BIOMEDICAL RESEARCH INSTITUTE

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Snail Egg clutch collection

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Introduction
The egg clutches (masses) of *Biomphalaria glabrata* and *Bulinus truncatus truncatus* typically contain a variable number of embryos. From the time the egg clutches are deposited by the adult snails, embryos begin to emerge in about 2 weeks. Snails prefer to deposit egg clutches on any hard surface, including the shells of other snails. Plastic strips, or pieces of Styrofoam, placed in an aquarium containing adult snails serve as convenient materials on which to collect and manipulate the egg clutches.
Note: Styrofoam (also known as expanded polystyrene) use is becoming more restrictive as it is considered harmful to the environment.

Equipment
Small spatula or flat forceps

Materials
Small, clear plastic strips or pieces of styrofoam (~100 mm x 100 mm)
Aerated “Pond H2O”

Procedure
- Place the plastic strips or styrofoam on the surface of the water containing adult *B. glabrata* snails.
- After a few days remove the plastic/styrofoam strips.
- Gently lift the egg clutches with a small spatula, and place them in a container of aged tap water.

Follow-up comments/recommendations
Removal of egg clutches from the adult snails allows the embryos to hatch and grow unimpeded by crowding (or other effects) due to the presence of the adult snails. One can also treat the surface of the egg clutches with a sodium hypochlorite solution (1% commercial bleach in aged tap water) for 10 minutes to eliminate most contaminating commensals such as rotifers.

References

Standen, O.D. 1951. Some observations upon the maintenance of *Australorbis glabratus* in the laboratory. Annals of Tropical Medicine and Parasitology 45: 80-83.

Pimental, D. 1957. Life history of *Australorbis glabratus*, the intermediate snail host of *Schistosoma mansoni* in Puerto Rico. Ecology 38: 576-580.

Olivier, L. and W.T. Haskins. 1960. The effects of low concentrations of sodium pentachlorophenate on the fecundity and egg viability of *Australorbis glabratus*. American Journal of Tropical Medicine and Hygiene 9: 199-205.

Chernin, E. 1957. A method of securing bacteriologically sterile snails (*Australorbis glabratus*). Proceedings of the Society for Experimental Biology and Medicine 96: 204-210.

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