

**TAXONOMY OF DRAGONFLY (ANISOPTERA) FROM
UNIVERSITI TEKNOLOGI MARA (UiTM) PAHANG,
KAMPUS JENGA**

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ABSTRACT

TAXONOMY OF DRAGONFLY (ANISOPTERA) FROM UNIVERSITI TEKNOLOGI MARA (UiTM) PAHANG, KAMPUS JENGA

This is the taxonomy study of dragonfly in UiTM Pahang, Kampus Jengka. This study focused on the findings of dragonfly species under the order Odonata which is well known as being one of the most fascinating insect groups. The problem statements of this study were how many species of dragonfly that can be found in UiTM Pahang, Kampus Jengka. In UiTM Pahang, Kampus Jengka, the species of the dragonfly is not well explored. Secondly, what are the morphology and taxonomic characteristics including venation of wings and external genitalia of dragonfly and where to map the existence of dragonfly in UiTM Pahang, Kampus Jengka. This study was done to determine the species of dragonfly, to compare the morphology and taxonomic characteristics emphasis on venation of wings and external genitalia of dragonfly and to map the existence of dragonfly in different study site in UiTM Pahang, Kampus Jengka. For methodology process, the dragonfly species were identified by random sampling and specimen collection. Sampling method by sweeping net was used. Dragonflies can be differentiated morphologically at the species level. Morphological variations and taxonomic characteristics that focus on venation of wings and external genitalia among dragonflies were compared. The existence of dragonflies in 3 different places were mapped by using A-GPS and Google earth application. The sampling area consists of forest reserve, plantation and residential area. A rich collection of 102 individuals belonging to 14 genera and 17 species of dragonflies from 3 families of Odonata (Anisoptera) were successfully collected in UiTM Pahang, Kampus Jengka in contrast to 15 species previously recorded. The number of species now stands at 27 species from 3 families. This research has contributed to the discovery of 12 species new to UiTM Pahang, Kampus Jengka. Libellulidae was found to be the most dominant family followed by Aeshnidae and Gomphidae. The most common genera were *Neurothemis*, *Trithemis* and *Ictinogomphus*. The rare genera were *Heliaeschna*, *Gynacantha* and *Tholymis*. The residential has shown the highest number of genera and species which were 9 genera and 10 species, followed by 9 genera and 9 species from plantation 6 genera and 7 species from forest reserve.

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