



## **A Survey of Container-Breeding Mosquito Species in Kuching Area**

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**Faculty of Medicine and Health Sciences,**

**Universiti Malaysia Sarawak**



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## ABSTRACT

A visual larval inspection was done from October 2010 to January 2011 to identify the common species of container-breeding mosquitoes in Kuching, Sarawak. A total of 14 areas in Kuching were surveyed. All the 1216 larvae collected were identified. The dominant species was *Ae. albopictus* (79.03%), followed by *Culex sp.* (20.97%). The most common breeding sources were plastic containers. The container index was the highest for Taman Budaya, Kuching (83.33%). Larval breeding habitats were found within the temperature range of 25.1°C to 33.0°C and pH of 3.0 to 9.9. There is no significant difference of water temperature between *Ae. albopictus* ( $30.2^{\circ}\text{C} \pm 1.0$ ) and *Culex sp.* ( $30.2^{\circ}\text{C} \pm 0.6$ ). However, the pH of water for *Culex sp.* ( $7.6 \pm 0.1$ ) was found significantly lower than that of *Ae. albopictus* ( $7.8 \pm 0.9$ ). Mean pH of natural containers ( $6.7 \pm 1.3$ ) was significantly lower than mean pH for artificial containers ( $7.8 \pm 1.1$ ). Mix breeding of *Ae. albopictus* and *Culex sp.* was found in coconut and plant saucers collected from Kampung Kudei and Waterfront, respectively. Based on its dominance and versatility, we suggest that *Ae. albopictus* may present as a sole vector for dengue virus in Kuching.

**Key words:** container-breeding mosquitoes, *Ae. albopictus*, container index

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