

JUMPING SPIDERS OF BANGLADESH : GENUS *MARPISSA* KOCH

(ARANEAE : SALTICIDAE)

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INTRODUCTION

'Jumping spiders' (Salticidae) of the genus *Marpissa* Koch are one of the important predators of insect pests in the garden and crop-fields. Works on this spiders in this Sub-continent is scarce. In India, Pocock (1900), Narayan (1915), Tikader (1967, '74a, b, '75, '77a, b), Tikader and Biswas (1981), Biswas and Biswas (1992) and Proszynski (1992) reported salticid spiders in different times in which very few species were under the genus *Marpissa*. In Bangladesh, Chowdhury and Pal (1984), Biswas, et. al., (1993), Okuma, et. al., (1993) and Biswas and Raychaudhuri (1997) recorded few salticids but there is no report on this genus. Kamal, et. al., (1992) reported *M. calcuttaensis* Tikader from the paddy fields in Bangladesh. Works on this spiders was done in various places of the world by different authors (Cutler, 1985; Chikuni, 1989; Locket & Millidge, 1951; Proszynski 1990; Ikeda, 1993; Yaginuma, 1986; Zabka, 1980a, b, '85, '87).

In view of the importance of spiders as biological control agents, the present paper is a part of the survey of the 'spider fauna of Barisal division', Bangladesh. It contains description of a new species *M. proszynskii* together with the taxonomic position of another species *M. bengalensis* Tikader which is a new record from the area.

Genus : *Marpissa* Koch, 1846

1846. *Marpissa* Koch, Die Arachn., 13 : 56.

1992. *Marpissa* : Biswas & Biswas, Fauna of West Bengal, Araneae, 3 : 388.

Type-species : *Marpissa muscosa* Clerck.

Distribution : AMERICA; ASIA; AUSTRALIA; EUROPE.

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1. *Marpissa bengalensis* Tikader

1974. *Marpissa bengalensis* Tikader, Proc. Indian Acad. Sci., 79 (5) : 212.

1992. *Marpissa bengalensis* : Biswas & Biswas, Fauna of West Bengal, Araneae, 3 : 391.

Material examined : 2 ♀, Kawkhali, Dist. Barisal, 18. VII. 1995, Coll. V. Biswas; 1 ♀, Mathbaria, Dist. Pirojpur, 25. IX. 1995, Coll. V Biswas; 1 ♀, Dist. Jhalokathi, 12. X. 1995, Coll. V. Biswas; 2 ♀, Potuakhali, 15. VIII. 1995, Coll. V. Biswas.

Distribution : BANGLADESH : Barisal, Pirojpur, Potuakhali, Jhalokathi; INDIA, West Bengal.

2. *Marpissa proszynskii* sp. nov.

(Figs. 1-5)

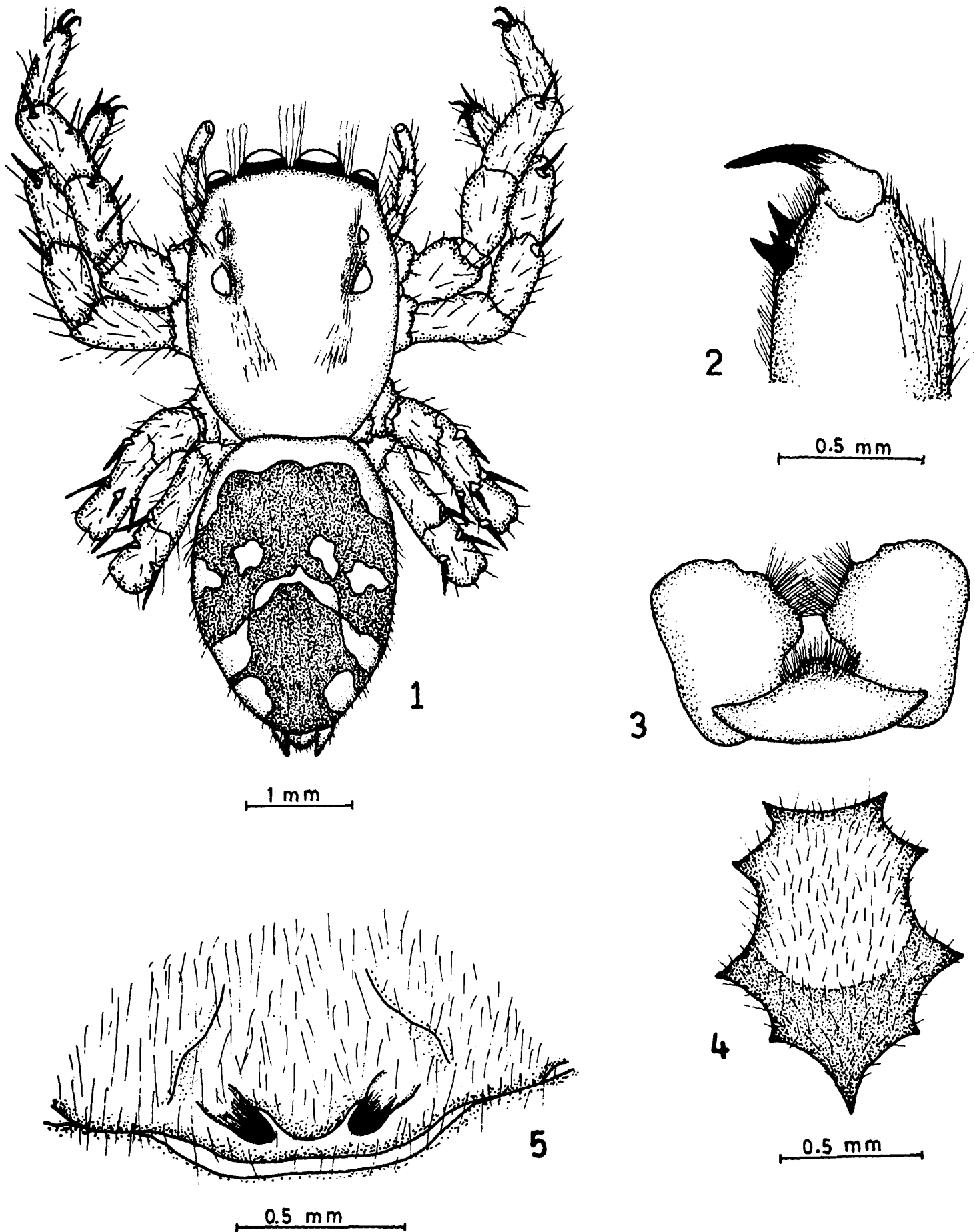
General : Cephalothorax brown, legs yellow-brown; abdomen pale-brown, with dark brown bands. Total body length 5.60 mm. Carapace 2.80 mm long, 2.00 mm wide; abdomen 3.00 mm long, 2.00 mm wide.

Cephalothorax : Longer than wide, both anterior and posteriorly narrowing, medially broad, clothed with hairs and pubescence; cephalic region raised, anterior margin slightly curved. Eyes pearly-white, dissimilar, anterior row of eyes recurved; anteromedians nearly $2\frac{1}{2}$ times larger than the anterolaterals; 2nd row of eyes minute; posterior row of eyes straight; ocular trapezium longer than wide (fig. 1). Chelicerae brown, broad, thick, with one sharp tooth on inner margin and 2 on outer margin (fig. 2). Maxillae and labium pale brown; maxillae little longer than wide, anteriorly scopulate (fig. 3); labium wider basally, bell-shaped, scopulate anteriorly (fig. 3). Sternum pale brown, wider postero-medially, posteriorly pointed (fig. 4), clothed with long, sharp hairs and few spines. Legs pale brown, slender, I and II robust, clothed with hairs and tibiae and metatarsi with strong spines (fig. 1); leg formula 1243 and the measurements (in mm) as in Table-1.

Leg	Femur	Patella	Tibia	Metatarsus	Tarsus	Total
I	1.5/1.5	0.9/0.9	1.0/1.0	0.9/0.9	0.6/0.6	4.9/4.9
II	1.3/1.3	0.9/0.9	1.0/1.0	0.8/0.8	0.5/0.5	4.5/4.5
III	1.3/1.3	0.8/0.8	1.0/1.0	0.7/0.7	0.5/0.5	4.3/4.3
IV	1.3/1.3	0.9/0.9	1.0/1.0	0.7/0.7	0.5/0.5	4.4/4.4

Table-1. Measurements (in mm) of different parts of legs of *Marpissa proszynskii* sp. nov.

Abdomen : Oval, anteriorly little wide, posteriorly narrowed, dorsum decorated with few black bands, clothed with hairs and pubescence (fig. 1), ventrally pale, with irregular brown spots; epigyne as in fig. 5.



Figs. 1-5 : *Marpissa prozyskii* sp. nov. 1. Dorsal view of female 2. Chelicera 3. Labium and Maxillae 4. Sternum 5. Epigynum

Male : Unknown.

Holotype : Female in spirit.

Types are at present in the Department of Zoology, Government P. C. College, Bagerhat and will be deposited to the Museum of the Department of Zoology, University of Dhaka, Dhaka-1000, Bangladesh in due course of time.

Etymology : The species is named after the famous Polish-Arachnologist professor Dr. Jerry Proszynski.

Type-locality : BANGLADESH : Pirojpur, Barisal; date 8. V 1995, Coll. V. Biswas.

Diagnosis : The present species *M. proszynskii* sp. nov. differs with *M. decorata* Tikader (Tikader, 1974) in the following characters :

1) The external appearance of the present species shows a little similarity with *M. decorata* Tikader.

2) The epigynum of the present species structurally differs with *M. decorata* and any of its Indian congeners (Tikader, 1967; Tikader & Biswas, 1981; Biswas & Biswas, 1992) and species known from elsewhere (Proszynski, 1992; Davies & Zabka, 1989; Chen & Zhang, 1989; Locket & Millidge, 1951; Ikeda, 1993 and Chikuni, 1989).

Therefore, the species is described as new to science.

SUMMARY

The jumping spiders of the genus *Marpissa* Koch of Barisal division, Bangladesh, is represented by 2 (two) species *M. bengalensis* Tikader and *M. proszynskii* sp. nov.

Studies on spiders of this area started since 1994, have revealed the existence of above two species of the genus *Marpissa* of a particular area of Bangladesh. Identity of the species were later confirmed by the Zoological Survey of India, Calcutta.

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