Breeding Your Own Feeder Insects: Mealworms

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After crickets, mealworms are the second most popular feeder insect fed to reptiles. Despite their name, they aren't actually worms at all. Rather, they are the larval stage of the Darkling Beetle, and they are very easy to breed yourself.

Housing

If you are purchasing mealworms to feed directly to your herp, most suppliers recommend that you keep them in the refrigerator. This is because the cold slows the growth of the larvae, causing them to become inactive. It keeps them fresh longer while preventing them from turning into beetles. If you plan on breeding them, you cannot keep them in your fridge. Instead, they should be kept on a counter or table at a temperature of approximately 75° to 80°F.

Keep them in a shallow, smooth walled container. What size you will need will depend on how many mealworms you are keeping in it. A 5-gallon container is sufficient for about 5,000 mealworms. If you use a lid, be sure to poke holes in it for proper ventilation, or use a screen secured by a rubber band. Avoid using wood containers, as they could eat through the wood or climb the walls and escape.

Fill the container with about 1-1/2" to 2" of mealworm bedding. This will act as both substrate and food for your mealworms. You can also add maize or corn meal, bone meal, cricket chow, or crushed bran flake meal for added nutrition. For moisture, put a piece of fruit or vegetable on top of the bedding and change it every couple days to prevent molding.

Life Cycle

The life cycle of the mealworm is as follows:

- Darkling beetles lay eggs, which hatch in approximately 1 to 4 weeks.
- Larvae are born and remain in this stage for about 10 weeks.
- After 10 weeks, the larvae change into pupae for about 1 to 3 weeks.
- The pupae change into adult Darkling Beetles and live for approximately 4 to 16 weeks.

Breeding

Start by purchasing your initial stock of mealworms, which will take several months to pupate. About 2 weeks after the beetles emerge, they will start to breed and will continue to do so until they die. A beetle buried in the substrate is usually laying eggs. A female Darkling Beetle can lay about 500 eggs on average in her lifetime. After the eggs hatch, tiny larvae will emerge, though you may not be able to see them for 2 to 3 weeks.

Once the larvae are visible, you may want to move any beetles and pupae to a different container. They will nibble on the larvae, killing them or damaging them so they will not develop properly. However, try not to disturb the containers whenever possible during breeding time.

As you can see, breeding mealworms is fairly simple. You do not need to do much other than maintain proper living conditions, make sure the substrate remains dry, and change the piece of vegetable or fruit on top of the substrate. You may want to sift substrate between breedings to remove waste, but other cleaning is not necessary.

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