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## EVALUATIONS OF CONTACT AQUATIC HERBICIDES FOR CONTROLLING TWO POPULATIONS OF SUBMERSED FLOWERING RUSH

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Treatment of Submersed Triploid MN and ID FR Samples

Treatment	FR type	Exposure Time	Shoot biomass	Root biomass
diquat (370 $\mu\text{g ai L}^{-1}$ )	MN	6 and 12 hours	>70% reduction	No impact
flumioxazin (200 $\mu\text{g ai L}^{-1}$ )	MN	12 and 24 hours	No impact	No impact
endothall (1500 and 3000 $\mu\text{g ai L}^{-1}$ )	MN	12 and 24 hours	>70% reduction	No impact
flumioxazin (400 $\mu\text{g ai L}^{-1}$ )	ID	24 hours	>70% reduction	>70% reduction
endothall (3000 $\mu\text{g ai L}^{-1}$ )	ID	24 hours	>70% reduction	>70% reduction
endothall (3000 $\mu\text{g ai L}^{-1}$ )	MN	24 hours	>70% reduction	Did not greatly reduce

**Results of both experiments showed that contact herbicides are effective against flowering rush.**

**Application strategies for complete control of triploid flowering rush shoots and roots with contact herbicides may require repeat applications and/or combinations with each other and systemic herbicides.**

**Early spring applications would be advantageous when using contact herbicides against submersed flowering rush because impacts on collateral non-target native vegetation that is still in winter quiescence would be mitigated (Netherland et al. 2000, Poovey et al. 2002, Skogerboe et al. 2008). Moreover, young triploid flowering rush plants with less biomass than mature plants would be more susceptible to herbicides and vegetative reproduction potential would be reduced.**