

Key breeding containers for *Aedes* mosquito in Melaka Tengah

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ABSTRACT

Introduction: Classification of *Aedes* breeding container is important to help in managing dengue outbreak. Targeting the suitable breeding containers will help to break dengue transmission. In this study, the most common breeding container and location of breeding (indoor/outdoor) in dengue outbreak localities were evaluated. **Materials and methods:** Indoor and outdoor premise inspection was performed in 11 dengue outbreaks localities in year 2016 in Melaka Tengah district. Type of breeding containers and total amount of immature *Aedes* (L1-L4 larvae and pupae) stages were identified, recorded and analysed. Identification was performed using stereo microscope. Statistical analyses were performed using SPSS software version 24 from IBM. **Results and conclusion:** A total of 20 breeding containers were found. The most profound breeding container was discarded paint container (20%). Other common breeding containers were cistern tank, pail, garbage bin and plastic container (all at 10%). Most breeding containers were found outdoor (80%) compared to indoor (20%). There was significant difference between breeding found in indoor and outdoor with $U=19.5$ and $p=0.008$. In term of species, *Ae. aegypti* species was the most dominant with mean \pm SE value of 7.65 ± 3.92 compared to *Ae. albopictus* with 4.3 ± 2.3 . However, t-test analysis showed that was no significant difference between both species with p value= 0.36. Most of the *Aedes* breeding in Melaka Tengah dengue outbreak localities was found outdoor with discarded paint container being the most profound. It is hoped these findings will give insight to health authority to focus on the breeding containers especially during outbreak in Melaka Tengah district to effectively manage dengue outbreak.

Keywords: *Aedes* breeding container, *Aedes aegypti*, *Aedes albopictus*, Melaka Tengah