

Habitat modelling of Odonata of Irinjalakuda ponds, central Kerala, India

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Abstract: Dragonflies and damselflies (Insecta: Odonata) were sampled in 20 randomly selected ponds in Irinjalakuda municipality, Kerala, southern India during November 2019-February 2020 using Visual Encounter Surveys (VES). Their diversity was tested for correlation with 13 habitat parameters measured. Species distribution density maps were generated using ArcGIS 10.3.

Introduction

Dragonflies and damselflies which belong to the insect Order Odonata are considered as vital components of freshwater ecosystems and good indicators of ecosystem health because of their amphibious life history, relatively short generation time, high trophic position and diversity (Corbet 1993). Ponds are home to a diverse community of specialized plants and animals and are hence of great conservation concern. Through land-use changes, ponds have been disappearing rapidly and the remaining ponds are often threatened by contamination