

## Preliminary Study of Odonates in Kilinochchi Premises of University of Jaffna, Sri Lanka

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Kilinochchi district is one of the major developed cities located in the northern part of Sri Lanka. This study mainly focused on the diversity of Odonates in Kilinochchi premises. Northern province has a unique flora and fauna diversification compared to other regions. But the records of Odonates poorly documented due to the lack of proper studies and research in this area for a long time. This survey was conducted in the Kilinochchi premises of University of Jaffna, using the opportunistic survey method in a randomly selected area. The main objective is to study the species diversity and population density of the Order Odonata. Data were collected from March to August 2022 within a selected area near to a water reservoir. The observation was made by naked eye and the photographs were taken using a DSLR camera. The data was obtained from 10.00 to 17.00 at day time. Odonates were identified using standard guides. The 'Place' app was used for the mark the GPS locations. According to the results 19 species of Odonates were recorded during this study period. Among them 13 dragonflies (Anisoptera) and 6 species were damselflies (Zygoptera). Families *Libellulidae*, *Gomphidae*, *Coenagrionidae* and *Platycnemididae* were reported in this study. Dancing Dropwing (*Trithemis pallidinervis*) was mostly recorded species in this study area and the Wandering Glider (*Pantala flavescens*) was recorded in resident population. The Black-tipped Percher (*Diplacodes nebulosa*) and the Asian Slim (*Aciagrion occidentale*) were recorded only once during the study period. During these months the Wandering Glider (*Pantala flavescens*) was recorded in very high amount of abundance but it was gradually decreased and in the later parts of this study. With the changing precipitation patterns, a remarkable changes were observed in the abundance of Odonates.

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