

Arizona Pistachio Orchard Protocol

Regenerative soil health for established pistachio orchards. Improve water efficiency and nutrient use while building long-term soil function for generational orchards.

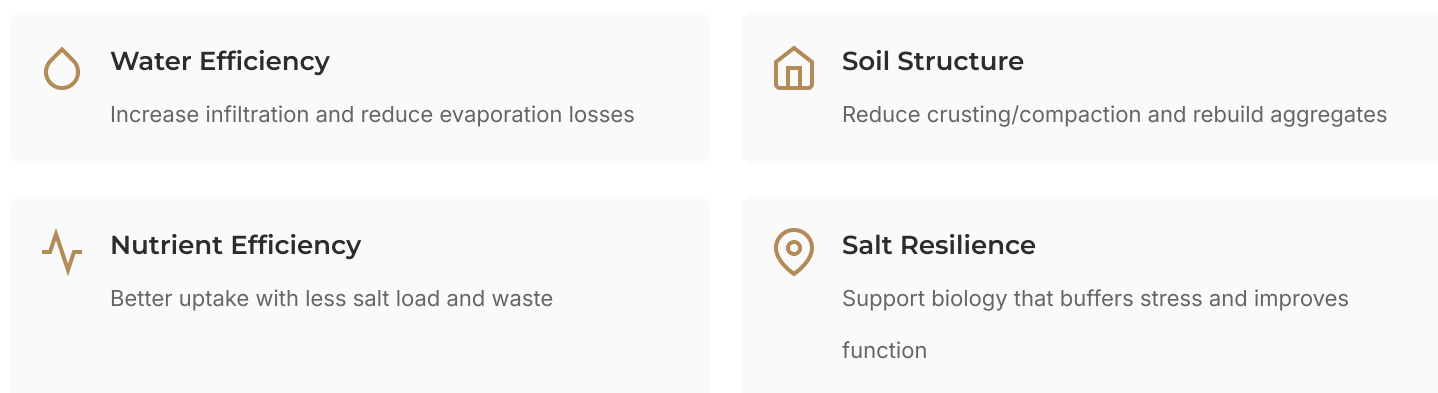
The Pistachio Opportunity

Pistachios are built for arid environments, but orchard performance still depends on infiltration, salt management, and a strong fungal network in the root zone. When soil structure breaks down, you pay with water, stress, and uneven production.



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

Program Objectives



Expected Performance Improvements



Plain-English Summary: We build soil structure and biology so the orchard runs smoother: better infiltration, less stress, and more consistent production over time.

The Biology Protocol

Pistachio orchards respond well to a strong fungal network. The goal is resilience and efficiency — not a vegetative push.

<p>~1.8:1</p> <p>FUNGAL : BACTERIAL</p>	<p>AMF</p> <p>MYCORRHIZAE TYPE</p>	<p>Efficiency</p> <p>NOT FORCE</p>
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Year 1: Three-Step Foundation

- 1 Compost Band (Wet Zone)**

Stabilized compost to build aggregates and habitat for fungi.
 - 2 Gypsum (If Soil Test Indicates)**

Supports aggregation and helps manage sodium issues. Enabler, not fertilizer.
 - 3 Extract Program (2–3x / Year)**

Fungal-leaning compost extract through drip/micro at key timing.
- What This Avoids: Excess nitrogen stimulation, bacterial-heavy teas, and unnecessary tillage/disturbance.

Expected Outcomes



Program Components

01

Compost Blend

02

Woody Carbon

03

Extract Drench

04

Mycorrhizae (AMF)

05

Pomona Blend

Implementation Timeline

1

Foundation

DORMANCY–SPRING

2

Canopy Balance

SPRING

3

Kernel Fill

SUMMER

Application Rates & Methods


COMPONENT	YEAR 1	MAINTENANCE	APPLICATION METHOD
Compost Blend	1/2–1"	Top-up	Banded in wet zone under canopy
Woody Carbon	2–4"	Top-up	Mulch for moisture + biology protection
Gypsum	As test	As needed	Applied per soil analysis for Ca:Na balance
Extract Drench	3x	2–3x	Drip/micro: key root timing
Pomona Blend	Targeted	Targeted	Micronutrient support based on tissue/soil tests


Simple rule: Pistachios win long-term. This program is designed to build durable soil function that supports consistent production and resilience.


Rates customized by soil test, irrigation water quality, and orchard conditions.


Capital Investment

This is an investment in long-term orchard function: better infiltration, more consistent performance, and reduced stress costs.

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

**Production Capacity**
Support consistent yield and quality in tough years.

**Water Security**
Improve infiltration and water-use efficiency over time.

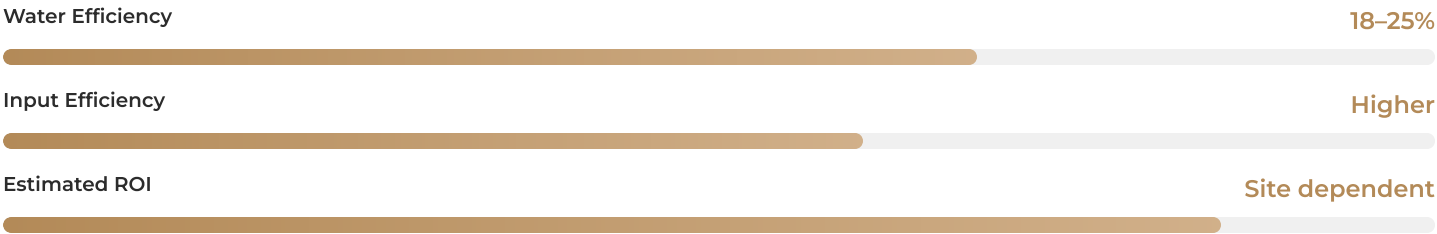
**Generational Orchard**
Designed for durability and long-term stability.

Projected 5-Year Snapshot

METRIC	BASELINE	YEAR 3	YEAR 5
Water Use (example)	100%	85–90%	75–82%
Infiltration	Limited	Improving	Higher
Salt Stress	Variable	Reduced	Lower
Yield Stability	Variable	Improving	More consistent

**Illustrative snapshot. Actual results vary by site conditions, weather, and management.*

Key Performance Indicators



Management Philosophy: Pistachios don’t want force — they want steady function. This program builds the soil system that supports efficiency and resilience.

CONTACT

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