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Date: 6/27/19

Goal:

1. Transfer some O. Marina and D. Tertiolecta into filtered, autoclaved seawater.
2. Filter and autoclave more seawater
3. Verify algal life
4. Feeding the O. Marina
  - a. 4 mL of the D. tertiolecta was fed to the O. Marina in the temporary solution while  
1 mL of the D. tertiolecta was given to the saltwater culture.

Date: 6/27/19

Goal:

1. Transfer some *O. Marina* and *D. Tertiolecta* into filtered, autoclaved seawater.

Protocol:

**Transferring *Oxyrrhis marina* and *Dunaliella tertiolecta* in seawater**

1. Two flasks were filled with 250 mL of filtered, autoclaved seawater.
2. 1 mL of each alga was placed into a flask.
3. Each flask was placed on a stir plate and both solutions are spun for movement of oxygen.

Date: 7/27/19

Goal:

1. Filter and autoclave more seawater

Protocol:

**Filter 1 L of Saltwater**

1. 1 liter of saltwater was vacuumed filtered using 0.22 um Millipore filter paper.
2. The saltwater was then autoclaved.

Date: 6/27/19

Goal:

1. Verify algal life

Protocol:

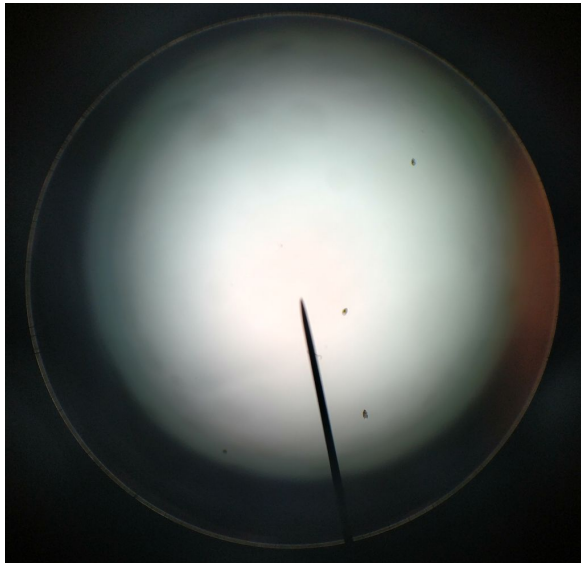
**Verify Algal life**

1. Looked at algae under the microscope
2. Movement indicated life

- 1.

Results

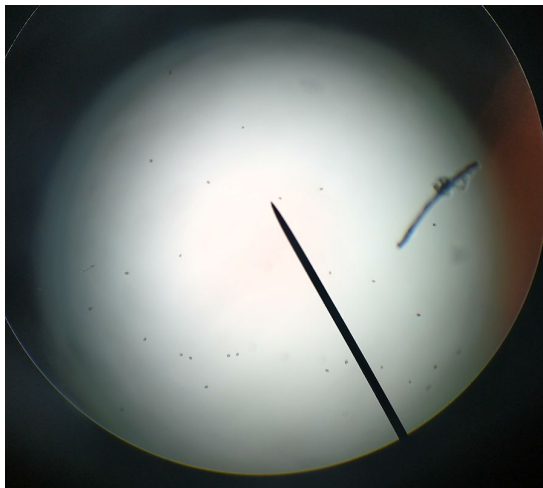
**O. Marina**



#### **D. Tertiolecta**



#### **S. Microadriaticum**



- All three algae were seen moving.
- O. Marina swims in random directions with a relatively larger range.
- D. Tertiolecta either swims in circles or vibrates in place.
- S. Microadriaticum only moves in very small circles with no other patterns of motion.

## Conclusion

D. Tertiolecta is probably meant to be cultured in F/2 media because it was not active in the filtered seawater alone. Tomorrow, we should prepare two liter flasks; 1 mL of the F/2 media in each flask. One should be filled all the way with di water while the other should be filled to a liter with filtered, autoclaved seawater.

We learned that the dinoflagellates should not be agitated, so we'll restart the culturing process because we had a stir bar aerating the cultures.