



Terra Ag  
Technologies®

"Producing higher yields for growers, one farm at a time."®

100%  
sustainable  
Produced without  
greenhouse gas emissions



## Organic Plant & Soil Pro 2™ Avocado

Organic Avocado with Organic Plant & Soil Pro 2™  
vs. the control group

**Soil Health and Carbon Sequestration Results**

**Location:** San Luis Obispo, CA

**Date:** October 22 2022

**Variety:** Avocado

**Company:** Mission Produce

**Farm:** Cal Poly Farm

**Soil Type:** Clay-Sandy loam

**Treatment:**

Organic Plant & Soil Pro 2 + Grower Standard Program (From May 2020 to Oct 2022) Plan to finish the program and collect the harvest data for season 2021, and continuing with Organic Plant & Soil Pro 2 for the 2023 season.

**Objective:**

Increase yield and quality, Benefit soil health with less nitrates and increase carbon sequestration. Increase absorption of nutrients in the trees in order to favor the development of the fruit.



## Fruit loading for next season



During the 2022 season, the estimation of 950 fruit loading per tree and number of fruit indicates a significant increase in production.

According to the Head Grower, the loading number and health of the new fruit coming for next season is very positive, with a projection of great sizing and quality and yield.

Most of the fruit quality is Type A, with better sizes, color and texture.



Overall view of Block, with trees totally loaded with fruit, and tremendous increase in foliage and overall health of the crop, due to better nutrient absorption rates and soil regeneration.



Due to the program with Organic Plant & Soil Pro 2, there is an increase of up to 50% more absorbent roots, and a very important regeneration of the soil, with very high rates of populations of beneficial microorganisms that favor a high rate of absorption of nutrients and a sustainable system with high rates of carbon sequestration.

## Results of Avocado Hass with Organic Plant & Soil Pro 2

Projected yield according to more flowering and load:

- 25,000 Pounds/Acre with more than 950 fruits per tree. Estimation of 22% more yield by using Organic Plant & Soil Pro 2.
- Soil regeneration, sustainability and increased carbon sequestration.

*"The best agricultural decision is the one based on data analytics and not on perception"*

## FINAL CONCLUSIONS AND RECOMMENDATION

The application of Organic Plant & Soil Pro 2 as a plant based natural alternative, favored the orchard in a positive way, helping to mitigate the effects of lack of absorption and translocation of nutrients for the final growth of fruits and flowering production, favoring an increase in the trees root system for a significantly healthier more productive tree.

The effect of Plant & Soil Pro 2 improves the natural condition of soil (true soil regeneration), balancing nutrients and maintaining a natural positive effect in carbon sequestration in soil, projecting better crops with increased yields and the quality of fruit.

Carbon Sequestration Mission Ranch Cal Poly  
 Woods End 2023 samples

		# per acre	Tons per Acre		# per acre	Tons per Acre		Kg per hec	# per acre	Tons per Acre		
<b>Dec-22 Data</b>	Soil 1 P&Sp2 Block 3	125,424	63	<b>Nov-22 Data</b>	Soil 1 P&SP2 Block 3	63,956	31.98	<b>Apr-22 Data</b>	Cal Poly3/ P&SP2 1	66,865	59,691	29.85
	Soil 2 P&SP2 Block 3	119,700	60		Soil 2 P&SP2 Block 3	97,112	48.56		Cal Poly3/ P&SP2 2	61,799	55,169	27.58
	Soil 3 P&SP2 Block 3				Soil 3 P&SP2 Block 3	29,391	14.70		Cal Poly3/ P&SP2 3	73,221	65,365	32.68
	Soil 4 P&SP2 Block 3				Soil 4 P&SP2 Block 3	23,613	11.81		Cal Poly3/ P&SP2 4	114,234	101,978	50.99
	Mean*		61		Mean*		26.76				70,524	35.28
	Soil 1 Control Block 2	62,464	31		Soil 1 Control Block 2	32,751	16.38		Cal Poly 2/Control 1	41,903	37,407	18.70
	Soil 2 Control Block 2	42,428	21		Soil 2 Control Block 2	39,270	19.64		Cal Poly 2/Control 2	37,989	33,913	16.96
	Soil 3 Control Block 2				Soil 3 Control Block 2	61,578	30.79		Cal Poly 2/Control 3	43,387	38,732	19.37
	Soil 4 Control Block 2				Soil 4 Control Block 2	28,331	14.17		Cal Poly 2/Control 4	40,981	36,584	18.29
	Mean*		26		Mean*		20.24				36,653	18.33

2000 # per ton

2000 # per ton

2.205 # per Kg

2.205 # per Kg

2.47 Acres per hec

2.47 Acres per hec

\*Mean is total /2

\*Mean is total /4