


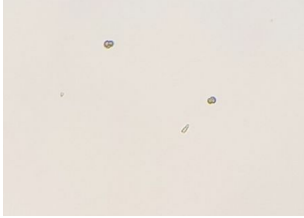
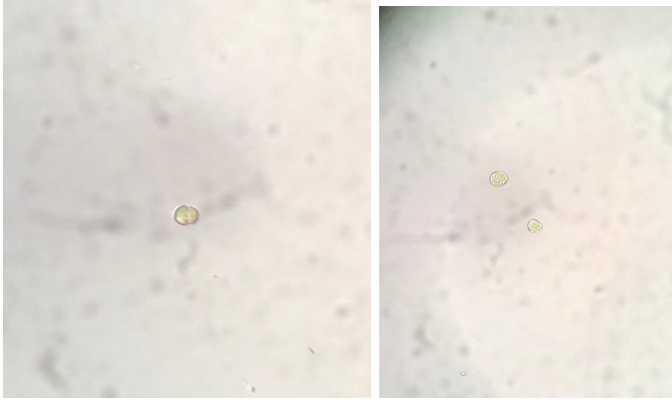



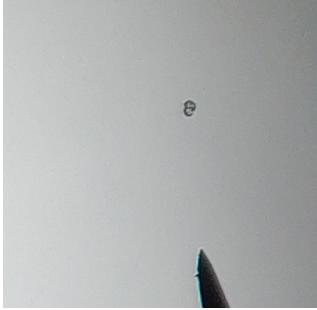
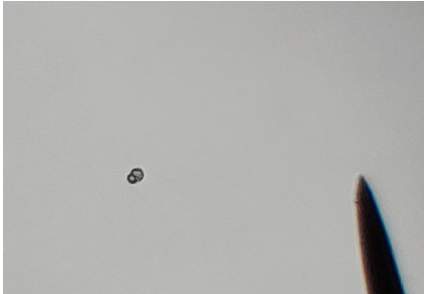
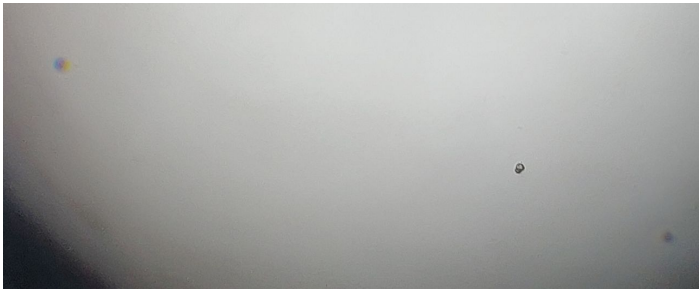
Name: Kennex Lam, Krithika Karunakaran

Date: 7/12/19

S. Microadriaticum

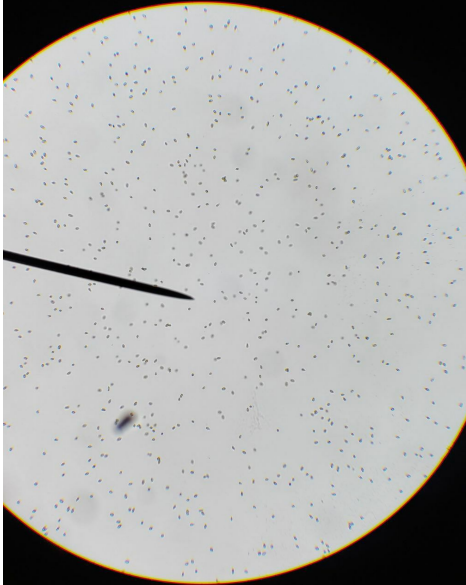
<p>Stock</p>   	<p>Densely packed and majority are rapidly swimming in circles.</p>
<p>F2 10 mL</p>	<p>Very few algae visible. Most are spinning in circles, some were swimming in loops, and a small percent were dead</p>
<p>F2 25 mL</p>	<p>Few number of algae but most are spinning in circles and rest are dead.</p>
<p>F2 75 mL</p>	<p>Low number, most were spinning in circles and few were loop swimming. Did not observe any dead algae.</p>
<p>ASP-8A 10 mL</p>	<p>Most were spinning in circles, but the</p>

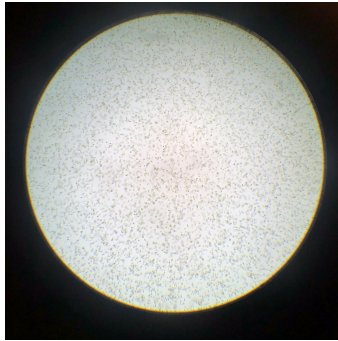
	<p>speed of the spins is lower. Some are moving back and forth (linear motion).</p>
<p>ASP-8A 25 mL</p>	<p>Most are swimming in circles, some are moving back and forth like they are vibrating, and the rest are unmoving - maybe dead</p>
<p>ASP-8A 75 ml</p> 	<p>Most spinning in circles. A few were loop swimming. A few were dead. Notice the different shapes.</p>
<p>L1 10 mL</p>	<p>Most are spinning in circles. Some are drifting and floating around, low concentration and individual algae look smaller than in ASP-8A and F/2</p>
<p>L1 25 mL</p>	<p>Extremely low concentration. Of the existing algae, all are spinning in circles</p>
<p>L1 75 mL</p>	<p>Observed less than 5 living algae. All are swimming in circles.</p>
<p>L1 + F2 10 mL</p> 	<p>Some dead, but the rest are spinning in circles. Only saw one that is swimming normally (pictured)</p>

<p>L1 + F2 25 mL</p> 	<p>Not much movement of algae. Observed a small concentration and only 3 or 4 were actively swimming in circles. This one was one of the few that was spinning.</p>
<p>L1 + F2 75 mL</p> 	<p>Only 2 dead algae, rest are spinning in circles. No algae swimming normally.</p>
<p>ASP-8A w/ SW 10 mL</p> 	<p>Lots of movement. Almost all are spinning. In this picture there are 3 spinning algae.</p>
<p>ASP-8A w/ SW 25 mL</p>	<p>Low concentration. Observed 1 swimming normally at relatively fast speed. No death, just absence.</p>
<p>ASP-8A w/ SW 75 mL</p>	<p>Not a lot of movement. 2 swimming normally (1 of them pictured) rest are slowly drifting or dead.</p>

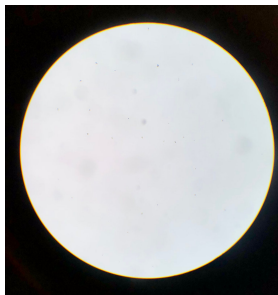
	
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D. Tertiolecta

<p>Stock</p> 	<p>Overgrowth. Many were swimming but a noticeable amount are immobile and are likely dead.</p>
<p>ASP-8A 75 mL</p>	<p>A gooey film was formed and when viewed under microscope, the D. tert overgrew. Many were still but many were still swimming.</p>

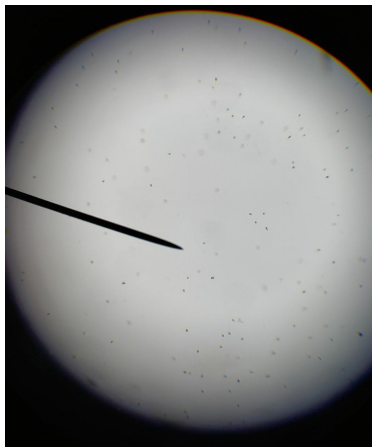


ASP-8A w/ SW 10 mL



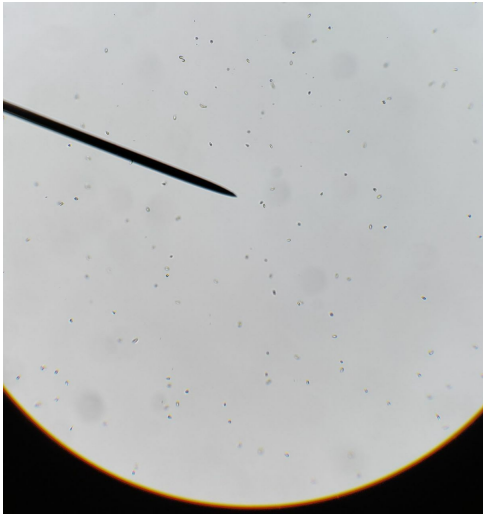
Solution already looks visibly green. Nearly all are swimming but many are shaking then stopping and then swimming.

ASP-8A w/ SW 25 mL



Very high concentration. Majority are swimming normally with very few dead and even fewer swimming abnormally. All black dots pictured are algae.

ASP-8A w/ SW 75 ml



Very high concentrations with normal swimming, and low death numbers. A little more dense than 25mL.

* Changed the 75 mL ASP-8A media.

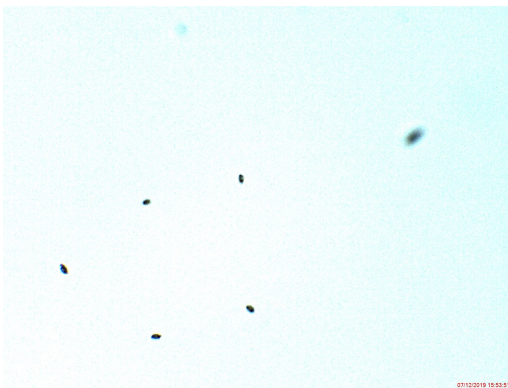
O. Marina

Stock






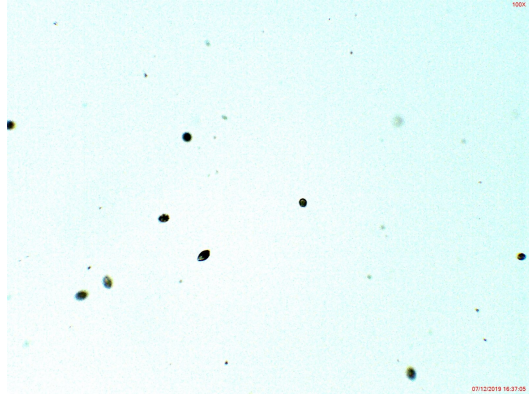
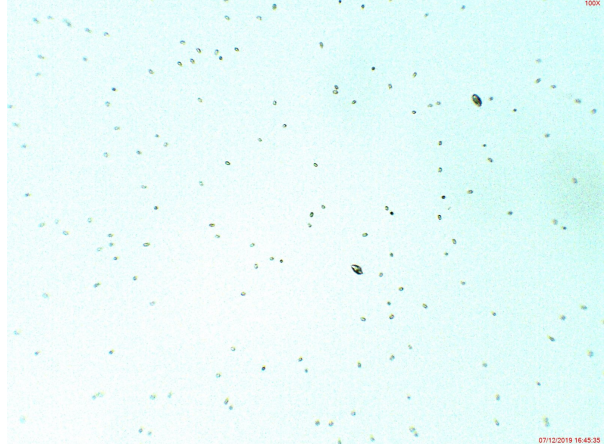

Seems like low concentrations. Rapid swimming and healthy algae. No visible death.

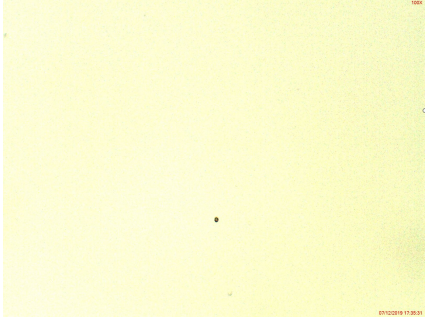
F2 10 mL



Tube filled to 13.5mL
Most are swimming normally. Not very high concentrations and some of the o. Marina are swimming very slowly and in loops.

<p>F2 25 mL</p> 	<p>All are swimming quickly and seem to be relatively healthy</p>
<p>F2 75 mL</p> 	<p>All are swimming normally and rapidly. Did not observe any dead <i>O. marina</i>. Not as dense as 25mL but still seems to be healthy.</p>
<p>ASP-8A 10 mL</p> 	<p>Seems to be much more <i>O. marina</i> in ASP-8A than in F/2. Healthy, swimming normally, relatively more dense.</p> <p>(6/28/19)</p>
<p>ASP-8A 25 mL</p>	<p><i>O. marina</i> swimming normally and some <i>D. tert</i> found floating around. Some are swimming but <i>O. Marina</i> is much more abundant</p> <p>(6/28/19)</p>

	
<p>ASP-8A 75 ml</p> 	<p>Abundance of D. tert and small concentration of O. marina. Observed at 400x as well and watched O. marina feeding - they swim in a helix pattern and spin around during feeding. The o. Marina have a green coloration inside (possibly due to feeding on D. tert). A significant amount of the D. tert was dead but the living still outnumbered O. marina.</p> <p>(6/28/19)</p>
<p>ASP-8A w/ SW 10 mL</p> 	<p>Decent concentration of O. marina but not abundant. Most were clear (few were green) and no d. Tert was present.</p> <p>(7/11/19)</p>
<p>ASP-8A w/ SW 25 mL</p>	<p>Very low concentration of o. Marina but normal swimming patterns. Only observed 3 living cells. No d. Tert and no dead o. Marina present. This could mean that o. Marina is exhibiting cannibalistic behaviors.</p>

	<p>(7/11/19)</p>
<p>ASP-8A w/ SW 75 ml</p>	<p>More D. tert than o. Marina in this. Not enough for media to turn green, but enough for the o. Marina to have a green coloration. Only observed about 15 D. tert and about 3 o. Marina. Normal swimming patterns for all.</p> <p>(7/11/19)</p>