

Copepod Care Protocol

***Copepods are given a 50% water change, and are fed three times a week on Mon/Wed/Fri. ***

***Take care to only use materials labelled for use with copepods – do not use plastic or glassware from molecular lab (324) or marine lab (basement)*

Retrieve food for copepods

- Get three plastic pitchers from room 106
- Collect ~50mL of each standard diet component (TW, Tetraselmis, and Rhodomonas) for each existing copepod culture using the siphon located above the cultures.* Take care to use different pitchers to collect each alga, and rinse gloves with 70% ETOH between each collection.
- Combine species into one plastic pitcher, and bring to room 106 for feeding.

*If siphon is not working, use green auto pipette and disposable 50mL pipettes (make sure to use a new pipette for each alga you collect!)

50% Water Change and Feeding

- Check the salinity of the stock sea water before beginning water changes (Ideal salinity is 30ppt, but a range from 29-31 is acceptable).
- Remove air stone from culture
- Close lid and tightly seal before moving the culture from the incubator to the bench.
- Check status of culture, and fill out culture log
- Reverse filter (using large 60 micron filter) 50% of the total volume in the culture, taking care to rinse the sides of the container so no copepods are left high and dry.
- Rinse the filter with sea water, to remove any copepods pinned onto the mesh screen.
- Check the salinity of the culture by sampling waste water from the bucket (the goal is to prevent a change of > 2ppt between the culture and the new stock water, you may need to adjust the stock accordingly).
- Replace volume with clean, chilled stock sea water.
- Stir algal mixture and pour in ~150mL of algae into the culture.
- Check culture to make sure copepods are not in distress
- Check waste water bucket for stray copepods before discarding
- Secure lid on the culture and return culture to the incubator.
- **Make sure that the air stone is placed back in the container and bubbling at a slow steady rate**
- **Make sure the lid is left ajar.**

Rinse the filter and the siphon with tap water before cleaning the next culture

Make sea water

- Bring two 5gal buckets upstairs to MLS324
- Fill with RO using RO line in MLS324
- Add ~2 scoops of Instant Ocean to each bucket, and mix well
- Adjust salinity to reach ~30ppt
- Fill cubes by pouring sea water through a filter
- Bring cubes to incubator in room 106 to be chilled
- Make sure to place air stones in each cube of sea water and leave lids ajar