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LABORATORY EVALUATION OF 21 INSECT REPELLENTS AS LARVICIDES AND AS OVIPOSITION DETERRENTS OF *AEDES ALBOPICTUS* (DIPTERA: CULICIDAE)

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Abstract Twenty one commercial insect repellent products, including 12 natural, 6 deet-based, and 3 other synthetic organic, were evaluated as larvicides and as oviposition deterrents of *Aedes albopictus*. Ten of the 12 natural products at 0.1% concentration provided 57-100% mortality of laboratory-reared 4th instar *Ae. albopictus* larvae at 24 h posttreatment. Five of the 6 deet-based products and 3 other synthetic organic repellents at 0.1% concentration induced 88-100% larval mortality at 24 h post treatment. All 12 natural products proved highly effective oviposition deterrents of *Ae. albopictus* and resulted in 76-100% effective repellency at 24 h post-exposure. The 6 deet-based repellents and the other 3 synthetic organic repellents caused 84-100% effective oviposition repellency of *Ae. albopictus* at 24 h post-exposure. Several natural repellents previously shown to have minimal protection from mosquito bites proved effective oviposition deterrents. Some commercial topical repellents have good potential for development and use in management of container-inhabiting mosquitoes because they deter oviposition and kill larvae.