The results of this study indicated that LAE was the best candidate for mitigating biofouling on RO membranes. The concentration at which LAE can effectively prevent biofilm growth is 63 mg/L.

The concentration at which LAE can effectively remove biofilm growth is 5000 mg/L.

Given the results from this study, further studies may be required to further validate the applicability of LAE in RO systems.

- Testing LAE’s ability to prevent and remove biofilms from RO membranes
- Testing LAE’s compatibility with RO membranes
- Perform anti-biofouling tests on laboratory, pilot and full-scale RO treatment systems

I would like to thank Dr. Heather Buckley, Luiz Henrique Da Silva Correa and the Green Safe Water Lab.

This research was supported by the Jamie Cassels Undergraduate Research Awards, University of Victoria, and supervised by Dr. Heather Buckley.

Produced on March 3rd, 2023