

Effects of Graft Union Height on Vine Performance and Winter Survival

Progress Report

PI:

William R. Nail (10%)
Department of Forestry and Horticulture
Connecticut Agricultural Experiment Station
123 Huntington Street
New Haven, CT 06504
(203) 974-8491
(203) 974-8502 (FAX)
William.Nail@po.state.ct.us

Cooperators:

Hilary Sandler
University of Massachusetts
Cranberry Experiment Station
1 State Bog Rd., PO Box 569
E. Wareham, MA 02538
(508) 295-2212, ext. 21
(508)-295-6387 (FAX)
hsandler@umext.umass.edu

Rob Russell
Westport Rivers Vineyard and Winery
417 Hixbridge Road
Westport, MA 02790
(508)636-3423, ext. 2
(508) 636-4133 (FAX)
rob@westportivers.com

Research and Extension

Budwood of Chardonnay clone 96 was collected from the vineyards of Lenz Winery in New York in January, 2006. The budwood was grafted onto standard and tall C.3309 rootstock in late spring at Westport Rivers Vineyards and Winery in Westport, MA. The grafted vines were planted outdoors in a nursery bed and cared for during the growing season. The vines were dug up in early December and are being held in cold storage prior to being planted in their permanent locations in spring, 2007.

The planting locations in Hamden, CT and Westport, MA have been prepared according to standard practices: Existing vegetation in the rows was killed using a fall application of glyphosate. A pre-emergence herbicide was also applied to help prevent germination of winter weeds. Where needed, lime will be applied in early spring 2007 and tilled into the soil as deeply as possible to adjust soil *pH* to 6.5. A second application of glyphosate will be applied approximately two weeks prior to planting to control spring weed seedlings. The experimental plots will be planted in late April- early May. Preliminary trellising will be established when funds become available in July, as the vines grafted to the tall rootstock can be lightly trained to the fruiting wire during the 2007 growing season.

Dr. Hilary Sandler has agreed to replace Justine Vanden Heuvel as a cooperator in Massachusetts.

Appendix:

Impact Statement

This experiment will provide winegrape growers information regarding the applicability and feasibility of using high-grafted grapevines in a vineyard; whether the benefits, if any, might justify the increased cost and labor of production; and whether further studies, involving various heights of the graft union and scion/rootstock combinations should be done. There is considerable interest in this research in southern New England. These benefits are in keeping with the Management Efficiency and Sustainability priority of the National Grape and Wine Initiative.