

7. Using the Macro lens

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Master Trainer Session

Science Background

- 1. Introduction to GO MHM
- 2. Mosquito Vectors of Disease
- 3. Satellite Data and NASA Connections-
- 4. Prior Knowledge Quiz
- 5. Using the app for the first time
- 6. Describing your mosquito habitat site using the GO MHM App

Lunch and Fieldwork

Hands-on session and Tour of GO MHM

7. Using the macrolens

- 8. Identifying specimens
- 9. Breakouts- Small Group Work
- 10. Education and Training Resources/ Bingo and Digital Games





Mosquito Identification using a clip-on macrolens

Follow these instructions make sure you get a clear view of your specimen.
For best results, use a clip-on macrolens on a mobile device. This will allow you to identify your specimen to species.
Use a lens 60x-100x for best results.

Tip: You can also use hand lens to identify some of the characteristics and identify most specimens to genera. You can take a picture through the lens.









Mosquito Identification using a clip-on macrolens

A note about lenses:

There are several types of lens available. Each has benefits. The 60x is very easy to use and is recommended, especially working with students. This is because it does not need to be focused.

If it is important for you to determine the difference between *Aedes aegypti* and *Aedes albopictus*. In that case, the 100x version, seen on the right, will provide sufficient resolution to see the comb scales on slightly older models. However it can be frustrating to learn to focus using this model. Select the right tool for your situation.



60x



100x



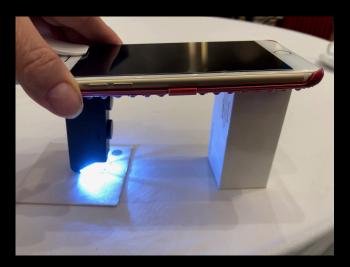


Here are a few tips using the 100x macrolens

- 1. Remove the plastic tab that is protecting the batteries.
- 2. Make sure the batteries are alternated with +, -, + in a line
- 3. Use the box to make a bridge to support your mobile device. That will allow you to use your other hand to focus using the knobs
- 4. For most models, the clear plastic sleeve rests on the plate. This provides the correct focal length. The specimen is positioned in the circle inside the plastic sleeve.











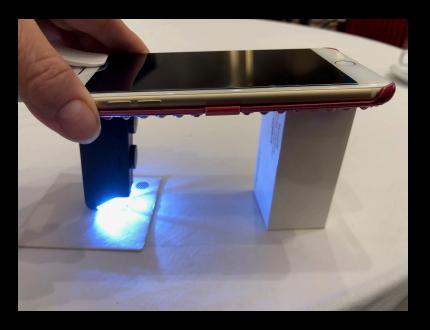


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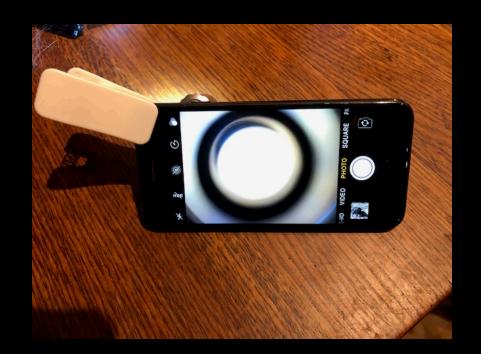






Recording your Data- using a macrolens

Clip the lens over the lens of the camera on the mobile device.
Adjust the position until you have a perfect, white circle in the camera viewfinder.





Acknowledgements

Mosquito Habitat Mapper Team USA

Russanne Low, IGES

Holli Riebeek Kohl, GSFC

Kristen Weaver, GSFC

Dorian Janney, GSFC

Theresa Schwerin, IGES

Cassie Soeffing, IGES

David Overoye, SSAI

Rebecca Boger, Brooklyn College

Pablo Munoz, INTEL

Krishna Woerheide, UNL

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