

Lumbriculus

A CAROLINA™ CareSheet

Immediate Care and Handling

As soon as your shipment arrives, open the container and inspect your order. *Lumbriculus* (blackworms) will disintegrate quickly if you don't keep them cool. The ideal temperature is about 15° C (60° F); a slightly warmer range of 18 to 21° C (65 to 70° F) is acceptable but requires that you change the culture water more frequently—about every 2 to 3 days (instead of the usual 2 to 3 weeks). Temperatures above 21° C (70° F) will cause organism disintegration.

We recommend gentle aeration. To aerate the culture, place the tip of the pipette in the upper layer of liquid in the culture container and gently press the pipette bulb. This will blow air bubbles into the liquid. Remove the pipette tip from the liquid and allow it to refill with air, then blow more air bubbles into the liquid. Do this several times.

Habitat Setup and Maintenance

You will need a deep pan or dish, spring water (or aged tap water), a plastic pipette, a brown paper towel, and sinking fish food. (See General Guidelines for information on conditioning tap water.)

Fill the pan with 2 to 3" of spring water. Cover the bottom of the pan with strips of folded brown paper towel. This will serve as a substrate for the worms and for numerous microscopic organisms that may inhabit the culture, such as bacteria, rotifers, and ostracods. Folding the paper towel allows *Lumbriculus* to hide inside the folds and avoid light. Transfer the worms into the water with a plastic pipette and not forceps or hooks, as you can easily injure them. Feed 1 to 2 fish food pellets or flakes, adding more only after these are consumed. Do not overfeed; decomposing food can contaminate and kill the culture. Irregular feedings or weeks of starving will not harm the worms.

Add spring water as water evaporates. Replace culture water every 2 to 3 weeks as the paper towel disintegrates and waste residues accumulate. Decant the culture slowly, being careful not to pour out the paper and worms at the bottom. After rinsing, refill the pan to the original level, adding new pieces of towel. Occasionally "harvest" the surplus worms (for classroom experiments, live fish food, or starting duplicate cultures). Maintenance of at least one duplicate culture is strongly suggested. Under these conditions, worms will reproduce asexually and you can sustain cultures for years.

FAQ's

Will the blackworms reproduce?

In a culture, blackworms reproduce readily by asexual fragmentation and regeneration. Sexual reproduction is very unlikely to occur in culture, although it is common in natural populations.

Do blackworms have eyes?

No, but their sensory cells can detect shadows and they may rapidly contract when they sense one. This may help them escape from predators. They are also sensitive to pressure changes and vibrations.

Our blackworms disappeared.

You may have to switch to spring water. If the temperature is above 21° C (70° F), you must lower the

temperature and change the water more often.

Problems? We hope not, but if so contact us. We want you to have a good experience.

Orders and replacements: 1-800-334-5551 then select Customer Service

Technical Support and Questions: caresheets@carolina.com



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