

ABSTRACT

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STUDY FAUNA *ANOPHELES* MOSQUITOES IN POLAMAN SUB DISTRICT MIJEN DISTRICT SEMARANG 2005

Malaria continues to be a major public health problem in most countries of the tropical world included Indonesia. Such disease/ malaria are caused by parasites of genus *Plasmodium*. *Anopheles* mosquitoes transmit the parasites from person to person. In addition, the Polaman sub district was mainly suspected as the receptive area since its hilly areas with particular rice fields and rivers, which tend to be *Anopheles* breeding places as the center of malaria vector. This research was aimed to discover the *Anopheles* fauna in the Polaman sub district. Beside that, this research was an entomological society health since with Polaman sub district Mijen district Semarang as the data source. The data was taken on November – December 2005.

The research was simply qualitative – descriptive by using time method survey. For that reason, it used cross sectional method, which was applied in every 18 houses, 2 cages, and few of the breeding places.

The result found some specific species such as: *An. aconitus*, *An. vagus*, *An. kochi*, *An. tessellatus*, and last but not least were *An. annularis*. Yet, from all those species had brought *An. vagus* to the highest density level of their ability on outdoor blood sucking in one night. It was observed through 0,9/man/our with highest fluctuation on 6 – 7 pm. On the other way around, *An. aconitus* had the highest density on indoor blood sucking in one night. It went all over 0,3/man/hour with highest fluctuation on 7 – 10 pm. Additionally, each of the two mentioned species had their different breeding places. The observation showed that *An. aconitus* were breded in terracering rice fields. Whether *An. vagus* were in both ordinary and terracering rice fields. Furthermore, the population of *An. aconitus* in the Polaman sub district had a long longevity with parity rate of 82 %. Generally, the average temperature (indoor and outdoor) was around 24,5 °C with 96,5 % humidity.

The conclusion of this research showed that Polaman sub district was a receptive area for the spread of *An. aconitus* as the malaria vector with long longevity and wide spread breeding places. It is better for the farmers there to develop their rice fields together considering that part of their rice fields were terraced. As we all know that terraced rice fields with their irrigation system through the whole years could increase more breeding places for mosquitoes population.

Key word : Fauna, *Anopheles*
Book : 25, 1979 - 2005

ABSTRAK

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**STUDI FAUNA NYAMUK *ANOPHELES* DI KELURAHAN POLAMAN
KECAMATAN MIJEN KOTA SEMARANG.**

Malaria merupakan masalah kesehatan masyarakat di berbagai negara, yang di sebabkan oleh *Plasmodium*, dan nyamuk *Anopheles* sebagai vektornya. Kelurahan Polaman diduga daerah reseptif karena merupakan daerah perbukitan dengan jenis sawah dan sungainya memungkinkan sebagai tempat perindukan spesies *Anopheles* yang merupakan vektor malaria. Penelitian ini bertujuan untuk mengetahui fauna nyamuk *Anopheles* di Kelurahan Polaman. Penelitian ini merupakan ilmu kesehatan masyarakat di bidang entomologi, dengan lokasi penelitian di Kelurahan Polaman Kecamatan Mijen Kota Semarang, dengan obyek yang diteliti adalah nyamuk dan larva *Anopheles* yang di tangkap beserta jenis perindukannya. Penelitian dilaksanakan pada bulan November – Desember 2005.

Jenis penelitian ini bersifat kualitatif – deskriptif dengan menggunakan metode survei sewaktu. Pendekatan yang digunakan adalah *cross sectional*, dengan sampel penelitian 18 rumah, 2 kandang dan beberapa jenis perindukan.

Hasil dari penelitian ini adalah ditemukannya : *An. aconitus*, *An. vagus*, *An. kochi*, *An. tessellatus*, dan *An. annularis*. Dari semua spesies, *An. vagus* mempunyai kepadatan tertinggi menghisap darah di luar rumah dalam semalam penangkapan (0,9 /orang/jam) dengan fluktuasi tertinggi pada pukul 18.00 – 19.00), dan *An. aconitus* mempunyai kepadatan tertinggi menghisap darah di dalam rumah dalam semalam penangkapan (0,3 /orang/jam) dengan fluktuasi tertinggi pada pukul 19.00 – 22.00). Spesies yang diketahui tempat perindukannya adalah *An. aconitus* (sawah terasering) dan *An. vagus* (sawah terasering dan sawah biasa). Populasi *An. aconitus* di Kelurahan Polaman mempunyai longivitas panjang (*parity rate* 82 %). Di Kelurahan Polaman rata-rata bersuhu udara (di dalam maupun di luar rumah) 24,5 °C dengan kelembaban 96,5 %.

Kesimpulan dari penelitian ini adalah Kelurahan Polaman merupakan daerah reseptif karena ditemukannya *An. aconitus* (merupakan vektor malaria) dengan longivitas panjang beserta tempat perindukannya yang luas. Sehingga, disarankan untuk para petani di Kelurahan polaman sebaiknya menanam padi secara serentak mengingat sawahnya sebagian berteras dan aliran airnya selalu ada sepanjang tahun yang dapat meningkatkan populasi nyamuk.