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Growth of immature *Biomphalaria glabrata*

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Introduction

The growth rate of *B. glabrata* is highly dependent on the ambient temperature at which the snails are maintained. Newly hatched *B. glabrata* can grow to about 5 mm (shell diameter) in 3-4 weeks (or sooner) if the temperature is maintained at 26ºC, providing other growth conditions are also optimal.

Equipment
Shallow plastic pans

Materials and reagents
Artificial Pond Water
Food sources such as: *Nostoc* (cyanobacteria)
Wilted lettuce
Dried fish food/fish flake

Procedure

- Maintain newly hatched snails in shallow containers, separate from the adult snails.
- Feed small amounts of lettuce wilted by heat (never fresh), in combination with another nutritious food source, such as *Nostoc* or dried fish food.
- Change the water if it becomes cloudy or foul-smelling.

Recommendations

Numerous sources of food have been used for the maintenance of juvenile *B. glabrata*. Lettuce leaves are widely used to feed mature *B. glabrata,* but snails 1-3 mm in diameter do not typically eat fresh lettuce. Juvenile snails will eat lettuce that has been wilted by heat, but lettuce should be supplemented with *Nostoc* or dried fish food. Be sure not to over-feed the snails, and clean the containers regularly, since bacterial growth (as evidenced by cloudy and foul-smelling water) can quickly become a problem if food is not consumed in a reasonable period of time.

References

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2. Tucker, M. S., Karunaratne, L. B., Lewis, F. A., Frietas, T. C., and Liang, Y-S. 2013. Schistosomiasis, in Current Protocols in Immunology 19.1.1-19.1.57, John Wiley and Sons, Inc., (R. Coico, Ed). Published online November 2013 in Wiley Online Library (wileyonlinelibrary.com). doi: 10.1002/0471142735.im1901s103.