

Arizona Stone Fruit Orchard Protocol

Regenerative soil health for peach, plum, and stone fruit orchards. Improve soil structure, water efficiency, and fruit consistency while keeping trees balanced.


The Stone Fruit Opportunity


Stone fruit is responsive — in good and bad ways. When soil is compacted or biology is weak, trees swing from stress to vigor, and fruit quality suffers. The goal is a steady, balanced system with predictable water and nutrient flow.





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

Program Objectives

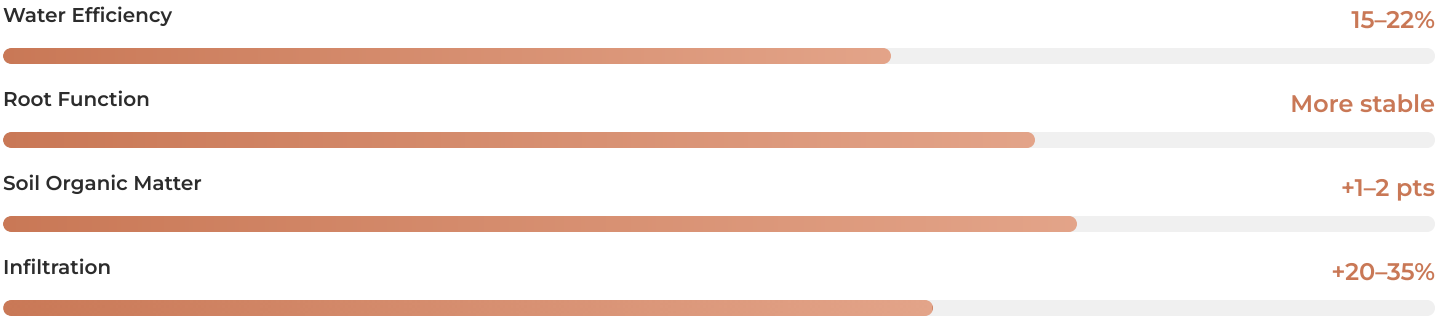
**Soil Structure**
Reduce compaction and rebuild aggregation in the wet zone

**Water Efficiency**
Improve infiltration and reduce evaporation losses

**Nutrient Efficiency**
Improve uptake while reducing unnecessary inputs

**Fruit Quality**
Support consistent sizing, firmness, and flavor

Expected Performance Improvements



Plain-English Summary: We stabilize the soil so trees behave more consistently: fewer stress swings, better uptake, and more predictable fruit.

The Biology Protocol

Stone fruit tends to do best with a balanced soil biology that supports steady uptake, without stimulating excessive canopy.



Year 1: Three-Step Foundation

- 1 Compost Band (Wet Zone)**
Stabilized compost to improve structure and microbial habitat.
 - 2 Woody Carbon Cover**
Thin woody layer to protect biology and reduce evaporation.
 - 3 Extract Program (2–3x / Year)**
Balanced extract through drip/micro at key timing.
- What This Avoids: Excess nitrogen stimulation, “hot” composts, and unnecessary disturbance.

Expected Outcomes

Balanced Vigor

More consistent

Water-Use Efficiency

15–22%

Program Components

01

Compost Blend

02

Woody Carbon

03

Extract Drench

04

Mycorrhizae (AMF)

05

Pomona Blend

Implementation Timeline

1

Foundation

DORMANCY-SPRING

2

Fruit Set

SPRING

3

Quality Support

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	Under canopy, breathable layer
Extract Drench	3x	2-3x	Drip/micro at key timing
Mycorrhizae (AMF)	Seasonal	As needed	Applied to wet zone, watered in
Pomona Blend	Targeted	Targeted	Micronutrients based on tissue/soil tests

Simple rule: Stability beats force. We build soil function so trees stay balanced and fruit stays consistent.


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

Capital Investment


This is an investment in orchard stability: better structure, better water use, and better fruit quality over time.




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



Production Capacity
Support consistent fruit quality and yield cycles.



Water Security
Reduce irrigation dependency through better soil function.



Long-Term Stability
More predictable growth and fruit consistency.

Projected 5-Year Snapshot

METRIC	BASELINE	YEAR 3	YEAR 5
Water Use (example)	100%	86–90%	78–85%
Soil Organic Matter	Low	Up	Up
Tree Balance	Variable	Improving	More stable
Fruit Consistency	Variable	Improving	More consistent

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

Key Performance Indicators



Management Philosophy: Stone fruit doesn't want force — it wants balance. This program uses biology to regulate, not accelerate.

CONTACT
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