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The Effect of Sanding and Pruning on Yield and Canopy Microclimate in 'Stevens' Cranberry

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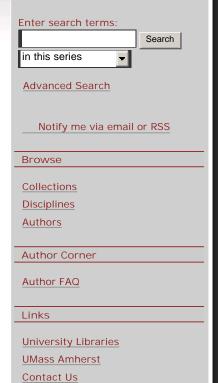
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Vaccinium macrocarpon, anthocyanin, uprights, canopy management, light penetration, leaf wetness

Abstract

Sanding and pruning are two practices used in the cranberry industry for vine management and yield stimulation. This study compared the effects of varying levels of sanding and pruning in April 2006 on vine canopy characteristics and yield over the course of two growing seasons. Each practice was applied at four levels: sanding at four depths: control (0 cm), light (1.5 cm), moderate (3.0 cm), or heavy (4.5 cm) of sand; pruning at four numbers of passes with a commercial pruner: control (0 passes), light (1 pass), moderate (2 passes), and heavy (3 passes). Pruning levels had no affect on upright density over the two seasons whereas heavy sanding treatment decreased the number of uprights per unit area significantly. A linear increase in light penetration was observed for the first season only as intensities increased for both pruning and sanding. Number of fruiting uprights relative to total uprights decreased in the first



year as intensity increased for sanding and pruning. This effect continued in the second year for sanding treatments. Yield and net returns averaged over the two years were greatest in lightly pruned plots, followed by lightly sanded plots. Moderate and heavy treatments were associated with lower yields and net returns than those for the controls.

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