

GUIDELINES FOR EFFICACY TESTING OF INSECTICIDES FOR INDOOR AND OUTDOOR GROUND-APPLIED SPACE SPRAY APPLICATIONS



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**World Health
Organization**

**CONTROL OF NEGLECTED TROPICAL DISEASES
WHO PESTICIDE EVALUATION SCHEME**

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The first draft of the guidelines was subsequently peer reviewed by individuals and institutions known for their expertise in the subject.

The above-mentioned drafting committee considered all comments received and prepared a second draft. This revised draft was reviewed and discussed at the WHOPES consultation held at WHO headquarters in Geneva, Switzerland on 23–27 February 2009. Industry was invited to attend the first one-and-a-half-days of the meeting for the purpose of information exchange and views, after which the second draft and comments were further reviewed by a group of WHO appointed experts, who finalized the guidelines by consensus. The WHO appointed experts were Dr Jane Bonds, Florida A&M University, Panama City, FL, USA; Dr Don Barnard, Mosquito and Fly Research Unit, United States Department of Agriculture, Gainesville, FL, USA; Dr Ulrich Bernier, Mosquito and Fly Research Unit, United States Department of Agriculture, Gainesville, FL, USA; Dr Gary Clark, Mosquito and Fly Research Unit, United States Department of Agriculture, Gainesville, FL, USA; Dr Vincent Corbel, Centre de Recherches Entomologiques, Cotonou, Benin; Dr David Dame, Gainesville, FL, USA; Dr Nigel Hill, London School of Hygiene and Tropical Medicine, London, UK; Dr Zairi Jaal, Universiti Sains Malaysia, Penang, Malaysia; Mr Christophe Lagneau, EID Méditerranée, Montpellier, France; Mr Mark Latham, Manatee County Mosquito Control; Palmetto, FL, USA; Dr Lee Han Lim, Institute

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1. INTRODUCTION

The purpose of these guidelines is to provide specific and standardized procedures and criteria for efficacy testing and evaluation of insecticides for indoor and outdoor, ground-applied space spray applications against vectors and pests of public health importance. Their aim is to harmonize the testing procedures carried out in different laboratories and institutions in order to generate comparable data for registering and labelling such products by national regulatory authorities. However, the requirements for registration of pesticides are determined by national regulatory authorities.

These guidelines are an expanded and updated version of those recommended by the WHO Pesticide Evaluation Scheme (WHOPES) Informal Consultation on the evaluation and testing of insecticides, held at WHO headquarters in Geneva, Switzerland on 7–11 October 1996 (1). They were reviewed and recommended by the WHO Consultation on testing and evaluation of public health pesticides held at WHO headquarters on 23–27 February 2009.

The document provides guidance and stepwise procedures on laboratory studies, field testing and evaluation leading to the determination of efficacy, and application rates of, insecticides for operational use in indoor and outdoor ground-applied space spray applications. While most examples provided pertain to mosquitoes, with some modifications the guidelines can be used to determine efficacy against other flying vectors and pests of public health importance. Operational trials of products intended for use as space spray treatments should be preceded by laboratory studies and small-scale field assessments that have been conducted in a field or room, depending on whether the treatment is intended for outdoor or indoor use.

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