

Making Subcultures

Preparation

For smaller facilities, which don't require a large amount of water for paramecia production, autoclaving is the easiest way to get clean water for paramecia production.

For larger facilities, that will need more food and there for more water, a filtration unit is probably more appropriate. At ZIRC, all the paramecia water is filtered through a .23um Millipore Stainless-Steel Pressure Filter.

- To make subcultures, set out 4 clean cages and fill each one with 500-1000ml of either autoclaved or filtered fish water, or filtered de-chlorinated tap water.
- To each cage, add .05g powdered brewer's yeast tablets. Powdered brewer's yeast products are available but we have found that they don't work as well as the powdered tablets.
- Add 10 dry whole-wheat kernels that have been autoclaved. Ten kernels is approximately 1/4 tsp.
- Retrieve the 2 culture dishes that were set aside and add 1/2 of each culture to each cage.
- Label the cage with the date, mark it as a subculture, and cover the containers with a clear lid. Do not cover the containers with airtight lids! If container lids are tight fitting, drill some air holes in them.

The subcultures generally take 7-10 days to reach optimum density but will remain at that density for about a week and usually up to 2 weeks.