Vineyard Establishment

1:30 to 2 p.m.
Friday March 8th, 2019
Show Me Grape & Wine Conference

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Forms of Agriculture used in Vineyards

Conventional Agriculture

Integrated Pest Management (IPM)

Sustainable Agriculture

Organic Agriculture

Biodynamic Agriculture
Hazardous Vineyard Locations

- Golf Courses
- Schools
- Rail Road Tracks
- Corn / Soybean / Wheat fields
- City Parks
- Power Line Right of Ways
- Cemeteries
Vineyards require close attention during the growing season
Cold Injury Insurance
Grapes have 3 buds.
Too much VIGOR – Most common problem.

http://www.geobabble.org/~hnw/esri98/
Location – Location - Location

South Facing Slope or Ridgeline
Well Drained Soil
Higher Topography to Deter Frost Damage

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<tr>
<th>Good Fertility</th>
<th>pH = 5.5-7.0</th>
<th>P = 25ppm+</th>
<th>K = 125ppm+</th>
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<td></td>
<td>Zn = 2-4ppm</td>
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<td>2-4% OM%</td>
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Stay at Least 100’ from Lime Gravel Roads
No Trees within 100’ of Vineyard
Seasonal Water Table 4’ or Deeper
Site Selection is Key for Frost Protection
3 ft deep hole full of water should drain:

24-48 hrs - Good
48-72 hrs – Marginal
72+ hrs - Poor Site
https://websoilsurvey nrcs.usda.gov/app/HomePage.htm

FREE
Soil Map
Soils Info
Acres
Options for Tight Soils?

Planting Vines on a Ridge of Soil

Drip Irrigation

Ripping 24-36” deep under vine row prior to planting

Surface & Subsurface Tile Drainage

Fill Augered holes with good soil prior to planting grapes

Run a Ditch Witch Type Trencher down each row and fill back in.
Remove Vineyard Acres out of USDA Farm Program Acres Prior to Planting Grapes!

Contact Your County FSA Office

http://www.fsa.usda.gov/
Contact Missouri One Call a least 3 days and not more than 10 days prior to digging.

https://www.mo1call.com/
PLANTING OPTIONS

TREE PLANTING BAR

TRACTOR MOUNTED TREE PLANTER

AUGER
The Auger Transporter
Designed, built & patented by Christmas Tree Grower
Lewis H. Bowser

U.S. Patent 6125951

New Features:

- Echo 50 cc Engine & Transmision
- Anti-Torque & Vibration Isolation System

Every plant deserves an augered hole for a perfect growing environment.

The Auger Transporter is very easy to operate; far safer than a hand-held earth auger; and gets the planting job done in much less time. Saves money! Used in nurseries, tree plantations, vineyards, berry production, vegetable transplants, lawn & garden jobs, etc.

Augered holes are proven to give the best growing environment for young plants. It loosens soil; provides large enough hole to properly position roots, preventing J-rooting; contains rain and irrigation; promotes rapid new growth. The proper RPM keeps the dirt mounded at the top of the hole.

http://christmas-tree-equipment.com/
Trim Back to 3-5 Buds

Save as much root as possible.
4 hr. Max Soak in Water Prior to Planting
Plants Sink in Loose Soil
Drip Irrigation, Maybe?

Grow tubes are good for herbicide spray & critter protection.
Signs are worth a 1,000 words!
PHENOXY Drift

2,4-D & dicamba (Banvel)
Register Your Commercial Site on Driftwatch

Map My Specialty Crops
Click here to sign up as a commercial crop producer.

Map My Apiaries
Click here to sign up if you only keep bees.

Applicator Registration
Click here to sign up if you are a licensed applicator.

https://driftwatch.org
Misc. Horticulture Supplies
AM Leonard: https://www.amleo.com/
Forestry Suppliers: https://www.forestry-suppliers.com/
Gemplers: https://www.gemplers.com/
Hummert Intl.: https://www.hummert.com/

Pesticides
Midwest Grower Supply, MO: http://mwgsupply.com/
Local Ag Dealers

Posts
Farm Supply / Lumberyards/Fence Builders
Post Brokers

Vineyard Equipment & Supplies
MDT & Associates, MN: https://www.mdgtgrow.com/
Midwest Vineyard Supply, IL:
https://www.midwestvineyardsupply.com/
Oregon Vineyard Supply: http://www.ovs.com/
Spec Trellising, PA: https://www.spectrellising.com/
Midwest Grower Supply, MO: http://mwgsupply.com
Plantra: https://www.plantra.com/
Example Cold Hardy Grapevine Nurseries

Aberfoyle Nursery – MN: [http://www.aberfoyle.org](http://www.aberfoyle.org)
Carlos Creek Winery – MN: [http://www.carloscreekwinery.com](http://www.carloscreekwinery.com)
Double A Vineyards – NY: [https://doubleavineyards.com/](https://doubleavineyards.com/)
Inland Desert Nursery – WA: [http://www.inlanddesert.com](http://www.inlanddesert.com)
Silver Creek Nursery – IL: [http://www.silvercreekvineyards.com](http://www.silvercreekvineyards.com)
St. Francois Vineyard- MO: [http://www.stfrancoisvineyard.com](http://www.stfrancoisvineyard.com)
Resources included at end of each ISU Wine Grower News

Grapes e-Xtension  Iowa Wine Growers Association

ISU Viticulture Extension  ISU Midwest Grape & Wine Industry Institute

ISU 2019-20 Midwest Fruit Pest Management Guide  Northern Grapes Project

A Review of Cold Climate Grape Cultivars  Wisconsin Fruit News

VESTA (Viticulture Enology & Science Technology Alliance)

Dr. Tom Zabadal’s YouTube Channel  Mike White’s YouTube Channel

The Vineyard Advisor FREE App
iTunes App Store (iPhone)  Google Play (Android)

Growing Grapes in Minnesota 168 pp. Free Download from the MGGA
with 14 Best Practice videos

The Efficient Vineyard Project – Precision Viticulture

https://www.extension.iastate.edu/wine/growersnews
To Subscribe to this FREE Newsletter

E-mail “mlwhite@iastate.edu” with the word subscribe in subject line.

https://www.extension.iastate.edu/wine/growersnews
Excellent Book from the Minnesota Grape Growers Association

Chapter 1  Growing Grapes in Minnesota
Chapter 2  Considering Growing Grapes?
Chapter 3  Vineyard Economics Tables
Chapter 4  Grape Cultivars for Minnesota
Chapter 5  Starting the Vineyard
Chapter 6  Care of Established Vineyards
Chapter 7  Pruning
Chapter 8  Canopy Management
Chapter 9  Fertilization and Nutrition
Chapter 10  Weed Control and Vineyard Floor Management
Chapter 11  Winter Protection for Tender Cultivars
Chapter 12  Vineyard Pest Management
Chapter 13  Insect Pests of Grapes
Chapter 14  Wildlife Pests of Grapes
Chapter 15  Grape Maturation
Chapter 16  Resources
Chapter 17  Growing Grapes in Minnesota Tables

166 pp. FREE Download

https://www.mngrapes.org/page/GrowingGrapes
Last but not Least!

Spend your first year visiting as many Midwest Wineries, Vineyards and Vine/Wine Events as you possibly can prior to putting your business plan together.

What you think you know – you don’t!