

Protocol for Shipping Gametophyte Cultures

1. Ensure your work area is clean and sterilize any surfaces that will be used with a generous amount of ethanol.
2. Gather supplies:
 - ☐ Gloves
 - ☐ Ethanol spray bottle
 - ☐ Paper towels or kimwipes
 - ☐ Permanent marker
 - ☐ Media Vessel
 - ☐ Pasteurized seawater
 - ☐ F/2
 - ☐ Dump vessel
 - ☐ Parafilm
 - ☐ Falcon or microcentrifuge tubes
 - ☐ Tube rack
 - ☐ Insulated shipping cooler or other cooler for shipping
3. Ensure all supplies are sterile.
4. Prepare some fresh culture media with F/2 and pasteurized seawater. (Keep the media partially covered parafilm to prevent slashes from contaminating it.)
5. Remove the culture from red light.
6. Visually inspect the culture and make sure it is right to send.
 - Contaminated cultures should not be sent for seeding purposes.
 - If you are sending a culture for seeding purposes and need it to be ready on arrival, you may need to do additional preparation of the biomass before mailing. See "Preparing Biomass for Seeding".
7. If you are only shipping a small tuft, use the pipette to move the biomass from the culture to the labeled microcentrifuge tube.
 - Fill the tube to near the top, leaving enough space for the cap to snap without causing spillage.
 - Jump to step 18 if you are only sending the small amount.
8. If you are sending a larger amount of gametophytes, remove the top of the container and slowly pour out the water into the dump vessel; dump as much as possible. (Avoid dumping out any of the gametophytes and be mindful of the splash.)
9. Pour or pipette the appropriate amount of biomass into the labeled falcon tube.
10. Top the tube and culture off with media.
11. Replace the caps of both the tube and culture.
12. Return the culture to red light.
13. Use a small strip of parafilm to seal the falcon tube.
 - They sometimes leak and the parafilm will prevent any major spillage
14. Refill the culture with fresh media with F/2.
15. Replace the top back on the culture.
16. Make sure the label on the culture is clear and legible; touch it up if it isn't.

17. Record the water refreshment in a culture maintenance data sheet.
18. Put the tubes in a tube rack and pack in a well-insulated cooler with ice packs.
 - The ice packs should not directly touch the sides of the falcon tubes.
 - The ice packs should be placed on the top and the bottom of the package for best results.
19. Add extra packing material to make sure everything is snug.
20. Seal the package with tape at every seam.
21. Ship the package so that they do not spend more than 48 hours in the mail.