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10, 20 and 40 Gallon Mini-Farm Operating Instructions

These instructions apply to product numbers #3, #4 and #5

Upon receipt of your Mini-Farm kit, verify all components are present.

1. Bag(s) of Special Brine Shrimp Salt mix with resting brine shrimp eggs.
2. Bottle(s) of special Brine Shrimp Food containing dry food ingredients.
3. 30 cc measuring cup for liquid food.
4. 9 oz clear measuring viewing cup and clear plastic spoon.
5. Small, fine mesh aquarium net to harvest adult brine shrimp.
6. Floating aquarium thermometer.

You will need to provide the appropriate size culture tank, aquarium heater and air pump.

Set Up Instructions

1. Culture Tank. A large, shallow, plastic tray is recommended for best results and not a glass aquarium. For the 10 and 20 gallon Mini-Farm kit, a 36"x24"x8" deep tray is recommended. These trays are available at Home Depot and Lowe's in the construction supply department (listed as : Large black mixing tub). Other plastic trays of a similar size will work. Do not use metal containers. Fill the 36"x24"x8" tray to 4 inches deep for ten gallons of water and one inch from the top for approximately 20 gallons. For a 20 gallon Mini-Farm a 36" x 24" tray with at least a 12 inch depth that can have 8 inches of water (20 gallons) is recommended for ease of operation. The culture tank needs a heater, air pump and 1 or 2 air stones.

2. Water. Fill the culture tank with freshwater. We suggest distilled water, RO water (reverse osmosis) or carbon filtered tap water. Install the aquarium heater and set to 80 F. Let the culture water sit for 24 hours, check the water temperature (80F) and adjust as necessary. Add the air pump (see Aeration section for proper use). Water will evaporate and make up water (same as original freshwater) should be added as needed to bring water depth to original level.

3. Salt Mixture. Slowly add the salt mixture with resting brine shrimp eggs. Occasionally stir the water with the plastic spoon to help dissolve the salt. After 24 hours, the salt will have dissolved and eggs will have hatched. This is referred to as Day 1 of the culture. The water may have a slight cloudiness at this point which is normal. The baby brine shrimp (nauplii) are very small and hard to see. Use the enclosed clear cup for closer viewing. A magnifying glass and/or flashlight

will assist in viewing.

4. Aeration. Due to the large number of brine shrimp in the culture water, air exchange at the surface is not adequate to support the population of brine shrimp. Install a small to medium air pump for the 10 gallon tanks, use a medium to large air pump for the 20 to 40 gallon tank. Use an air flow control valve so as not to be overly turbulent. In all Mini-Farm kits use vigorous aeration to provide adequate dissolved oxygen levels and circulate water throughout the culture tank. For the 36"x24"x8" tray, place a two inch air stone at each end (caddy-corner) for proper circulation. You may also place one large air stone directly in the center of the tray. If using a 10 or 20 gallon glass aquarium (not recommended), place a 2 inch air stone in a back corner. If using a larger glass aquarium, place a 2 inch air stone in both back corners. Always aerate vigorously and maintain constant aeration (24/7). Be aware that when brine shrimp are approaching full size, you may see them congregating at water surface. If this happens, it means the brine shrimp need more air. Therefore, increase your air flow. The lack of proper supplemental mechanical aeration can kill your culture so monitor it carefully.

5. Feeding. DO NOT OVER FEED. Over feeding can kill your culture. Your Mini-Farm kit comes with a pre-measured bottle(s) of Special Brine Shrimp Food. The larger the kit is, the larger the bottle. Fill the bottle 50% full with tap water and shake vigorously for 2 minutes or until all the dry food has dissolved. Now add more water until the bottle is 90% full. Always store the food in the refrigerator after mixing. The kit comes with a small feeding cup calibrated in CC's. The general guideline is to feed once daily the following amount of food.

10 gallon Mini-Farm kit

8 oz food bottle

DAY 1-5: 5cc/day

DAY 6-10: 10cc/day

Day 11-15: 15cc/day

20 Gallon Mini-Farm kit

16 oz food bottle

DAY 1-5: 10cc/day

DAY 6-10: 20cc/day

DAY11-15: 30cc/day

40 gallon Mini-Farm kit

2-16oz food bottles

DAY 1-5: 20cc/day

DAY 6-10: 40cc/day

DAY 11-15: 60cc/day

Caution: If tank water does not clear up (very foggy) 24 hours after feeding, do not feed again. It is normal to have slight foggy water but too much can cause trouble. Wait until the next day to feed again. Once your brine shrimp are full size (about 3/8 inch long) in 12-15 days, you can maintain them for an additional 15 days in the same tank without a water change. For the second 15 day period, feed a daily maintenance diet of 5-10cc/10 gallons of culture water while harvesting brine shrimp for aquarium feeding.

6. **Harvesting.** You can expect adult brine in 12-15 days at 80F. Brine shrimp growth is temperature dependent. If the temperature is less than 80F, it will take longer than 12-15 days to produce adult brine shrimp. A temperature below 70F is not recommended. Use the fine mesh net to remove brine shrimp as needed on a daily basis.