

Develop a fertilizer program for your vineyard

Need to know & understand your soil

Begin before planting

- Optimize the soil pH for grapes (5.5 to 6.5 or 7.0)
- Amend to optimize the level of major nutrients (P,K)
- Understand your soil's internal drainage characteristic

After planting – adjust the program based on:

- Soil's fertility level (Organic Matter content)
- Vineyard needs (petiole analysis)
- Cultivar characteristics (vigor, cold hardiness)
- Cropping potential.

No two sites are alike.

Nutrition

Is Fertilizer needed?

- Visual observation
of problems - usually too late
- Soil sampling - every 3-5 years
- Petiole sampling - every year

Midwest Grape Production Guide

Bulletin 919-05, Ohio State University

Nutrient Desirable Ranges - from soil tests for grapes		
pH	~	5.5 to 6.5
Organic Matter	~	2 to 3%
Phosphorus	~	40 to 50
Potassium	~	250 to 300
Magnesium	~	200 to 250
Boron	~	1.5 to 2.0
Zinc	~	8 to 10

Nutrition

Fertilizer application

- Methods
 - Broadcast, band, foliar
- Timing
 - Nitrogen
 - » One week before bloom
 - » Split: bloom and after fruit set
 - » Fall applications - ?
 - Potassium
 - » Post harvest

Spray program

▶ Rotate chemicals – avoid resistance ◀

Fungicides -	Planned spray program
Herbicides -	Planned program - 3X per year
Insecticides -	Integrated Pest Management (IPM)
Miticides -	Integrated Pest Management (IPM)

Sample Spray Program →

from Midwest Grower Supply – 2011

Other Resources:

- ❑ [Midwest Small Fruit and Grape Spray Guide](#), published annually
- ❑ Iowa State (Mike White) sample spray program

Cautions:

- Re-entry intervals (REI)
- Pre-harvest interval (PHI)

GRAPE PROGRAM 2011

TIMING	PRODUCT	PER ACRE
DORMANT	SULORIX	1 GAL
BUD SWELL (Optional)	SEVIN XLR	1 QT
EARLY SPRAYS (1" shoot growth to bloom)	MANZATE DF	3 LB
	PLUS - RALLY 40W	3 OZ
	SEVIN XLR	1 QT
BLOOM (Optional)	MANZATE DF	3 LB
	PLUS - RALLY 40W	3 OZ
	ASSAIL 30SG	2.5 OZ
COVER SPRAYS (90% bloom to harvest)	CAPTAN 80WDG	2 LB
	PLUS - TEBUZOL 45DF	4 OZ
	SEVIN XLR	1 QT
	** ABOUND	11 OZ
POST HARVEST	MANZATE DF	3 LB
	PLUS - RALLY 40W	3 OZ

1. Spray on 7 to 14 day interval or as needed
2. Add Tebuzol with Captan when Powdery Mildew is conducive can use Topsin
3. Rotate **Abound as needed (Limited to 2 to 3 sprays)
4. Use higher rates when pressures are high and shorten spray interval
5. Apply two applications of Assail starting at bloom and repeat in 7 days
6. Post Harvest sprays – remember that disease continue after harvest

WATCH HARVEST RESTRICTIONS AND FOLLOW LABEL INSTRUCTIONS