

Algae is being studied for its interconnections with biofuel production, ability to remediate pollution (including CO<sub>2</sub>), and as a food source for animals and humans. One of the major issues to scaling up algae culture is the open-air culture ponds becoming contaminated with organisms from the ambient environment. This includes, but is not limited to, zooplankton contaminants feeding on the algae. Large-scale solutions to preventing contamination can be costly, and need to not harm the growth of the algae or inhibit its downstream use. Presently, solutions are being investigated on a lab-scale, where algae are being fed to several *Daphnia* species as test species of zooplankton. Of interest are the growth rates of the *Daphnia* fed different amounts of algae, induction and hatching from the dormant ephippial stages, and reproductive rates. A search of the scientific literature is being conducted to identify potential zooplankton inhibitors. Since both *Daphnia magna* and the algae *Selenastrum capricornutum* have been used for biological toxin testing, their response to numerous chemicals is known. We are looking for a chemical at a specific concentration that is not deleterious to humans nor algae but greatly inhibits *Daphnia* at some point in their life cycle. Zinc, for example, across a narrow concentration range appears to have minimal effects on *S. capricornutum* and negative effects on *D. magna*. We hope to identify other examples which can be used safely to allow us to make progress on decreasing zooplankton contamination, thus benefiting the developing algae industry.