

Identification of gregarines in mealworms (see page 122 in the class textbook)

1. Use a pair of forceps to select mealworms for identification
2. Place the mealworms in a dissecting tray and use the dissecting needles or pins to secure the worm to the tray.
3. Using a razor blade or scapel, make an incision through the length of the worm to expose the gut without cutting through the worm.
4. Pipet PBS using a plastic squeezer and add 1-2 drops of PBS to the gut. Pipet a drop of the gut contents onto the center of a slide.
5. Carefully place a coverslip over the drop, ensure that there is not an excess of PBS/gut contents around the coverslip. If there is excess, wipe with kimwipes. Wait 30 seconds to 1 minute and observe the gregarines under the microscope using 40X objective lens.
6. Repeat steps 3 and 4 and place the opened worm or pipet the entire gut contents and place in a depression slide.
7. Observe the contents under the microscope at 10X or 40X to observe the movements of the gregarines.
8. Observe the gamonts; primite, satellite, zygotes with sporozoites or pairs in syzgy.
9. Illustrate observations in your lab notebook.