

# New insights on mosquitoes that spread disease

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The Asian tiger mosquito (*Aedes albopictus*) is a highly invasive species and a vector of multiple pathogens including various viruses, such as chikungunya, dengue, and Zika. Credit: Mikel Bengoa

The Asian tiger mosquito (*Aedes albopictus*) is a highly invasive species and a vector of multiple pathogens including various viruses, such as chikungunya, dengue, and Zika. A new *Medical and Veterinary Entomology* study that evaluated the relationship between the mosquito's presence and habitat variables at a small scale provides important information for planning effective prevention and control campaigns.

When investigators examined mosquito populations on Mallorca Island off the coast of Spain, they found that *Ae. Albopictus* presence was negatively associated with altitude, probably due to greater human presence at low altitudes near the coast. Moreover, *Ae. albopictus* presence was positively associated with the extent of fresh water surface (mainly swimming pools), due to nearby gardens, plants, and freshwater sources. The researchers combined these two variables to predict the presence of the species on the entire island at a small scale.

"Given the widespread presence of Asian tiger mosquito on Mallorca Island and its association with human activities, the removal of potential breeding sites by citizen intervention will be essential to improve [species control](#)," said lead author Dr. Ana Sanz-Aguilar, of IMEDEA (CSIC-UIB), in Spain.

**More information:** A. Sanz-Aguilar et al, Water associated with residential areas and tourist resorts is the key predictor of Asian tiger mosquito presence on a Mediterranean island, *Medical and Veterinary Entomology* (2018). [DOI: 10.1111/mve.12317](https://doi.org/10.1111/mve.12317)

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