

# KERAGAMAN SPESIES, KEPADATAN VEKTOR, DAN KEBERADAAN SPOROZOIT PADA *Anopheles spp* DI DAERAH ENDEMIK MALARIA

(Studi di Desa Jatirejo Kecamatan Kaligesing Kabupaten Purworejo)

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## ABSTRAK

**Latar belakang:** Nyamuk merupakan organisme merugikan bagi kehidupan manusia karena dapat menyebarkan penyakit malaria, demam berdarah, cikungunya dan filariasis. Kabupaten Purworejo menjadi daerah endemis terutama Kecamatan Kaligesing tergolong daerah rawan malaria karena daerah ini paling nyaman sebagai perkembangan vektor malaria. Data Badan Pusat Statistik (BPS) Kabupaten Purworejo pada tahun 2015 terdapat jenis ternak seperti kuda, kerbau, sapi, domba, kambing, kambing peranakan Etawah (PE) dimana keberadaan serta lokasi pemeliharaan ternak berhubungan terhadap kejadian malaria. **Tujuan:** Mengetahui keragaman spesies nyamuk, menghitung kepadatan vektor, dan mangetahui keberadaan sporozoit pada *Anopheles spp* yang ditangkap menggunakan Umpam Badan Orang (*Human Landing Collection*) dan Umpam Hewan (*Animal Bait Collection*). **Metode:** Rancangan penelitian ini menggunakan desain *cross-sectional* deskriptif. Sampel pada penelitian ini yaitu nyamuk *Anopheles spp* yang ada di dalam dan di luar rumah serta kandang ternak kambing yang terdapat di sekitar rumah penderita malaria dan rumah penduduk radius 100 meter. **Hasil:** Diperoleh tiga spesies nyamuk yang tertangkap yaitu *Anopheles maculatus*, *Anopheles subpictus*, *Anopheles aconitus* dan tidak ditemukan nyamuk yang positif sporozoit. Kepadatan nyamuk *Anopheles spp* lebih banyak tertangkap menggunakan metode umpan ternak (UT) sebanyak 8 ekor dan umpan badan orang luar rumah (UOL) sebanyak 6 ekor. **Simpulan:** Diperoleh tiga spesies nyamuk yang tertangkap terdiri dari *Anopheles maculatus*, *Anopheles subpictus*, dan *Anopheles aconitus*. Dari hasil pemeriksaan sporozoit terhadap tiga spesies nyamuk yang tertangkap tidak di temukan nyamuk yang positif sporozoit.

**Kata kunci:** kepadatan vektor, *Anopheles spp*, endemik malaria

## ABSTRACT

**Background:** Mosquitoes are an organism that is detrimental to human life because it can spread malaria, dengue fever, cikungunya and filariasis. Purworejo Regency is an endemic area, especially Kaligesing Subdistrict, which is classified as malaria-prone area because this area is most convenient as a development of malaria vectors. Data from the Purworejo Regency Central Bureau of Statistics (BPS) in 2015 revealed that there were livestock such as horses, buffaloes, cows, sheep, goats, Etawah breeders (PE), where the existence and location of livestock raising was related to malaria incidence. **Objective:** To find out the diversity of mosquito species, calculate vector density, and find out the presence of sporozoites in *Anopheles spp* that were captured using the *Human Landing Collection* and *Animal Bait Collection*. Method: The design of this study used a descriptive *cross-sectional* design. The samples in this study were *Anopheles spp* mosquitoes inside and outside the house and goat pens found around malaria sufferers' homes and houses of 100 meters radius. **Results:** Three species of mosquitoes were caught, namely *Anopheles maculatus*, *Anopheles subpictus*, *Anopheles aconitus*, and no *sporozoite-positive* mosquitoes were found. The density of *Anopheles spp* mosquitoes was more caught using the livestock feed method (UT) as many as 8 animals and bait from the outdoors (UOL) as many as 6 animals. **Conclusion:**

Obtained three species of caught mosquitoes consisting of *Anopheles maculatus*, *Anopheles subpictus*, and *Anopheles aconitus*. From the results of examination of *sporozoites* on three species of caught mosquitoes not found mosquitoes that were positive for *sporozoites*.

Keywords: vector density, *Anopheles spp*, malaria endemic

