



Pruning and Training of Muscadines

Mark Hoffmann, NC State University
Small Fruits Extension Specialist
mark.hoffmann@ncsu.edu



Pruning mature muscadines

General Training Tips

Training in the first years



Before



After



- ❖ Why is yearly pruning important?
- ❖ What are the options?
- ❖ What tools are recommended?
- ❖ How do you prune a muscadine vine?

- ❖ Control of disease
- ❖ Increasing Yield
- ❖ Vineyard Access



- ❖ Black Rot
- ❖ Macrophoma
- ❖ Trunk Diseases

Many more



Manual



Mechanical



Photo: Dr. Cain Hickey

Manual

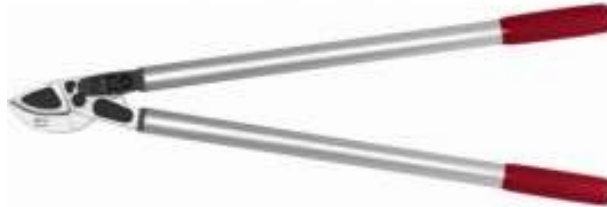
- ❖ Very labor intensive
- ❖ Best control of yield and disease
- ❖ fresh-market: YES
- ❖ A very well trained person: 10-15 min per vine
- ❖ A trained person: 20-30 min per vine

Often limiting factor in winter on larger acreage farms

Mechanical

- ❖ Less labor intensive
- ❖ Lower control of yield and disease
- ❖ fresh-market: NO
- ❖ Can be done on a rotation with manual pruning (2-4 years)
- ❖ Often used in large acreage processing vineyards (Carlos, Noble, Doreen, Magnolia)

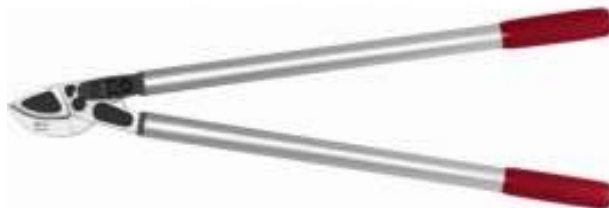
Higher initial costs (for machinery)



Hand Pruners:

- ❖ Bypass
- ❖ Heavy Duty
- ❖ Replaceable Parts
- ❖ Reliable
- ❖ Should not hurt the hand

Cost: \$40-70/piece



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- ❖ Large opening

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Pruning Saws:

- ❖ Replaceable Parts
- ❖ Reliable

Cost: \$60-100/piece

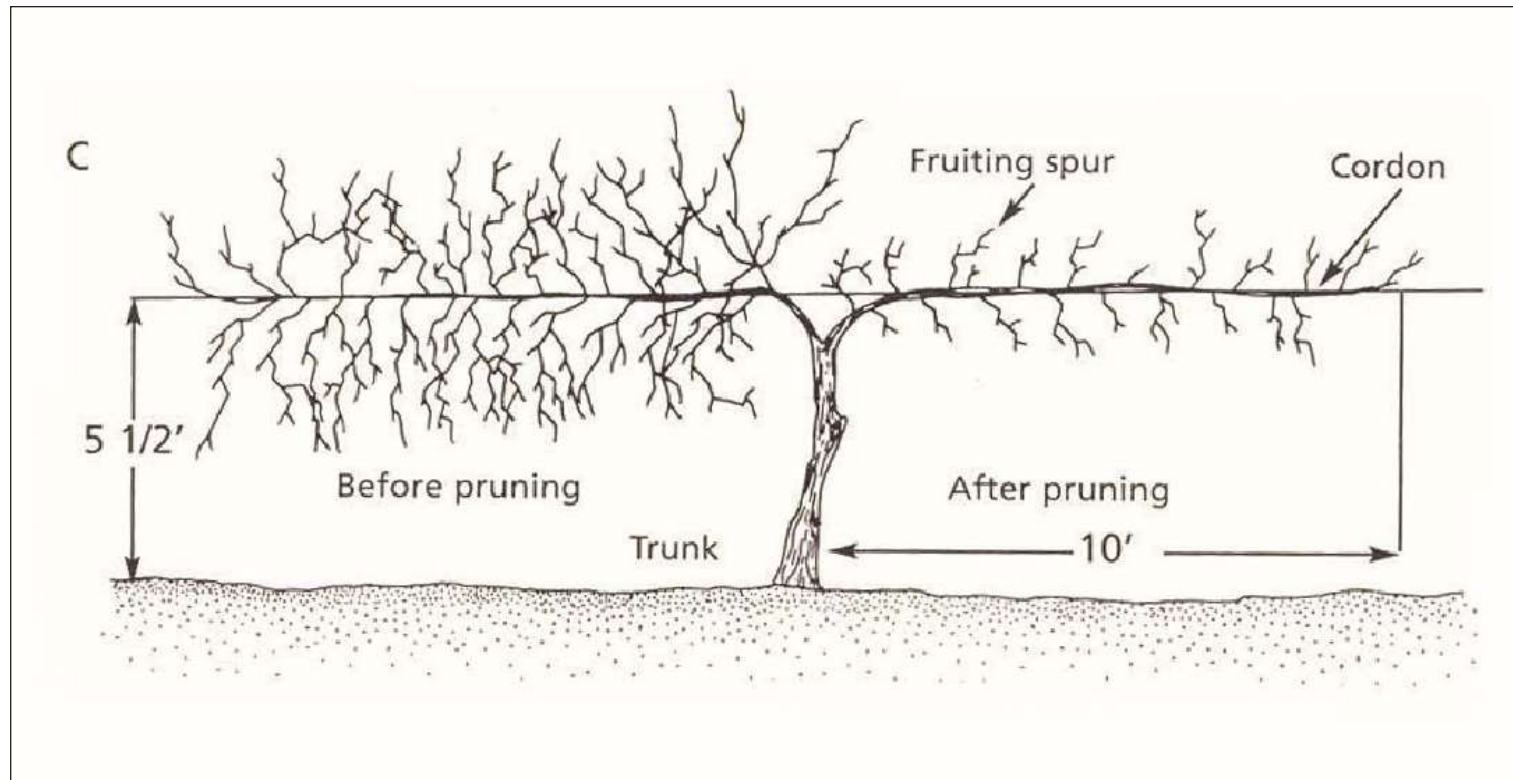
Electrical/Pneumatic Pruners
❖ For larger acreage

Cost: \$1,000-1,500/piece



What else:

- ❖ Replacement Blades
- ❖ WD-40
- ❖ Lysol
- ❖ Work Gloves



Poling et al. (2016)

1st STEP:

Assess the vigor of the vine

The more vigor, the more
buds you will have to keep

2nd STEP:

Evaluate the structure of the
vine

Do you need to cut off old
wood? Replace Spurs?
Replace a Cordon?

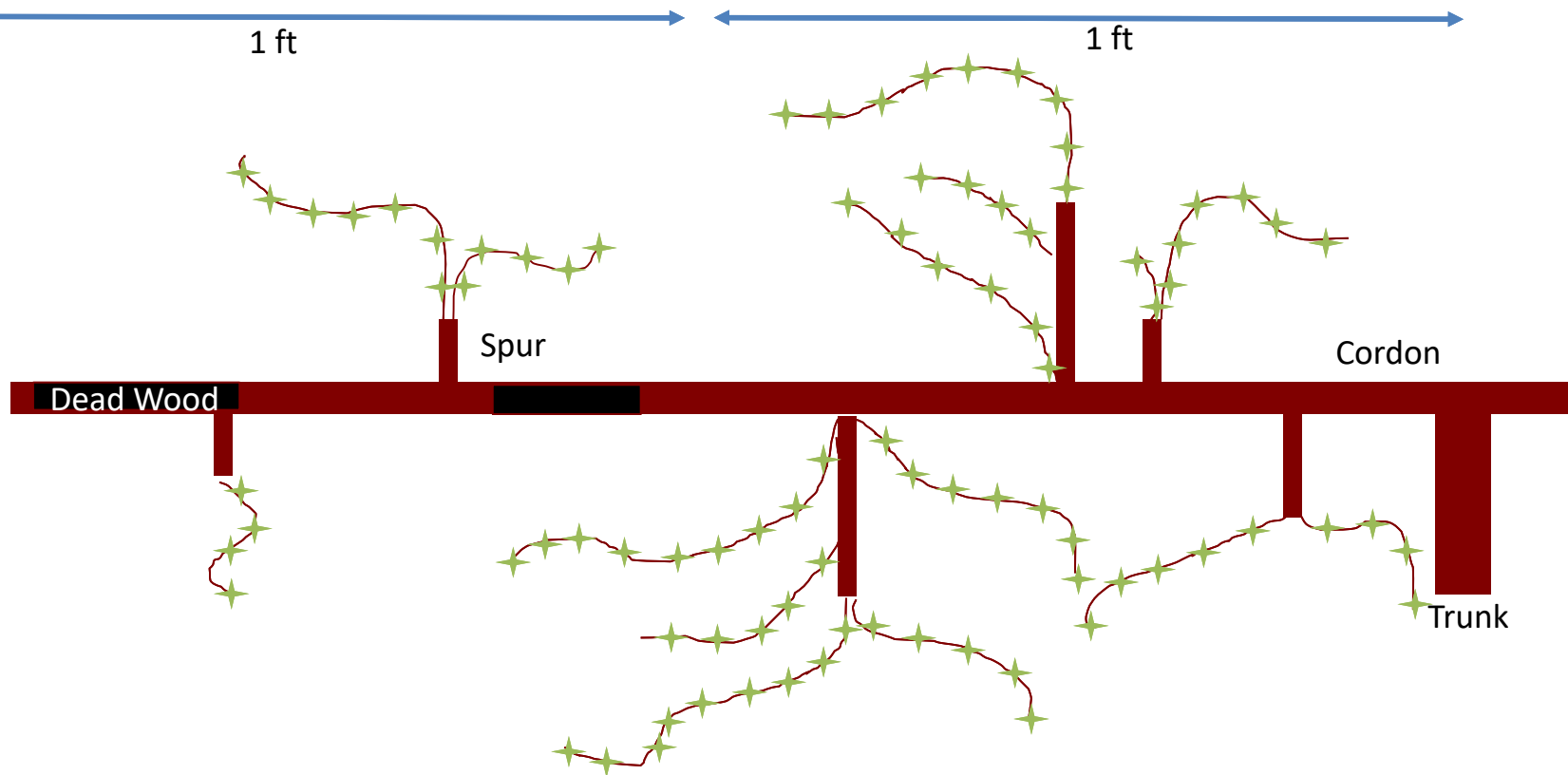


Vigor	Number of buds/foot of cordon	Number of buds/vine (20ft)	Typical Cultivar Examples
++	35-40	700-800	Carlos, Noble
+	25-30	400-600	Supreme

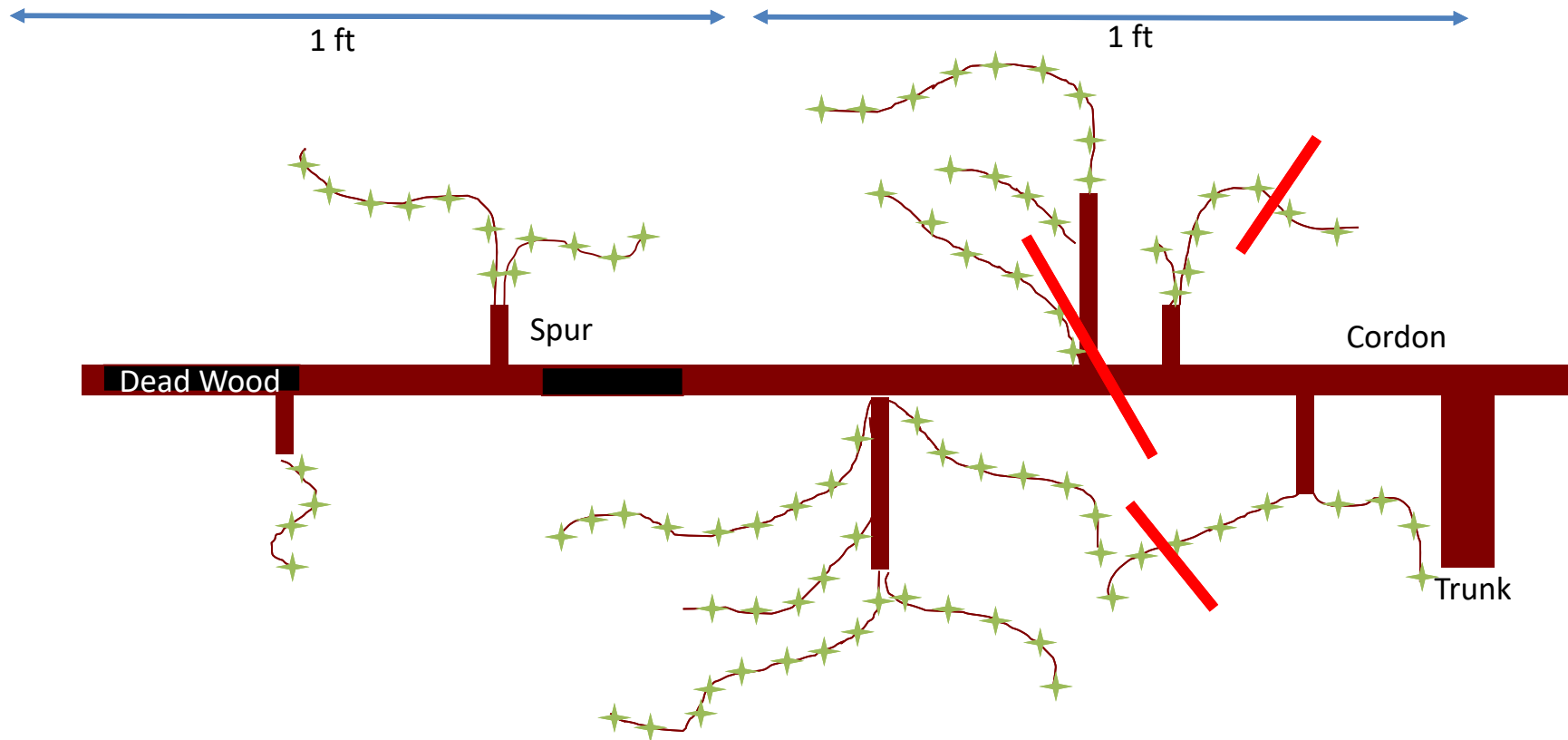
- ❖ PRE-HEGE!!!!
- ❖ Avoid anklers and long spurs
- ❖ Stay close to the trunk
- ❖ Healthy wood is brown, pencil thick.
- ❖ Nodes are about 2 inches apart

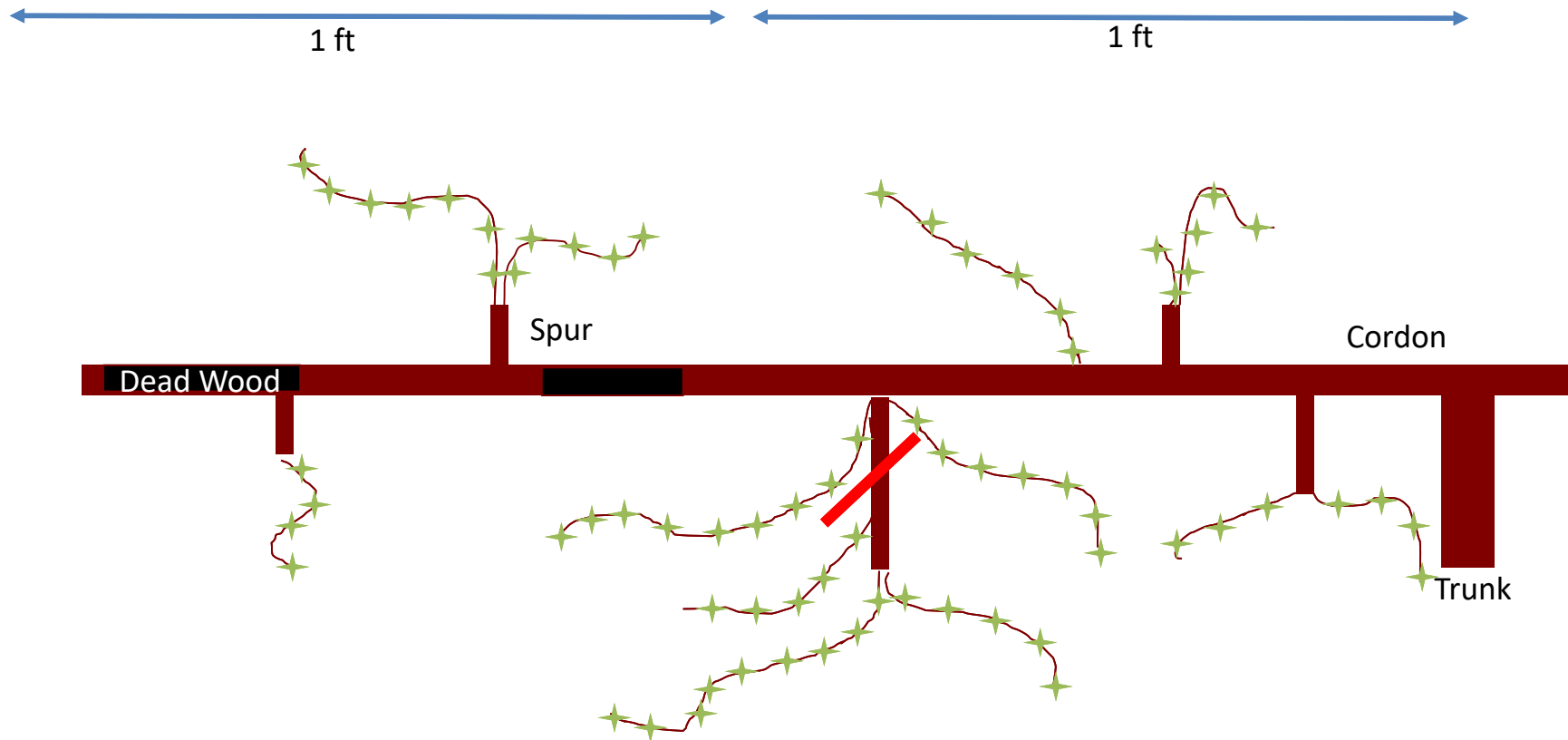


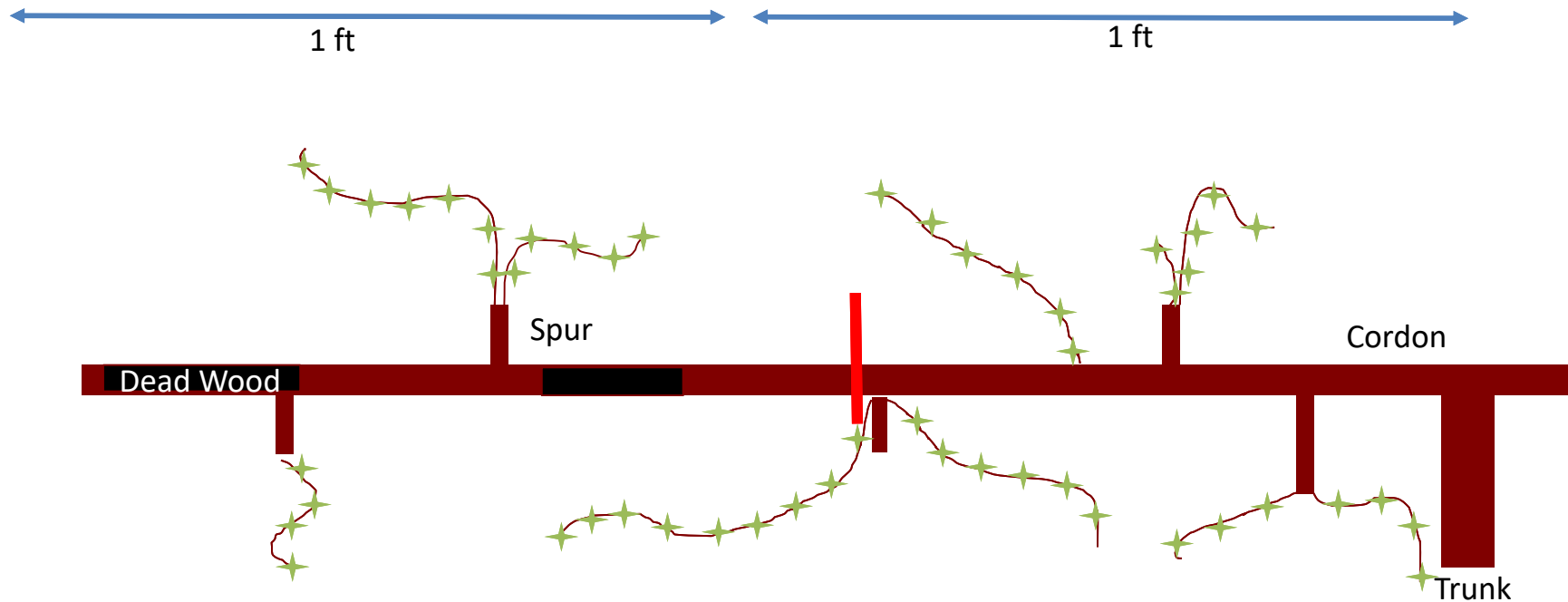


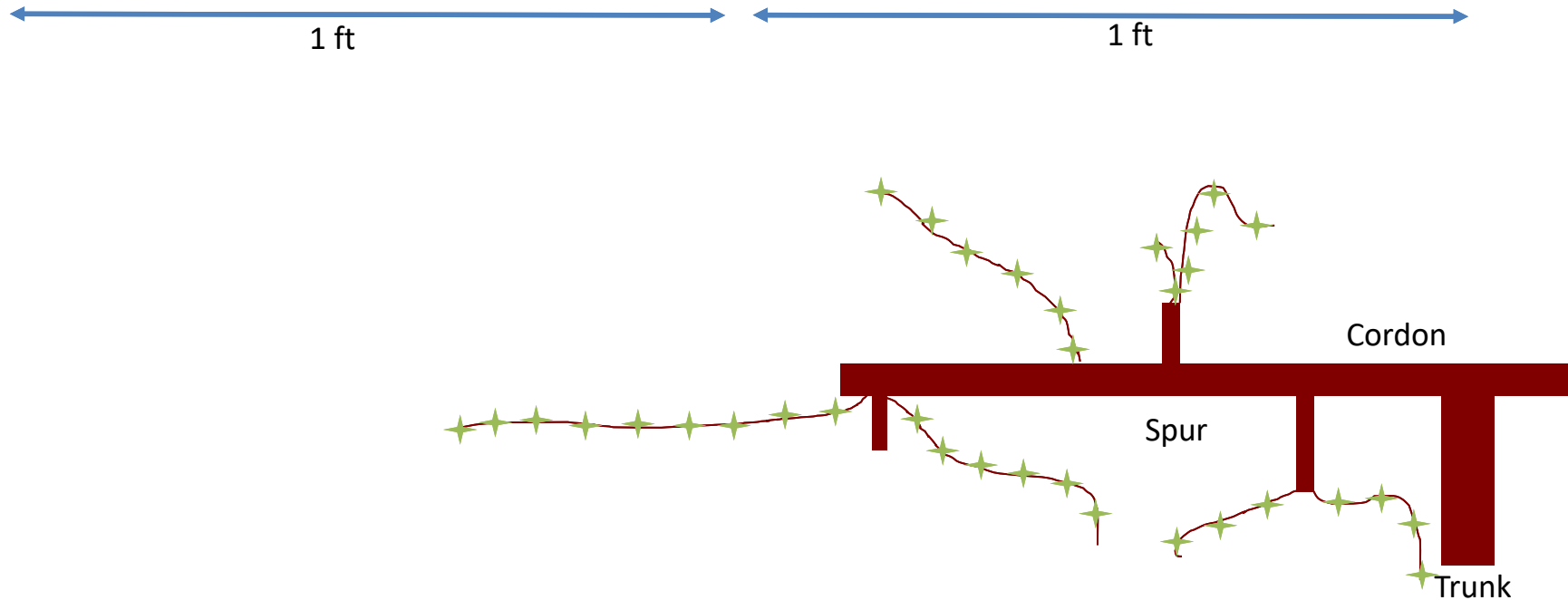


25 buds/foot









Latest in the following year

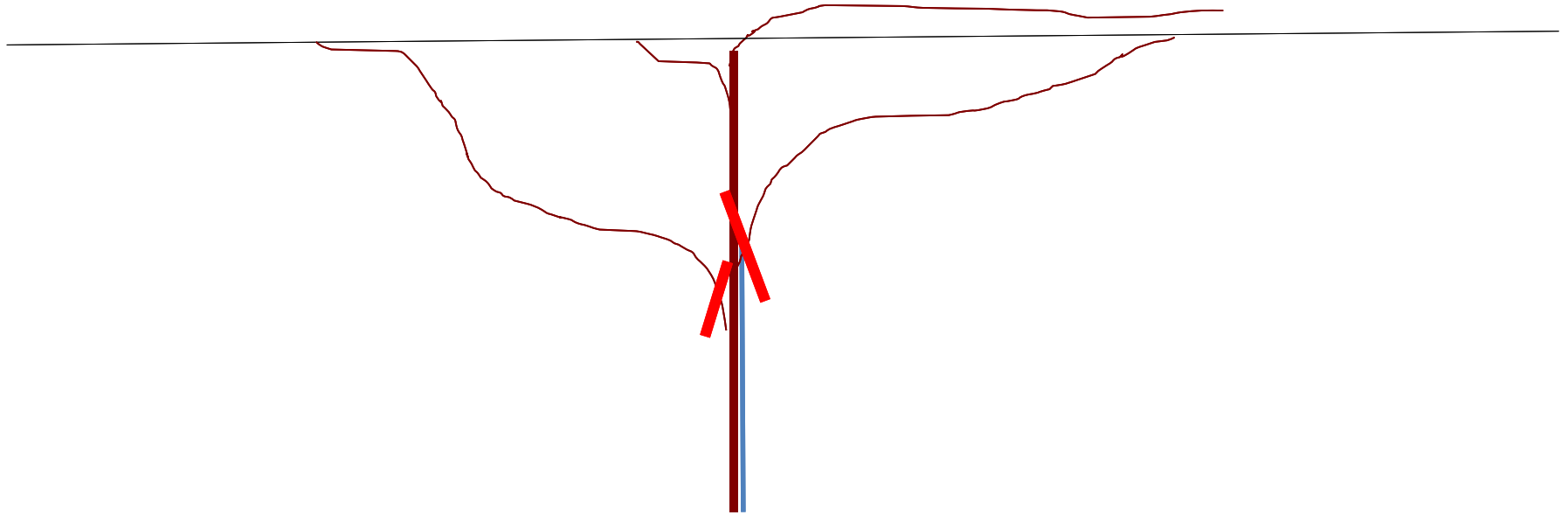


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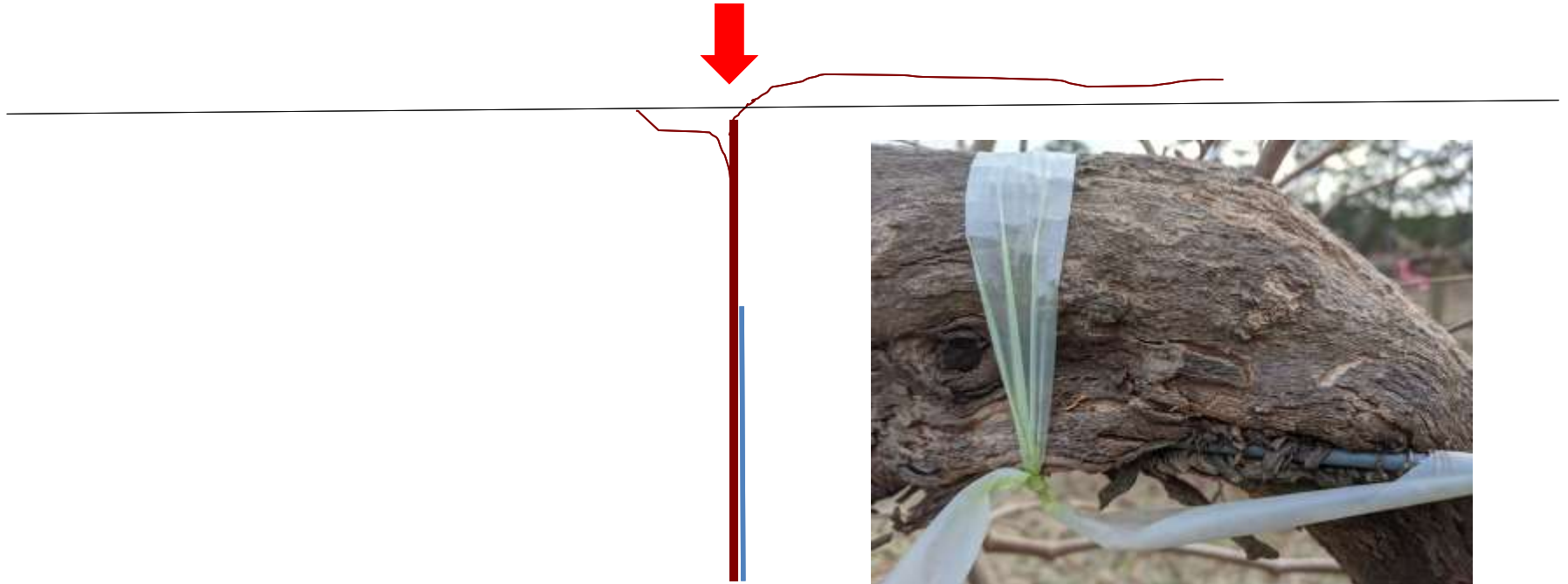
General Training Tips

Training in the first years

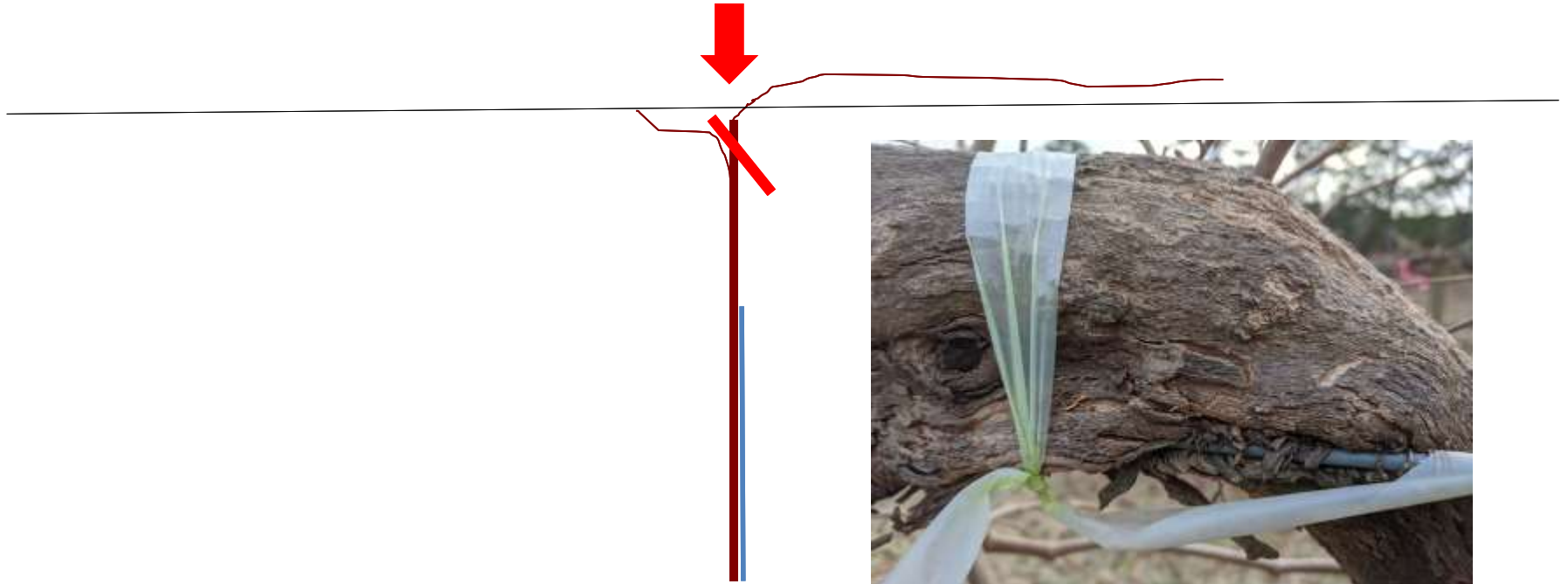
- ❖ When planting the plant: Keep enough space, so that roots don't curl
- ❖ First two years: Do pinch off flowers and fruit as much as you can
- ❖ AIM: Develop a healthy trunk and root system
- ❖ **Train a STRAIGHT TRUNK!!!!**
- ❖ **Use a string or a metal/bamboo stick**
- ❖ **Cut vine back after year 1, all the way to the trunk if not very vigorous**



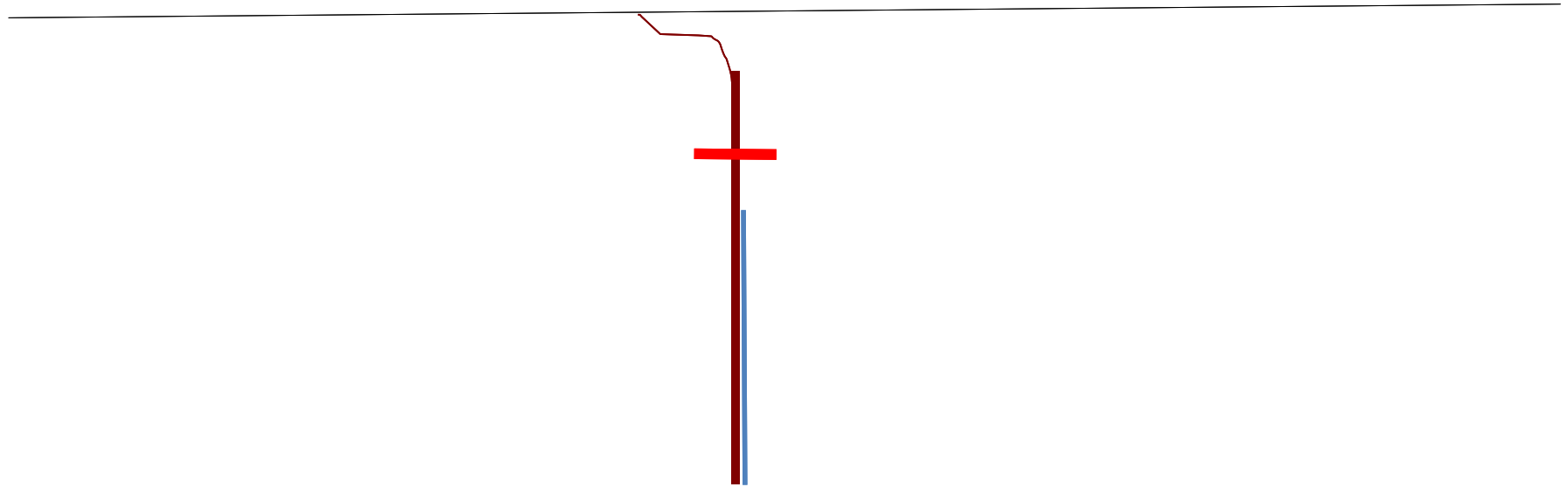
End of Year 1



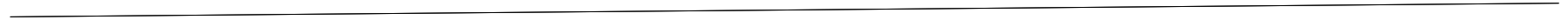
End of Year 1



End of Year 1

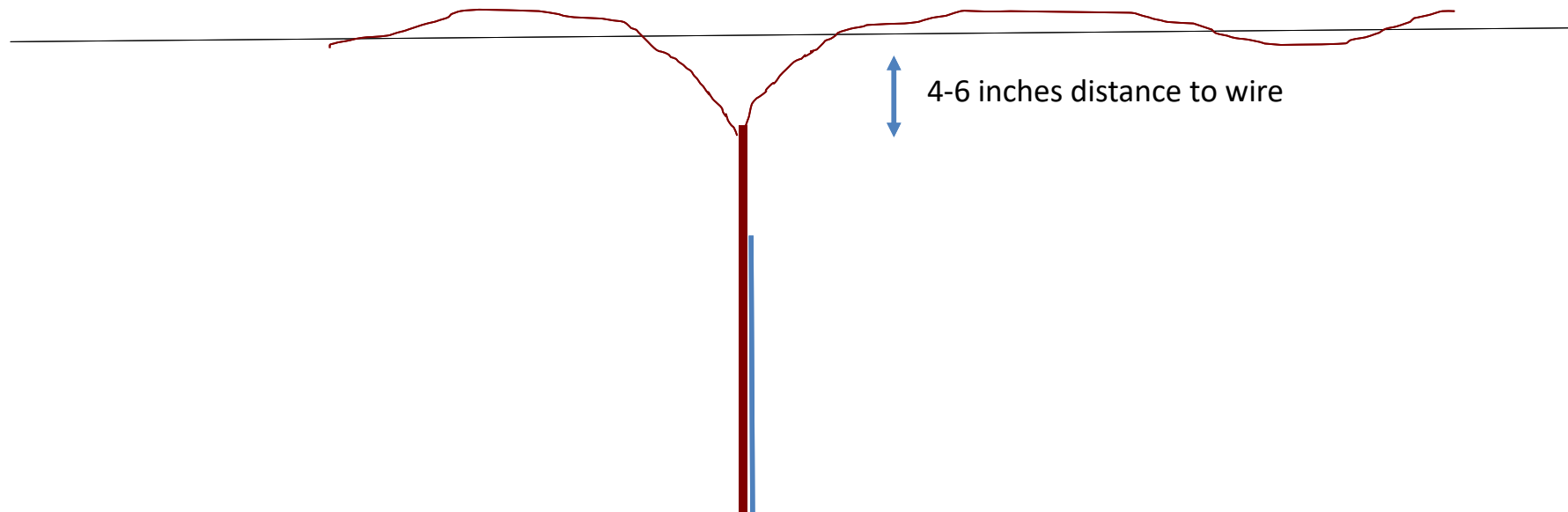


End of Year 1



End of Year 1

Make wide curls around the wire or hang the cord on the wire



End of Year 2

More information on Muscadines

- Webinars: <https://grapes.ces.ncsu.edu/grape-diary/webinars-2020/>
- Grape news: <https://grapes.ces.ncsu.edu/>

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Authors:

Mark Hoffmann

Patrick Conner

Phillip Brannen

Hannah Burrack

Wayne Mitchem

Bill Cline

Penelope Perkins-Veazie,

Barclay Poling

Main Editor:

Mark Hoffmann

Co Editors:

Cain Hickey

Hannah Burrack

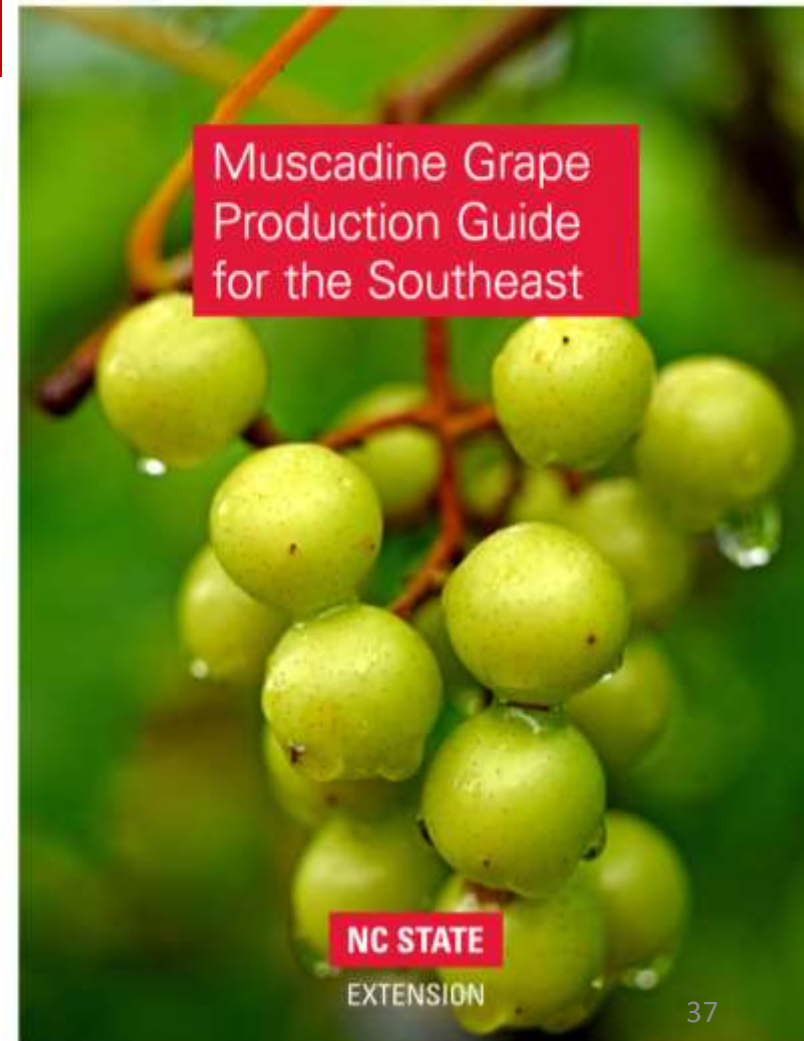
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<https://grapes.ces.ncsu.edu/2020/02/new-muscadine-production-guide/>





Thank You and Q+A