

EARLY DETECTION OF MALARIA VECTORS THROUGH THE DIVERSITY OF ANOPHELES SP

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Abstract

Background: Malaria is an infectious disease which gets serious attention throughout the world. Malaria is caused by a protozoan parasite infection – a genus of plasmodium which lives and breeds in infected human red blood cells. Ogan Komerang Ulu District has a tropical and wet climate with temperatures varying between 22-31 celcius degree. These temperature conditions support the Anopheles mosquitoes breeding that have optimum development 20-30oC. The characteristics of the Anopheles mosquitoes can transmit malaria, they have black, short and small body, with the same length between proboscis and pupae. **Aims:** The aim of this research was to identify the morphology that can be useful to know the characters and total number of species so that it can describe the Anopheles diversity in an area. **Subject and Methods:** This research was conducted in December 2017 to March 2018. Based on the research that has been done, there are seven types of malaria vector found during this research, they are *Anopheles barbirostris*, *Anopheles kochi*, *Anopheles maculatus*, *Anopheles nigerrimus*, *Anopheles subpictus*, *Anopheles tessellatus* and *Anopheles vagus*. **Result:** The results of calculation of MHD, MBR, Relational Abundance, number frequency and dominance of figures showing that the mosquito *Anopheles vagus* has the highest percentage value of the vagus 9.97, 9.97, 88.05, 0.880, and 77.484. As for the mosquito *Anopheles maculatus* and *Anopheles subpictus* has the same and lowest percentage values of 0.02, 0.02, 0.18, 0.001, and 0.00018, which indicates that doubled in two different months, the mosquito *Anopheles vagus* has potenis most high as vectors of malaria. *Anopheles vagus* dominated his existence an hour catching up so that it is known that malaria vectors has a wide range of activities.

Keyword: Anopheles Sp, Parasite Infection, Malaria Vectors, Diversity

