SIGHTING OF RUDDY MEADOW SKIMMER NEUROTHEMIS INTERMEDIA (RAMBUR, 1842) (INSECTA: ODONATA: LIBELLULIDAE) IN DELHI, INDIA

1* RAJESH CHAUDHARY

1* Department of Biomedical Science, Acharya Narendra Dev College (University of Delhi), Govindpuri, Kalkaji, New Delhi-19.

Corresponding: rajeshchaudhary@andc.du.ac.in

Reviewer: Peter Smetacek

The dragonfly, Ruddy Meadow Skimmer (Paddyfield Parasol) Neurothemis intermedia (Rambur, 1842) is widely distributed in India, Sri Lanka and many South-East Asian countries (Fraser, 1936; Subramanian, 2009; Singh, 2022). In India, it is found throughout peninsular India, Bengal, Assam, and Sikkim (Fraser, 1936; Subramanian, 2009). In northwest India, it has been reported from the states of Uttarakhand, Uttar Pradesh, Punjab, Himachal Pradesh, Harvana and Rajasthan (Singh, 2022). Despite its widespread occurrence in northwest India, it has not been reported from Delhi (Kumar, 1997; Singh, 2022). This dragonfly is usually found in grasslands, marshy vegetations near ponds and lakes, and paddy fields (Suri Babu, 2000; Subramanian, 2009; Singh, 2022). It is seen on the throughout the year except during winter months as long spells of cold temperature slow down the development of larval stage (Suri Babu, 2000).

Males of the Ruddy Meadow Skimmer have a bright red abdomen with brownish ventro-lateral stripes; rusty-brown thorax; transparent wings with an amber-yellow patch at the base of both the pairs of wings. Females are similar to males, but have more defined ventro-lateral abdominal markings; pale-yellow wings, and lack the amber-yellow patch at the

base (Fraser, 1936; Subramanian, 2009; Singh, 2022). An andromorphic form of female Ruddy Meadow Skimmer has been reported in one instance from central India (Prasad, 2000; Joshi *et al.*, 2020).

An individual of Neurothemis intermedia was observed in the residential area in northwest Delhi (28° 42′ 30″ N, 77° 07′ 49" E) on 2nd August 2020, at 10:30 am. The dragonfly was roosting on a cable wire, and was photographed using digital SLR camera (Figure 1). The features of dragonfly notable from the photographs include-pale labrum, clypeus and frons; eyes - reddish-brown above and pale-grey below: thorax, rusty-brown and bright red abdomen with ventro-lateral blackishbrown stripes interrupted at apical end of the segments; both pairs of wings with amber-yellow base and dark reddishbrown pterostigma. These features are indicative of the individual being a male. However, it possessed female-like anal appendages (Figure 1C). Thus, observed individual of Ruddy Meadow Skimmer was an andromorphic form of female

The observed Ruddy Meadow Skimmer could be a vagrant to Delhi. It is also possible that the species is a resident of Delhi, and the observed individual has migrated into the residential area from its

nearby natural habitat (agricultural farms and water bodies).

This communication therefore reports the sighting of Ruddy Meadow Skimmer *Neurothemis intermedia* in Delhi for the first time. Also, the sighted individual was an andromorphic female, the occurrence of which, to the best of our knowledge, has been reported only once in the literature (Prasad, 2000; Joshi *et al.*, 2020).

ACKNOWLEDGEMENTS

The author is grateful to Dr. K. A. Subramanian for confirmation of the identity of the dragonfly. The author acknowledges Mr. Dheerendra Singh for sharing his experiences regarding *Neurothemis intermedia*, and improving the content of the manuscript.

REFERENCES

Fraser, F.C. 1936. *The Fauna of British India including Ceylon and Burma*. Vol. III; Taylor and Francis, London. pp 357-360.

Joshi, S., N. van der Poorten, A. Sumanapala, E. Nielsen, J. Patel, B. Nielsen, D. Sawant & M. Sherif. 2020. New records of polymorphism in Asian

Libellulid dragonflies (Insecta: Odonata). *International Journal of Odonatology* 23(4): 337-356.

Kumar, A. 1997. Fauna of Delhi, Odonata: larval stages. Zoological Survey of India; pp. 161-172.

Prasad, M., P. P. Kulkarni & S. S. Talmale. 2000. New record of andromorphic females in two species of *Neurothemis* dragonflies (Odonata: Libellulidae) from Central India. *Bionotes* 2(3): 54.

Suri Babu, B. 2000. Description of the larva of *Neurothemis intermedia* (Rambur), with notes on biology (Anisoptera: Libellulidae). *Odonatologica* 29(4): 341-346.

Subramanian, K.A. 2009. *Dragonflies of India-a field guide*. Vigyan Prasar, Department of Science and Technology, N. Delhi; ISBN: 978-81-7480-192-0; pp. 63.

Singh, D. 2022. Field guide to dragonflies and damselflies of northwest India. Bishen Singh Mahendra Pal Singh, Dehradun, India. ISBN: 978-8194332329; pp 392-393.

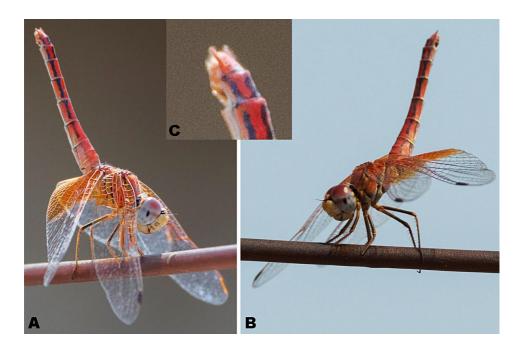


Figure 1: 'A' and 'B' photographs of Ruddy Meadow Skimmer *Neurothemis intermedia* as observed in Delhi; 'C' Close up of tip of the abdomen of same individual showing anal cerci.