

A NOTE ON THE HETEROCHROMOUS FEMALE OF *PALPOPLEURA S. SEXMACULATA* (FABRICIUS) (ANISOPTERA: LIBELLULIDAE)

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Abstract – The sp. is well known for its considerable variation at various localities. Here, a single “heterochromous” specimen is described and il-

lustrated. Its size is small, but it is unclear whether or not this is correlated with its wing coloration.

Introduction

Polymorphism in female *Palpopleura sexmaculata* in India is not well evident. Only the exceptional preapical spot in the hind wings of *P. s. sexmaculata* has so far been recorded (FRASER, 1936).

Recently (28-III-1996), while studying the behavioural patterns and seasonal ecology of some dragonflies at Asan Reservoir in Dehra Dun, India, I collected three mature females *P. s. sexmaculata* in courtship. One of these appears heterochromous, and is described here (Fig. 2), varying distinctly from the patterns, described by FRASER, 1936 (Tab. I). The specimens are deposited in the National Zoological Collection at Zoological Survey of India, Dehra Dun.

Description

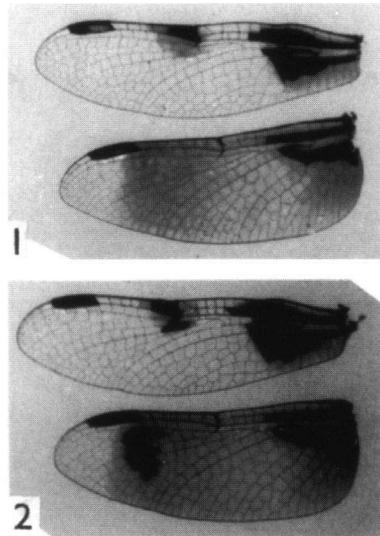
Abdomen 12 mm, hind wing 16.5 mm.

H e a d: Labium, labrum & face, including whole of frons greenish yellow. Ocelli dark brown. - **T h o r a x:** Prothorax brownish, except the base of anterior lobe, sides of posterior lobe

and a subdorsal spot on each side of middle lobe. These areas are entirely black. Dorsum of the thorax dark brown, sides brownish. Wings broadly marked with blackish brown and black spots and deeply tinted with amber-yellow. Distribution of spots on the wings are as follows: A black spot at node in fore wings covering 2 cells proximal to node. A black streak in subcostal space running from base and ends 4 cells before node and overlapping costal space for a few cells near its middle. A streak between sectors of arc occupying 5 cells. Another stripe in cubital space extending from base nearly to whole of subtrione, discoidal cell and a large anal area. A dark brown spot extending 2 cells present just below the nodal spot. Spots are similar in the hind wing, but the subcostal stripe not extending into costal stripe. The intersector stripe extending 3 cells only. A large

Table I – Comparison of dissimilar characters between the usual (FRASER, 1936) and the heterochromous female specimen of *P. s. sexmaculata*

Character	“Normal”	Heterochromous
Size:		
Abdomen	13-14 mm	12 mm
Hind wing	18-21 mm	16.5 mm
Colour:		
Body	Yellowish to ochreous	Brownish
Ocelli	Orange	Dark brown
Legs	Bright yellow, flexor surface of tibiae, tarsi and outer sides of middle and anterior pairs of femora black	Blackish brown changes to black towards tibiae, tarsi and claws
An extra subnodal spot in fore wing	Absent	Present
Preapical spot in the hind wing	Absent	Present
Cubito-anal spot in the hind wing	Less extended	Widely extended
Nodal index	6-11½ / 5-7 , 10½-6 / 8-5	6-11½ / 5-9 , 11½-6 / 9-5



Figs 1-2. *Palpopleura s. sexmaculata*: (1) usual form; (2) heterochromous specimen.

preapical brown spot present beneath the pterostigma. Neuration in the dark areas golden yellow; pterostigma black for distal half, creamy yellow for proximal, nodal index: 6-11½ / 5-9, 11½-6 / 9-5. Legs blackish brown, changes to black towards tibiae, tarsi & claws. – **A b d o m e n**: Brownish with a mid-dorsal stripe of black extending from segment 3 to end, anal appendages black and shortly conical.

Discussion

This heterochromous female differs from the usual type in its small size, body colour, colour of legs, presence of an extra subnodal spot in the fore wings as well as a preapical spot in the hind wings and in the size of the cubito-anal spot. However, as the

species shows great variation, and I have only a single specimen, the conclusion can only be preliminary.

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Reference – FRASER, F.C., 1936, *The fauna of British India, Odonata*, Vol. 3, Taylor & Francis, London.

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