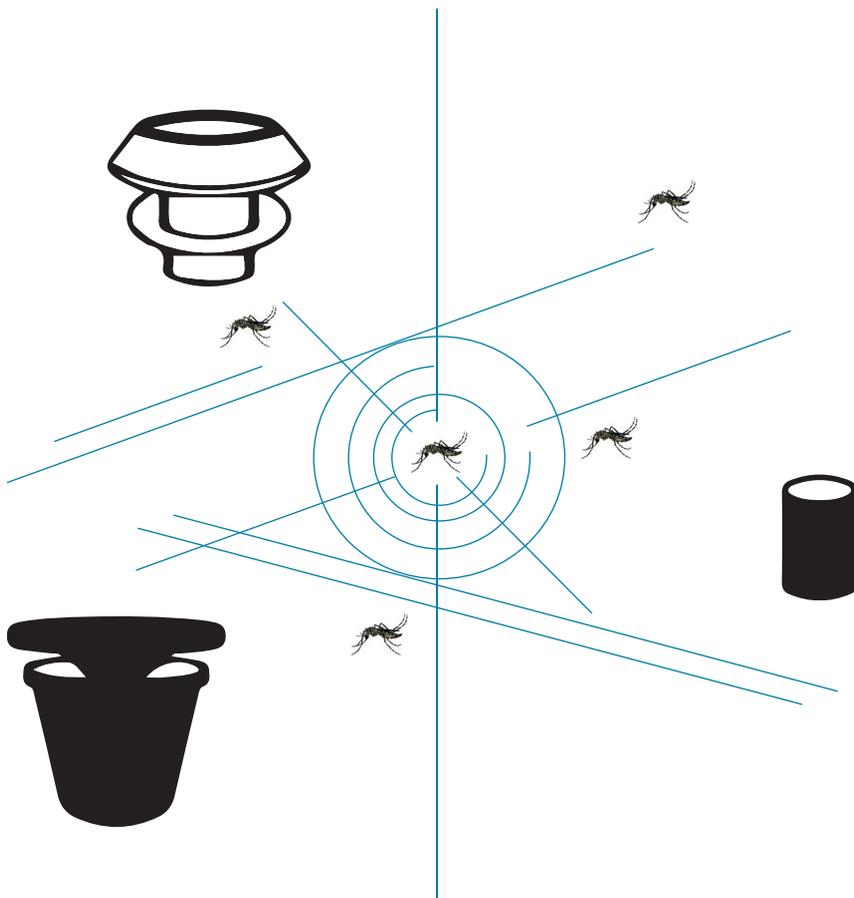


# EFFICACY-TESTING OF TRAPS FOR CONTROL OF *Aedes* spp. MOSQUITO VECTORS



World Health  
Organization



EFFICACY-TESTING OF TRAPS  
FOR CONTROL OF *AEDES SPP.*  
MOSQUITO VECTORS



**World Health  
Organization**

WHO/CDS/NTD/VEM/2018.06

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Suggested citation. Efficacy-testing of traps for control of aedes spp. Mosquito vectors (WHO/CDS/NTD/VEM/2018.6). Geneva: World Health Organization; 2018. Licence: CC BY-NC-SA 3.0 IGO.

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## ACKNOWLEDGEMENTS

The first edition of guidelines for vector traps was prepared by a drafting committee appointed by WHO. Members were chosen on the basis of their expertise in the field and their willingness to undertake the work. The drafting committee members were: Heather Ferguson (chair), Nicole Achee, Roberto Barrera, Sarah Moore, Amy Morrison and Dawn Wesson.

WHO thanks Professor Heather Ferguson in particular for her initiative and leadership in chairing the drafting committee, Dr Jenny Carlson for the initial draft framework, Dr Anna Drexler, who contributed to all parts of the document and coordinated its finalization and publication, and Dr Raman Velayudhan, Coordinator, and Dr Rajpal Yadav, Scientist, Vector Ecology and Management unit, WHO Department of Control of Neglected Tropical Diseases, who provided advice on all the chapters.

WHO also acknowledges the institutions of the individuals listed above. We wish to recognize valuable contributions made in peer review from researchers, experts in *Aedes*-borne diseases, trap developers and trap manufacturers. The financial support provided by the Bill & Melinda Gates Foundation is gratefully appreciated.

WHO recognizes that as the first guidelines provided for a rapidly developing area of mosquito vector control, we anticipate these to evolve with the field, and actively encourage feedback and suggestions for improvement.

## ABBREVIATIONS AND ACRONYMS

ABV	<i>Aedes</i> -borne virus
AC50	concentration that attracts 50% of insects
AC90	concentration that attracts 90% of insects
AI	active ingredient
EI	emergence inhibition
EI50	concentration that prevents emergence of 50% of adults
EI90	concentration that prevents emergence of 90% of adults
FT	time to first take-off
IgG ELISA	immunoglobulin G enzyme-linked immunosorbent assay
IGR	insect growth regulator
LC50	concentration that kills 50% of insects
LC90	concentration that kills 90% of insects
NS1	nonstructural protein 1
PCR	polymerase chain reaction
VCAG	WHO Vector Control Advisory Group

## GLOSSARY

**Active ingredient.** The part of a product that has the primary action on the insect (e.g. pesticidal, behavioural, attractant).

**Attractant.** A biological or chemical (e.g. odorant) or other attractive element (e.g. visual, acoustic) that attracts mosquitos to a trap (also referred to as “bait”).

**Attractive oviposition trap.** Trap designed to attract and kill gravid or ovipositing mosquitos.

**Autodissemination.** Picking up by adult mosquitos of an active ingredient from treated surfaces of a device or trap and transferring it to aquatic habitats in sufficient quantities to kill larvae or prevent pupae from emerging to adults. Also known as “horizontal transfer (of chemicals)” by mosquitos (HTM), or “mechanical dissemination by mosquitos (DSM)”.

**Autodissemination devices.** Devices designed to lure and contaminate mosquitos with a disseminating agent (e.g. an insect growth regulator) for its transfer to additional oviposition sites.

**Bait.** See “attractant”.

**Autodisseminant.** See “disseminating agent”.

**Discriminating concentration.** Concentration of an insecticide that, during a standard length of exposure, discriminates the proportions of susceptible and resistant phenotypes in a mosquito population.

**Disseminating agent (or “autodisseminant”).** An active ingredient that is typically picked up by mosquitos from treated surfaces, retained and transferred to aquatic mosquito habitats.

**Durability.** In relation to vector traps, the physical integrity of a trap and its components over time.

**Efficacy.** With regards to traps, efficacy is the impact in lowering the mosquito population and/or disease incidence/prevalence in humans.

**Efficacy trial.** Study to estimate the effect of an intervention under the ideal conditions that can usually be achieved only in a trial, for example, by ensuring maximal coverage

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