

Rec. zool. Surv. India : 105 (Part 3–4) : 37-42, 2005

**DESCRIPTION OF THREE NEW SPECIES OF THE GENERA
THOMISUS WALCKENAER, *CHEIRACANTHIUM* KOCH, C. L.
AND *TINUS* CAMBRIDGE OF THE FAMILIES THOMISIDAE,
CLUBIONIDAE AND PISAURIDAE FROM INDIA**

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INTRODUCTION

Spiders of the families Thomisidae, Clubionidae and Pisauridae have received attention by Tikadar (1960-1980), Biswas (1981-1992, 1995, 1997, 2000, 2003, 2004), Gajbe (1999) after the fauna of British India, Arachnida by Pocock (1900). While examining the spider collections from Silent Valley Expedition, we came across three new species of the genera *Thomisus* Walckenaer, *Cheiracanthium* Koch, C. L. and *Tinus* Cambridge (Araneae : Thomisidae, Clubionidae and Pisauridae) which are described in this paper.

The types are deposited in the National Collection of the Zoological Survey of India, Kolkata.

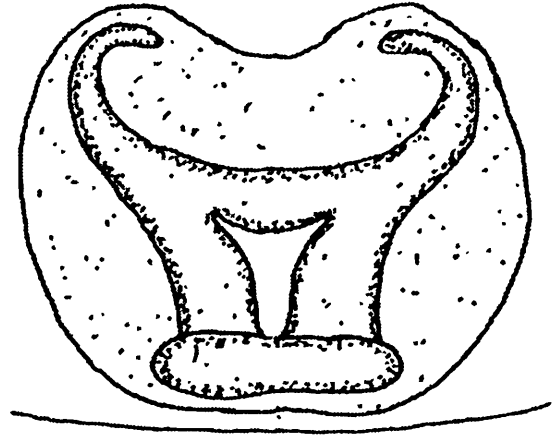
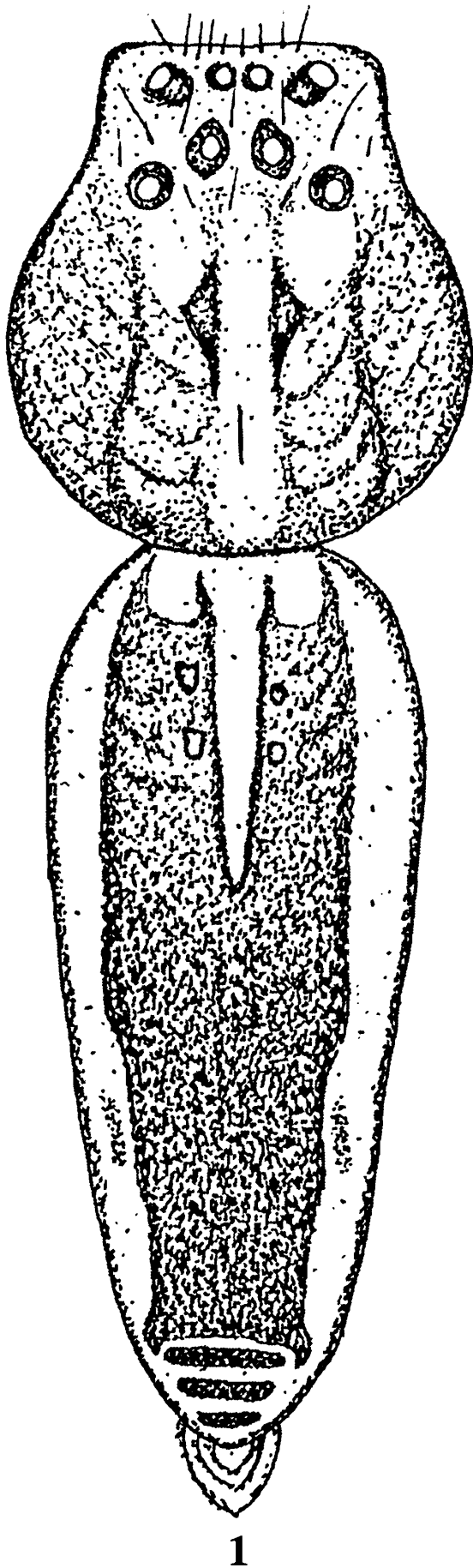
1. *Tinus arindamai* sp. nov.

(Figs. 1-3)

General : Cephalothorax, legs yellowish brown and abdomen brownish black. Total length 10'00 mm. Carapace 4'00 mm. long, 3'50 mm. wide; abdomen 6'50 mm. long, 2'50 mm. wide.

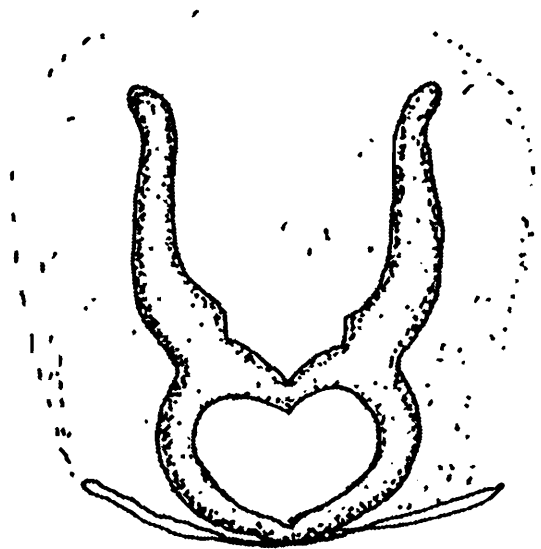
Cephalothorax : Slightly longer than wide, anterior part convex, cephalic region high with prominent fovea, narrowing in front; two distinct brown patch on either side of fovea with scattered brown reticulated bands. Light brown patches on the margin of the cephalic region. Three rows of eyes, first row with four showing slightly procurved in appearance. Middle and posterior row farming strongly procurvedness. Eyes with distinct black tubercles. Median eyes of the first row smaller than the laterals. Eyes of the third row largest. Sternum heart shaped, yellowish in colour. Legs are very long, yellowish colour with spines. Leg formulae are 1/2/4/3.

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2

1.00 mm



3

Figs. 1-3. : *Tinus arindamai* sp. nov. 1. Dorsal view of female, Holotype (Legs are omitted); 2. Epigyne; 3. Internal genitalia.

Abdomen : Longer than wide, two yellowish bands extending from anterior to posterior and of the abdomen laterally. Anterior half of abdomen with lance-shaped yellowish patch. Extreme part of the abdomen provided with three transverse deep brown stripes remain separated by narrow yellowish band.

Type specimen : Holotype female, paratype one female preserved in rectified spirit (70%). Registration numbers 5574-75/18.

Type-locality : Karapara Expedition, Silent Valley, Panthanthedu, Kerala, India, 13.xii.1980, coll. R. S. Pillai & party.

Remarks : *Tinus arindamai* is compared with *Tinus sikkimus* Tikader which differs in the following characters (1) Two distinct brown patches on either side of fevea with scattered brown reticulated bands in *T. arindamai* sp. nov. but there is no such in *T. sikkimus* Tikader (2) Two yellowish bands extending from anterior and of the abdomen laterally but there is no such in *T. sikkimus* (3) Extreme part of the abdomen provided with three transverse deep brown stripes in *T. arindamai* sp. nov. which is not found in *T. sikkimus* Tikader (4) Epigyne and internal genitalia are also structurally different.

2. *Cheiracanthium tanmoyi* sp. nov.

(Figs. 4-6)

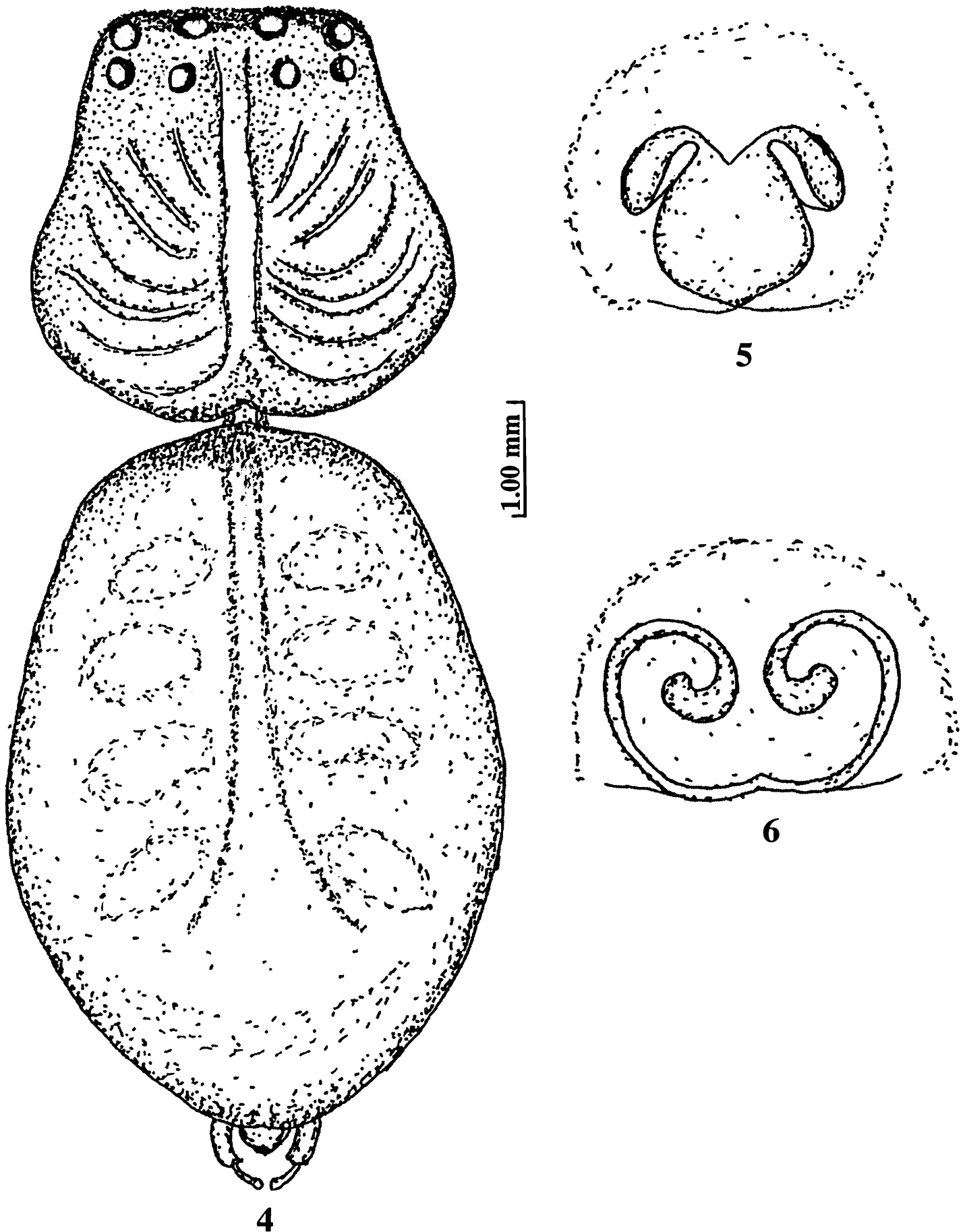
General : Cephalothorax dark brown in colour, legs moderately brown and abdomen comparatively light brown in colour. Total length 11.50 mm. Carapace 4.00 mm long, 3.00 mm wide; abdomen 7.50 mm long, 4.00 mm wide.

Cephalothorax : Longer than wide, convex anteriorly, wider posteriorly, covered with fine pubescence, having no distinct favea. Two rows of eyes present. Anterior row slightly procurved and posterior slightly recurved. Median eyes of both anterior and posterior row larger than the laterals. Ocular quad wider than long. Chelicerae dark brown in colour, prominent, longer than wide, inner margin with three and outer margin with two teeth. Maxillae and labium longer than wide, scopulated anteriorly. Sternum oval, covered with fine pubescence. Legs are longer than wide. Leg formulae are 1/4/2/3.

Abdomen : Oval in shape, longer than wide, covered with fine hair. Dorsum of the abdomen with deep brown patch on the middle. Male is unknown.

Type specimen : Holotype female preserved in rectified spirit (70%). Registration number is 5576/18.

Type-locality : Silent Valley Expedition, locality Kummathanthodu, Kerala, India, 22.iv.1980, coll. R. S. Pillai.



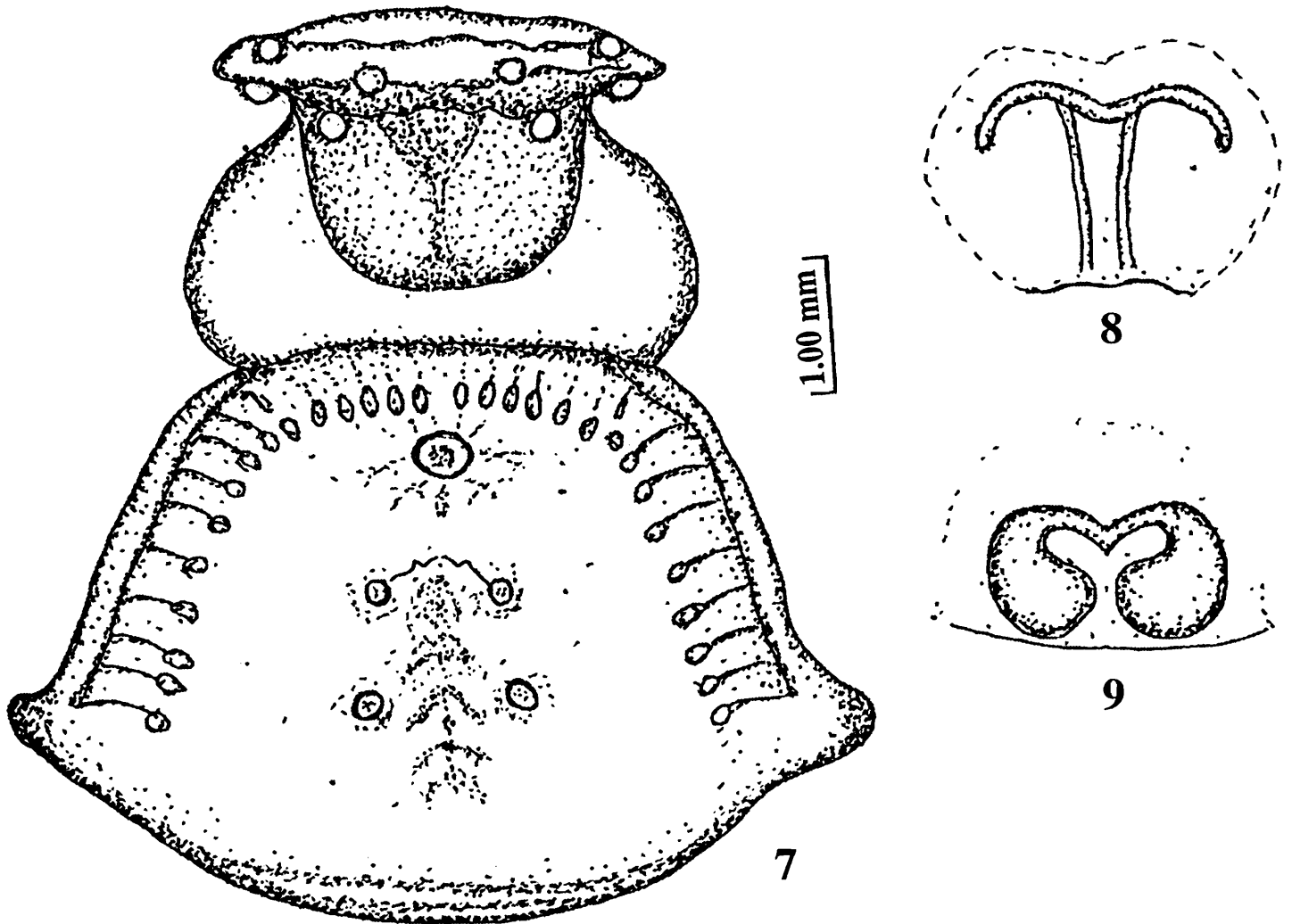
Figs. 4-6. : *Cheiracanthium tanmoyi* sp. nov. 4. Dorsal view of female, Holotype (Legs are omitted); 5. Epigyne; 6. Internal genitalia.

Remarks : *Cheiracanthium tanmoyi* sp. nov. is compared with *Cheiracanthium murina* Thorell which differs in the following characters (1) Colour of the cephalothorax and abdomen varies from *C. murina*. (2) Middle of the dorsum of the abdomen of *C. tanmoyi* bears deep brown patch longitudinally but in *C. murina* no such patch. (3) Epigyne and internal genitalia are also structurally different.

3. *Thomisus keralae* sp. nov.
(Figs. 7-9)

General : Cephalothorax brownish yellow, ocular area yellowish, triangular with transverse yellow patch between the posterior median eyes. Abdomen chalk-white in colour. Total length 7.00 mm. Carapace 2.50 mm long, 3.00 mm wide; abdomen 5.00 mm long, 5.50 mm wide.

Cephalothorax : Wider than long. Eyes are comparatively small in size, more or less equal. Two rows of eyes. Anterior row of eyes strongly procurved, posterior row of eyes more or less in straight line. Postero-median eyes situated on triangular head and anterior median eyes situated



Figs. 7-9. : *Thomisus keralae* sp. nov. 7. Dorsal view of female, Holotype (Legs are omitted); 8. Epigyne; 9. Internal genitalia.

in front of the head. Two broad light brown patches present on the lateral side of the cephalic region starting from the whitish middle portion towards the lateral side. Legs yellowish in colour and unevenly swollen. I and II pair of legs longer than III and IV III pair of legs smallest in size. Sternum heart shaped brownish yellow in colour, pointed behind. Leg formulae are 1/2/4/3.

Abdomen : Pentagonal, overlapping the posterior region of cephalothorax in front, broadest just behind the middle. One pair of brown spots present on the postero lateral side of dorsum of the abdomen. Sigilla five in number, anterior sigilla bigger in size and single in number situated at the mid-dorsal of the abdomen. Rest four sigilla are pairs in orientation. Several depressions are present on the anterior roundish part of the dorsum.

Type specimen : Holotype female preserved in rectified spirit (70%). Registration number is 5577/18.

Type-locality : Thekkady, Silent Valley, Mullayane, Kerala, India, 23.ii.1981, coll. K. Mathew.

Remarks : *Thomisus keralae* sp. nov. is compared with *Thomisus bulani* Tikader but differs in the following characters (1) Colour pattern of both the species are different. (2) One pair of brown spots present on the postero-lateral side of dorsum of the abdomen but in *Thomisus bulani* Tikader three pairs reddish brown spots present. (3) Epigyne and internal genitalia are also structurally different.

SUMMARY

Three new species under genera *Tinus* Cambridge, *Cheiracanthium* Koch, C. L. and *Thomisus* Walckenaer (Families : Pisauridae, Clubionidae, Thomisidae) described and illustrated in this paper.

ACKNOWLEDGEMENT

Our sincere thanks to Dr. J.R.B. Alfred, Director, Zoological Survey of India for preparation of this paper. Our heartest thanks to Dr. Pillai and Mr. Mathew for their valuable collection.

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