

**TWO NEW SPECIES OF THE GENERA *META* C.L. KOCH AND
NEOSCONA SIMON OF THE FAMILY ARANEIDAE
(ARACHNIDA : ARANEAE) FROM COASTAL ANDHRA PRADESH, INDIA**

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INTRODUCTION

Some informations are available on Indian araneid forms along with other groups of spiders from previous workers *viz.*, Walckenaer (1841), Doleschall (1857), Cambridge (1859, 99), Stoliczka (1869), Simon (1877, 89, 1906), Thorell (1877, 95), Pocock (1900), Narayan (1915), Gravely (1921, 22), Sherriffs (1928, 29), Caporiacco (1934, 35), Dyal (1935) and Sinha (1951). Recently Tikader and his co-workers (1960-1982), Sadana (1973) and Patel (1975) added several new species of this family.

The genus *Meta* was first recorded and only one species was described by Cambridge (1885) from N.W. India. Then, Tikader (1982) added one more species of the same genus. Till now 18 species of the genus *Neoscona* are described from India, out of which recent additions are of two species by Tikader (1975, 80), six species by Tikader & Bal (1981) and one species by Patel & Reddy (in press), *Meta abdominalis* is the third species and *Neoscona dhumani* is the nineteenth species described from Indian sub-continent.

While examining the spider collections made by one of us (TSR) from Coastal Andhra Pradesh, we came across a new species of the genus *Meta* and a new species of the genus *Neoscona* which are described and illustrated here.

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

1. *Meta abdominalis* sp. nov. (Fig. 1, a-d)

General : Cephalothorax and legs light yellowish brown with chalk white and brownish patches. Abdomen chalk white greyish with brown patches. Total length 3.75 mm. Carapace 1.20 mm long, 1.15 mm wide ; abdomen 3.00 mm long, 2.50 mm wide.

Cephalothorax : Slightly longer than wide, narrowing in front, clothed with

pubescence and hairs ; cephalic region is slightly elevated than the thoracic region and pale in colour ; thorax with deep fovea. Anterior row of eyes recurved but posterior row nearly straight or slightly recurved. Anterior medians are slightly smaller than the posterior medians, posterior medians encircled by black. rings and closer to each other than to adjacent laterals. Laterals close together and situated on prominent tubercles as in Fig. 1 a. Ocular quad as long as wide. Sternum heart shaped, pointed behind, clothed with pubescence and hairs. Labium slightly wider than long, brownish with pale distal end. Maxillae slightly longer than wide, brownish with pale distal end and provided with scopulae. Sternum, labium and maxillae as in Fig. 1 b. Chelicerae moderate, yellowish, having indistinct small boss. Legs thin, long and strong, light yellowish brown, clothed with pubescence, hairs and spines. Femora of all legs provided with some fine but strong hairs on ventral side. Leg formula 1 2 4 3.

Male : Unknown.

Abdomen : Suboval, clothed with pubescence, pointed anteriorly. Dorsum of abdomen provided with a folium composed of chalk white greyish and brownish

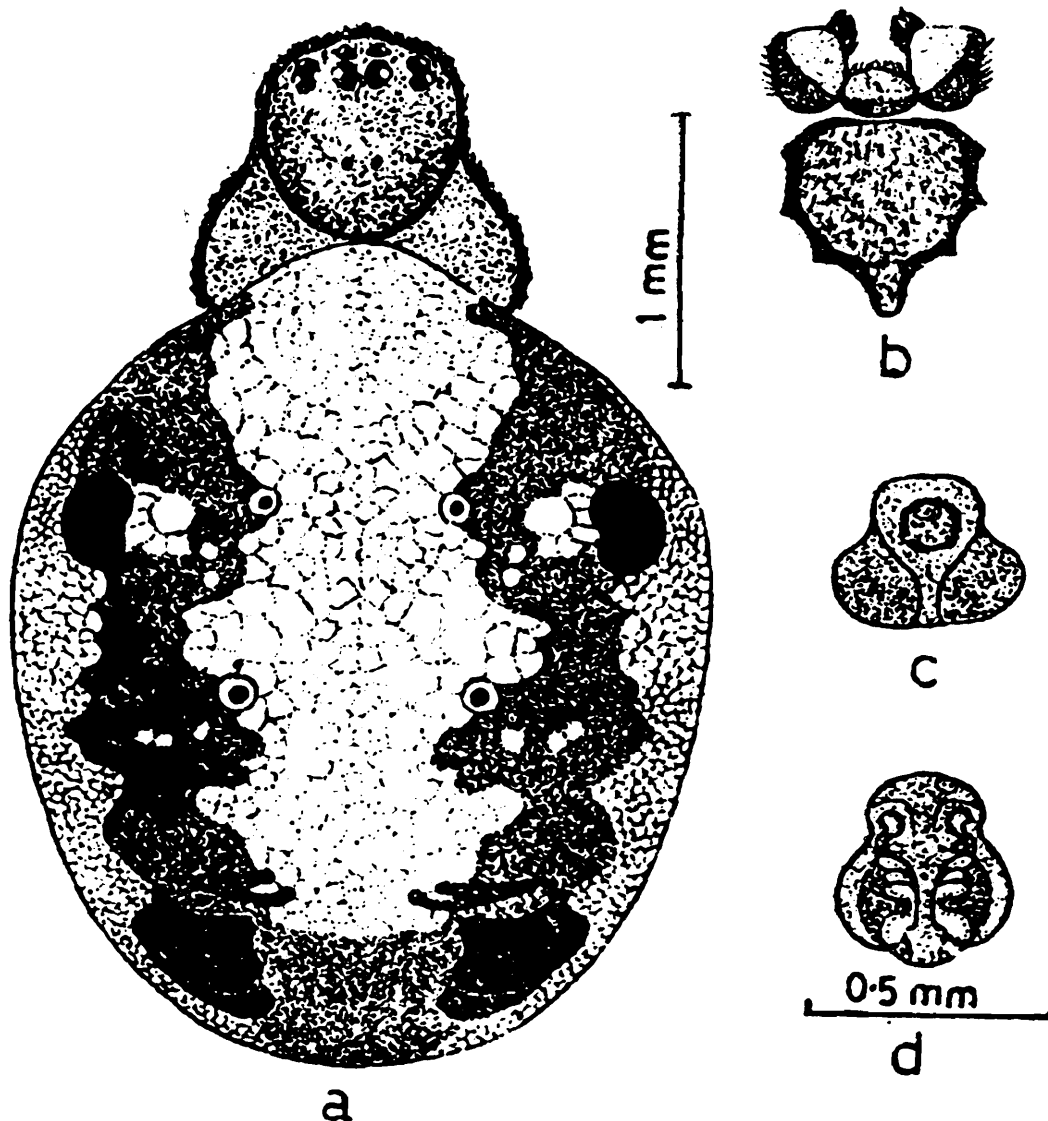


Fig. 1. *Meta abdominalis* sp.nov. : a. Dorsal view of female (legs omitted) ; b. Sternum, labium and maxillae ; c. Epigyne ; d. Internal genitalia.

patches and two pairs of distinct sigillae arranged midlongitudinally as in Fig. 1 a. Abdomen both antero-laterally and postero-laterally provided with one pair of black patches. Ventral side greyish brown with a median broad greyish patch guarded by a pair of chalk-white bracket shaped patches inbetween epigastric furrow and spinnerets. Epigyne provided with a broad median septum and a pair of lateral swellings as in Fig. 1 c. Internal genitalia as in Fig. 1 d.

Holotype : One ♀ in spirit.

Type Locality : Araku valley, Dist. Visakhapatnam 18.x.1986. Coll. T.S. Reddy.

Diagnosis : This species resembles to *Meta simlaensis* Tikader but it is separated as follows : (i) Abdomen both antero-laterally and postero-laterally provided with one pair of black patches but in *M. simlaensis* no such black patches. (ii) Abdomen suboval, pointed anteriorly but in *M. simlaensis* oval, not pointed anteriorly. (iii) Epigyne and internal genitalia are also structurally different.

2. *Neoscona dhumani* sp. nov. (Fig. 2, a-h)

General : Cephalothorax and legs yellowish, abdomen yellowish grey. Total length 6.05 mm. Carapace 2.65 mm long, 2.30 mm wide ; abdomen 3.75 mm long, 3.65 mm wide.

Cephalothorax : Longer than wide, narrowing in front, yellowish-brown, clothed with pubescence and hairs. Thoracic region provided with thin longitudinal deep fovea. Both rows of eyes recurved. Anterior median eyes slightly larger than the posterior medians, laterals close together and each situated on a tubercle. Ocular quad slightly wider than long, wider in front than behind as in Fig. 2 a. Sternum heart shaped, pointed behind, yellowish. Labium wider than long, crescent shaped, yellowish and distal end with hairs. Maxillae nearly triangular, yellowish and provided with distinct scopulae. Sternum, labium and maxillae as in Fig. 2 b. Chelicerae moderately strong, yellowish and provided with median boss ; inner and outer margins of fang furrow provided with three teeth each. Legs long and strong, yellowish, clothed with hairs and spines. Tibiae and metatarsi of legs I and II provided with five and four pairs of ventral spines respectively. Leg formula 1 2 4 3.

Male : It is similar to female but slightly smaller. Total length 4.50 mm. Male palp as in Fig. 2 f, g and h.

Abdomen : Nearly oval, yellowish grey with chalk-white patches, clothed with black based grey hairs, anterior portion wider than behind as in Fig. 2 a. Dorsum of abdomen provided with five pairs of sigillae arranged mid-longitudinally in descending order for their size. Ventral side pale in colour. Epigyne with a upwardly directed scape provided with a constriction nearly at the middle as in Fig. 2 c and d. Internal genitalia as in Fig. 2 e.

Holotype : 1 ♀ , **paratype** : 11 ♀ , **allotype** : 2 ♂ in spirit.

Type Locality : Bhimunipatnam, Dist. Visakhapatnam, 8.x.1986. Coll. T.S. Reddy.

Diagnosis : This species resembles to *Neoscona pavida* (Simon) but it is separate as follows : (i) Base of cephalic region is not provided with a 'V' shaped brow

marking but in *N. pavida* base of cephalic region provided with a 'V' shaped brown marking. (ii) Thoracic region is not provided with a longitudinal deep groove but in *N. pavida* it is present. (iii) Dorsum of abdomen provided with five pairs of sigillae but in *N. pavida* four pairs of sigillae. (iv) Epigyne and internal genitalia are also structurally different.

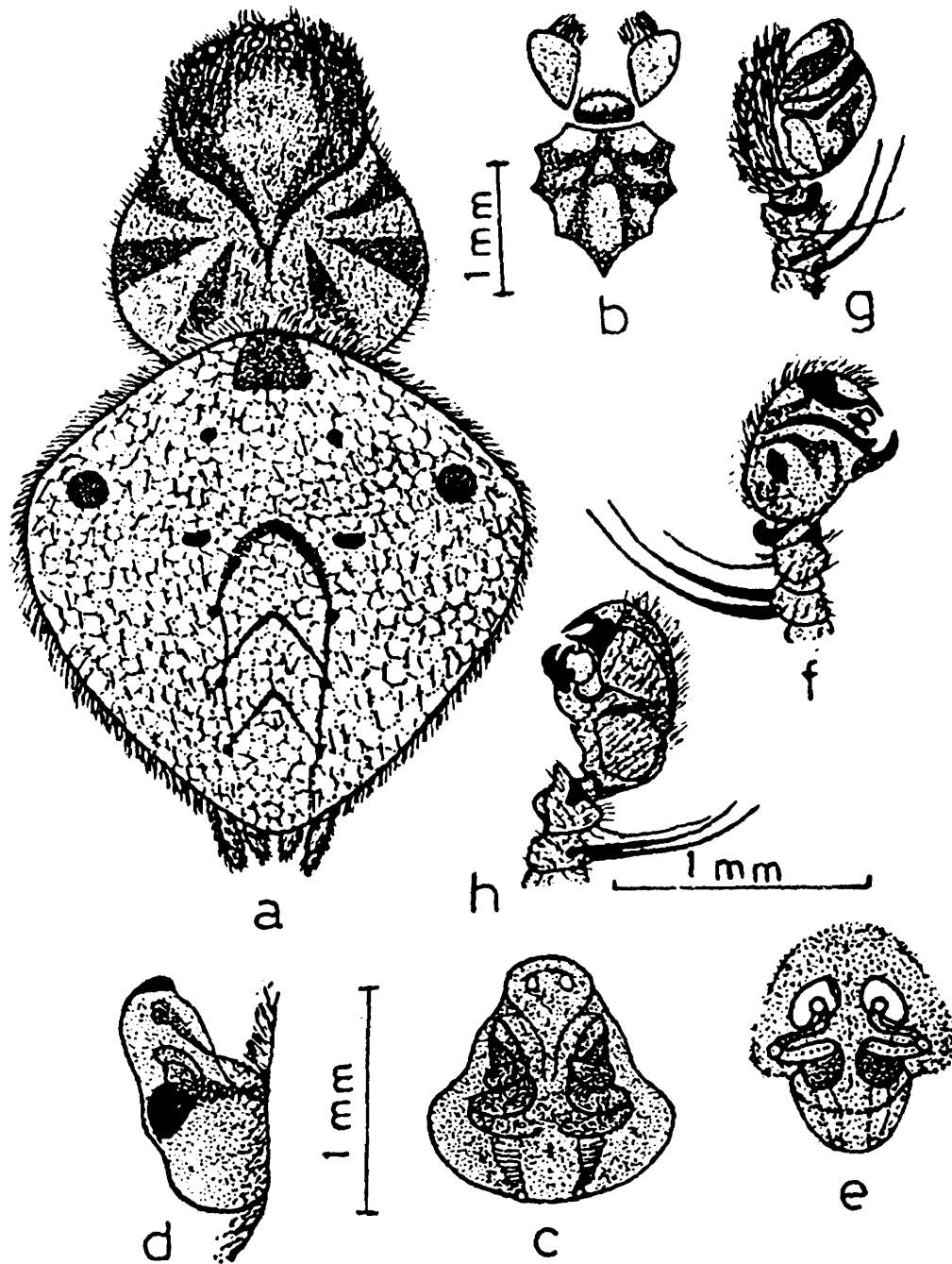


Fig. 2. *Neoscona dhumani* sp. nov. : a. Dorsal view of female (legs omitted) ; b. Sternum, labium and maxillae ; c. Epigyne ; d. Lateral view of epigyne ; e. Internal genitalia ; f. Right male palp - ventral view ; g. Right male palp - outer view ; h. right male palp - inner view.

SUMMARY

Two new species of the genera *Meta* and *Neoscona* viz., *Meta abdominalis* and *Neoscona dhumani* are described and illustrated here from Visakhapatnam District of Coastal Andhra Pradesh, India.

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