

KEPELBAGAIAN DAN KELIMPAHAN
ODONATA DI HUTAN SIMPAN TRUSAN
SUGUT, BELURAN, SABAH.

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ABSTRACT

DIVERSITY AND ABUNDANCE OF ODONATA IN TRUSAN SUGUT FOREST RESERVE, BELURAN, SABAH.

*This research was carried out along the rivers in the Trusan Sugut Forest Reserve, namely Sungai Sakit Mata, Sungai Dean, Sungai Petin, Sungai Melati, Sungai Bethumue, Sungai Rose, and in watery areas in oil palm plantation near the Trusan Sugut Forest Reserve, Beluran, Sabah. The objectives of this study were to (1) determine the diversity and abundance of Odonata species in Trusan Sugut Forest Reserve; and (2) to study the effect of time to the abundance of Odonata. The sampling activity was conducted manually using aerial insect nets, from 9.00 am to 4.00 pm in January 2017. In total, 481 individuals representing six families, 20 genera and 25 species of Odonata were identified in this study. Shannon-Wiener diversity index ($H' = 2.3840$) showed that the diversity of species in the Forest Reserve Sugut Trusan is within the normal range. Simpson diversity index ($D = 0.8604$) showed that the possibilities of two individuals chosen at random is of the same species is high, due to the presence of a dominance species. Odonata population in Trusan Sugut Forest Reserve are dominated by *Neurothemis fluctuans* (27.65%) and *Neurothemis terminata* (18.30%) which have a higher abundance than the other species. As for the effect of time to the abundance of Odonata, it was found that the abundance of dragonflies and damselflies increased from morning at 9.00am until 11.59am, but the abundance decreased again by afternoon starting from 2.00pm until 3.59pm. In this study, the abundance of Odonata was the highest at 11.00am to 11.59pm, and the lowest at 3.00pm to 3.59pm. The data from this research can become future reference for future research on Odonata in this study site.*

Keywords: *Odonata, Diversity, Abundance, Effect of time, and Trusan Sugut Forest Reserve, Sabah.*