

HATCHING BRINE-SHRIMP - BETTER THAN BEFORE

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The first article I wrote on hatching brine-shrimp eggs (Artemia cysts) was using the snell-less eggs available. These proved to be quite expensive, especially when you consider the hatching rate obtainable was only around 50 - 60 percent. However this was better than no brine-shrimp at all. This article appeared in Tank Talk Vol. 11 No. 2, and since then the CDAS shop began stocking a different kind of brine-shrimp egg.

Now, using these eggs available in the small vials, the hatching rate has increased to about 90 - 95 percent and only costs about one third of the price. So the fish fry are happier and so are we. These brine-shrimp eggs are Bio-Marine brand, from California U.S. of A. and we have seen them available in a couple of shops in Sydney but, not in Canberra. They come in tins and these tins are quite expensive, but the vials available from the CDAS shop last about a fortnight and work out quite inexpensive, about ten cents a day, feeding about six lots of fry.

Method of hatching was using 2 - 1.25 litre plastic drink bottles, a constant supply of brine-shrimp can be hatched. Each bottle is used alternately. Airhose pulled through a hole in the lid of the bottle long enough to reach the bottom of each bottle which are separately fixed onto controlling valves to which an airpump is attached. A straw can be fitted around the outside of the airhose to stiffen it so it goes straight down to the bottom of the bottle. No airstone is needed, as these clog very fast and the brine-shrimp must be kept moving. The bottles can be placed in a tank or in a warm room. Ours are kept in a room where in the middle of winter it only goes down to 18°C at night and up to around 22°C - 24°C in the day. Here they all hatch in at least 48 hours but start hatching in about 30 hours. If you put then in a warmer tank you could probably do one bottle a day, however as we never get any spare tanks or heaters we are happy to use the extra bottle. They are sitting in an ice-cream container in between two tanks and a light from one tank extends over the side to sit over the container.

The water must be salty for brine-shrimp to hatch in and the ratio I have found most successful is seven level tablespoons of non-iodised salt (rock salt, swimming pool salt, cooking salt etc.) to four litres of water. Or if you wish to make just what is needed it's six and a half level teaspoons of salt to 1.25 litres of water. I normally make it up as is needed. The water needs to be changed at least weekly in each bottle. When you do change the water give the bottle a good wash with a bottle brush and water. Then what I do is, using a funnel put in the bottle, add the salt and pour in the fresh room temperature water to wash the salt in, add the measured amount of eggs (after removing the funnel) and then the airhose, and the salt soon dissolves

before the eggs even think about hatching. I keep a 2 litre bottle of tap water in the fish room for distributing and hatching brine-shrimp, at room temperature so as not to shock the fry or shrimp with freezing tap water.

About one quarter of a level teaspoon of eggs is the maximum to put in a 1.25 litre bottle, but this amount is usually more than enough needed by most aquarists, if not use a bigger bottle or more. Anyway, its enough for me to feed about six different lots of fry, and give them full bellies. Once or twice a day from the same bottle depending on how much and now often it is needed. Just have enough air going through to keep the eggs moving around but not bubbling up into the neck of the bottle.

Now when you have your bottle all set up and have put your one quarter of a teaspoon of eggs in, one day apart and you are at the point of having one bottle sitting in front of you, watching all those little brine-shrimps swimming around and you are wondering how you are going to get them out. No problem! What you need for this is another piece of airhose with a section stiffened for going down to the bottom of the bottle and the rest going down into another bottle, about one metre in length will probably do.

I remove the bottle that is ready for use and take it down to the laundry sink. Here it is placed sitting with a slight lean, you'll see why later. The stiffened end of the airhose, for extracting brine-shrimp, is placed all the way down to the bottom of the bottle but on the side where the bottom is lowest. Something slightly smaller than the opening of the bottle is fitted in the top of the bottle to keep the airhose in place and from moving. Next, a two litre empty bottle (I use a plastic orange juice bottle) is needed and a clean cotton handkerchief kept aside for this is used. Wet the hanky, wring it out well and open it up. Place the centre of the hanky over the empty bottle and poke it down into the bottle with a chop stick or something that will do the same thing, until the edges of the hanky are left around the top, flatten these edges around the top of the bottle. Place a funnel into the middle of the hanky, inside the bottle. Now place this into the sink, lower than the brine-shrimp bottle.

The brine-shrimp hatching bottle needs to sit for about 10 - 15 minutes, to allow all the empty egg shells to float to the top and the swimming brine-shrimp to mainly gather at the bottom. By placing the hose in early and securing it, the eggs up top won't be disturbed and be mixed again. Now, with this ready, the nose siphon will need to be started. I use a plastic syringe body to start the siphon going (these are obtainable from Horseland at Fyshwick). Just draw enough through the hose but not into the syringe. Remove the hose from the syringe and place down into the funnel. Now stand back and watch. The hose will draw all the brine-shrimp out and most of the floating egg snells will stick on the sides of the bottle. When the water goes down past the black base of the bottle it will need to be held to stop it from falling, remember it would have been sitting at a slight angle. As much water as you can get out by having the hose in place to one side. If feeding twice daily, only do as much as is needed the first time

then replace the saved water and do it again for the second time. A few shells or unhatched shrimp will have also been transferred but these will do no harm. Now gather up the edges of the hanky and wash the shrimp inside the hanky under running water for a few seconds. While the shrimp is being siphoned, I normally get a glass beaker of room temperature water, about one cup full for dividing the shrimp out in, and have this ready to put the just washed shrimp in. After the shrimp is washed down into the bottom of the hanky, wring the top of the hanky out and shake out the excess water. Place the hanky over the beaker and spread the hanky out so that the shrimp can be pushed into the water with a finger or that useful plastic chop stick. Wash all the shrimp into the water and it is now ready for feeding the fry. The bottle is washed out and the saved salty solution can be returned, unless it has been used for a week then a fresh lot should be added. Then you start the whole process over again.

This is how I hatch and distribute brine-shrimp and have found it, so far, the easiest and best method. However if anyone finds a better way please let me know.

I wrote this brine-shrimp article and the previous one because when we wanted to know how to do it we could never find anything to say just how to, step by step. Hope this helps some of you out there.

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