STUDIES ON SOME CRAB-SPIDER (FAMILY: THOMISIDAE) FROM KHASI AND JAINTIA HILLS, ASSAM, INDIA

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ABSTRACT

Five new species of spiders are described in this paper. Most of the species were collected from Khasi and Jaintia Hills, Assam. The new species belong to four genera distributed in the family Thomisidae.

INTRODUCTION

The spider fauna of Khasi and Jaintia Hills (Assam) is very rich but unfortunately there very little seems to have been recorded on this group. Only Tikader (1962) has described some species belonging to the families Thomisidae, Agelenidae and Clubionidae.

The spider of the family Thomisidae has received little attention in India. Recently, Tikader (1960–64) has described a number of species in this family from different parts of India.

I have given here descriptions of five new species belonging to four different genera. The genus Regillus Cambridge is reported for the first time from India. The text-figures were prepared by me with the help of a camera lucida.

All type specimens will in due course be deposited in the collection of the Zoological Survey of India, Calcutta.

1. Thomisus cherapunjeus sp. nov.

General.—Cephalothorax and legs deep to light green, abdomen brown and mixed with dirty white. Total length 5·20 mm. Carapace 2·20 mm. long, 2·00 mm. wide; abdomen 3·40 mm. long, 2·50 mm. wide.

Cephalothorax.—Slightly longer than wide, clothed with fine hairs, cephalic region slightly high and narrow, lateral two sides provided with
conspicuous longitudinal broad deep brown patch extending from base of lateral eyes to base of thorax. Ocular tubercle high and laterally pointed and transversely jointed with an elevated ridge and chalk white in colour; mid-dorsally provided with a narrow longitudinal chalk-white line extending from ocular area to base of thorax. Eyes black, both rows recurved but posterior row less recurved and longer than anterior row; both lateral eyes situated on the base of opposite side of lateral conical tubercle, anterior lateral eyes larger than other. Ocular quad longer than wide and narrow in front. Clypeus moderate, margin of clypeus provided with seven small spines directed forward but middle one directed upward. Sternum heart-shaped, pointed behind, clothed with hairs. Legs I and II pairs very long and stout; tibiae of I with five and metatarsi with eight pairs of robust ventral spines.

*Abdomen.*—Longer than wide, nearly elliptical in shape, maximum width behind the middle. Dorsally provided with five sigilla marked with deep brown or black as in Text-Fig. 1, a. Lateral sides of abdomen provided with three or four longitudinal deep brown thin lines and all lines jointed respectively on the posterior side of abdomen. Ventral side uniform pale green colour and two sides provided with longitudinal parallel muscular elevations. Epigyne as in Text-Fig. 1, b.

Male similar in colour with female but very small and I and II pairs of legs conspicuously long.

*Holotype.*—One female, *paratype* four females, *allootype* one male in spirit.


This species is closely related to *Thomisus elongatus* Stoliczka but differs as follows: (i) Ocular quad narrow in front wider than long, but in *T. elongatus* ocular quad not very narrow in front. (ii) Epigyne also structurally different.

2. *Regillus elephantus* sp. nov.

*General.*—Cephalothorax, legs and abdomen light to deep brown. Total length 8·20 mm. Carapace 4·00 mm. long, 3·30 mm. wide; abdomen 4·20 mm. long, 3·50 mm. wide.

*Cephalothorax.*—Longer than wide nearly flat but cephalic region mid-dorsally provided with high longitudinal ridge and narrow in front. Eyes
Crab-Spider (Family: Thomisidae) from Khasi and Jaintia Hills

Text-Fig. 1. Thomisus cherapunjeus sp. nov. (a) Dorsal view of female, legs omitted; (b) Epigyne.

both rows recurved, lateral eyes large and situated on the prominent tubercles. Ocular quad longer than wide and slightly narrower in front. Clypeus high, margin of clypeus provided with seven spines directed forward. Sternum nearly oval, clothed with hairs and few spines. Legs robust with conspicuous spines, I legs very long and robust than other legs; anterior half of I femur very wide and inner side provided with four robust spines and tibiae provided with five pairs of long ventral spines and metatarsus with three pairs spines.

Abdomen.—Longer than wide, widest behind the middle, dirty brown colour, clothed with conspicuous blant spines and bases of spines slightly elevated. Ventral side light colour than dorsal and provided with hairs and few spines. Epigyne as in Text-Fig. 2 b,
Text-Fig. 2. Regillus elephantus sp. nov. (a) Dorsal view of female, with one side legs; (b) Epigyne.

Holotype.—One female in spirit.

Type-locality.—Elephant falls, Upper Shillong, Assam, India. Coll. B. K. Tikader, 4-8-1965. This genus is reported for the first time from India.

This species resembles with Regillus bituberculatus Simon but it is separated as follows: (i) Cephalothorax mid-dorsally provided with a
longitudinal high ridge but in R. bituberculatus cephalothorax uniform flat. 
(ii) Epigyne also structurally different.

3. *Xysticus shyamrupus* sp. nov.

*General.*—Cephalothorax, legs and abdomen light brown to deep brown. Total length 6·00 mm. Carapace 3·00 mm. long, 3·40 mm. wide; abdomen 3·80 mm. long, 3·40 mm. wide.

*Cephalothorax.*—Slightly wider than long, convex, cephalic region slightly high and broad, clothed with conspicuous long and stout spines, lateral two sides provided with longitudinal broad deep brown patches, mid-dorsally provided with wide longitudinal light patch extending from ocular area to base of thorax. Eyes black, lateral eyes large and provided with conspicuous high tubercles. Ocular quad almost square or slightly wider than long. Clypeus high, margin provided with nine robust spines directed forward but middle one directed upward. Sternum heart-shaped, pointed behind, clothed with hairs and pigmented brown dots. Legs I and II robust and longer than III and IV, clothed with three pairs of robust ventral spines and metatarsi with four or five pairs of ventral spines.

*Abdomen.*—Oval, slightly wider than long, clothed with conspicuous spines, maximum width behind the middle. Dorsally ornamented with brown and dirty-white patches. Ventral side uniform light colour, clothed with hairs. Epigyne as in Text-Fig. 3 b.

*Holotype.*—One female, paratype two females in spirit.


This species resembles *Xysticus sujatai* Tikader but it is separated as follows: (i) Margin of clypeus with nine spines but in *X. sujatai* margin of clypeus with seven spines. (ii) Abdominal colour pattern different. (iii) Epigyne also structurally different.

4. *Xysticus mandali* sp. nov.

*General.*—Cephalothorax, legs and abdomen light green. Total length 2·80 mm. Carapace 1·00 mm. long, 0·90 mm. wide; abdomen 1·80 mm. long, 1·60 mm. wide.

* It is with much pleasure that I name this species after Shri Shyamrup Biswas of this station who collected these specimens.

* It is with much pleasure that I name this species after Dr. A. K. Mandal, Assistant Zoologist of this Station, who collected these specimens.
Cephalothorax.—Nearly as long as wide, spined, the sides provided with broad longitudinal conspicuous black bands, extending from the base of lateral eyes to near the base of thorax. Clypeus high, margin with five spines, directed forward but the median directed upward. Eyes round, black, ringed with dirty white tubercles; ocular quad slightly wider than long, space of the anterior median eyes a little smaller than that of posterior. Posterior median eyes smaller than the anterior medians; lateral eyes large but anterior lateral larger than all eyes. Legs I and II pair long and stout, spined, tibiae I and II with two pairs of ventral spines.

Abdomen.—Almost oval, dorsum provided with spines and hairs, slightly overlapping the posterior region of cephalothorax, dorsal side provided with two conspicuous black broad longitudinal bands extending from base to end of the abdomen but in some specimens these bands not continuous. Abdomen broadest just behind the middle. Lateral sides provided with a black spot. Ventral side uniform light green. Epigyne as in Text-Fig. 4, b.

Holotype.—One female, paratype two females in spirit.
Type-locality.—Risha Colony, Shillong, Assam, India. Coll. A. K. Mandal, 18-6-1965.

This species is closely related to *Xysticus minutus* Tikader but it is separated as follows: (i) Cephalothorax with two conspicuous black broad longitudinal bands but in *X. minutus* cephalothorax with two inconspicuous brown longitudinal bands. (ii) Abdomen dorsally provided with two longitudinal black bands extending from base to end of abdomen but in *X. minutus* abdomen dorsally with dentated bands beautifully coloured with admixture of white, dark brown and red.

5. *Diaea jaintious* sp. nov.

*General.*—Cephalothorax and abdomen light to deep brown, legs light green. Total length 6·00 mm. Carapace 2·00 mm. long, 1·80 mm. wide; abdomen 4·00 mm. long, 4·80 mm. wide.

*Cephalothorax.*—Longer than wide, convex, narrowing in front, clothed with spines, lateral two sides provided with conspicuous longitudinal deep brown patches extending from base of lateral eyes to near the base of thorax; mid-dorsally with a longitudinal white broad patch extending from ocular area to base of thorax. Eyes black, lateral eyes situated on the shallow tubercles; ocular quad wider than long and narrowing in front. Clypeus
moderate, margin provided with seven spines directed forward but middle one directed upward. Sternum heart-shaped, clothed with hairs. Legs I and II conspicuously long, clothed with hairs and spines; II pair of legs more darker in colour than I pair; metatarsi of I and II pairs of legs provided with six pairs of ventral spines; III and IV pairs of legs comparatively very short and absent ventral spine.

Abdomen.—Oval, prominently dilated behind, clothed with spiny hairs, and some hairs arranged longitudinally on the dorsum and base of each hair with a white dot. Dorsal side almost deep brown in colour but lateral sides and posterior half provided with some whitish longitudinal patches. Ventral side uniform pale colour. Epigyne as in Text-Fig. 5 b.

Text-Fig. 5. Diaea jaintious sp. nov. (a) Dorsal view of female, legs omitted; (b) Epigyne.
Crab-Spider (Family: Thomisidae) from Khasi and Jaintia Hills

Holotype.—One female, paratype three females in spirit.

Type-locality.—Risha Colony, Shillong, Assam, India. Coll. S. N. Prasad, 19-6-1965.

This species resembles with Diaea dorsata (Fab.) but it is separated as follows: (i) Cephalothorax laterally provided with conspicuous deep brown longitudinal broad patches but in D. dorsata cephalothorax uniform emerald green. (iii) Epigyne also structurally different.

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REFERENCES

Simon, E.  
.. *Histoire Naturelle des Araignées Paris*, 1892–95, 1, 9496–100.

Stoliczka, F.  
.. “Contribution towards the knowledge of Indian Arachnoidae,” *J. As. Soc.*, Bengal, 1869, 38, 201.

Tikader, B. K.  

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