

Menthol protocol to bleach Aiptasia

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Abstract

Method to chemically bleach Aiptasia in small volume dishes.

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Guidelines

You should see a response by the 2nd day at the latest, with noticeably whiter anemones and visible pellets of expelled algae in the water. If not, sometimes the stock menthol solution loses effectiveness over time, so try increasing the dosage or making a new stock. Assess and repeat if needed.

If algae are not being expelled fast enough after three days, you can try another menthol treatment or cold shock (though these may produce different bleaching effects). Cold shock consists of subjecting the animals to 4°C for 4 hours per day for 1 week with abrupt water changes (rather than gradual cooling). This seems much more stressful to the animals, though they usually survive.

Protocol

Step 1.

Slowly add 1.35 mL of menthol (20 g/L) to the ASW 1 drop at a time. Stir constantly with the bubbler to prevent a surface film. Final concentration = 0.58 mM menthol solution

Step 2.

Leave bubblers inside the container, replace the lid, and wait for 8 hours.

Step 3.

Drain the menthol/ASW and replace with fresh ASW.

Step 4.

Leave the containers overnight in the dark.

Step 5.

Repeat for three days.



GOTO

-> go to step #1

Step 6.

After day 3 of menthol treatment, store Aiptasia in the dark.

Note: an extra day of exposure may be necessary. See Description for more information.
