

# LETS TAKE A LOOK AT INFUSORIA

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Feeding young fry has and always will be a problem for the hobby aquarist. In my experience of feeding fry, my infusoria cultures were always a 'hit and miss' affair, with the miss ending up with a tank full of

dead fry, this occurrence happened to me more frequently than I would like to admit. For me it was like hitting a brick wall with a cotton bud - no answer.

I endeavoured to find out which method of culturing produced the most infusoria, percentage of pollution in it, how long it takes to breed and its food concentration for fry, if I had 300 fry to feed for 24 days, how much infusoria is contained in a culture and how many cultures would I need for that period.

I started 3 cultures in separate 2 litre beakers filled with syphoned off aged water from my tank. In beaker 1 a Lettuce culture, in beaker 2 a Banana culture and in beaker 3 a Potato culture, all cultures were kept at my rooms winter temperature which is 58 degrees fahrenheit.

Culture 1 - Lettuce - into this container I placed 2 large crushed lettuce leaves.

Culture 2 - Banana - one banana skin.

Culture 3 - Potato - peelings from 4 medium sized potatoes.

In all tests, I took 10 millilitres of each solution and viewed the culture under a microscope at a magnification of 15x. Although there were many different crustaceans in the solution, to get a standerd regular count I only counted the infusoria strains of PARAMECIUM.

After 3 days there was very little or no movement visable in any of the cultures, mainly due to the room tempreture being so low.

After 5 days:

Culture	crustaceans per 10 ml	crustaceans per beaker
Lettuce	20	4,000
Potato	20	4,000
Banana	60	12,000

After 7 days:

Culture	crustaceans per 10 ml	crustaceans per beaker
Lettuce	400	80,000
Potato	400	80,000
Banana	1000	200,000

Remember only the PARAMECIUM crustaceans were counted and there were millions of smaller forms of life, which of course were uncountable.

After 10 days the cultures showed a decomposition and had a milky slime around the rim of the beakers at the waters edge. The bottom was also very milky white, under the microscope these areas showed dead and dying PARAMECIUM. But there was still enough life in the middle water but I felt it must be used at this point otherwise the culture would be past the period at which it is at its peak.

Conclusion: With the banana culture, found to be the best by far, I had no problems with discolouration or pollution with the tank water whatsoever. That the culture was quite clear in the middle of the beaker and was able to draw this off with a syringe, the sediment remained on the bottom and the floating refuse stayed on top at the waters surface.

Each feeding I would draw off 30 millilitres of tank water and replace it with 30ml of culture, (some ' 3,000 PARAMECIUM'S spreading out on the water surface of the tank). Doing this twice a day for approximately 4 days, hence I would need 2 x 2 litre cultures for 300 fry, total use of culture 1440 millilitres.

But I then found irregular growth among my fry, so a drip system was used to ensure a continual flow of food throughout the day.

Some of the reasons why infusoria strains do not eventuate.

(1) Oily film on the waters surface, indicating bacterial growth in culture vessel.

(2) Bacterial growth on water surface - especially on second or further cultures due to an unclean vessel. Clean all previously used containers with salt water, wipe clean and then rinse thoroughly.

(3) Banana skins above water line - this situation is encouraging bacterial growth to appear on the exposed part of the banana skin.

(4) Topping up the Culture with tap water - this contains chlorine, fluride or both, only use old tank water or airated water which has been standing for about 2 weeks.

(5) Insects gaining entry to the culture, the obvious answer to this is make sure the cap or top is secure and completely sealed.

POST SCRIPT :- STILL LOOSING FRY!!!

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