Using Carolina Fruit Fly Food

<u>Ingredients</u> Carolina Mix Water Pinch of active yeast

Protocol:

- 1. Add your Carolina mix to a clean dry bottle (amount depends on size of bottle)
- 2. Add an equal volume of water
- 3. Add a small pinch of yeast and let it set for 5-15 minutes.
- 4. Add something for the flies to crawl on. Excelsior or I use cut up plastic screen.

<u>Keeping Fruitflies</u> I got my fly cultures at: https://www.joshsfrogs.com/ There are many ways to keep flies that work but here is how I do it.

- 1. Wash 4 small plastic bottles and dry (if the bottles aren't dry the medium sticks to the sides)
- 2. Add ¹/₄ cup fly medium (I use a funnel for this and steps 3 and 8)
- 3. Add $\frac{1}{4}$ cup warm water and swirl to mix
- 4. Add a pinch or less of active yeast (I take a pinch and use that for 4 6 cultures)
- 5. Add a ¹/₂ " x 3" piece of filter floss (this will embed in the medium and give the larvae and pupae something to climb on; It also sticks into medium and won't come out when you tap the bottle to feed flies to the fish)
- 6. Add a 12" x ³/₄" piece of nylon mesh (I use the black plastic screening you buy to cover plants; this give the adult flies someplace to climb)
- 7. I use a piece of filter floss to completely seal the bottle. (this allows oxygen but won't let wild flies in or your flies out; I just bought foam plugs from Carolina Biologogical; they can be run through the dishwasher, rinsed and re-used <u>https://www.carolina.com</u>)
- 8. Add 10 20 flies (more flies larger number of larvae, pupae and young).
- 9. Place the bottle where it will be 70 80 F°. (warmer means faster growth time but bad things can happen)
- 10. Feed by removing the stopper and tapping the bottle to drop flies into the culture.

More Information

- 1. Feed daily and the culture will last a long time. I usually have cultures last at least 8 weeks.
- 2. Drosophila melanogaster (vestigal wings) have a two week cycle from egg to adult
- 3. Drosophila hydrai (flightless but have wings) are four times larger but require a four week cycle
- 4. These sites (http://www.fruitflies.net/supplies.htm; http://www.atchison.com/; http://www.livefoodcultures.com) have a lot of useful information