

Fly Care Instructions

Upon receiving flies from UF:

- 1) Unpack the flies from the box.
- 2) Keep the flies at room temperature, cotton ball side up. Do not remove the cotton ball. The flies come with enough food to survive for 10-12 days and do not need any additional food or water.



Flies resting at room temperature

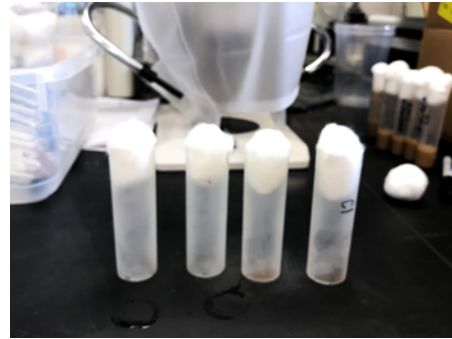
To prepare the flies for the chill coma assay

****Note: The flies need to chill on ice three hours before students will conduct the lab**

- 1) The flies need to be transferred from the vials with food that they were shipped in to empty vials or else they will stick to the food when placed on ice. Before transferring label the empty vials with the names of the fly lines with permanent marker.
- 2) To transfer the flies place a plastic, wide mouth funnel in the empty vial. Tap the vial containing flies on the lab bench a few times to get the flies to settle to the bottom of the vial. Quickly remove the cotton from the vial containing flies and dump the flies into the empty vial using the funnel. Without removing the funnel tap the new vial on the lab bench a few times. Quickly remove the funnel and insert the cotton into the vial. The cotton acts as a stopper to prevent the flies from escaping. Repeat this procedure until all flies are in empty vials with cotton stoppers. Only insert the cotton into the top part of the vial (see picture below). As you are transferring a fly (or two) may escape. This is ok. There does not need to be an identical number of flies in each assay vial.



Transferring flies to empty vials



Flies in Empty Vials before submerging in ice

- 3) Place the vials on ice for 3 hours, submerging the vials far enough down in the ice to keep all the flies below the ice line. **Make sure no water from the melting ice can get into the top of the vials.**



Flies on ice

- 4) Do NOT distribute flies to students until directly before students will begin the assay. Keep the flies on ice while going over background information and the procedure.

Disposal:

- 1) All plastic vials (including the empty food vials the flies were shipped in) can be thrown in the regular trash container.
- 2) Extra vials containing live flies can be euthanized via transfer into a large beaker with ethanol or isopropyl alcohol or placed in freezer for 48 hours and then thrown in the regular trash container.
- 3) Eppendorf tubes containing euthanized flies in household grade isopropyl alcohol can be thrown in the regular trash. If the flies are euthanized in laboratory grade alcohol the alcohol should be disposed of according to established procedures.

Options for Additional Student Engagement with *Drosophila*

- 1) Students can view the flies while still in the food vials under a compound microscope.