

ABSTRACT

ASSOCIATION OF WATER CONTAINER TYPES AND WATER QUALITY WITH MOSQUITO LARVAE PRESENCE AT THE FACULTY OF MEDICINE UNIVERSITY OF LAMPUNG 2025

By

KEISHA AZZAHRA TETADRIAN

Background: Vector-borne diseases are a global public health issue due to their high transmission and morbidity rates. Mosquitoes are the main vectors of various diseases, and water plays a crucial role in their life cycle. The type of water containers and water quality, including temperature, pH, and salinity, can influence the development of mosquito larvae. This study aims to examine the relationship between the type of water container and the physical and chemical parameters of water quality with the presence of mosquito larvae at the Faculty of Medicine, University of Lampung.

Methods: This study used a descriptive-analytic design with a cross-sectional approach, utilizing purposive sampling on 196 water containers that met the criteria. Larvae were identified microscopically, and water quality parameters were measured directly in the field. Data were analyzed using the Chi-Square test.

Results: Larvae were found in 54.1% of indoor water containers and 47.5% of outdoor containers. The most common types of containers that tested positive for larvae were buckets and plant sheaths, with the highest number located in Building D. The dominant mosquito larvae species found in this study was *Aedes* sp. The *House Index* was 54.17%, the *Container Index* was 37.76%, and the Larval-Free Rate (ABJ) was 45.83%.

Conclusion: There was a significant relationship between chemical parameters (water pH) and physical parameters (water temperature) with the presence of mosquito larvae.

Keywords: vector-borne diseases, mosquito larvae, water quality, pH, temperature, salinity, vector control.

ABSTRAK

HUBUNGAN JENIS TEMPAT PENAMPUNG DAN KUALITAS AIR DENGAN KEBERADAAN LARVA NYAMUK DI FAKULTAS KEDOKTERAN UNIVERSITAS LAMPUNG TAHUN 2025

Oleh

KEISHA AZZAHRA TETADRIAN

Latar Belakang: Penyakit tular vektor merupakan masalah kesehatan masyarakat global karena memiliki tingkat penularan dan kesakitan yang tinggi. Nyamuk merupakan vektor utama berbagai penyakit, dan air menjadi media penting dalam siklus hidupnya. Jenis tempat penampung dan kualitas air, termasuk suhu, pH, dan salinitas dapat memengaruhi perkembangan larva nyamuk. Penelitian ini bertujuan untuk mengetahui hubungan jenis tempat penampung dan kualitas air berupa suhu, pH, dan salinitas dengan keberadaan larva nyamuk di Fakultas Kedokteran Universitas Lampung.

Metode: Penelitian ini menggunakan desain deskriptif analitik dengan pendekatan potong lintang menggunakan *purposive sampling* pada 196 Tempat Penampung Air yang memenuhi kriteria. Identifikasi larva dilakukan secara mikroskopis, dan parameter kualitas air diukur langsung di lapangan. Data dianalisis menggunakan uji *Chi-Square*.

Hasil: Larva ditemukan pada 54,1% TPA dalam ruangan dan 47,5% TPA luar ruangan. Jenis TPA positif jentik dominan adalah ember dan pelepah tanaman dan paling banyak berlokasi di gedung D. Larva yang dominan ditemukan dalam penelitian ini adalah *Aedes* sp. Didapatkan *House Index* sebesar 54,17%, *Container Index* 37,76%, dan Angka Bebas Jentik (ABJ) 45,83%.

Kesimpulan: Terdapat hubungan signifikan antara parameter kimia kualitas air berupa pH air dan parameter fisik berupa suhu air dengan keberadaan larva nyamuk.

Kata kunci: penyakit tular vektor, larva nyamuk, kualitas air, pH, suhu, salinitas, pengendalian vektor.