

**JUMPING SPIDERS OF BANGLADESH : GENUS *PLEXIPPUS* KOCH
(ARANEAE : SALTICIDAE)**

V. BISWAS* and D. RAYCHAUDHURI

*Entomology Laboratory, Department of Zoology,
University of Calcutta, 35, Ballygunge Circular Road,
Calcutta 700 019, India*

INTRODUCTION

'Salticidae' or 'Jumping spiders' are one of the common predators of insects in different habitats. Among the pioneer workers on this group of spiders Pocock (1900) and Narayan (1915) made excellent contribution from the Indian sub-continent. Afterwards, Bradoo (1980), Tikadar (1966, '67, '73a, b, '74a, b, '75, '76, '77a, b) and Tikadar and Biswas (1981) made a series of contribution on the salticids of India. Recently, Proszynski (1992) and Biswas and Biswas (1992) made a valuable contribution on Salticidae from India.

On the contrary, Chowdhury and Pal (1984), Biswas, *et al.* (1993) and Okuma, *et al.* (1993) recorded a few salticids from Bangladesh. The present paper deals with the genus *Plexippus* Koch represented by two species from Bangladesh. Of these, one *P. wesolowskai* is recognised as new to science and other one, *P. paykulli* (Audouin) is a new record from the area. The new species is described and illustrated.

1. *Plexippus paykulli* (Audouin)

1825. *Attus paykulli* Audouin, *Descr. Egypt.*, 22 : 172.

1850. *Plexippus paykulli* Koch, *Meb. Ar. Syst.* 5 : 51.

1989. *Plexippus paykulli* Chen & Zhang, *Fauna of Zhejiang*, Araneida, 356p.

Specimen examined · 2♀, Harinkhana, Dist. Bagerhat, 18. V. 1991; 4♀, Shikerpur, Dist. Jhenaidah, 12. VIII. 1992; 2♀, 1♂, Dist. Kustia 19. VII. 1993; 1♀, Japhlong, Dist. Sylhet, 28. XII. 1993; 2♀, Dist. Rajshahi, 4. III. 1992; 1♀, Tangail, 19. X. 1993. 3♀, Manikganj, 12. V. 1993.

Distribution ; BANGLADESH : Bagerhat, Jhenaidah, Kustia, Manikganj, Sylhet, Rajshahi, Tangail ; AMERICA ; AFRICA; BURMA; CHINA; INDIA; JAPAN; SRILANKA; EUROPE.

* Department of Zoology, Government P. C. College, Bagerhat- 9301, Bangladesh.

2. *Plexippus wesolowskai* n. sp.

(Figs. 1 to 5)

General : Cephalothorax dark brown; legs light brown; abdomen brown. Total body length 6.80mm. Carapace 3.40mm long, 2.50mm wide; abdomen 3.20mm long, 2.20mm wide, Legs as in Table-1.

Cephalothorax : broader, longer than wide, posteromedially broad, anteriorly narrowing; dorsum decorated with a black band and a posterior longitudinal and transverse white bands. Eyes pearly-white; anterior row recurved, ringed with basal band, anteromedians twice larger than anterolaterals; 2nd row of eyes minute; posterior row straight, placed marginally (Fig. 1), Chelicerae long, cylindrical, inner margin with 2 teeth (Fig. 2). Maxillae anteriorly broad, posteriorly narrowed, scopulate (Fig. 3). Labium wide, apple-shaped, scopulate anteriorly (Fig. 3). Sternum elongate, vase-shaped, posteriorly produced and pointed (Fig. 4). Legs strong and stout; tibiae and metatarsi of I and II with strong spines; leg formula 4312 and the measurements (in mm) in Table-1. Male palp as in Fig. 5.

Table-1 : Measurements (in mm) of different parts of legs of *Plexippus wesolowskai* n. sp.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
I	1.0/1.0	0.3/0.3	0.7/0.7	0.7/0.7	0.4/0.4	3.1//3.1
II	0.9/0.9	0.3/0.3	0.6/0.6	0.6/0.6	0.4/0.4	2.8/2.8
III	1.2/1.2	0.4/0.4	0.8/0.8	0.8/0.8	0.5/0.5	3.7/3.7
IV	1.3/1.3	0.4/0.4	0.9/0.9	0.9/0.9	0.6/0.6	4.1/4.1

Abdomen : Elongately oval, pointed posteriorly, medially wide; dorsum with 2 black and 1 longitudinal white band extending from anterior margin upto the posterior extremity.

Female : Unknown.

Holotype : Male in spirit,

Type-locality : BANGLADESH ; Bangerhat, Khulna; date 12. IV. 1992; Coll. V. Biswas.

This species resembles *Plexippus paykulli* (Audouin) (Tikader, 1967; Yaginuma, 1986) but can be separated by the following characters:

1. Male palp without tibial apophysis.
2. Thoracic fovea absent.
3. Middle row of eyes closer to the anterior row and
4. Sternum elongate and wide in front.

SUMMARY

The jumping spiders of the genus *Plexippus* Koch in Bangladesh is represented by two species *P. paykulli* (Audouin) and *P. wesolowskai* n. sp.

Studies on our collection of spiders, recorded since 1988, has revealed the existence of two species.

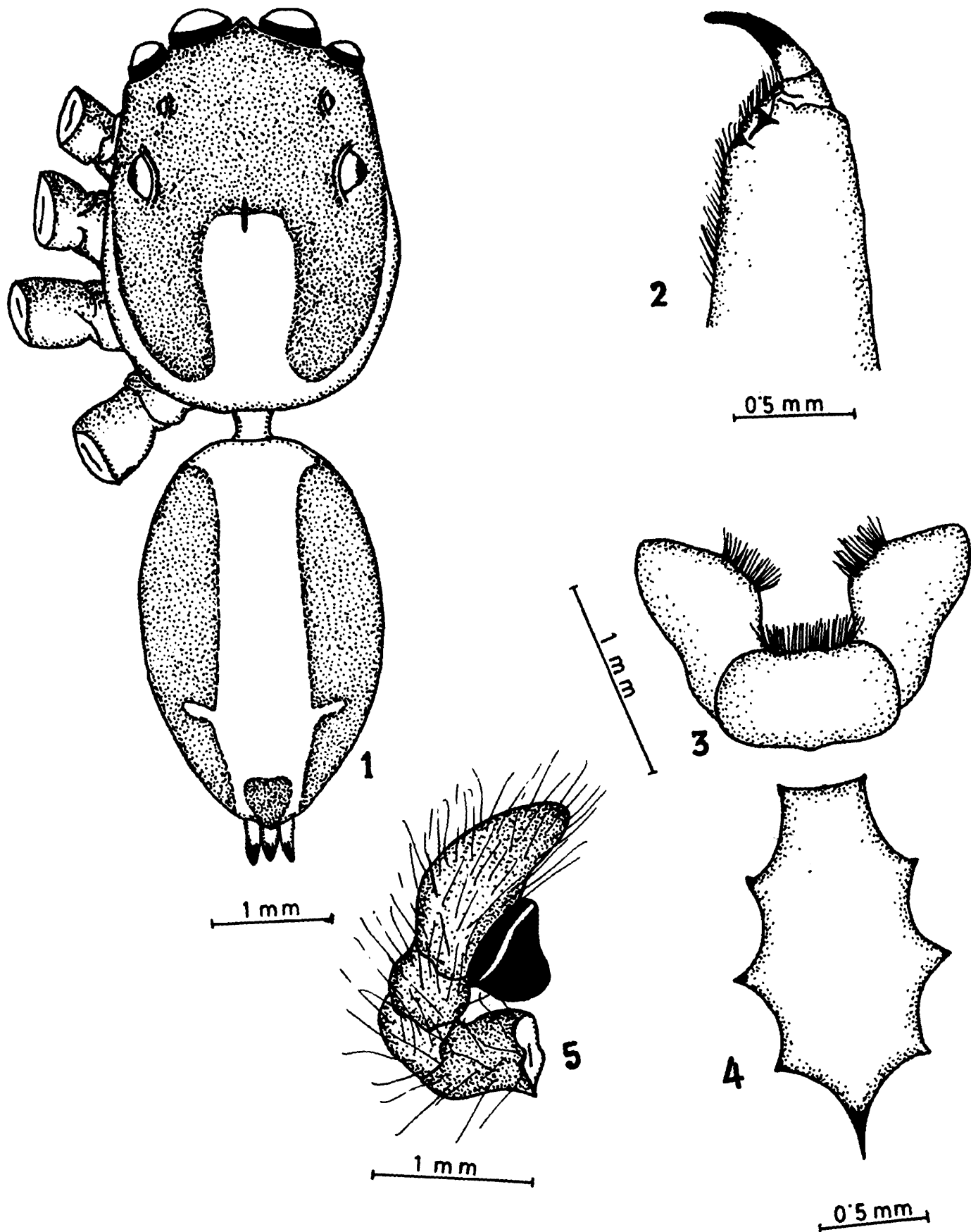


Plate-1 : Figs 1-5, *Plexippus wesolowski* n. sp.

Fig. 1: Whole body (dorsal view); Fig. 2: Chelicerae; Fig. 3: Maxillae and Labium; Fig. 4: Sternum; Fig. 5: Male palp (lateral view)

(indicated above) of *Plexippus* in Bangladesh. Identity of the species were later confirmed by the Zoological Survey of India, Calcutta.

The types are at present in the collection of the Department of Zoology, Government P. C. College, Bagerhat, but will be deposited to the Museum of the Department of Zoology, University of Dhaka, Dhaka-1000, Bangladesh.

ACKNOWLEDGEMENTS

The authors are thankful to Dr. S. C. Majumder, Scientist-'SD' Sunderban Field Research Station, Zoological Survey of India, Canning, West Bengal, for the confirmation of the identity of the species and to the Head, Department of Zoology, University of Calcutta for providing laboratory facilities.

REFERENCES

- Biswas, B. K. and K. Biswas, 1992. State Fauna Series-3; Fauna of West Bengal, Araneae; Spiders : 357-500
- Biswas, V., H. R. Khan, N. Q. Kamal and A. Begum, 1993. A preliminary study of the rice-field spiders in Jhenaidah, Bangladesh. *Bangladesh J. Zool.*, 21 (2) : 85-92.
- Bradoo, B. L. 1980. A new ant-like spiders of the genus *Myrmarachne* MacLeay (Salticidae) from India. *Curr. Sci.* (Bangalore), 49 (10) : 387-388.
- Chowdhury, S. H. and S. K. Pal, 1984. Further report on rice-field spiders from Bangladesh. Chittagong University Studies II. 8 ; 25-39.
- Narayan, K. 1915. Notes on ant-like spiders of the family Attidae in the collection of Indian Museum. *Rec. Indian Mus.* Calcutta, II (5) ; 393-406.
- Okuma, C., N. Q. Kamal, Y. Hirashima, Z. Alam and T. Ogata, 1993. Illustrated monograph on the spiders of Bangladesh. IPSA-JAICA, Salna, Gazipur : 1-93p.
- Pocock, R. I. 1900. *The Fauna of British India* (Arachnida). Taylor and Francies, London. XII + 279p.
- Proszynski, J. 1992. Salticidae (Araneae) of India in the collection of the Hungarian National Natural History Museum in Budapest. *Ann. Zool. Warszawa*, 44 (9) ; 165-277.
- Tikader, B. K. 1966. Studies on spider fauna of Khasi and jaintia Hills, Assam, India. *J. Assam Sci. Soc.*, IX : 1-16.
- Tikader, B. K. 1967. Studies on some Salticidae spiders from Sikkim Himalaya, India. *Proc. Indian Acad. Sci.* 66 (4) : 177-122.
- Tikader, B. K. 1973a. Studies on some ant-like spiders form India (Family : Salticidae). *Proc. Indian Acad. Sci.*, 78 (2) : 59-67.
- Tikader, B. K. 1973b. Studies on some jumping spiders from India (Family : Salticidae). *Proc. Indian Acad. Sci.*, 78 (2) : 68-72.
- Tikader, B. K. `1974a. Studies on some jumping spiders of the genus *Phidippus* from India (Family : Salticidae). *Proc. Indian Acad. Sci.*, 79 (3) : 120-126.

- Tikader, B. K. 1947b. Studies on some jumping spiders of the genus *Marpissa* from India (Family : Salticidae). *Proc. Indian Acad. Sci.*, **79** (5) : 204-215.
- Tikader, B. K. 1975. Studies on jumping spiders of the genus *Zygoballus* from India (Family : Salticidae). *Proc. Indian Acad. Sci.*, **81** (4) : 150-153.
- Tikader, B. K. 1976. Description of *Harmochirus brachiatus* (Thorell) (Araneae : Salticidae), A new record from India. *J. Bombay nat. Hist. Soc.*, **73** (2) : 410-411.
- Tikader, B. K. 1977a. Description of two new species of jumping spiders of the genus *Phiddipps*. (Family : Salticidae) from India, *Entomon.*, **2** (1) ; 97-99.
- Tikader, B. K. 1977b. Description of two new species of jumping spiders of the genus *Rhene* (Family : Salticidae) from India. *Proc. Indian Acad. Sci.*, **85** (5) ; 274-277.
- Tikader, B. K. and B. Biswas, 1981. Spider fauna of Calcutta and vicinity. *Rec. zool. surv. India, Occ. Pap. No. 30* : 1-149.
- Yaginuma, T 1986. *Spiders of Japan in colour* (new ed.). Hoikusha Pub. Co., Osaka, 305p.