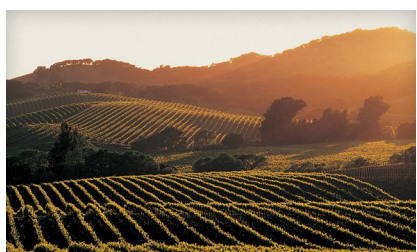


# Transit Soil® Improves Yield & Quality on Central Coast Wine Grapes

**Holden Research & Consulting**

**4 Year Research Study** Ventura County, California



## 60%

AVERAGE YIELD INCREASE  
IN **CHARDONNAY** WINE GRAPES  
**1.81 MORE TONS PER ACRE**

## 17%

AVERAGE YIELD INCREASE  
IN **PINOT NOIR** WINE GRAPES  
**0.38 MORE TONS PER ACRE**

These differences were statistically significant at 99.9% confidence level.

## DESCRIPTION

A 4 year (2010-13) research trial conducted by Holden Research and Consulting demonstrated the positive effects **Transit Soil** has on both quality and quantity of commercially grown Wine Grapes along the Central Coast of CA. This was a randomized complete block study with 4 replicates on 2 varieties of Wine Grape, Pinot Noir and Chardonnay.

## RESULTS

### Yield & Quality

- » Brix levels in the fruit were significantly higher in the weeks leading to harvest and at harvest.
- » All indications showed **Transit Soil** promoted earlier fruit development and maturity.
- » Titratable acid levels were significantly higher.
- » pH levels in the fruit were unchanged.

### Growth Parameters

- » **Transit Soil** significantly increased chlorophyll density of leaves.
- » Beginning the second year there was a significant increase in bunches per vine where **Transit Soil** was applied.
- » Significant increase in berries per bunch indicates less shatter after bloom and significantly better retention of fruit.
- » Significantly greater bunch length and bunch weight.

## APPLICATIONS

### » Treatment 1

Grower Standard

### » Treatment 2

**Transit Soil** applied at  
**8-12 oz/acre** at bud break  
and at pre-bloom.

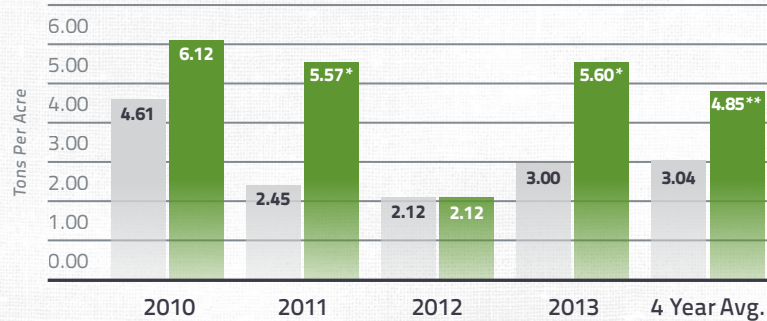




# CHARDONNAY WINE GRAPES

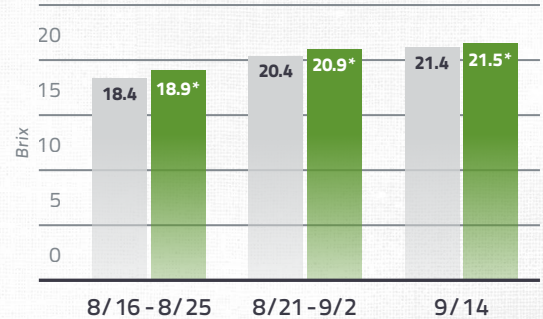
## 60% AVERAGE YIELD INCREASE

CHARDONNAY WINE GRAPES



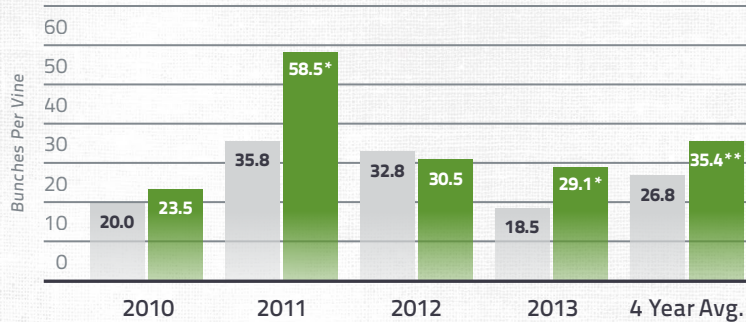
## BRIX LEVELS AVERAGE

4 YEAR AVERAGE



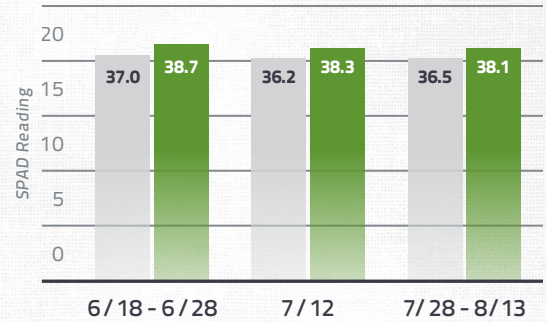
## BUNCHES PER VINE

CHARDONNAY WINE GRAPES



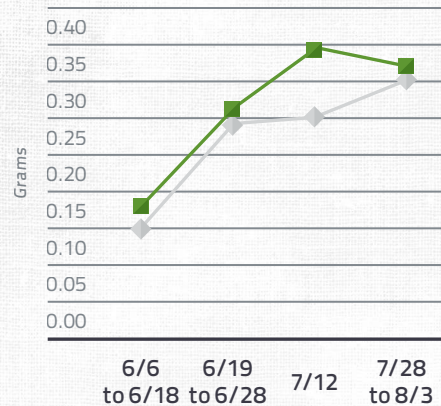
## CHLOROPHYLL AVERAGE

4 YEAR AVERAGE \*\*



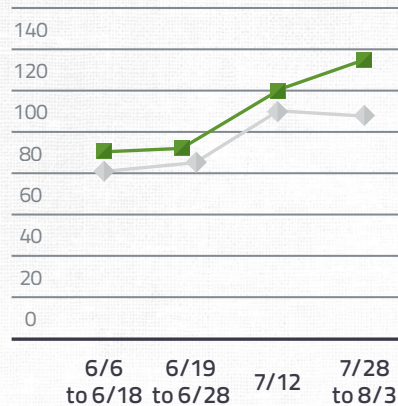
## BERRY WEIGHT

4 YEAR AVERAGE \*\*



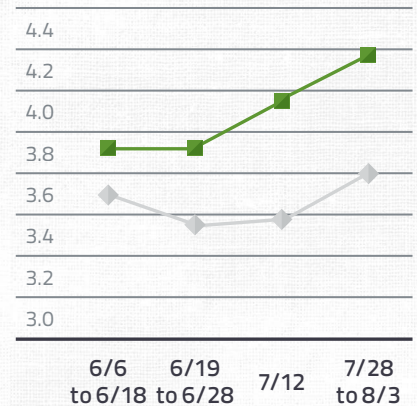
## BERRIES PER BUNCH

4 YEAR AVERAGE \*\*



## BUNCH LENGTH

4 YEAR AVERAGE \*\*



Grower Standard
 Transit Soil

\* yield differences are significant at 95% confidence level according to ANOVA

\*\* differences are significant at 99% confidence level according to 3-Way ANOVA

## TITRATABLE ACID & PH LEVELS 4-YEAR AVERAGE

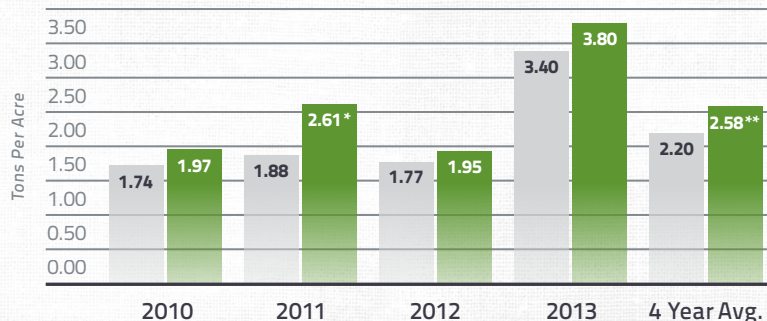
	TA g /100 ml	% of Standard	pH	% of Standard
Grower Standard	0.676	100%	3.21	100%
Transit Soil	0.733*	108%	3.18	99%



# PINOT NOIR WINE GRAPES

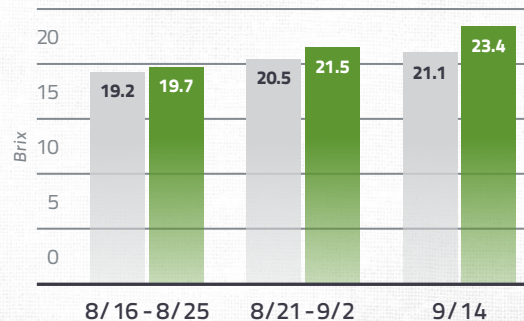
## 17% AVERAGE YIELD INCREASE

PINOT NOIR WINE GRAPES



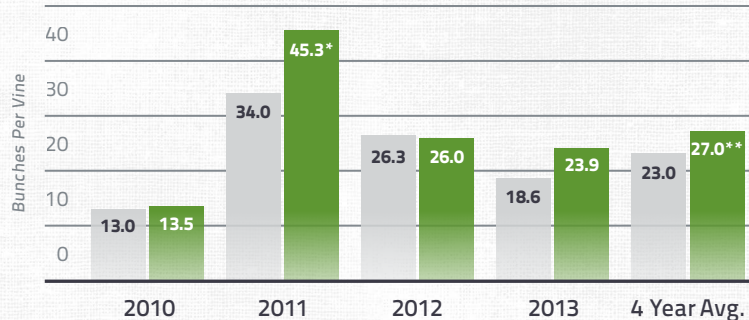
## BRIX LEVELS AVERAGE

4 YEAR AVERAGE



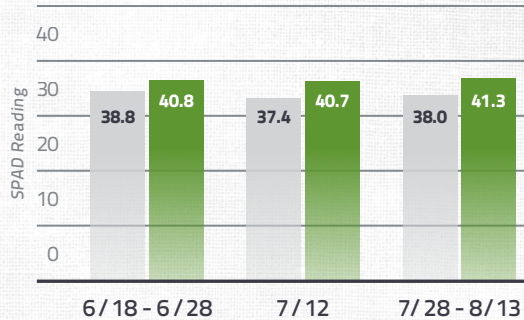
## BUNCHES PER VINE

PINOT NOIR WINE GRAPES



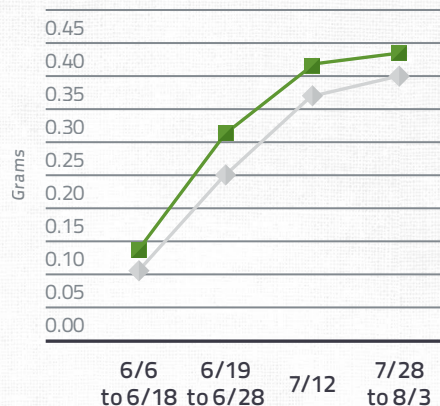
## CHLOROPHYLL AVERAGE

4 YEAR AVERAGE \*\*



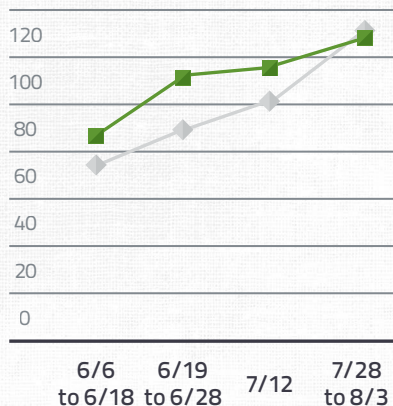
## BERRY WEIGHT

4 YEAR AVERAGE \*\*



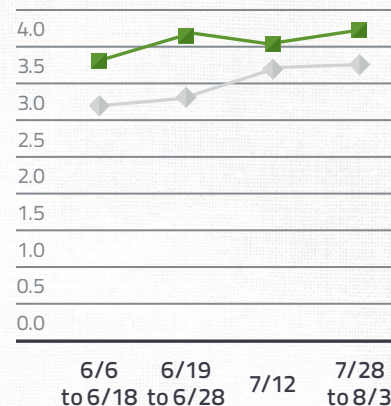
## BERRIES PER BUNCH

4 YEAR AVERAGE \*\*



## BUNCH LENGTH

4 YEAR AVERAGE \*\*



Grower Standard
 Transit Soil

\* yield differences are significant at 95% confidence level according to ANOVA

\*\* differences are significant at 99% confidence level according to 3-Way ANOVA

## TITRATABLE ACID & PH LEVELS 4-YEAR AVERAGE \*\*

	TA g/100 ml	% of Standard	pH	% of Standard
Grower Standard	0.641	100%	3.3	100%
Transit Soil	0.664	104%	3.4	102%



# Transit Soil® Improves Yield & Quality on Central Coast Wine Grapes

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**4 Year Research Study** Ventura County, California



## APPLICATION RECOMMENDATION

Apply **8-12 oz/acre** of **Transit Soil®** at bud break and pre-bloom.

To get the most out of your **Transit Soil** program, apply **8-12 oz/acre** at bud break, pre-bloom, and during sizing. Also, apply **10-12 oz/acre** at post-harvest.



### DESCRIPTION

**Transit Soil** is a soil-applied liquid nutrient product that is designed to resolve nutrient deficiency in all crops.

### DIRECTIONS FOR USE

**Transit Soil** is compatible with most NPK fertilizers regardless of pH. Also, it is compatible with most fertilizers that contain major and micronutrients. However, a standard jar test is always recommended before tank mixing.

### RATES & TIMING FOR ALL CROPS

<b>In Furrow or Pop-up Fertilizers</b>	Mix <b>6-8 ounces</b> with fertilizers applied near the seed.
<b>Banded Fertilizers</b>	<b>For with the seed, side dressed, dribbled, strip tilled:</b> Mix <b>8-12 ounces</b> with liquid fertilizers; higher rates of fertilizer require the higher label rates of <b>Transit Soil</b> .
<b>Dry Granular Fertilizers</b>	Impregnate <b>1.0-7.5 quarts</b> onto each ton of dry fertilizer depending on the final application of fertilizer in the field. Final applied fertilizer should carry <b>8-12 oz/acre</b> of <b>Transit Soil</b> .
<b>Broadcast Liquid Fertilizers</b>	Mix <b>8-12 ounces</b> with chemical applications or suspensions.
<b>Irrigation</b>	<b>8-12 ounces</b> can be applied by itself or mixed with fertilizer through irrigation systems.

### WARRANTY & CONDITIONS OF SALE

Manufacturer warrants that this material conforms to the chemical description hereon and is reasonably fit for use as directed. No other warranty is made, either expressed or implied. **BEFORE OPENING**, see other conditions and limitations that apply which are available at: <http://www.FBSciences.com/ProductConditionsOfSale/>. Information regarding the contents and levels of metals in this product is available on the Internet at: <http://www.aapfco.org/metals.htm>

2.50 US Gal / 9.46 Liters  
8.68 lbs per Gallon @ 68° F  
1.04 kg per Liter @ 20° C  
**Net Wt. 21.70 lb / 9.83 kg**

**FBSciences Inc.**  
153 N. Main St, Suite 100  
Collierville, TN 38017 USA

F1837  
V081817

### GUARANTEED ANALYSIS

Zinc (Zn) ..... 0.50%  
0.5% Chelated Zinc  
Derived from: zinc EDTA.

**READ ENTIRE LABEL BEFORE USE**  
**SHAKE WELL BEFORE USE**  
**DO NOT STORE BELOW 40°F (5°C)**  
**KEEP OUT OF REACH OF CHILDREN**  
**WARNING**



### HAZARD STATEMENTS

Contact with eyes or skin may cause irritation.

### PRECAUTIONARY STATEMENTS

Wear protective gloves and protective eyewear. Wash skin thoroughly after handling. Clothing should be thoroughly washed before re-use.

**IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.

**IF SWALLOWED:** Do not induce vomiting. Clean mouth with water. Call a Poison Control Center or doctor if you feel unwell.

**IF ON SKIN:** Remove immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs get medical attention.

**IF INHALED:** Remove person to fresh air & obtain medical attention immediately if breathing becomes difficult.

**fbsciences**

Specimen Label

**fbsciences**

formulation also available  
for use as a foliar application

**Transit  
Foliar®**