



ASSESSMENT AND STATUS OF LEPIDOPTERA AND ODONATA OF RAIRANGPUR FOREST DIVISION, ODISHA, INDIA

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ABSTRACT: Habitat destruction by rapid loss of forest lands, urbanization, illegal mining are declining many measurable insect species from the earth gradually, whereas many small insects are known for their various ecological and ecological values. Among which Lepidoptera and Odonata are the prominent insect orders in the invertebrate world. These insects are greatly known for their roles as pollinators and bio-indicators for various environmental factors. So, the current study focused on enlisting the Lepidoptera and Odonata species found in Rairangpur Forest Division between April to July 2021. The study was conducted by line transect surveys and the collection of some ecological and environmental variables. The study resulted a total of 70 species of butterfly belong to 4 families, 12 species of moth belong to 6 families and 18 species of dragonflies belong to 3 families were recorded. Under which 5 butterfly species were found Schedule I species according to Wildlife (Protection) Act, 1972.

Keywords: Checklist, India, Lepidoptera, Odonata, Odisha, Rairangpur

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INTRODUCTION

A variety of animals act as a pollinating agent in this diverse ecosystem, though most pollinators are invertebrates (Wojcik, 2021). Lepidoptera and Odonata are one of the importance group of Non-chordates which help in sustaining ecosystem whereas lepidopteron act as potential pollinators and beautiful creatures (Khan *et al.*, 2021) which take part in the transport of pollen grains, aiding in the reproduction of over 80% of all flowering plants (Wojcik, 2021). However, Odonata act as bio-control agent because of their predatory nature to feed upon mosquitos and aquatic snails and

served as biomonitors of aquatic ecosystem (Knight *et al.*, 2005). These insects are an essential component to food webs in terrestrial and semi-aquatic ecosystems. The diversity and density of these insects is attributed to the health of strong terrestrial and aquatic habitats (Kehinde *et al.*, 2014). These intricate systems evolved over 140 million years ago and are the reasons for the rich, diverse landscapes we enjoy and benefit from today (Wojcik, 2021).

Nowadays, these magnificent insects are facing many challenges for their survival due to rapid urbanization, habitat destruction, use of