

Rec. zool. Surv. India: 106(Part-2): 51-54, 2006

DESCRIPTION OF ARGIOPE LOBATA PALLAS (ARANEAE : ARANEIDAE) FROM NALLAMALAI REGION, EASTERN GHATS, ANDHRA PRADESH, INDIA

K. Thulsi Rao¹, D.B. Bastawade², S.M. Maqsood Javed¹ and I. Siva Rama Krishna¹

¹Ecological Research & Monitoring Laboratories, Nallamalai Hill Ranges, Eastern Ghats, Project Tiger Circle, Srisailam-518 102, Kurnool Dist., Andhra Pradesh

²Zoological Survey of India, Western Regional Station, Pune-411 044, Maharashtra

Argiope lobata Pallas

(Figs. 1-6)

1772. Argiope lobata, Pallas, Spc. Zool. Ipt., 9:46.

1900. Argiope lobata, Pocock: Fauna Brit. India Arachnida: 221.

General: Female cephalothorax yellowish brown with few radiating dark patches on mid lateral portion, palps yellowish, legs lighter on trochanter and femur, except femur I, but darker on distal digits, tibiae IV with a yellow round spot at the proximal joint on ventral side. Abdomen light yellow with few darker marking and sigillae, lobed, ending blunt.

Measurements (mm): Total length 19 mm; Cephalothorax 5 mm long, 4.75 mm wide; Abdomen 14 mm long, 10 mm wide.

Cephalothorax: Longer than wide, Cephalic region slightly raised, eyes in two rows, anterior row almost straight with anterior lateral pairs smaller than median pair as well as posterior lateral pair, posterior row recurved, both pairs almost of same size and encircled with black ring, ocular quadrangle longer than wide. Thoracic portion with a median shallow depression with elongated fovea chelicerae with elongated basal segment, moderate to weak boss noticeable on external basal portion, few spines present at the inner basal portion, elongated and distally covered with few spines and hair, fang furrow distinct with aboral margin with four distinct teeth, 2nd being longer oral margin with 3 teeth, almost of equal size, fang not much curved but sharply pointed; palps

¹E-mail: ermlabs_srisailam@yahoo.co.in

52 Rec. zool. Surv. India

with spines on coxae, trochanter but femora with one spine each on distal inner portion, patellae with out spine but tibiae and tarsi with many robust spines. Legs formula 2143, I & II coxae and trochanters with few minute spines below, femora, patellae, tibiae and tarsus with many long and pointed spines, III & IV coxae, trochanters with short ventral spines; femora III with 4 to 5 spines, IV with a row of many ventral spines; patellae, tibiae and tarsi with many strong spines, all legs covered with small, delicate pubescence; sternum heart shaped, pointed posteriorly, yellow medially but 2–3 black patches laterally, labium almost as long as wide, narrow mid-anteriorly, maxillae broad, with brown ridge anteriorly.

Abdomen: Longer than wide, 3 pairs of prominent and 3 pairs of rudimentary lateral lobes, smooth, with 6 pairs of darker sigillae, blunt on posterior end; ventrally with middle blackish patch, middle lateral yellowish patches posteriorly encircle the spinnerets; epigyne with a anterior median scape forming a median septum and joining to posterior short basal septum; internal genitalia with a pair of rounded spermathecae, each with a short duct, opening posteriorly (Fig. 4).

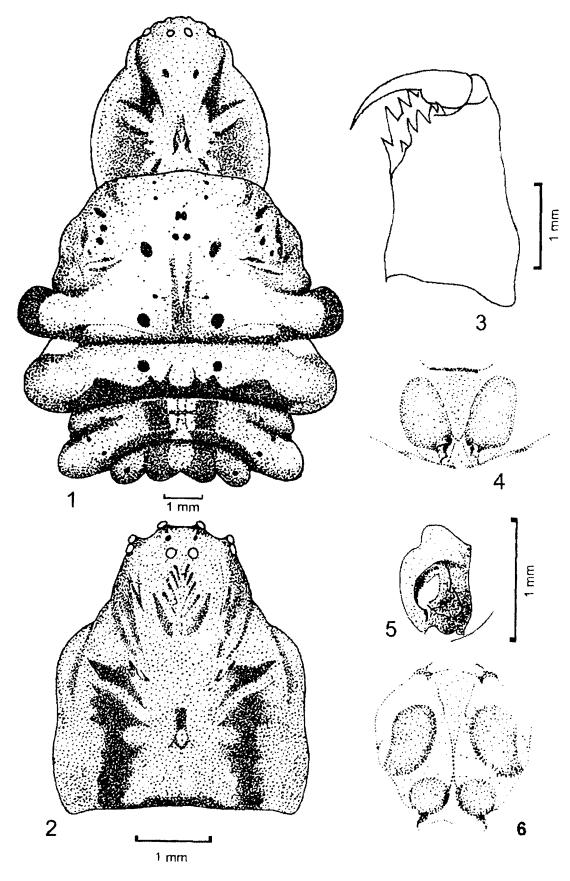
Material examined: 2♀♀; Rollapadu Wildlife Sanctuary, NSTR, Kurnool Dist., Andhra Pradesh, India, Coll. K. Thulsi Rao & S.M. Maqsood Javed, 4.4.2003.

Distribution: Bellary, Karnataka (Pocock), Daghra Karoor (Simon).

Remarks: Pocock (1900) in his keys to Argiope species mentioned that unspined 3rd and 4th coxae and trochanters which seems to be misleading. Further Tikader (1982) has not dealt with the species described as Argiope lobata (Pallas) though it was known from India; this probably may be due to the unavailability of type specimens. The description and illustrations presented by Tikader (1982) in his fauna of Indian spider 2(1): Araneidae Figs. 215–218 for Argiope arcuata Simon shows definitely that Argiope lobata Pallas is a different species from that of Argiope arcuata Simon. Author do not agree with Levy for synonymous placement of Argiope lobata Pallas to Argiope arcuata Simon, on basis of above remarks. Complete re-description and illustrations have been presented including internal genitalia which show considerable difference to that of Argiope arcuata Simon.

ACKNOWLEDGMENTS

The authors are very much thankful to Sri S.K. Das IFS, Prl. Chief Conservator of Forests (Admt.), Sri, K.S. Rao, IFS, Prl. Chief Conservator of Forests (WL) & Chief Wildlife Warden, Sri Hitesh Malhotra, IFS, Addl. Prl. Chief Conservator of Forests (WL), Sri A.V. Joseph IFS, Chief Conservator of Forests (WL), Andhra Pradesh and K.N. Benarji, IFS, Conservator of Forests & Field Director, Project Tiger for constant encouragement and sustained support. We are also grateful to Dr. Rajesh Gopal, IFS, Inspector General of Forests and Director Project Tiger and the MoEF, New Delhi,



Figs. 1-6: Argiope lobata, Pallas; 1. Female dorsal view (legs omitted). 2. Carapace, dorsal view. 3. Chelicera inner view showing arrangements of teeth. 4. Internal genitalia, dorsal view. 5. Epigyne, lateral view. 6. Epigyne, ventral view.

Sec. zool. Surv. India

for their consistent funding support and encouragement. We gratefully acknowledge our thanks to Dr. J.R.B. Alfred, Director, ZSI, Kolkata and Dr. Anil S. Mahabal, Scientist-E and Officer-in-Charge, Z.S.I, WRS, Pune for extending facilities. We like to acknowledge our thanks to V. Madhusudhan Reddy, Computer operator, E.R.M. Labs, Project Tiger, Srisailam, A.P.

REFERENCES

Pocock, R. I. 1900. Fauna of British India, Arachnida: 1-279.

Tikader, B.K. 1982. Fauna of India, Spiders (Araneae: Araneidae and Gnaphosidae) 2(1 & 2): 1-536.