



SOP: Scoring of mosquitoes following experiment hut collections after indoor residual spraying

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Title	Scoring of mosquitoes following experimental hut collections after indoor residual spraying
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Timeline

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2			

Version Control¹

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Related documents

- I2I Best Practice SOP Library, 30 October 2020 (<https://innovationtoimpact.org/>)
- 'Indoor residual spraying of experimental huts for evaluation of insecticides' I2I-SOP-014 (<https://innovationtoimpact.org/>)
- 'Preparation of experimental huts for evaluation of IRS' I2I-SOP-015 (<https://innovationtoimpact.org/>)

1. Purpose

The purpose of this SOP is to provide instructions on the correct scoring of mosquitoes collected in experimental huts during small-scale semi-field trials of indoor residual spraying (IRS) applications.

2. Materials and equipment

- Dissecting microscope
- Aspirator

3. Procedure

- 3.1. Identify mosquitoes and separate them by species using appropriate identification keys.

¹ Historical versions of SOPs can be found on the I2I website (<https://innovationtoimpact.org/>)

- 3.2. For each species, note the blood fed status of each mosquito.
- 3.3. For each species, note the immediate mortality.
- 3.4. Hold the live mosquitoes for 24hours post arrival at the laboratory for acting insecticides, and up to 72hours for slower acting insecticide products.
- 3.5. Do not hold more than 10 mosquitoes in paper cups or cages
- 3.6. Provide the mosquitoes with 10% sugar solutions (see I2I-SOP-018 'Preparation of sugar-soaked cotton wool for feeding adult mosquitoes in holding cages or during transportation between the laboratory and field').
- 3.7. Maintain the temperature in the room/cabinet in which the mosquitoes are held at $27^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and the relative humidity at $80\% \pm 10\%$. Record these environmental conditions at the start and end of the mosquito holding period.
- 3.8. Count delayed and final mortality.
- 3.9. If required, conserve the mosquitoes of interest in Eppendorf tubes containing silica gel (one mosquito per tube).

4. Glossary of terms

For the purpose of this SOP, dead mosquitoes are classified as:

- Mosquitoes that show no movement
- Mosquitoes that cannot stand

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IRS Indoor residual spraying

SOP

Standard operating procedure



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