GROWER COOPERATIVE TRIAL INTERIM PROGRESS REPORT

Guarantee® Organic Seaweed Extract

Promotes Enhanced Growth Rates and Vigor in Wine Grape Replants

Guarantee® Organic Seaweed Extract increases the growth of Chardonnay vines over the grower standard in a trial started late in the growing season.

CROP

Chardonnay grape replants, under one year old.

STUDY OBJECTIVES

The objective of this trial is to test whether **Guarantee Organic** applications in late summer of 2014 will enhance springtime vigor in the grape vine replants as they begin their canopy growth in 2015, as compared to a grower standard fertility program. This trial was started late in the 2014 growing season. Preliminary growth measurements were taken to observe growth rates in replants. The aim is to increase root mass in order to drive rapid shoot growth in spring of 2015.

LOCATION/SCIENTISTS

Monterey County, CA Investigator: Art Dawson, Ph.D., The Dawson Company

DESIGN

Replicated block design trial with **Guarantee Organic** applied by backpack sprayer. Late summer application followed by applications at 2 week intervals.



Over a 6-week interval, with the Guarantee® Organic vines there was a roughly 50% incremental shoot length advantage over the non-treated control.

Four applications of seaweed were made between Aug 13 and Sept 24, 2014.

TREATMENTS

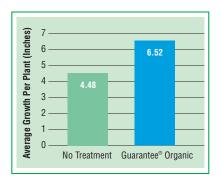
Control: Grower Standard Practices
Treatment 1: Grower Standard
Practices, plus Ocean Organics
Guarantee Organic (1 pint/acre)

PRELIMINARY RESULTS

Vine measurements were taken at 2-week intervals. First measurements were taken on 8/13/14. Most recent measurements were taken on 9/24/14. Over this 6-week interval, the Grower Standard replants grew an average of 4.48 inches per plant. The replants treated with **Guarantee Organic** grew an average of 6.52 inches per plant.

CONCLUSIONS

Guarantee Organic applications at 2-week intervals resulted in an increase in total growth in the grape vine replants as compared to the Grower Standard. This growth is an indicator of enhanced root development and we anticipate that this will lead to enhanced vine vigor and canopy growth in the next season. Regardless of the 2015 objective, we are encouraged by the roughly 50% incremental shoot length advantage we have seen thus far over the non-treated control.



Summary, Height Totals, Inches

			3			
	No Treatment			Guarantee® Organic		
Dates	8/13	9/24	Total Growth	8/13	9/24	Total Growth
Block 1	286.5	337	50.5	325	411.5	86.5
Block 2	260	293	33	293	338.5	45.5
Block 3	332.5	383.5	51	302	365.5	63.5
Sum			134.5			195.5
Avg. growth/plant (10 plants/block)			4.48			6.52

Ocean Organics is a manufacturer of high performance, scientifically proven seaplant-extract based biostimulants, plant growth materials and granular fertilizers. Our state-of-the-art products contain unique and proprietary constituents. Founded in 1977, we are the developers and manufacturers of the Emerald Isle foliar fertilizers and biostimulants, now owned and distributed to professional turf and ornamental markets by Lebanon Turf Products. Our materials have been tested in over 25 universities and independent laboratories.



Manufacturing

Waldoboro, Maine • 888-312-0106

Administration

Ann Arbor, Michigan • 800-628-GROW (4769) oceanorganics.com