

Rubired Grapes

Effect of *Converted Organics™ LC* and *Converted Organics™ XK*: Multiyear Crop Trial

California accounts for 38 percent of the national fruit and nut production and 65 percent of the national value of fruit and nut crops. In 2004, grapes continued to be the top-valued fruit and nut crop with \$2.76 billion, increasing 19 percent from the previous year.¹ Wine grapes accounted for \$1.6

billion of that crop's total value. With such a large investment, growers are constantly looking for ways to improve crop yields and quality in addition to reducing the expenses and environmental effects associated with the use of synthetic fertilizers and pesticides while protecting the largest investment of all—their soil.

TRIAL BACKGROUND

This multi-year, large scale wine grape trial began in 2005 to determine if *Converted Organics™ LC* and *Converted Organics™ XK*, when added to growers standard fertilizer program could: 1) increase yields 2) increase color and 3) increase overall vine health (vigor).

Table 1. Rubired Grape Trial Conditions

Products Tested	<i>Converted Organics™ LC</i> and <i>Converted Organics™ XK</i>
Harvest Date(s)	2005 and 2006 Seasons
Wine Grape Variety	Rubired
Soil Type	Ranging from clay to sand
Application Method	Flood irrigation: shanked or sprayed Drip irrigation: injected
Application Schedule	At bloom, 30-40 days after first application, during veraison
Application Rate/Acre	Application 1: 7 gallons <i>Converted Organics™ LC</i> Application 2: 7 gallons <i>Converted Organics™ LC</i> Application 3: 7 gallons <i>Converted Organics™ LC</i> and 4 gallons <i>Converted Organics™ XK</i>
Treatment Lots	12 field lots/6 growers
Treatment Acres	501
Control Acres	40
Field Locations	Southern San Joaquin Valley: Madera to Arvin

2005 WINE GRAPE TRIAL SUMMARY RECAP

The results from the complete 2005 Wine Grape trial showed that the first application of *Converted Organics™ LC* helped reduce shatter in the Ruby Cabernet fields and two out of three Barbera fields. In some cases, a ton per acre increase was realized due to the increased set. In most fields, there was better bunch uniformity (fewer shot berries) and increased berry size diameter. There was a visual difference of increased color in some varieties in the treated areas. In some fields, a visual increase in canopy growth was observed where poor soil conditions prior to the trial had affected canopy growth.

2006 RUBIRED YIELD ANALYSIS

In the second year of application, *Converted Organics™ LC*, used in combination with *Converted Organics™ XK*, improved crop yields for Rubired grapes at an average rate of 1.13 tons per acre over that of the control area of the trial (See figure 1). This translates to an increased average gross return per acre of \$226.00 (See figure 2). Brix analysis for 2006 showed an average 6% increase over that of 2005 (See figure 3).

