



BIOMEDICAL RESEARCH INSTITUTE

NIH NIAID Schistosomiasis Resource Center

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***B. glabrata* growth conditions until patency**

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Introduction

The length of the prepatent phase of *S. mansoni* in *B. glabrata* is highly dependent on maintenance temperature. If the snails are maintained continually at 26°C, some snails can begin to liberate (shed) cercariae by 28-30 days after they are exposed to miracidia. In this four-week window, it is critical to get your 3-5mm snails as large as possible so that they can maintain themselves and their parasites as long as possible. It's best to split your snails into multiple containers, this ensures less competition for food and total loss if the water fouls from overfeeding.

Equipment

Incubator or modified room that can hold a steady temperature, ~ 26°C

Materials and reagents

Suitable pans for maintaining snails (examples; hydroponic pans, food storage containers)
Lettuces e.g. romaine (never use a tender lettuce like butter lettuce), algae, gel snail food

Procedure

- Maintain snails in shallow containers at a density of 12 – 15 snails per 1.5 L
- For a food source, use fresh lettuce, algae, gel snail food or a combination
- Be careful not to overfeed, give the snails enough food that can be cleared in 2 days
- Change the aquarium water regularly, especially if water becomes cloudy, snails are clinging to the perimeter at the water's edge or a foul odor is detected

Recommendations

The greatest amount of cercarial shedding typically occurs 1-2 weeks after initial shedding, but absolute numbers of cercariae vary between snails and are dependent upon many factors.

References

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