

# 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.

**15–22%**

WATER REDUCTION\*

**25+**

YEAR ORCHARD CYCLE

**+30%**

INFILTRATION

**Quality**

FRUIT CONSISTENCY

\*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

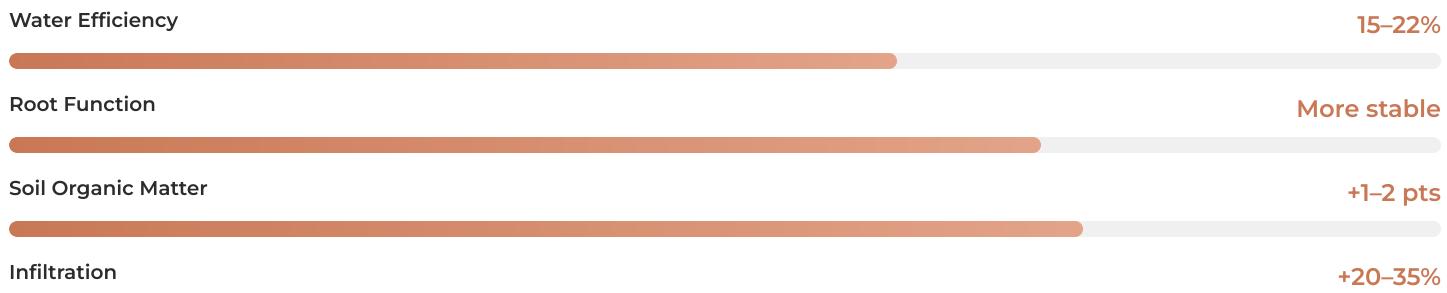
Improve uptake while reducing unnecessary inputs



### 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.

~1:1

FUNGAL : BACTERIAL

AMF

MYCORRHIZAE TYPE

Balance

NOT "PUSH"

## 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



## Implementation Timeline



## Application Rates & Methods

COMPONENT	YEAR 1	MAINTENANCE	APPLICATION METHOD
Compost Blend	½–1"	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.

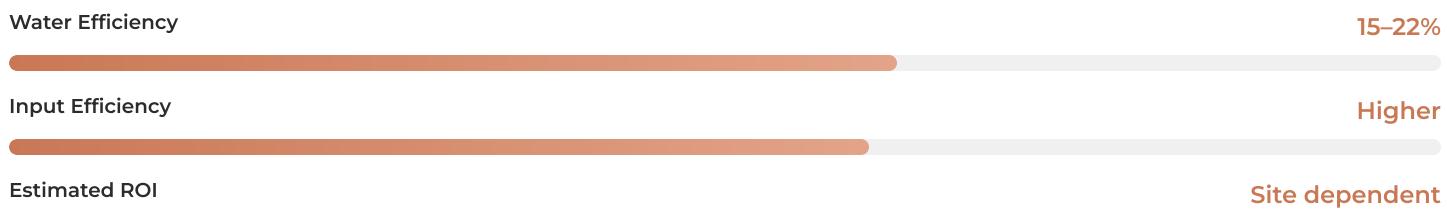
 Soil Asset Value	Build fertility that increases land value and productivity.	 Production Capacity	Support consistent fruit quality and yield cycles.
 Water Security	Reduce irrigation dependency through better soil function.	 Long-Term Stability	More predictable growth and fruit consistency.

## 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

[soilseedandwater.com](http://soilseedandwater.com)

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