

## Home made "Carolina Mix"

I found a recipe by Christina Hanson (she keeps herps ) somewhere online and changed it slightly.

Ingredients                      Makes approx. 40, ¼ cup cultures.

1 cup of powdered sugar  
4 teaspoons Methyl paraben  
8 cups potato flakes  
1/2 - 1 cup of brewers yeast.  
Pinch of active yeast

### Protocol:

1. Sift the powdered sugar and the Methyl paraben into a gallon or larger ziplock bag or container.
2. Shake well to thoroughly mix.
3. Add brewer yeast and mix well.
4. Add the potato flakes and shake well. This is the hardest ingredient to mix in.

I keep a large ziplock bag full of medium so I can make up 2 – 4 cultures every week or so.  
The cost is approx. \$0.25 per culture

Methyl paraben, also called Tegosept is a mold inhibitor. Some people use vinegar, YMMV.  
The brewer's yeast increases the nutritional value of the medium and thus the flies.  
Both can be purchased at <http://www.fruitflies.net/supplies.htm>

Keeping Fruitflies            I got my fly cultures at: <http://www.livefoodcultures.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 ¼ cup fly medium (I use a funnel for this and steps 3 and 8)
3. Add ¼ 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 ½ " 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 ¾" 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 Biological; they can be run through the dishwasher, rinsed and re-used <https://www2.carolina.com>)
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* (vestigial 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