Isabella Schneider The Effect of Octyl methoxycinnamate on Algae

A recent study has shown that octyl methoxycinnamate, a chemical in sunscreen, affects coral growth, therefore this project questioned whether or not octyl methoxycinnamate affects a common organism like algae, and if regular Dawn dish soap would be an adequate remedy. Results from this project could verify whether or not precautions should be taken when using sunscreen in natural waters. After testing different doses of octyl methoxycinnamate on algae, this chemical was found to decrease algae growth, although conclusions were unclear because the measuring device was unreliable. However, preliminary results indicate that there is a potential hazard in large concentrations of octyl methoxycinnamate. Additionally, Dawn dish soap does not help increase the algae growth like my hypothesis suggested. This was made known by comparing results from part 1 to part 2, and since the majority of the time there was a decrease in dissolved oxygen in the water, the Dawn dish soap had a negative effect. Because octyl methoxycinnamate is oil based, it separates from water, making remediation possible.