



SOP: Transportation of mosquitoes

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Timeline

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Version Control¹

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Related documents

- I2I Best Practice SOP Library, 30 October 2020 (<https://innovationtoimpact.org/>)
- 'Preparation of sugar-soaked cotton wool for feeding adult mosquitoes in holding cages or during transportation between laboratory and field' I2I-SOP-018 (<https://innovationtoimpact.org/>)
- 'Experimental hut preparation and running' I2I-SOP-009 (<https://innovationtoimpact.org/>)

1. Purpose

Correct transportation of mosquitoes to and from the field is one of the main factors determining the end results of the experimental hut trials. It is therefore important to ensure that necessary steps are followed to minimize the unrelated pre and post exposure mortality.

2. Materials and equipment

- A large cool box (large enough to accommodate the wooden racks)
- Wooden racks
- Damp towels
- Distilled water

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

- Thermometer
- Hygrometer

3. Procedure

3.1. Transportation of mosquitoes from the laboratory to the field

- 3.1.1. Prepare the cool box by lining the bottom with a damp towel and then placing the wooden rack on top.
- 3.1.2. Introduce the paper cups containing live mosquitoes into the wooden racks in an upright position and cover the cool box with a lid.
- 3.1.3. Provide mosquitoes with 10% sugar solution as described in I2I-SOP-018 'Preparation of sugar-soaked cotton wool for feeding adult mosquitoes in holding cages or during transportation between laboratory and field'.
- 3.1.4. Avoid shaking and keep the cool box upright during transportation to the field.
- 3.1.5. Record temperature and humidity in the cool box during the transport using a data logger.

3.2. Transportation of live mosquitoes from the field to the laboratory

- 3.2.1. Prepare the cool box as indicated in 4.1.1 above.
- 3.2.2. Place well labelled live mosquito specimens (species, blood-fed status, sex) in paper cups, covered with netting material and place them in the cool box.
- 3.2.3. Provide the mosquitoes with 10% glucose as described in 4.1.3 above.

3.2.4. Avoid shaking the specimens during transportation to the laboratory.

3.3. Transportation of dead mosquitoes from the field to the laboratory

3.3.1. Place well labelled dead mosquito specimens (species, blood-fed status, sex) in paper cups, covered with netting material and place them in the cool box.

3.3.2. Avoid shaking the specimens during transportation to the laboratory.

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4. Glossary of terms

I2I Innovation to Impact

SOP Standard operating procedure



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