


Name: Kennex Lam

Date: 7/4/19

S. Micradriaticum

Stock	Majority spinning in circles while $\frac{1}{4}$ are non-moving.
F2 10 mL 	Witnessed a cluster of them grouped together when dead. Many are spinning around in circles.
F2 25 mL	Some dead. One was swimming in a circle.
F2 75 mL	All (5 were seen) were swimming in circles.
ASP-8A 10 mL	Nearly all were dead. A couple of the Symbiodinium were clumped together in a group. Found 4 spinning in a circle.
ASP-8A 25 mL	Most (about 6) were spinning in circles. Few were dead and a cluster of 10 were dead.
ASP-8A 75 mL	None were seen.

* S. micradriaticum appears to prefer F/2 media.

* From now on, the 10 mL solution will contain 1 mL of Symbiodinium. 25 mL will have 2 mL of Symbiodinium and 75 mL solution will have 3 mL of Symbiodinium because they are more difficult to culture. The additional mL of stock S. Microadriaticum was added into the 25 and 75 mL today.

D. Tertiolecta

Stock	$\frac{1}{3}$ shaking in place while the majority are swimming around.
F2 10 mL	Half shaking in place, other half swimming

	around.
F2 25 mL	Majority shaking in place and few swimming.
F2 75 mL	Not as much density of cells as compared to the ASP-8A 75 mL solution.
ASP-8A 10 mL	Nearly all are swimming around. Despite the ASP-8A having more active <i>dunaliella</i> and a visibly greener appearance in the culture, the F2 appears to have a higher concentrated population.
ASP-8A 25 mL	A higher cell density compared to the F2 25 mL. The algae also look more active than the F2.
ASP-8A 75 ml	All swimming and active.

* We have to take into account that the stands holding the all the 25 mL cultures may not be getting as much sunlight as the other volumes were as the stands blocked some of the bottles. This could have hindered the growth of the 25 mL *S. microadriaticum* and *D. tertiolecta* in both the F2 and ASP-8A media as they are photosynthetic. The 25 mL cultures were moved to a better lit stand as of today.

O. Marina

Stock	Swimming normally and slightly green.
F2 10 mL	Seems to be a higher concentration of them compared to yesterday. All swimming.
F2 25 mL	<i>O. marina</i> swim much faster in F2 than in ASP-8A 25 mL.
F2 75 mL	Swimming normally and active.
ASP-8A 10 mL	All swimming as well, but they appear to have more cysts than compared to F2. They also do not swim as fast as those in F2.
ASP-8A 25 mL	It seems that the <i>D. tertiolecta</i> have overgrown in the <i>O. marina</i> solution like it was witnessed in the 75 mL ASP-8A solution as well. The <i>O. marina</i> are swimming freely.
ASP-8A 75 ml	Overgrowth of <i>dunaliella</i> . One appeared dead while another was swimming in circles.

* Based on the observations of this week, it seems that the *D. tertiolecta* prefer the ASP-8A media whereas the *O. marina* prefer the F2 media. There is the problem of *D. tertiolecta* over producing in ASP-8A, and as of now, we do not know whether that would be harmful to the *O. marina*.