

HABITAT POTENSIAL *Anopheles* spp. PADA WILAYAH KERJA PUSKESMAS CANGKREP DESA BRENGGONG KECAMATAN PURWOREJO PROVINSI JAWA TENGAH

INTISARI

Latar belakang: Kabupaten Purworejo adalah salah satu daerah endemis malaria di Jawa Tengah dengan jumlah kasus 1.411 pada tahun 2015 dan pada tahun 2018 ada 4 kasus yang disebabkan oleh *Plasmodium falciparum* di Desa Brenggong. Habitat potensial larva *Anopheles* sangat penting dipahami untuk pemantauan dan pengendalian vektor malaria di suatu wilayah.

Tujuan: Memperoleh gambaran karakteristik habitat potensial *Anopheles* spp. pada wilayah kerja Puskesmas Cangkrep Desa Brenggong Kecamatan Purworejo Provinsi Jawa Tengah.

Metode: Penelitian bersifat deskriptif analitik dengan rancangan *cross-sectional*, yang dilakukan pada bulan Agustus-September tahun 2019 yaitu: "survei habitat larva *Anopheles* spp. di Desa Brenggong Kecamatan Purworejo. Larva yang diperoleh selanjutnya di kolonisasi sampai stadium imago kemudian diidentifikasi untuk mengetahui spesiesnya.

Hasil: Dari 44 habitat potensial yang diperiksa ditemukan 4 jenis habitat yaitu kobakan sungai, mata air, sumur dan kolam perendaman kayu, namun yang positif larva *Anopheles* spp. hanya kobakan sungai. Variabel pencahayaan matahari secara signifikan berhubungan dengan keberadaan larva *Anopheles* spp. ($p=0,003 \leq 0,05$) sedangkan keberadaan vegetasi air dan predator alami tidak berhubungan dengan keberadaan larva *Anopheles* spp. ($p \geq 0,05$). Ada korelasi negatif yang signifikan antara variabel temperatur air dan kepadatan larva *Anopheles* spp. (Koef. korelasi $=r=-0,450$; $p=0,002$) tetapi tidak ada korelasi antara pH air dengan kepadatan larva (Koef. korelasi $=r=-0,123$; $p=0,426$). Spesies yang ditemukan adalah *An. maculatus*, *An. barbirostris*, *An. vagus* dan *An. indefinitus*. Jarak habitat potensial dengan rumah kasus malaria 301-500m (47,7%).

Kesimpulan: Karakteristik kobakan sungai dengan pencahayaan matahari langsung, arus air tergenang, temperatur air 27-28°C, vegetasi air dan predator sedikit, pH air 7-8, dan salinitas air ‰ di Desa Brenggong Kecamatan Purworejo mendukung keberadaan larva *Anopheles* spp. berkembangbiak menjadi nyamuk dewasa.

Kata kunci: Habitat potensial, karakteristik, spesies *Anopheles* spp.

POTENTIAL HABITAT *Anopheles* spp. IN THE WORK AREA OF CANGKREP VILLAGE HEALTH BRENGGONG VILLAGE SUB DISTRICT PURWOREJO PROVINCE CENTRAL JAVA

ABSTRACT

Background: Purworejo Regency is one of the malaria endemic areas in Central Java with 1,411 cases in 2015, and were 4 cases of malaria caused by *Plasmodium falciparum* in Brenggong village, Purworejo District in 2018. The potential habitat of *Anopheles* larvae is very important to understand for monitoring and controlling malaria vectors in an area.

Objective: To identify *Anopheles* spp. in the working area of the Cangkreng Health Center, Brenggong Village, Purworejo District, Central Java Province.

Methods: A descriptive analytic study with a cross-sectional design, was conducted in August-September 2019, namely: survey of potential breeding place of *Anopheles* spp. in Brenggong Village, Purworejo District. The larvae obtained were then reared to the imago stage, then identified to determine the species.

Results: From 44 potential habitats examined there were 4 types of habitats namely riverbanks, springs, wells and wood soaking ponds, but only the riverbank were breeding place of *Anopheles* spp. The solar lighting variable is significantly related to the presence of *Anopheles* spp. larvae ($P=0,003 \leq 0,05$), while the presence of aquatic vegetation and natural predators were not related to presence of *Anopheles* larva ($P \geq 0,005$). There is a significant negative correlation between water temperature variable and larva density of *Anopheles* spp (Correlation coefficient= $r=-0,450$; $P=-0,002$), but there is no correlation between water pH and larval density (Correlation coefficient= $r=-0,123$; $P=-0,4426$). The species found is *An. maculatus*, *An. barbirostris*, *An. vagus* and *An. indefinitus*. Distance of potential habitats with homes of malaria cases 301-500m (47.7%)

Conclusion: Characteristics of river ripples with direct solar lighting, stagnant water currents, water temperatures of 27-28°C, slight vegetation and predators, water pH of 7-8, and water salinity ‰ in Brenggong Village, Purworejo District support the existence of *Anopheles* spp larvae. breed into adult mosquitoes.

Keywords: *Potential habitat, characteristics, Anopheles spp.*