

A Semi-Sterile Method For Raising Paramecia

(Source: B. Trevarrow from [Zebrafish Book 5th Edition](#))

This method is a bit more tedious, but works if you have trouble growing paramecia with the simpler protocol.

Materials needed

Sterile fish water 24°C

Narrow necked clear glass bottles (500 ml tissue culture media bottles will do)

Liquid Fry (available through pet shops)

Wads of nylon filter wool

A disposable syringe (10 or 20 ml)

A productive healthy strain of para-mecia (Connecticut Valley, Carolina Biological, etc.)

Best temperature

21-24°C. The cul-ture grows more slowly at lower temperatures.

To establish the culture

1. Clean the bottles and fill with fish water about 3/4 full or until the bottle narrows. This should leave a relatively large surface area.
2. Sterilize the bottles by autoclaving.
3. Add several drops of liquid fry to each bottle (3 to 10 drops per 500 ml).
4. Add paramecia (about 1/4 to 1/8 of an aliquot per 500 ml). The culture will clear as the paramecia multiply, leaving mostly paramecia, flocculate material, and debris on the bottom. The paramecia can be seen as small specks. A dissecting scope can be used to ensure that the cultures are growing.

To harvest

1. Fill a narrow-necked bottle with the paramecia containing medium, if they were not grown there originally.
2. Add some water soluble vitamins to enhance the nutritional value of the paramecia a few hours before harvesting. They will absorb them directly from the medium.
3. If necessary, add deionized water to bring the fluid level up to the nar-row part of the neck of the bottle.
4. Press a wad of nylon filter wool into the neck until it is beneath the surface of the water. Make sure no bubbles, which could block the pas-sage of para-mecia upwards, are trapped under the wool.
5. Fill the bottle to its top with sterile 10% Hank's saline or sterile fish water.
6. After a few hours, the para-mecia will migrate up through the filter floss towards the air/water interface and into the small volume of clean 10% Hank's.
7. Remove the paramecia with a syringe or pour off and feed directly to the baby fish.

