

NEW SPECIES OF *YAGINUMAELLA* PROSZYNSKI FROM INDIA (ARANEAE: SALTICIDAE)

Jose K. Sunil*

* Department of Zoology, Deva Matha College, Kuravilangad, Kerala, India-686633, INDIA.
E-mail: sunil32@gmail.com

[Sunil, J. K. 2013. New species of *Yaginumaella* Proszynski from India (Araneae: Salticidae). Munis Entomology & Zoology, 8 (1): 63-66]

ABSTRACT: A new species of spider namely *Yaginumaella aishwaryi* sp. nov. (Fam.: Salticidae), is described from Kerala, India. Detailed morphological characters and illustrations of body and copulatory organs of the species are presented.

KEY WORDS: *Yaginumaella aishwaryi* sp. nov., new species, Salticidae, Kerala, India.

Salticids are the largest and most diverse family in India with nearly 181 described species (Siliwal, 2005). Even though their number is larger, they are one of the least studied families among Indian spiders. Previous works on Indian salticids are that of Tikader (1967, 1973, 1974, 1975, 1976, 1977), Zabkha (1981), Proszynski (1992a,b, 2000, 2003, 2012). In this paper I report the discovery of a new species of *Yaginumaella* found in India. The *Yaginumaella* is a tropical genus with nearly 38 described species from Bhutan, Nepal, Myanmar, India, China, Taiwan, Korea, Russia and Japan. Prószyński, has reported that *Yaginumaella* is closely similar to, and may well be synonymous with, *Ptocasius*. Only *Yaginumaella* species reported from India is *Y. senchalensis* Prószyński, 1992.

MATERIALS AND METHODS

The present species were collected during a study on the diversity of spiders in Kerala. Spiders were collected by methods described by Tikader (1987). Collected spiders were preserved in 70% ethyl alcohol and studied under Stereomicroscope, Leica S4E. Drawings were made with the aid of a drawing tube. All measurements are in mm taken with an eyepiece graticule. Palps were studied by clearing in 10% KOH. The species is identified by referring to Proszynski (2003). The type material is preserved in 80% alcohol and deposited in a reference collection housed at the Department of Zoology, Deva Matha College, Kuravilangad, Kerala, India. (Voucher No AR00103).

Abbreviations used are as follows: AME = Anterior median eyes, ALE = Anterior lateral eyes, PME = Posterior median eyes, PLE = Posterior lateral eyes, L = Length, W = Width, H = Height.

RESULTS

Yaginumaella aishwaryi sp. nov.

(Fig. a-f)

CARAPACE: Rectangular in outline; dorsum with two lateral dark brown bands, mid dorsal region yellowish brown and narrowed posteriorly; an oblique yellowish band present on lateral sides. Carapace highest at PLE, slightly sloping forwards and abruptly at backwards. *Eyes*: AME pearly white, ALE less pearly white. *Sternum*: Elongated and oval, slightly convex, whitish, mostly free of hairs.

Clypeus dark brown, broader, almost half the diameter of AME and equal to the diameter of ALE in width; sparsely clothed with white hairs. *Chelicerae*: Dark brown with two promarginal teeth, one retromarginal one. *Palp*: Dark brown, sperm duct clearly visible, embolus very long and circulates around bulbous, with distal end directed proximally. The tibial apophysis large and prominent. *Legs*: Black; spines long and strong, first leg dark brown, femur broader, distal half of tarsus yellowish, tibia with two distal spines; hairs on tibia, metatarsus and trochanter longer and blackish; coxae I & II dark brown, III & IV whitish. Leg formula: 4123

ABDOMEN: Elliptical and dark brown with a yellowish brown mid-dorsal patch. Anterior margin bears a tuft of white hairs. Ventrums pale yellow with a thin median dark line; posterior portion bears a pair of longitudinal dark brown patches. Lateral sides and spinnerets dark brown.

Colour in living specimens: Generally blackish, carapace and abdomen with whitish median and black lateral bands. Lateral margins of carapace also bear whitish bands. Legs black. Ocular area black, clothed with brownish hairs. All eyes black. Ventrums of abdomen clothed with whitish hairs. Book lung's region greenish yellow. Anterior coxa black, posterior coxae paler. Sternum pale, lateral margin clothed with white hairs. Maxillae black. Distal and inner margin paler, clypeus clothed with white hairs.

Measurements (in mm): Total length: 5.5L, Cephalothorax: 2.1L, 1.9W, 2.0H; Abdomen: 3.1L, 1.4W.

Measurements of the leg segments (Male).

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
I	2.0	0.7	1.3	1.3	0.8	6.1
II	1.8	0.6	1.1	1.1	0.6	5.2
III	1.5	0.5	1.0	1.0	0.5	4.5
IV	2.1	0.8	1.4	1.5	0.8	6.6

Etymology: The species name is derived from the name of the collector, Aishwarya Sunil K.

Holotype: Male: Moolampilly Island, Cochin, Kerala, India, N 9° 56' 21.2382", E 76° 15' 34.5738". Coll. Aishwarya Sunil K, 20.XI.2004.

Type deposition: Deposited at the Arachnological Collections of Department of Zoology, Deva Matha College, Kuravilangad, Kottayam, Kerala, India. (Voucher No AR00103).

Distribution: *India*: Ernakulam

DIAGNOSIS: Similar to *Y. thakkholaica* Zabkha, 1980 but distinguished by the following characters:

- 1) Longer embolus circulating around bulbous in *Y. aishwaryi*.
- 2) Abdomen oval and narrower in *Y. aishwaryi* compared to *Y. thakkholaica*
- 3) Darker eye field region present in *Y. thakkholaica* is absent in *Y. aishwaryi*.

Because of these differences this species is described as new to science.

CONCLUSION

The characters of *Y. aishwaryi* shows some differences from generic characters of *Yaginumaella* especially in the very long embolus circulating around bulbous. It is also similar to the closely related genus *Ptocasius*. Many authors like Proszynski (2003) suggested that both *Yaginumaella* and *Ptocasius* may be synonymous with each other but this is yet to be proved conclusively. While identifying the species, Proszynski also suggested that it is possible that *Y. aishwaryi* may belong to a new genus. But in the absence of a female a new genus can not be erected. If female of this species is collected at some later time species may perhaps be transferred to a new genus if female also differs strikingly from the generic characters of *Yaginumaella*.

ACKNOWLEDGEMENTS

I thank Principal, Sacred Heart College Thevara, Cochin, Kerala for facilities and encouragement. I am also grateful to Dr. Jerzy Proszynski, Poland for confirming the new identity of the species.

LITERATURE CITED

- Prószyn'ski, J.** 1992a. Salticidae (Araneae) of the Old World and Pacific Islands in several US collections. *Annls. zool., Warsz.*, 44: 87-163.
- Prószyn'ski, J.** 1992b. Salticidae (Araneae) of India in the collection of the Hungarian National Natural History Museum in Budapest. *Annls. zool., Warsz.*, 44: 165-277.
- Prószyn'ski, J.** 2000. On mostly new species of Salticidae (Aranei) from Levant. *Arthropoda Selecta*, 8: 231-262.
- Prószyn'ski, J.** 2003. Salticidae (Araneae) of the Levant. *Annls. zool. Warsz.*, 53: 1-180.
- Prószyn'ski, J.** 2012. Salticidae (Araneae) of the World; online at <http://www.salticidae.org/salticid/main.htm>
- Siliwal, M., Sanjay Molur & Biswas, B. K.** 2005. Indian spiders (Arachnida: Araneae) Updated checklist 2005. *Zoosprint J.*, 20 (10): 1999-2050.
- Tikader, B. K.** 1967. Studies on some Salticidae spider from Sikkim, Himalaya, India. *Proc. Indian Acad. Sci.*, 66 (B): 117-122.
- Tikader, B. K.** 1973. Studies on some jumping spiders from India (Family: Salticidae). *Proc. Indian Acad. Sci.*, 78 (B): 68-72.
- Tikader, B. K.** 1974. Studies on some jumping spiders of the genus *Phidippus* from India (Family: Salticidae). *Proc. Indian Acad. Sci.*, 79 (B): 120-126.
- Tikader, B. K.** 1975. Some jumping spiders of the genus *Zygoballus* from India (Family: Salticidae). *Proc. Indian Acad. Sci.*, 81 (B): 150-153.
- Tikader, B. K.** 1976. Redescription of a jumping spider *Harmochirus brachiatus* (Thorell) with a new record from India. *J. Bombay nat. Hist. Soc.*, 73: 410-411.
- Tikader, B. K.** 1977. Studies on spider fauna of Andaman and Nicobar islands, Indian Ocean. *Rec. zool. Surv. India* 72: 153-212.
- Tikader, B. K.** 1987. Hand Book on Indian spiders, *Zool. Surv. India, Kolkata.*, p. 251.
- Zabka, M.** 1981. Salticidae from Kashmir and Ladakh (Arachnida, Araneae). *Senckenberg. biol.*, 61: 407-413.

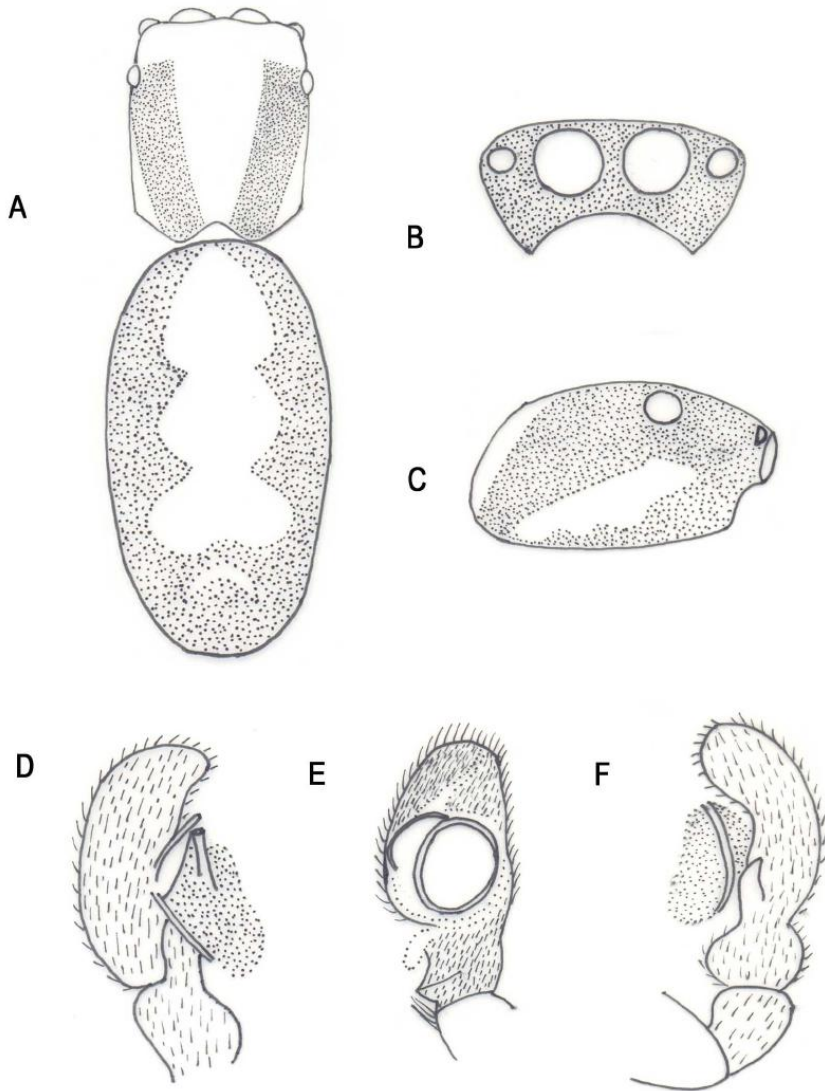


Figure 1. *Yaginumaella aishwaryi* sp. nov. male, A. Dorsal view, B. Eyes, frontal view, C. Carapace, lateral view, D–F. Palp.