



# Wine Grape Case Study

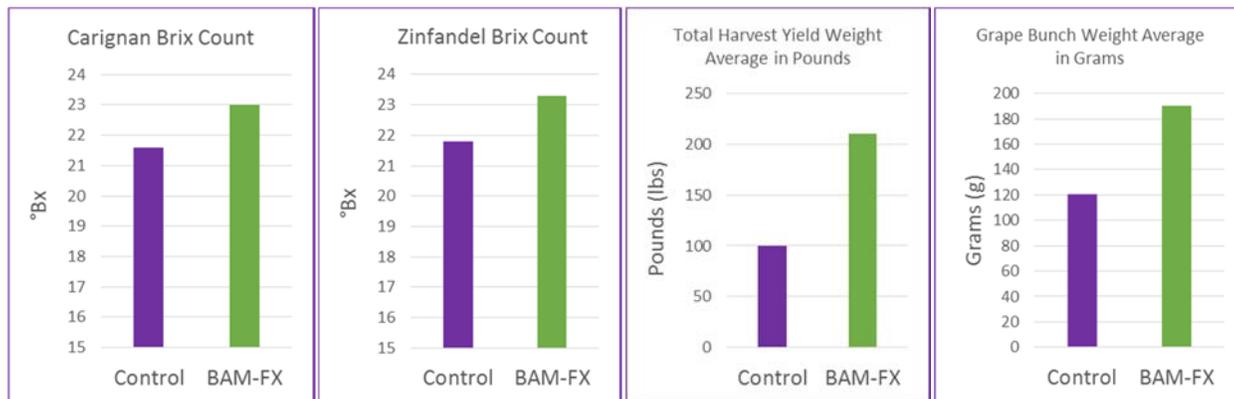
## Higher Brix Count and Increased Yield with BAM-FX™

### Introduction

The effects of **BAM-FX™** were evaluated through wine grape case studies at a prestigious winery in Morgan Hill, California. Since 1925 their vineyards have been producing high quality, award winning varietal wines. Two-year validations included mature Carignan and Zinfandel vines that were all similar in age, health, size and spacing. The objective was to produce the following: a measurably higher Brix count, a better total harvest yield weight and increased grape bunch weight by adding BAM-FX to the growers' existing fertilizer protocol.

### Results

A Juice Quality Panel and Berry Phenolic profile was done by Enartis Vinquiry Laboratories, an independent lab. The Carignan and Zinfandel grape juice in addition to the crushed grapes show a higher Brix (°Bx) count in the BAM-FX treated grapes. BAM-FX treated grape vines showed a consistent doubling in total harvest yield weight average per row (50 vines) and a significant increase in grape bunch weight average. These results illustrate a yearly application of BAM-FX at .05 oz./gallon of water can measurably improve important values such as Brix, bunch size and overall crop yield. Based on the data, BAM-FX can potentially lower Nitrogen fertilizer needs as well.



Wine grape harvest from Control row



Harvest from **BAM-FX™** treated row

### Benefits of BAM-FX:

- Higher Brix count
- More new vine growth
- Improved quality of grape berries
- Doubled harvest yield
- Increased assimilable Amino Nitrogen levels
- Rise in total anthocyanins and phenolics

### Recommended Application Method, Frequency and Rate for Wine Grape Vines

**A yearly application of BAM-FX** is all that is needed to **see positive and measurable results.**

The suggested protocol is fully customizable and can be adjusted to meet your specific needs. Based on the positive results obtained during the field trials at the Wine Grape grower in Morgan Hill, California the recommended BAM-FX application protocol is:

- 1<sup>st</sup> treatment done early in the season at the first sign of bud break (generally, this would be in March)
- 2<sup>nd</sup> spraying occurring during the early to mid-vegetative phase (normally, this will be in May)
- 3<sup>rd</sup> and final application taking place at the onset of 'veraison' or grape berry ripening (depending on the wine variety this can be as early as July for sparkling wine or as late as November for slow ripening varieties)

The average BAM-FX recommended usage rate for Wine grapes is 16 oz. of BAM-FX for foliar spray.

BAM-FX at 0.5 oz./gallon, when used after harvesting will make the vines recover quicker and therefore be stronger at the start of the next growing season.

BAM-FX's chemistry potentially decreases the fertilizer requirements for crops while increasing crop plant vigor and your ROI.

#### PLEASE NOTE:

**ALWAYS REFER TO AND FOLLOW BAM-FX LABEL APPLICATION AND SAFE HANDLING INSTRUCTIONS.**

### About the BAM-FX Chemistry

BAM-FX® is a unique mineral composition that induces priming in plants. This plant defense priming technology activates a plant's innate immune system to change, without genetic modification, the physiology of a plant to substantially increase the absorption and assimilation of minerals and micronutrients to create exceptionally robust biomass, root system and vigor. This increased plant vigor activates the plant's natural defense genes, which not only suppresses disease development and the effects of insect infestation, but also creates a curative response in plants allowing for recovery of infected plants. Using BAM-FX has many positive effects, including increased yield, increased Brix content, increased disease defense and increased pest tolerance. BAM-FX works best when used as a foliar or root based application and can be used safely in conjunction with a wide variety of other products. Contact your BAM-FX representative for more details on rates and applications for your specific crop type and region.

**BAM Agricultural Solutions, Inc.**  
**bam-fx.com**