



Standard Operating Procedures

BLACK WORM CULTURE (AT ROOM TEMPERATURE)

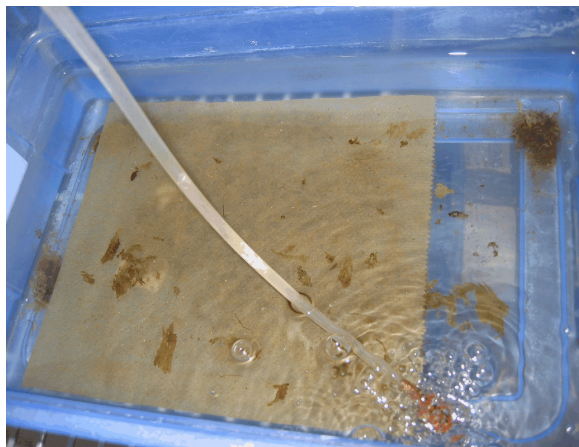
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You will need:

1. A plastic container; any size will do. The medium sized blue ones (~10L) work best though.
2. Paper towels
3. Small pellets of fish food
4. A constant flow of air, along with an air tube and stone
5. Raw/well water
6. A sponge
7. Black worms - Usually a colony already exists that you can borrow some worms from. Otherwise check with pet suppliers or Wards Natural Science to see where you can get some worms to start your colony.

How to culture them

1. Add approximately 3-4" of raw water to the bottom of the plastic container.
2. Place a paper towel into the water. Allow it to soak, then press it down until it sinks to the bottom of the container.
3. Add around 4-8 pellets of fish food, depending on the size of the colony.
4. Place the air-stone into the container, making sure there is proper air circulation
5. Add the worms.



It may take a while for your colony to establish itself but soon you will have more black worms than you can possibly need ☺ Check on the colony daily to ensure that the water level remains at 3-4". Also, once a week each container should be cleaned. In order to accomplish this without losing the worms, it is quite simple to tip the container slightly, and wait until all of the worms sink to the bottom of the container, then pour the water out. Be careful not to let the worms slip out, although one or two lost worms are no big deal. Repeat until water is fairly clear. Once most of the water is poured out, the opposite side of the container can be cleaned using a sponge. **DO NOT USE SOAP!!** Any kind of soap or other cleaner will kill the worms. Once the container is cleaned, and the worms rinsed with water a few times, fill the container back up with 3-4" of water.

In order to sustain a black worm colony at room temperature, they must be fed regularly. This means that a new paper towel should be added approximately once a month. Plus, 4-8 pellets of fish food should be added to the container approximately every 3 or 4 days. It is evident when the worms need more fish food, because they tend to separate and gather around the corners of the container, rather than bunching up around food pellets.

Harvesting the worms:

The pieces of fish pellet food with help with the harvesting of the worms. The worms tend to bunch together around the pellets. To collect the worms, simply use an eyedropper and suck up as many worms as needed. Many of the worms like to hide under the paper towel, so be sure to check under there too. Place them in a small container of water so that they can easily be fed to the mudskippers, killifish or other small animals.



Standard Operating Procedures

BLACK WORM CULTURE (IN REFRIGERATOR) May, 2004

You will need:

1. A plastic container; any size will do. The mini ones with screen in the top work best, but the medium sized blue ones are also ok.
5. Raw/well water
6. A sponge
7. Black worms - Usually a colony already exists that you can borrow some worms from. Otherwise check with pet suppliers or Wards Natural Science to see where you can get some worms to start your colony.

How to culture them

1. Remove screen lid from container if using a mini container with a screen lid, and add enough raw water to almost fill the container (leave around 1/2" of the container empty)
 2. Replace the screen lid, making sure that around 3/4 " of water is available for the worms above the screen.
 3. Add the worms on top of the screen, or the bottom of the container if using a medium sized regular container
 4. Place the container in the fridge.
- >> If a regular, medium sized container is being used, only fill it with around 1" of water, then add the worms.



It may take a while for your colony to establish itself but soon you will have more black worms than you can possibly need ☺ Check on the colony daily to ensure that the water level remains at around 3/4 " above the screen, to avoid the worms drying out, and corrugating to the screen. Also, once a week each container should be cleaned. To do this, simply remove the screen, and wipe it with the sponge, scraping off any dead, dried worms, but making sure no live worms are lost. There may be a few worms which squirmed through the screen, and are now in the bottom of the container. Simply pour the dirty water out of the container, being careful not to let any of the worms slip out. They should sink to the bottom, making this easier. Pour any worms who squirmed through back into the

screen, and clean the bottom container. DO NOT USE SOAP!! Any soap or other cleaning product will kill the worms. Once all pieces are cleaned, fill the container back up, replace the screen, and place back in the fridge.

If a medium sized container is being used, the container must still be cleaned weekly. To clean this container, simply tilt the container slightly, and wait until all of the worms have sunk to the bottom. Pour out the water, being sure to not lose any, or few worms. Once most of the water is removed, the opposite side of the container can be cleaned using a wet sponge, but NO SOAP!! . Once the container is cleaned, and the worms have been rinsed off a few times, fill the tank up with 1" of water, and place back in the fridge.

Once a black worm colony is placed in the fridge, they are totally self sustaining, and last much longer than those cultured at room temperature. They do not need to be fed at all, as they simply eat worms that have died.

Harvesting the worms:

These worms cultured in the refrigerator are not generally harvested, but used as a back-up supply for the colonies cultured at room temperature. Therefore, as the number of worms in the room temperature culture begin to decrease, worms from the refrigerator can be collected using an eyedropper, and added to needing room temperature cultures. Yet, if these worms are to be harvested, simply collect the needed amount using an eyedropper, and place them in a small container of water so that they can easily be fed to the mudskippers, killifish or other small animals.