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Philip W. Tipping, Melissa R. Martin, Min B. Rayamajhi, Paul D. Pratt, Lyn A. Gettys

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Combining biological and mechanical tactics to suppress *Melaleuca quinquenervia*

Philip W. Tipping<sup>a\*</sup>, Melissa R. Martin<sup>b†</sup>, Min B. Rayamajhi<sup>a</sup>, Paul D. Pratt<sup>c</sup>, Lyn A. Gettys<sup>d</sup>

<sup>a</sup> USDA/ARS Invasive Plant Research Laboratory, 3225 College Ave., Davie, FL 33314, USA

<sup>b</sup> U.S. Fish and Wildlife, ARM Loxahatchee National Wildlife Refuge, Delray Beach, FL 33473, USA

<sup>c</sup> USDA/ARS Exotic and Invasive Weeds Research Unit, 800 Buchanan St. , Albany, CA 94710, USA

<sup>d</sup> University of Florida, Fort Lauderdale Research and Education Center, 3205 College Ave., Davie, FL 33314

Abstract

A four y common garden study was initiated using once-cut *Melaleuca quinquenervia* trees that were subsequently subjected to a full factorial of treatments that included reduced versus unrestricted herbivory from biological control agents, a mechanical treatment (trees were not cut or were cut every 6 m), and an irrigation treatment (trees were irrigated or not). Repeated cutting reduced the total tree biomass by 76.4%, herbivory alone reduced total biomass by 58.7%, and the combination of cutting and herbivory reduced total biomass by 80.1%. Unrestricted herbivory reduced the seed biomass per tree by 93.9% in uncut trees while repeated cutting eliminated all seed production regardless of herbivory. Uncut trees subjected to unrestricted herbivory allocated an average of 8.8% of their biomass to

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\* Corresponding author.

E-mail address: [Philip.tipping@ars.usda.gov](mailto:Philip.tipping@ars.usda.gov) (P. W. Tipping)

† Present address: Natural Resources Conservation Service, Washington, DC, USA

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