

Wine Grape Vineyard Protocol

Regenerative soil health for established vineyards. Improve water-use efficiency, nutrient uptake, and fruit quality by rebuilding fungal-leaning soil biology—without pushing excessive vigor.

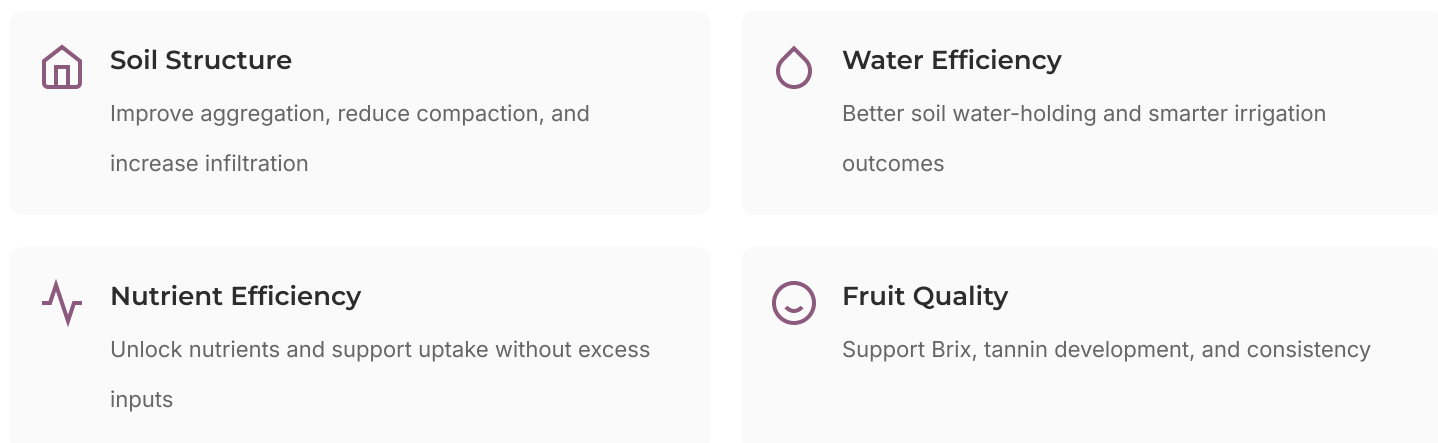
The Vineyard Advantage

Great wine starts in the soil. When vineyard biology is weak, vines have to work harder for water and nutrition, and fruit quality becomes less consistent. This protocol rebuilds the biological foundation that supports terroir expression.



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

Program Objectives



Expected Performance Improvements



Plain-English Summary: This protocol builds soil that feeds vines better. When soil biology thrives, vines handle stress better and express more terroir in the fruit.

The Biology Protocol

Wine grapes thrive in fungal-dominant soil. This protocol builds a fungal-leaning biology that regulates growth and improves fruit quality—without increasing excessive vigor.



Year 1: Three-Step Foundation

- 1 **Banded Compost (Under Vine)**
Light stabilized compost band in the vine row to build carbon and biology.
 - 2 **Woody Carbon Cover**
Clean woody fiber or prunings to protect fungi and reduce evaporation.
 - 3 **Extract Program (2–3x / Year)**
Fungal-leaning compost extract through drip/micro at key timing.
- What This Avoids:** Excess nitrogen stimulation, bacterial-dominant teas, unnecessary disturbance, and incompatible mycorrhizal products.

Expected Outcomes



Program Components

01

Compost Blend

02

Woody Carbon

03

Extract Drench

04

Mycorrhizae (AMF)

05

Bucchas Blend

Implementation Timeline

1

Dormancy Prep

WINTER

2

Spring Activation

BUD BREAK

3

Fruit Quality

PRE-VERAISON

Application Rates & Methods


COMPONENT	YEAR 1	MAINTENANCE	APPLICATION METHOD
Compost Blend	1/2-1"	Top-up	Banded in vine row (under vine)
Woody Carbon	2-4"	Top-up	Breathable woody layer to protect fungi
Extract Drench	3x	2-3x	Drip/micro: early season, fruit set, pre-veraison
Mycorrhizae (AMF)	Seasonal	As needed	Applied through irrigation or watered in
Bucchas Blend	Targeted	Targeted	Micronutrient support based on tissue/soil tests


Simple rule: Wine grapes don't want force — they want balance. This program uses biology to regulate, not accelerate.


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


Capital Investment

This is an investment in fruit quality and vineyard longevity — the foundation of premium wine production.

**Soil Asset Value**
Build long-term fertility and land value.

**Fruit Quality**
Support Brix, tannin structure, and consistency.

**Water Security**
Reduce irrigation dependency through better soil function.

**Vineyard Longevity**
Designed for long-term stability and resilience.

Projected 5-Year Snapshot

METRIC	BASELINE	YEAR 3	YEAR 5
Water Use (example)	100%	85–90%	80–85%
Soil Organic Matter	Low	Up	Up
Fruit Quality	Variable	Improving	More consistent
Vine Resilience	Variable	Improving	Higher

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

Key Performance Indicators



Management Philosophy: Wine grapes don’t want force — they want balance. This program uses biology to regulate, not accelerate.