REGENERATIVE ORCHARD PROTOCOL

SOIL SEED & WATER

SOIL HEALTH & CONSERVATION

California Avocado Grove Protocol

Regenerative soil health for established avocado groves. Build resilient root systems, improve nutrient efficiency, and reduce irrigation demand—without pushing excess vegetative growth.

CALIFORNIA AVOCADO GROVES

GROVE CONTEXT

The Avocado Advantage

Avocados are a high-value crop that depend on healthy feeder roots and stable soil moisture. In many groves, compaction, low organic matter, and salt pressure reduce root function and force higher irrigation inputs.

15–25%	50+	+35%	Quality
WATER REDUCTION*	YEAR GROVE POTENTIAL	INFILTRATION	ROOT + FRUIT HEALTH

**Targets depend on soil texture, salinity, irrigation system, and management. Results vary by site.*

Program Objectives

Water Efficiency

Improve soil water holding and reduce evaporation losses

Root Resilience

Build biology that supports feeder roots and reduces stress cycles

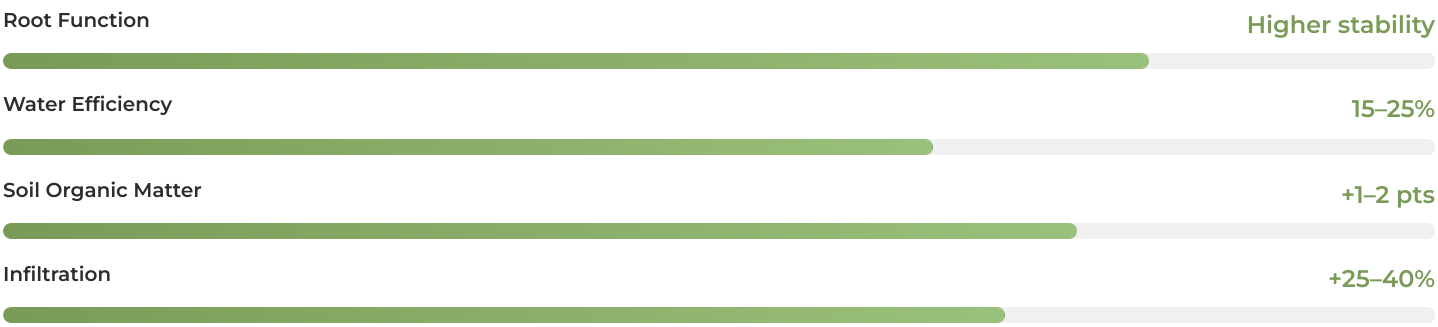
Nutrient Efficiency

Increase nutrient uptake with fewer inputs and less salt load

Fruit Quality

Support consistent sizing, oil content, and tree balance

Expected Performance Improvements



Plain-English Summary: This program makes your soil act like a better sponge and a healthier root habitat. When roots are happier, you can irrigate smarter, and the trees hold a steadier balance through heat and stress.

SOIL BIOLOGY APPROACH

The Biology Protocol

Avocado groves perform best with a strongly fungal-leaning soil biology that supports stable roots and steady uptake—without “pushing” excess growth.

~2:1	AMF	Balance
FUNGAL : BACTERIAL	MYCORRHIZAE TYPE	NOT “VIGOR PUSH”

Year 1: Three-Step Foundation

1. **Compost Band (Under Canopy)**
   Light band of fully stabilized compost in the wet zone. Carbon foundation + microbial inoculation.

2. **Woody Carbon Cover**
   Clean wood chips protect soil, moderate temperature, and favor beneficial fungi.

3. **Extract Program (2–4x / Year)**
   Fungal-leaning compost extract through micro/drip to help colonize the root zone.

> **What This Avoids:** Excess nitrogen stimulation, “sugar-heavy” bacterial teas, and unnecessary disturbance that breaks fungal networks.

Expected Outcomes

Reduced Stress Cycles — More consistent

Water-Use Efficiency — 15–25%

FIVE-COMPONENT SYSTEM

Program Components

01 Compost Blend

02 Woody Carbon

03 Extract Drench

04 Mycorrhizae (AMF)

05 Seriokai's Secret

Implementation Timeline

1
Foundation
WINTER–SPRING

2
Root Support
SPRING FLUSH

3
Fruit Balance
FRUIT SET

Application Rates & Methods

COMPONENT	YEAR 1	MAINTENANCE	APPLICATION METHOD
Compost Blend	½–1"	Top-up	Banded in wet zone under canopy
Woody Carbon	3–6"	Top-up	Under canopy, breathable layer
Extract Drench	3–4x	2–3x	Drip/micro, key root timing
Mycorrhizae (AMF)	Seasonal	As needed	Applied to wet zone, watered in
Seriokai's Secret	Targeted	Targeted	Micronutrient support based on leaf/soil test

Simple rule: Biology first, then nutrition. We improve the root environment so the tree can use what you already apply—more efficiently.

Rates customized by soil test, water quality, and grove conditions.

Capital Investment

This is not an expense — it's an investment in root stability, orchard resilience, and consistent fruit quality.

Soil Asset Value
Build fertility that increases land value and productivity.

Production Capacity
Protect yield consistency and packout quality over time.

Water Security
Reduce irrigation dependency through better soil function.

Long-Term Stability
More resilience through heat, salinity, and stress cycles.

Projected 5-Year Snapshot

METRIC	BASELINE	YEAR 3	YEAR 5
Water Use (example)	100%	85–90%	75–85%
Soil Organic Matter	Low	Up	Up
Root Stability	Variable	Improving	Stable
Fruit Consistency	Variable	Improving	More consistent

**Illustrative snapshot. Actual results vary by soil, water quality, climate, and management.*

Key Performance Indicators

Water Efficiency — 15–25%

Input Efficiency — Better uptake

Estimated ROI — Site dependent

> **Management Philosophy:** Avocados don't want force — they want a stable root zone. This program uses biology to regulate and strengthen, not to "push."

CONTACT

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