

Peer Review

Review of: "Aedes Distribution and Meteorological Effect on Ovitrap Index in Coastal Area of Besut, Terengganu: An Entomological Study"

Hany Akeel Al-hussaniy¹

1. University of Baghdad, Iraq

This study provides useful local entomological surveillance data on *Aedes* distribution in coastal Besut and contributes region-specific evidence on the relationship between temperature and the Ovitrap Index, with the strong correlation reported ($r=0.82$) highlighting the potential climatic sensitivity of vector density; the year-long surveillance and relatively large number of ovitraps ($n=3120$) are strengths, and the public health relevance is clear given the dengue burden in Malaysia. However, the analytical approach is relatively simplistic for a 52-week dataset, relying solely on Pearson correlation without accounting for time-series structure, lag effects (e.g., delayed rainfall impact), autocorrelation, or multivariable modeling, which limits causal interpretation; additionally, the reporting of larval counts versus ovitrap index percentages lacks clarity, and the statistical reporting (e.g., $r=0.82$ with $p=0.03$) appears inconsistent for such a high correlation unless the sample size is small, requiring clarification. The manuscript would be improved by applying time-series regression or generalized linear models, incorporating lagged meteorological variables, presenting confidence intervals, clarifying sampling design consistency across weeks, and adding spatial mapping to visualize distribution patterns; a deeper discussion of limitations (single locality, exclusion of unoccupied premises, potential confounding environmental factors) and a stronger linkage to vector control policy would also strengthen the impact. With more rigorous statistical modeling and clearer data presentation, the study could make a more robust contribution to climate–vector ecology research.

Declarations

Potential competing interests: No potential competing interests to declare.