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**Field testing and evaluation of insecticides for  
indoor residual spraying against domestic  
vectors of Chagas disease**

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## PREFACE

This document outlines the general procedures for field trials of residual insecticides against domestic Triatominae, where the aim is to eliminate the domestic bug populations and inhibit reinfestations. The procedure is suitable for village-scale field trials of a specified formulation applied at a single target dose rate, whose toxicological safety has already been approved. The procedure also allows for multiple village trials in order to compare the effects of different products, or different formulations of the same product, or different doses of the same formulation.

The basic procedure involves a pretrial entomological evaluation, followed by spraying and then a series of post-spray evaluations over a period of 12 months. Pre- and post-spray evaluations primarily involve manual capture of bugs infesting houses and peridomestic habitats, but post-spray evaluation also includes residue analysis and bioassays of residual activity on treated surfaces. Results are then expressed in terms of the proportion of houses apparently free of bugs over different periods of time post-spray, together with an estimation of the power of the residual product to inhibit any subsequent infestations.

## CONTENTS

	Page
<b>Acknowledgements</b>	i
<b>Preface</b>	ii
<b>1. Introduction</b>	1
1.1 Chagas Disease in Latin America	1
1.2 Experience in Chagas Disease Vector Control	2
<b>2. Rationale and Objectives of the Trial</b>	4
2.1 Domestic Infestations	4
2.2 Peridomestic Infestations	5
<b>3. Implementation of the Trial</b>	6
3.1 Preparatory Phase	6
3.1.1 Statement of Objectives	6
3.1.2 Selection of Product	8
3.1.3 Selection of Target Dose	8
3.1.4 Selection of Trial Site	9
3.1.5 Personnel and Materials	10
3.2 Prespray Evaluation	11
3.2.1 Informed Consent of Local Authorities	11
3.2.2 Household Visits	12
3.2.3 Operational Sketch Map	13

3.2.4	Geographical and Climatic Data	14
3.2.5	Baseline Infestation Levels	14
3.2.5.1	Manual Searches	14
3.2.5.2	Passive Monitoring Tools	15
3.2.5.3	Householder Collections	15
3.2.5.4	Back Correction of the Infestation Data	15
3.2.5.5	Storage of Captured Bugs	16
3.2.6	Epidemiological Data	16
3.3	Spray Intervention	17
3.3.1	Preparation of House for Spraying	18
3.3.2	Procedure for Monitoring Applied Dose Rate	18
3.3.2.1	Tank Charges	18
3.3.2.2	Sentinel Filter Papers	19
3.3.3	Spray Application	20
3.3.4	Disposal of Waste	20
3.4	Postspray Evaluations	21
3.4.1	Postspray Infestation Levels	21
3.4.2	Wall Bioassays	21
<b>4.</b>	<b>Interpretation of Results</b>	<b>22</b>
4.1	Spray Deposit Rates	23
4.2	Wall Bioassays	24
4.3	House Infestation Rates	25

<b>5.</b>	<b>Interpretation of Reinfestations</b>	<b>28</b>
<b>6.</b>	<b>References Cited</b>	<b>31</b>
<b>Annex 1</b>	<b>Summary Chronogram of Trial Activities</b>	<b>37</b>
<b>Annex 2</b>	<b>Basic Material and Equipment Requirements</b>	<b>38</b>
<b>Annex 3</b>	<b>Supervisors Checklist</b>	<b>40</b>
<b>Annex 4</b>	<b>Sample Data Entry Forms</b>	<b>44</b>
4.1	Example of Visit Card to be Affixed Inside the Door of Each House	44
4.2	Example of Data Entry Sheet For Each Visit to Each House	45
4.3	Example of Supervisors Data Control Form	47
<b>Annex 5</b>	<b>Suggested Procedure for Morphometric Analysis of Reinfestations</b>	<b>48</b>
<b>Annex 6</b>	<b>Analysis of Costs</b>	<b>52</b>

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