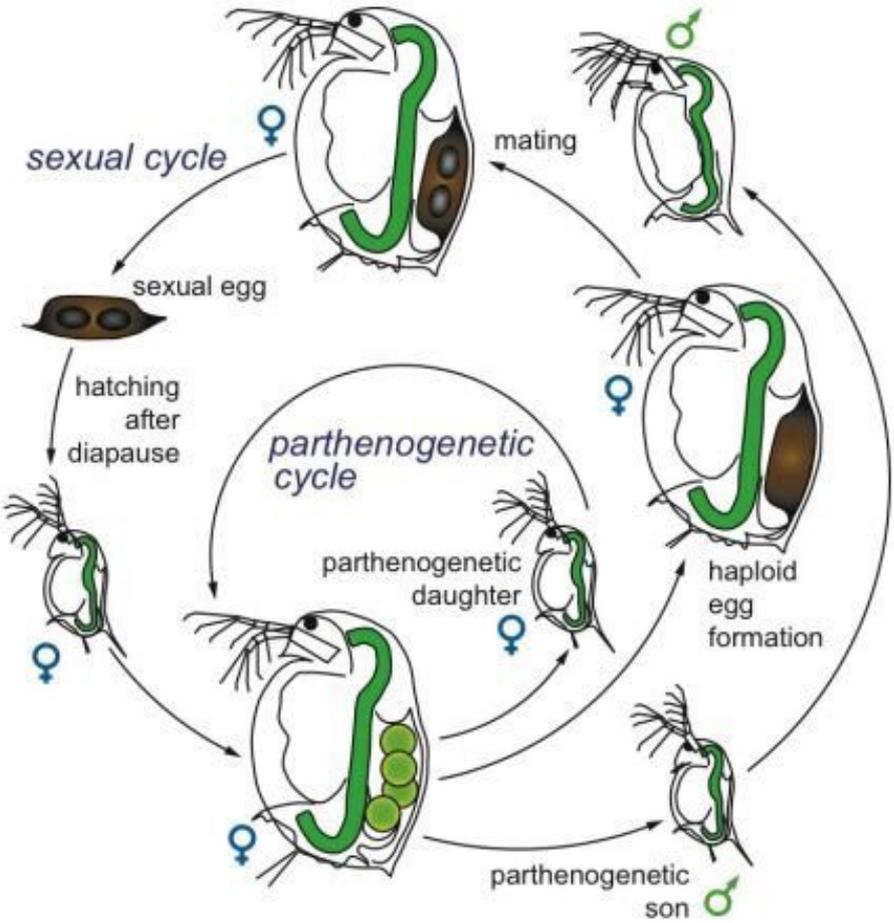


DAPHNIA CULTURE KIT GUIDE

For Freshwater Daphnia Culturing



DESCRIPTION

Culturing Daphnia for Fun or as a feed for Fish

Daphnia is a highly nutritious, live food that you can easily raise to feed your tropical fish, Axolotl's, Betas etc. Daphnia are also known as "water fleas" because of the way they move while swimming through the water, it's a jerky movement.

Daphnia are small, fresh water crustaceans that can be found all over the world in freshwater lakes, rivers, streams, ponds and puddles. They are an excellent source of fish food due to their high protein content. They are fed to so many different types of freshwater creatures I could not list them all here, however here is a few types. Discus, Goldfish, Angelfish, Axolotls' and especially to any young fry (5mm to 75mm in size).

They are also used in toxicology and a variety of different types of research and scientific studies.

The kit will contain some of the following:

- Either a 250ml or 500ml bottle of Daphnia
- ADaM (growing media) enough for either 20L or 60L
- Algae Paste 250ml or Live Freshwater Phytoplankton Culture
- Slow release feed kit, a 250ml refillable bottle/ Bag and a IV unit
- Stainless Steel Feed Hanger to hold the slow release feeding bag in position

When the Daphnia arrive open the lid of the bottle and tip the contents into another clean chlorine free container with some clean water. If you have old stockings tip the contents through that then empty into the clean water.

Steps

Step 1. Set up a clean washed 1,25L or 2L drink bottle.

Step 2. Add 1 litre of clean (boiled and cooled, bottled or RO water)

Step 3. Then add 10ml ADaM to the bottle and shake

Step 4. Water temp between 15°C and to a max of 25°C (cooler is better with the live daphnia)

Step 5. Now add the daphnia from the clean water

Step 6. Now add enough live algae to discolour the water 50ml or if using paste ½ a match head of paste.

Step 7. Let them grow and breed

Step 8. Do a 20% water change each week

As the colony grows increase the size of the container until it gets to a size you are happy with and then start harvesting. The ADaM will provide the vitamins and minerals for the Daphnia, Algae, and bacteria to grow, the nutrients and light feed the algae, the light and waste feed the bacteria and the Daphnia eat both the algae and bacteria.

Culturing Daphnia Tips

1. You can grow daphnia in almost any type of container. We grow them in 200L plastic vats. If you need a lot of daphnia, it's best to use a container that has a large surface area (a large 150L plastic tub, aquarium or a kid's swimming pool). If you don't need a lot of daphnia, you can also raise them in a 2L glass jar or 2L soda bottle or 20L aquarium.
2. Always use RO or age the water in your container before adding the live daphnia culture. Daphnia will not tolerate chlorine. The Daphnia will usually die if you add tap water directly into your container when making water changes.
3. The pH of the water can range from 6.8 to 7.6. We usually keep the pH of our water at around 7.2.
4. Change 20% of the water at least weekly; keep an eye on the ammonia levels. Remember to use RO or aged or bottled water as your replacement water. You can even use your old aquarium water, when you do a water change, as replacement water. If your daphnia culture is not reproducing quickly and thriving, you might want to do more frequent water changes.
5. The ideal temperature for growing daphnia is usually 15-25°C. When the water gets too warm, the daphnia culture will stop reproducing.
6. The daphnia culture doesn't need much oxygen to thrive. Containers kept outside with a large surface area don't need any aeration at all. Containers kept inside should have very light aeration (just enough to break the water surface). Too much aeration (bubbles) can kill off your culture.
7. It's a good idea to have multiple containers of daphnia growing at the same time. Having a backup culture is great insurance in case of a culture crash or similar, poor water or insufficient water changes the water goes bad and the culture dies.
8. Keep your daphnia containers in the sunlight for 8 to 10 hours is best. You must have a light on your daphnia for at least 14 hours if you grow them indoors. Placing their container in a sunny window is also a good idea as long as the water doesn't get too hot.
9. Daphnia will eat algae (green water), algae paste & powders I've also heard people use yeast and mashed peas I have never tried these. We feed our daphnia live freshwater algae. For paste and powder put ¼ teaspoon of algae paste or powder into a 2L bottle with water and mix it. Then add enough of the algae mixture to the daphnia container so that the water is slightly cloudy. The daphnia are filter feeders and will eat the algae in the water column. We feed the daphnia whenever the water becomes clear. Do not overfeed.
10. We use a daphnia net to catch our daphnia. It's best to move the net in a slow figure 8 motion when trying to catch them. We use a course net for daphnia net as it allows the smaller sizes to stay in the main tank. If you require smaller daphnia for a specific type of fish fry let us know, we can custom make net to your specific size. The larger size daphnia is fed to the larger size fry. The smallest daphnia is fed to the tiny fry.
11. It's important to harvest your daphnia on a regular basis. Failure to do so can cause the culture to crash due to overcrowding.
12. Finding a live daphnia starter cultures is not difficult. Aquatic Live Food will supply live daphnia cultures www.aquaticlivefood.com.au or ask at your local fish shop they should be able to supply you with some.

If you have questions please email me on sales@aquaticlivefood.com.au