

Small-scale evaluations of select pesticides for development of management recommendations for starry stonewort (*Nitellopis obtusa*)

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ABSTRACT

Starry stonewort is a nonnative, invasive macroalgae from Europe and western Asia. Unlike many of the native green macroalgae, starry stonewort can elongate into the water column and produce dense mats. Dense growth of starry stonewort can alter aquatic community structure and interfere with recreational activities. Management of starry stonewort has been difficult and unpredictable. The current study evaluated several formulations of copper algaecides as well as some herbicides for control of starry stonewort using controlled small-scale screenings. Copper formulation did not impact efficacy on starry stonewort, and all formulations tested offered > 60% biomass reduction, depending upon treatment concentration, except for Cutrine®-Ultra during one screening. Diquat and herbicides containing diquat offered > 95% biomass reductions 4 wk after treatments. Other herbicides evaluated did not offer significant reductions in biomass. Although promising from a small-scale perspective, data from field plots and further field demonstrations are needed.

Key words: algaecide, carfentrazone-ethyl, copper, diquat, endothall, flumioxazin, herbicide.

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