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PII: S1049-9644(18)30166-X
DOI: https://doi.org/10.1016/j.biocontrol.2018.03.009
Reference: YBCON 3735

To appear in: *Biological Control*

Received Date: 1 August 2017
Revised Date: 19 March 2018
Accepted Date: 20 March 2018

Please cite this article as: Tipping, P.W., Martin, M.R., Rayamajhi, M.B., Pratt, P.D., Gettys, L.A., Combining biological and mechanical tactics to suppress *Melaleuca quinquenervia*, *Biological Control* (2018), doi: https://doi.org/10.1016/j.biocontrol.2018.03.009

Combining biological and mechanical tactics to suppress *Melaleuca quinquenervia*

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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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