982) described four species, Tikader & Gajbe (1977) one species and Patel & Patel (1975) one species from India. The *Echemus* is being recorded for the first time from India.

While studying the spiders of the family Gnaphosidae the author encountered two new species of *Scotophaeus* and *Echemus*.

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

***Scotophaeus bhadatae* sp. nov.**

General : Cephalothorax and legs brownish-green. Abdomen gray. Total length 7.00 mm. Carapace 2.30 mm. long, 1.90 mm. wide ; abdomen 4.50 mm. long, 2.90 mm. wide.

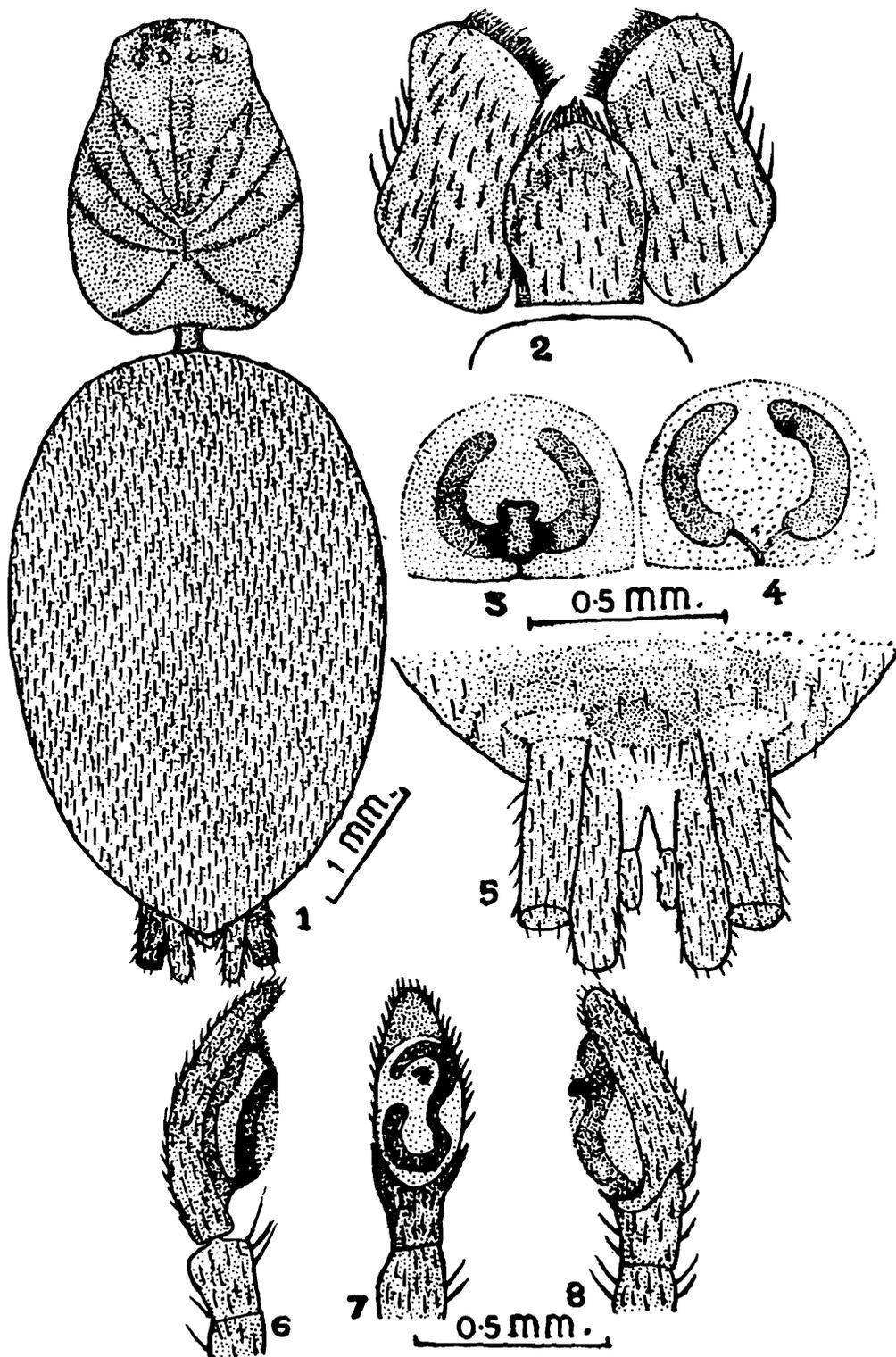


Fig. 1-8: *Scotophaeus bharratae* sp. nov. (1) Dorsal view of female, legs omitted. (2) Labium and maxillae. (3) Epigyne. (4) Internal genitalia. (5) Spinnerets. (6) Left male palp, retrolateral view. (7) Left male palp, ventral view. (8) Left male palp, prolateral view.

Cephalothorax : Longer than wide, convex, slightly narrowing in front, clothed with pubescence, posterior middle provided with a conspicuous fovea. Radiating strikes

diverge from fovea to lateral sides. Eyes pearly white except anterior medians which are black, posterior row of eyes slightly longer than the anterior row. Anterior row of eyes slightly procurved (as seen from infront), medians circular, larger than the laterals and closer to adjacent laterals than to each other. Posterior row of eyes slightly procurved, medians silvery white, elliptical and smaller than the adjacent laterals, equidistant from each other. Median ocular area longer than broad and narrow infront than behind as in fig.-1. Sternum heart-shaped, pointed behind and clothed with hairs. Labium nearly triangular, longer than wide, anterior margin of maxillae provided with conspicuous scopulae, shape as in fig. 2. Chelicera moderately strong, vertical, inner margin without tooth and outer margin with two similar teeth. Legs relatively long and strong, clothed with hairs and some spines, scopulae extend up to the base of matatarsi I and II. Legs formula 4123.

Abdomen : Longer than wide, oval, slightly narrowed behind, clothed with pubescence and hairs. Ventral side lighter in colour than dorsal. Epigyne as in fig. 3. Internal genitalia as in fig. 4. Spinnerets very prominent, anterior spinnerets widely separated, posterior spinnerets longer than others as in fig. 5. Male is darker in colour and half the size of the female. Male palp as in fig. 6, 7, 8.

Holotype : female (Reg. No. 5135/18) *allotype* one male (Reg. No. 5136/18) in spirit.

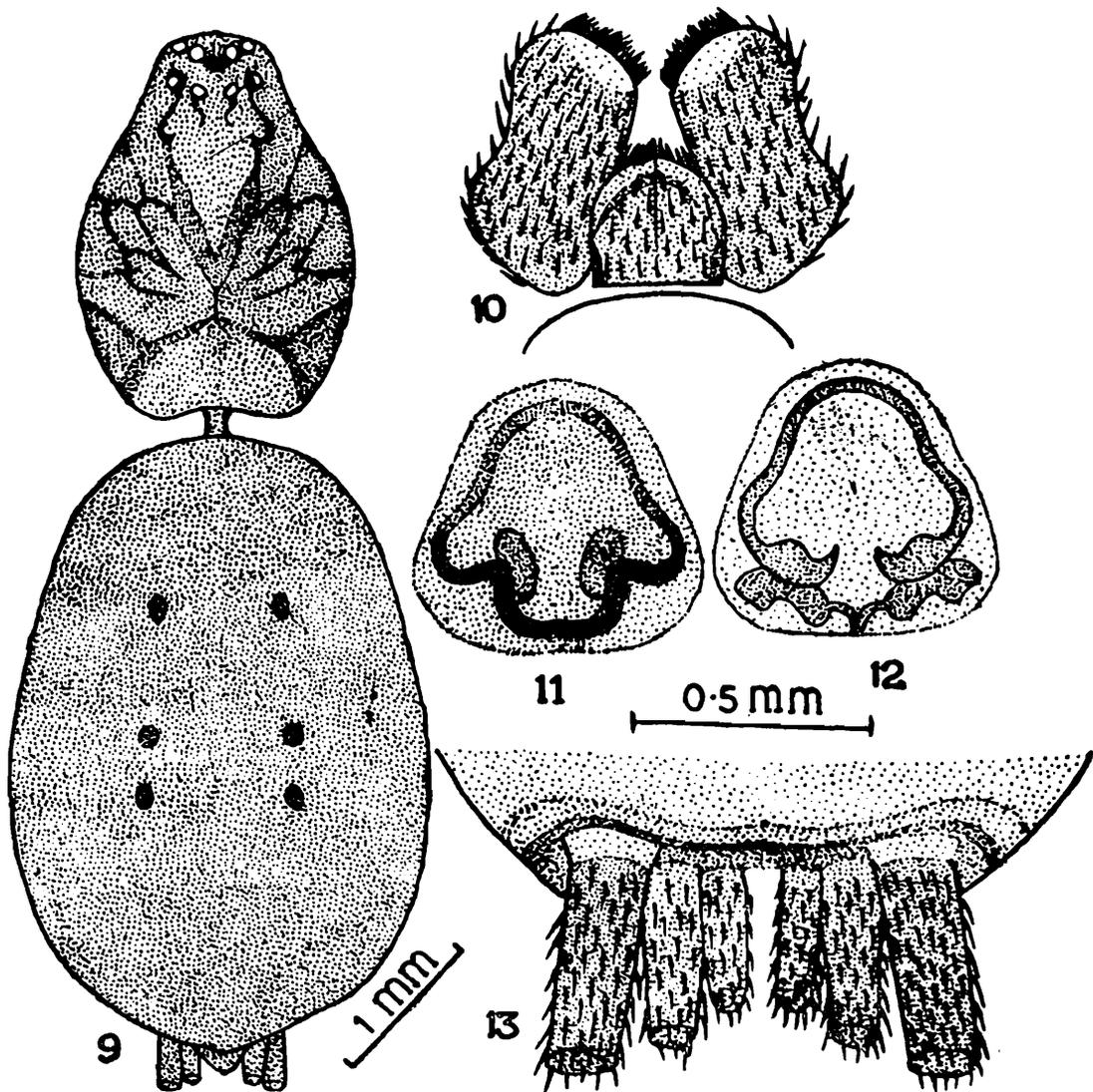
Type-locality : INDIA, West Bengal, Raharah, Dist. 24 Parganas. date 18.XI.1986. Coll. B. K. Tikader.

Remarks : This species closely resembles *Scotophaeus simlaensis* Tikader but differs from it as follows : (i) Cephalothorax and legs light brownish-green but in *S. bharatas* brownish-green. (ii) Inner and outer margin of chelicera provided with one minute tooth and five teeth respectively but in *S. bharatae*, inner margin without teeth and outer margin with two teeth. (iii) Epigyne and internal genitalia also structurally different.

Echemus viveki sp. nov.

General : Cephalothorax brown, legs reddish-green abdomen brownish-black. Total length 6.50 mm. Carapace 3.30 mm. long, 1.80 mm. wide ; abdomen 4.00 mm. long, 2.60 mm. wide.

Cephalothorax : Longer than wide, convex, narrow in-front, clothed with pubescence, posterior middle provided with an short inconspicuous fovea. Radiating strikes diverge from fovea to lateral sides. Eyes pearly white except anterior medians which are black, anterior row of eyes slightly procurved (as seen from in front), medians larger than the laterals and closer to laterals than to each other. Posterior



Figs. 9-13 : *Echemus viveki* sp. nov. (9) Dorsal view of female, legs omitted. (10) Labium and maxillae. (11) Epigyne. (12) Internal genitalia. (13) Spinnerets,

row of eyes strongly procurved, medians silvery white and smaller than the adjacent laterals and more or less equidistant to each other as in fig. 9. Median ocular area longer than wide and narrow behind than in front. Sternum heartshaped, narrow behind, rebordered, with sclerotized extensions to coxae, clothed with hairs. Labium nearly triangular, longer than wide, anterior margin of maxillae provided with conspicuous scopulae, shape as in fig. 10. Chelicerae moderately strong, vertical, inner margin provided with one minute tooth and outer margin with two dissimilar teeth. Legs relatively long and strong, clothed with hairs and some spines, scopulae extend upto the base of metatarsi III and IV. Preening comb on metatarsi III and IV. Legs formula 4123.

Abdomen : Longer than wide, oval, widest behind the middle, clothed with pubescence and three pairs of sagilla, Ventral side slightly lighter than the dorsal. Epigyne as in fig. 11. Internal genitalia as in fig. 12. Spinnerets prominent, anterior spinnerets widely separated as in fig. 13.

Holotype : Female (Reg. No. 5137/18) *paratype* one female (Reg. No. 5138/18) in spirit.

Type-locality : INDIA, West Bengal, Tibetan Nayabusta (Sonoda) Dist. Darjeeling date 31.XII.1970. Coll. J. M. Julka.

Remarks : This species closely resembles *Echemus angustifrons* (Westring) but differs from it as follows : (i) Cephalothorax light brown, abdomen gray but in *E. viveki* cephalothorax brown and abdomen brownish black. (ii) Outer margin of chelicera with three teeth but in *E. viveki* outer margin of chelicera with two teeth. (iii) Epigyne and internal genitalia also structurally different.

SUMMARY

The present paper deals with two new species *Scotophaeus bharatae* and *Echemus viveki* belonging to family Gnaphosidae.

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