

ON A COLLECTION OF DAMSELFLIES
(COENAGRIONIDAE : ODONATA)
FROM DISTRICT BHARATPUR (RAJASTHAN)

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INTRODUCTION

Adams (1899) has recorded for the first time these insects from Rajasthan under the general heading Neuroptera. He did not record a single species by name but mentioned only the family Libellulidae. Fraser (1933) and Kumar and Prasad (1981) have reported some species from North-West India. Agrawal (1957), Bose and Mitra (1976), Prasad and Thakur (1981) and Thakur (1985) have recorded a large number of Odonata from the different parts of Rajasthan.

Topographically Bharatpur is located in the eastern region of Rajasthan. Gurgaon, Morena, Agra and Alwar are situated in north, south, east and west directions of Bharatpur, respectively. Mathura and Sawai-Madhopur are also adjoining places to Bharatpur.

The present paper is based on a small collection of damselflies collected from different parts of Bharatpur district (Rajasthan). Following is the list of species recorded for the first time from Bharatpur.

Family COENAGRIONIDAE

Subfamily ISCHNURINAE

Ischnura senegalensis Rambur

1842. *Agrion senegalensis* Ramb., *Ins. Neurop.*, : 276.

1933. *Ischnura senegalensis* Fraser, *Fauna Brit. India*, Odonata, 1 : 348-418.

1981. *Ischnura senegalensis* Kumar & Prasad, *Rec. zool. Surv. India, Occ. Pap.*, No. 20 : 39.

Specimens Collected : 2 ♂♂, Bharatpur, 27.8.83; 1 ♂, Deeg, 29.8.83; 1 ♂, 1 ♀, Ghana, 21.9.83; 1 ♂, 1 ♀, Bari, 16.9.84; 3 ♂♂, Kama, 26.9.84.

Measurements : Male - Abdomen, 22 mm; fore wing, 17 mm; hind wing, 16 mm
Female - Abdomen, 24 mm; fore wing, 18 mm, hind wing, 16 mm.

Known distribution : Throughout India, Burma, Ceylon and extending to most of African countries.

Remarks : The specimens differ from the description of the species as given in the Fauna of British India, as follows :

In male : Post ocular spots greenish yellow in colour and Superior anal appendages about two-third the length of 10th segment. In female Labrum black in colour.

***Ischnura elegans* Vander Linden**

1823. *Agrion elegans* Vander Lind., *Opusc. Sci*, 4 : 104.

1933. *Ischnura elegans* Fraser *Fauna Brit. India*, Odonata, 1 : 351-354.

Specimens collected : 1 ♂, Deeg, 29.8.83; 2 ♂♂, Dholpur, 7.9.83; 1 ♂, Ghana, 21.9.83.

Measurements : Male - Abdomen, 23 mm, fore wing, 17 mm; hind wing 15 mm.

Known distribution : North west India and Baluchistan.

Remarks : In male Post ocular spots green in colour.

***Ischnura annandalei* Laidlaw**

1919. *Ischnura annandalei* Laid., *Rec. Indian Mus.*, 16 : 175-177.

1933. *Ischnura annandalei* Fraser, *Fauna Brit. India*, Odonata, 1 : 351-354.

Specimens collected : 2 ♂♂, 2 ♀♀, Bharatpur, 27.8.83; 3 ♂♂, 2 ♀♀, Dholpur, 7.9.83; 1 ♂, 1 ♀, Bari, 16.9.84; 2 ♂♂, Kama, 26.9.84.

Measurements : Male - Abdomen, 17 mm; fore wing, 12 mm; hind wing, 10 mm. Female - Abdomen, 19 mm; fore wing, 12 mm; hind wing, 12 mm.

Known distribution : India (Rajasthan), North Shan States and Burma.

Remarks : Specimens differs from the description of the species as follows : In Male Basal segment of antennae yellowish green. Broad quadrate basal spot absent on 10th segment. Inferior anal appendages shorter than superior anal appendages. In female Humeral region dull red in colour.

***Ischnura aurora* (Brauer)**

1858. *Agrion delicatum* Hagan, *Verh. zool. bot. Ges. Wien.*, 8 : 479.

1933. *Ischnura delicata* Fraser, *Fauna Brit. India*, Odonata, 1 : 360-362.

1981. *Ischnura delicata* Kumar & Prasad, *Rec. zool. Surv. India Occ. Pap.*, No. 20 : 38-39.

Specimens collected : 2 ♂♂, Bharatpur, 27.8.83; 1 ♂, 1 ♀, Deeg, 29.8.83; 1 ♂, Dholpur, 7.9.83; 2 ♂♂, 1 ♀, Bari, 16.9.84.

Measurements : Male - Abdomen, 19 mm; fore wing, 12 mm; hind wing, 12 mm.

Known distribution : Throughout India, Sri Lanka, Burma, Malaysia, The Sondaic Archipelago, Borneo, New Guinea, Australasia, Phillipines, Samosa.

Remarks : In Male - Basal segment of antennae yellowish green. Inferior anal appendages shorter than superior anal appendages.

Subfamily PSEUDAGRIONINAE

***Ceriagrion coromandelianum* Fabr.**

1798. *Agrion coromandelianum* Fabricius, *Ent. Syst. Suppl.*, : 287.

1933. *Ceriagrion coromandelianum* Fraser, *Fauna Brit. India*, Odonata, 1 : 315.

1971. *Ceriagrion coromandelianum* Prasad & Singh, *Rec. zool. Surv. India* 70 : 121-123.

1981. *Ceriagrion conomandelianum* Kumar & Prasad, *Rec. zool. Surv. India Occ. Pap.*, No. 20 : 36-37.

Specimens collected : 5 ♂♂, 1 ♀, Bharatpur, 27.8.83; 2 ♂♂, 2 ♀♀, Deeg, 29.8.83; 4 ♂♂, 1 ♀, Dholpur, 7.9.83; 3 ♂♂, 2 ♀♀, Ghana, 21.9.83; 2 ♂♂, 1 ♀, Bari, 16.9.84; 3 ♂♂, Kama, 26.9.84.

Measurements : Male - Abdomen, 29 mm; fore wing, 20 mm; hind wing, 19 mm; Female - Abdomen, 28 mm; fore wing, 21 mm; hind wing, 19 mm.

Known distribution : Throughout India, Nepal, Sri Lanka, South China, Malaysia, Indo-china and Burma.

Remarks : In Male : Eyes gray in colour.

Ceriagrion erubescens Selys

1891. *Ceriagrion coromendalium* race *erubescens* Selys, *Ann. Mus. civ Genova* (2) 10 : 516.

1933. *Ceriagrion erubescens* Fraser, *Fauna Brit. India*, Odonata, 1 : 315.

Specimens collected : 1♂, Bharatpur, 17.8.83; 2♂♂, Ghana, 21.9.83.

Measurements : Male - Abdomen, 29 mm; fore wing, 21 mm; hind wing, 19 mm.

Known distribution : Burma, Indo-China and Malaysia.

Remarks : 11 Post nodal nervures in fore wing and Abdomen yellowish orange in colour. It is recorded for the first time for India.

Pseudagrion malabaricum Fraser

1931. *Pseudagrion malabaricum* Fraser, *Rec. Indian Mus.*, 26 : 428, 494-495.

1933. *Pseudagrion malabaricum* Fraser, *Fauna Brit. India*, Odonata, 1 : 284-286.

Specimens collected : 3 ♂♂, 1 ♀, Deeg, 29.8.83; 2 ♂♂, 2 ♀♀, Ghana, 21.9.83; 1 ♂, Kama, 26.9.84.

Measurements : Male - Abdomen, 34 mm; fore wing, 22 mm; hind wing, 20 mm; Female - Abdomen, 23 mm; fore wing, 19 mm; hind wing, 17 mm.

Known distribution : South Kanara to Sri Lanka.

Remarks : In Male 10th segment black on dorsum. In female Ground colour of 2nd segment orange. It is recorded for the first time from Rajasthan.

Subfamily AGRIOCNEMIDINAE

Agriocnemis pygmaea Rambur

1842. *Agriocnemis pygmaea* Ramb. *Ins. Neurop.*, : 278

1933. *Agriocnemis pygmaea* Fraser, *Fauna Brit. India*, Odonata, 1 : 398-401.

1971. *Agriocnemis pygmaea* Sahn, *Bull. Ent.*, 12(2) : 69-84.

1976. *Agriocnemis pygmaea* Prasad & Singh, *Rec. zool. surv. India*, 72 : 121-123.

1981. *Agriocnemis pygmaea* Kumar & Prasad, *Rec. zool. Surv. India, Occ. Pap.*, No. 20 : 40.

Specimens collected : 1 ♂, 7 ♀♀, Bharatpur, 27.8.83; 3 ♀♀, Deeg, 29.8.83; 2 ♂♂, 6 ♀♀, Ghana, 21.9.83; 2 ♀♀, Bari, 16.9.84; 1 ♂, 3 ♀♀, Kama, 26.9.84.

Measurements Male - Abdomen, 17 mm; fore wing, 12 mm; hind wing, 10 mm; Female - Abdomen, 19 mm; fore wing, 13 mm; hind wing, 12 mm.

Known distribution : Throughout India and oriental region, Australia and Pacific Islands.

Remarks : The specimens differs from the description as given in the Fauna of British India, as follows :

In Male a broad dorsal thistle shaped marking on segment two species.

In Female Post ocular spots and stripe between eye spots yellowish red in colour.

SUMMARY

8 species of damselflies have been recorded for the first time from district Bharatpur (Rajasthan). Out of these *Ceriagrion erubescens* Selys is recorded for the first time from India. Differences from Fraser's (1933) description have been noted.

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