



# Pruning and Training of Muscadines

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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

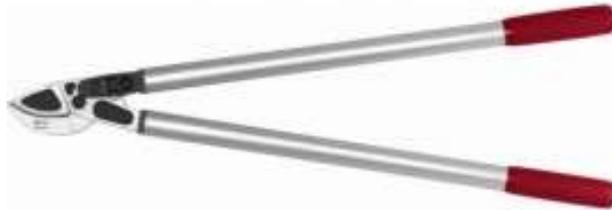
- ❖ Very labor intensive
- ❖ Best control of yield and disease
- ❖ **fresh-market: YES**
- ❖ A very well trained person: 10-15 min per vine
- ❖ A trained person: 20-30 min per vine

**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)

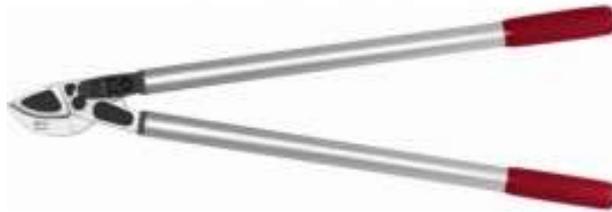
**Higher initial costs (for machinery)**



### Hand Pruners:

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

**Cost: \$40-70/piece**



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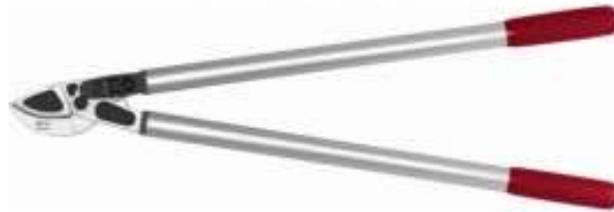
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## Pruning Saws:

- ❖ Replaceable Parts
- ❖ Reliable

**Cost: \$60-100/piece**

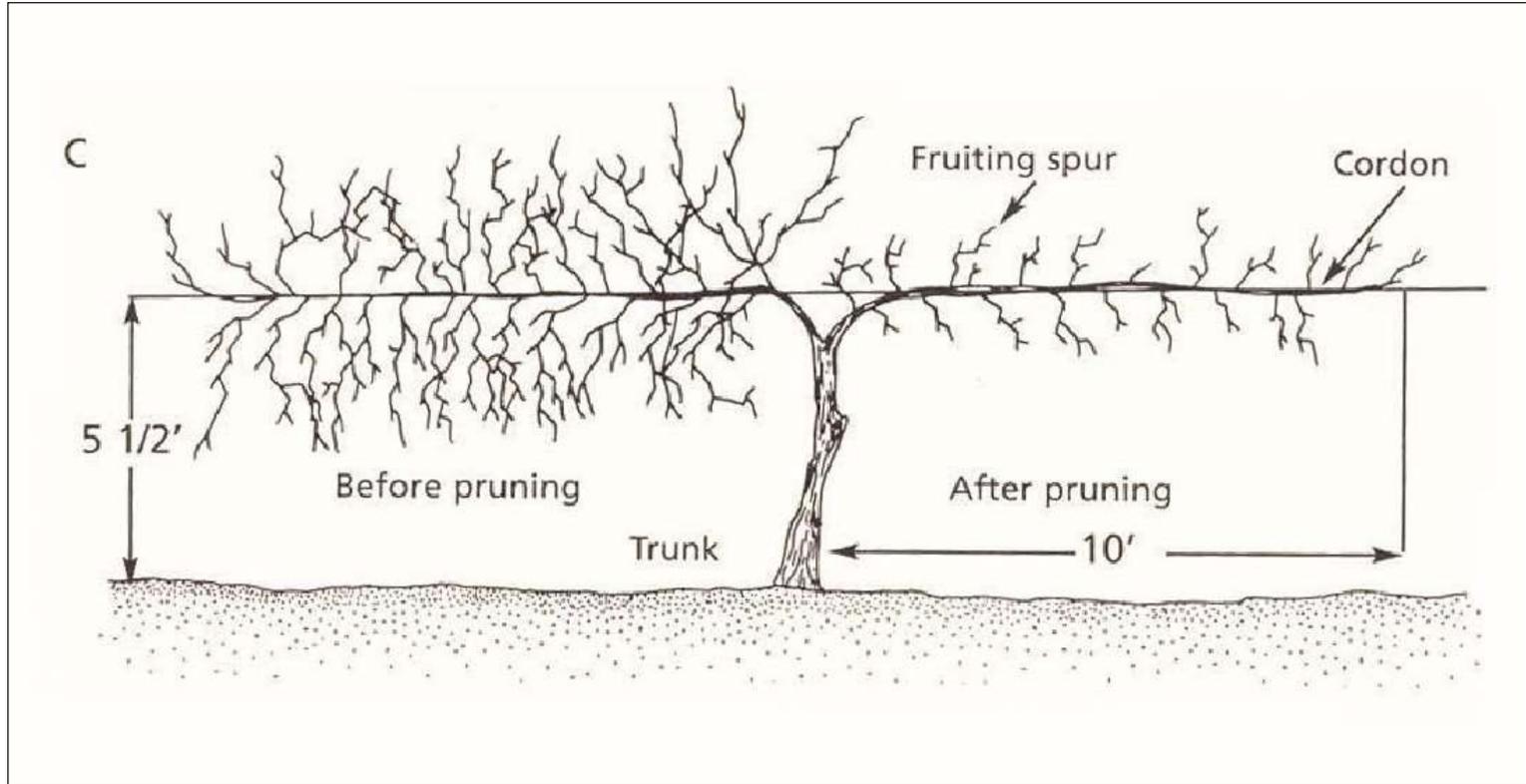
Electrical/Pneumatic Pruners  
❖ For larger acreage

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



What else:

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



Poling et al. (2016)

**1<sup>st</sup> STEP:**

Assess the vigor of the vine

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

**2<sup>nd</sup> STEP:**

Evaluate the structure of the vine

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

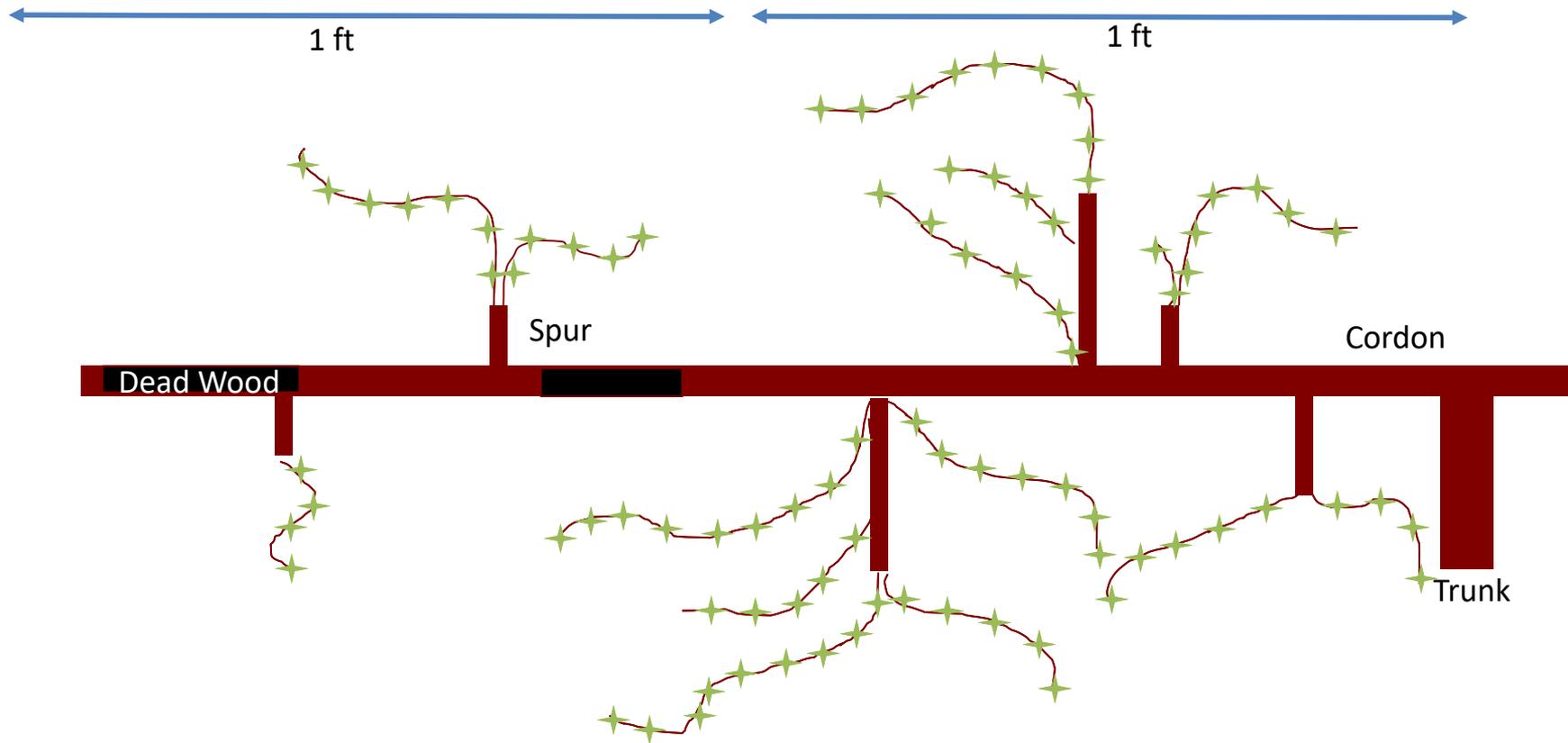


Vigor	Number of buds/foot of cordon	Number of buds/vine (20ft)	Typical Cultivar Examples
++	35-40	700-800	Carlos, Noble
+	25-30	400-600	Supreme

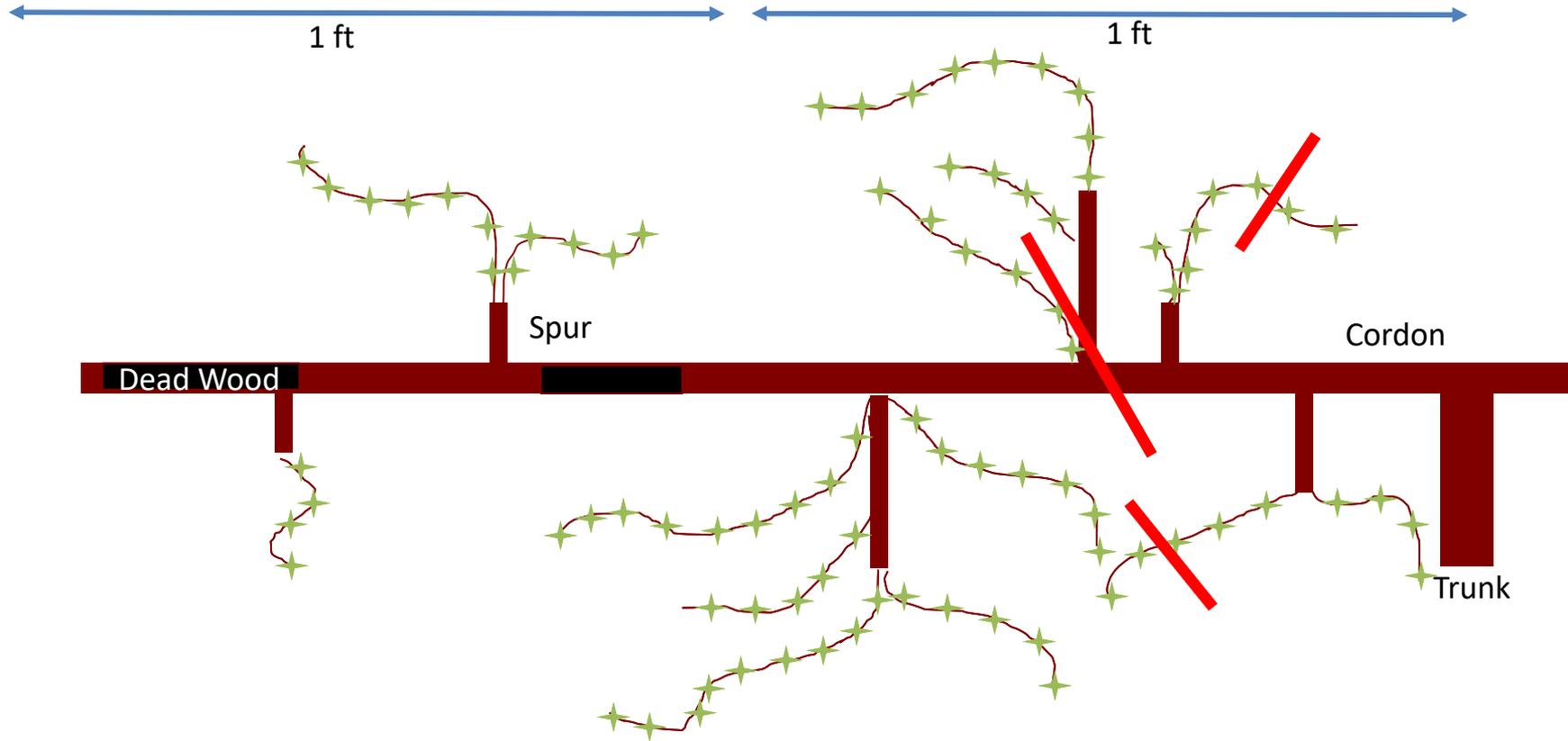
- ❖ PRE-HEGE!!!!
- ❖ Avoid anklers and long spurs
- ❖ Stay close to the trunk
- ❖ Healthy wood is brown, pencil thick.
- ❖ Nodes are about 2 inches apart

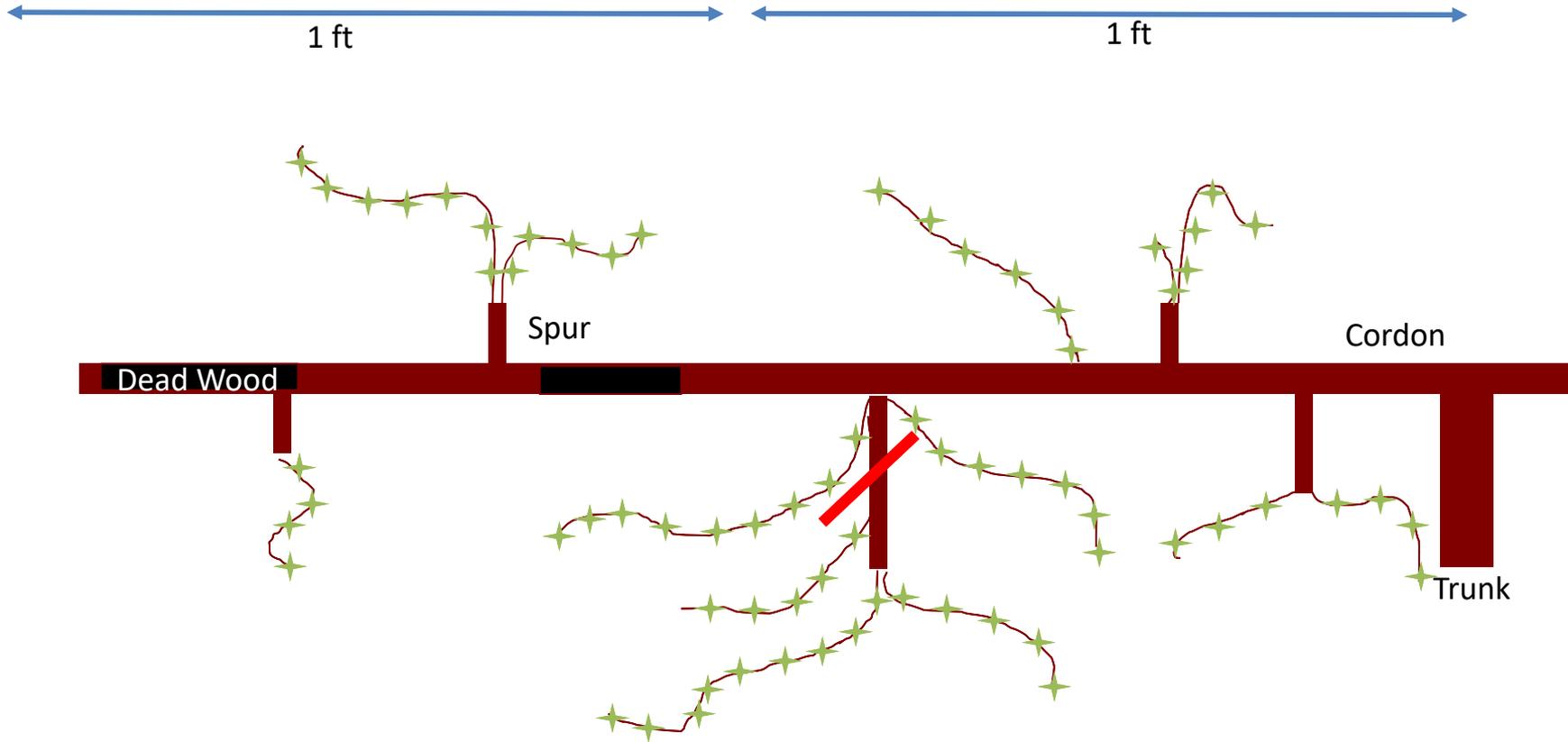


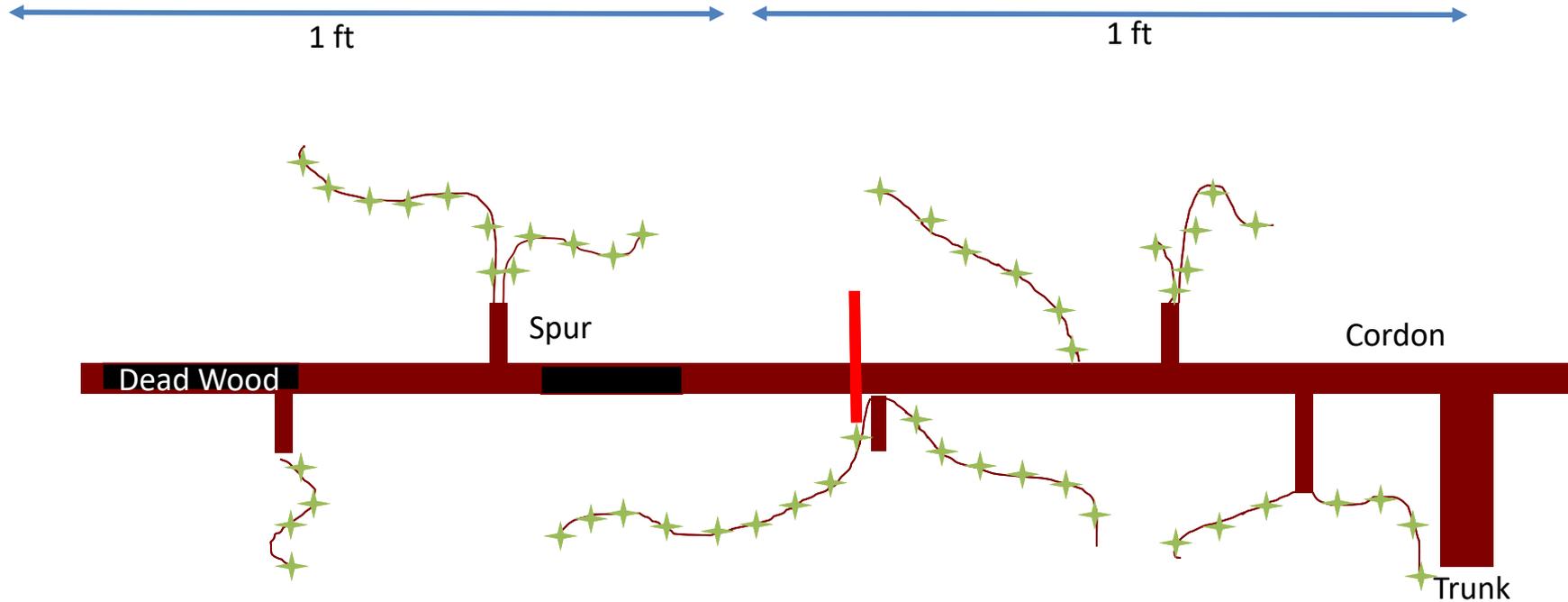




25 buds/foot









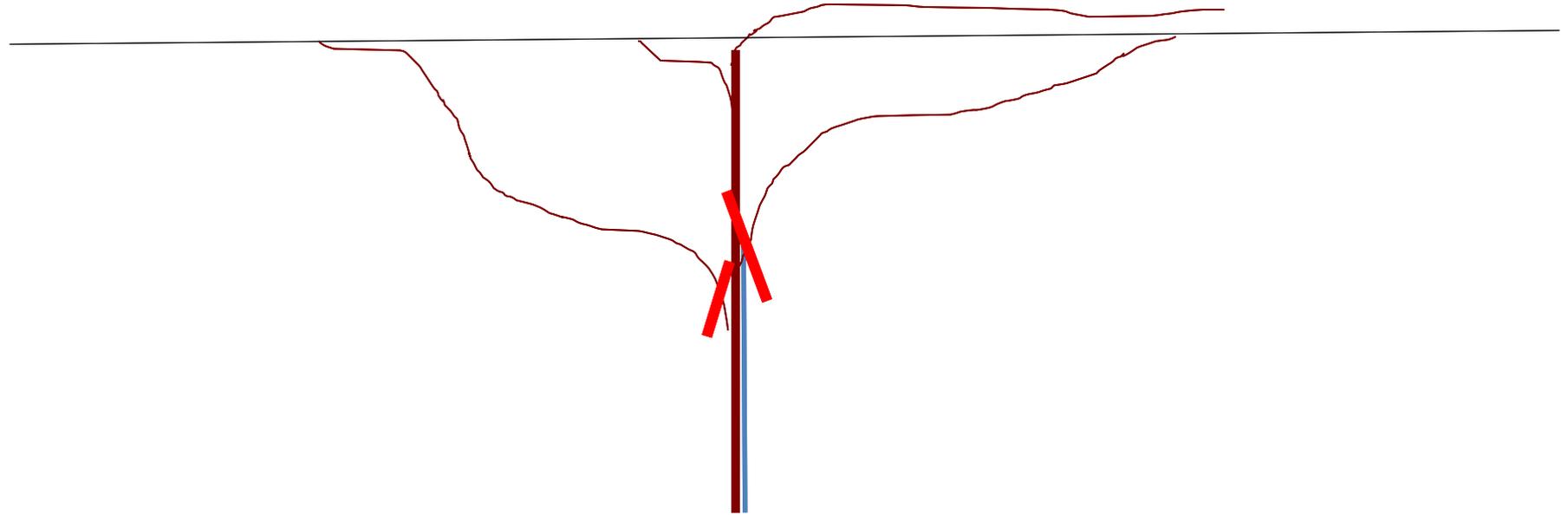


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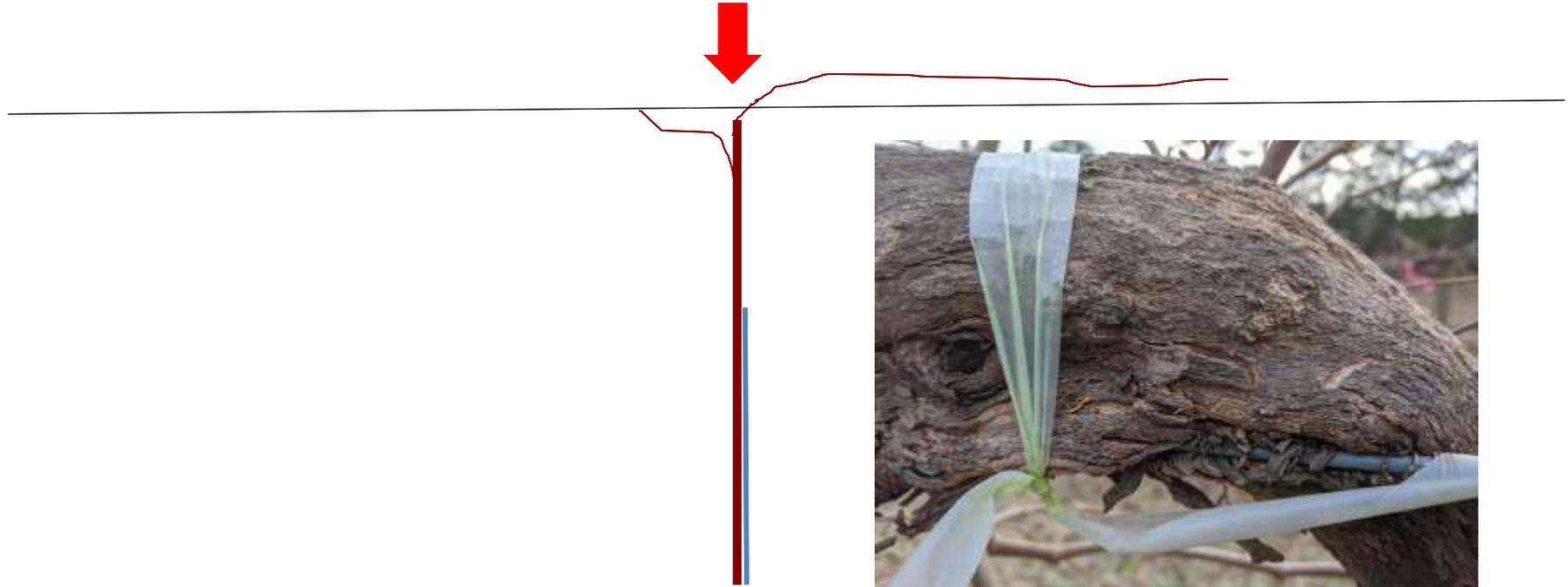
General Training Tips

Training in the first years

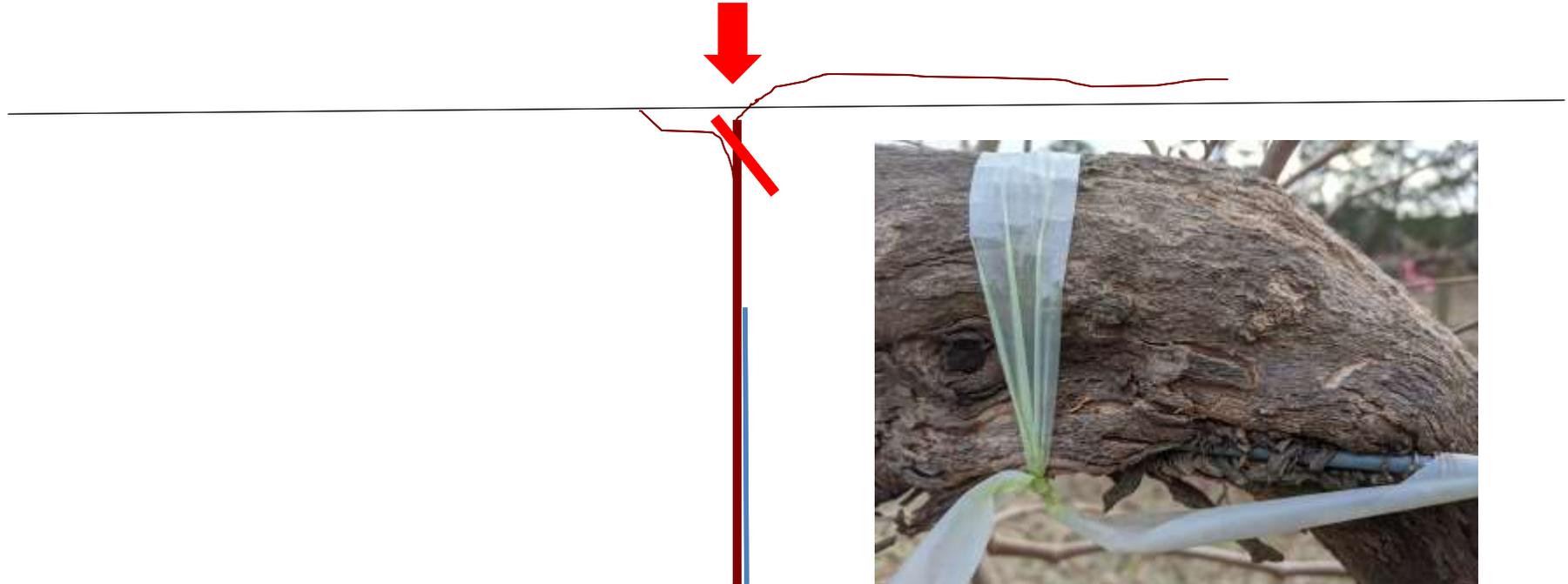
- ❖ When planting the plant: Keep enough space, so that roots don't curl
- ❖ First two years: Do pinch off flowers and fruit as much as you can
- ❖ AIM: Develop a healthy trunk and root system
- ❖ **Train a STRAIGHT TRUNK!!!!**
- ❖ **Use a string or a metal/bamboo stick**
- ❖ **Cut vine back after year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



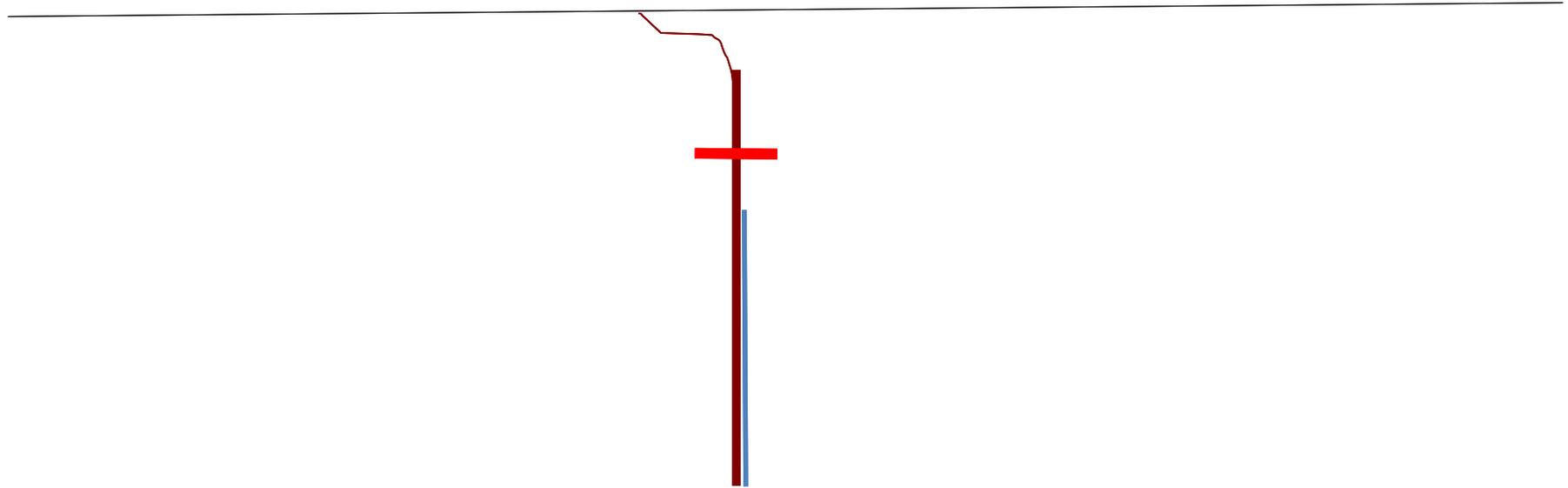
End of Year 1



End of Year 1



End of Year 1

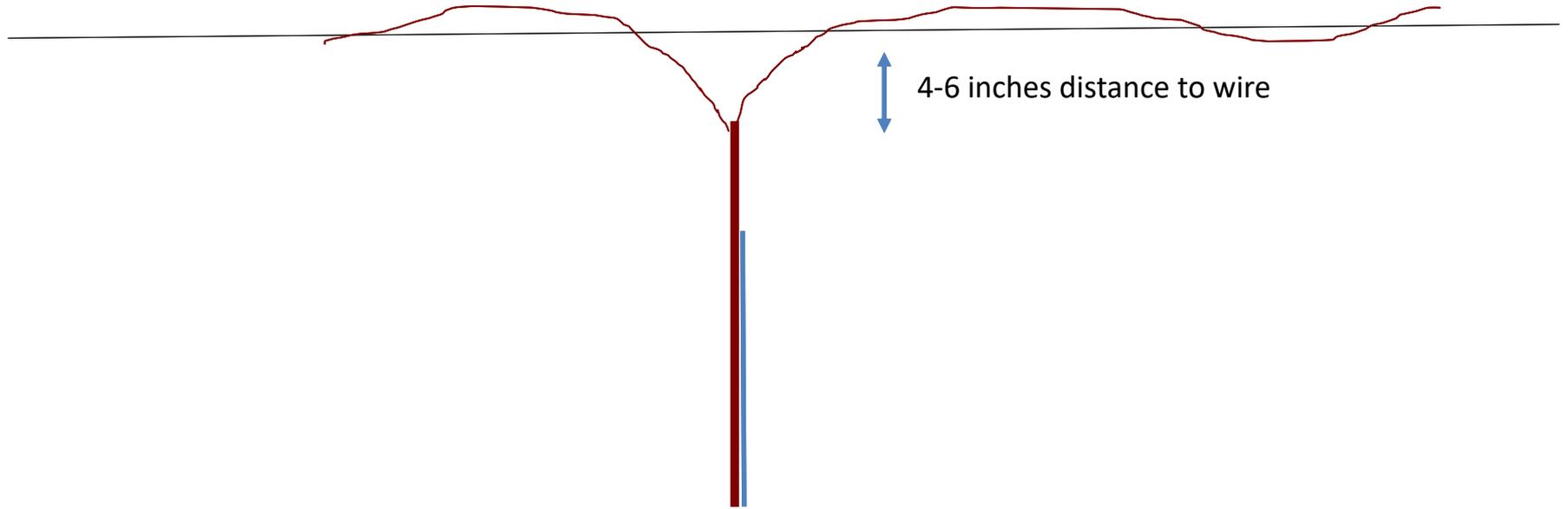


End of Year 1



End of Year 1

Make wide curls around the wire or hang the cordon 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/>

# Collaborative Effort

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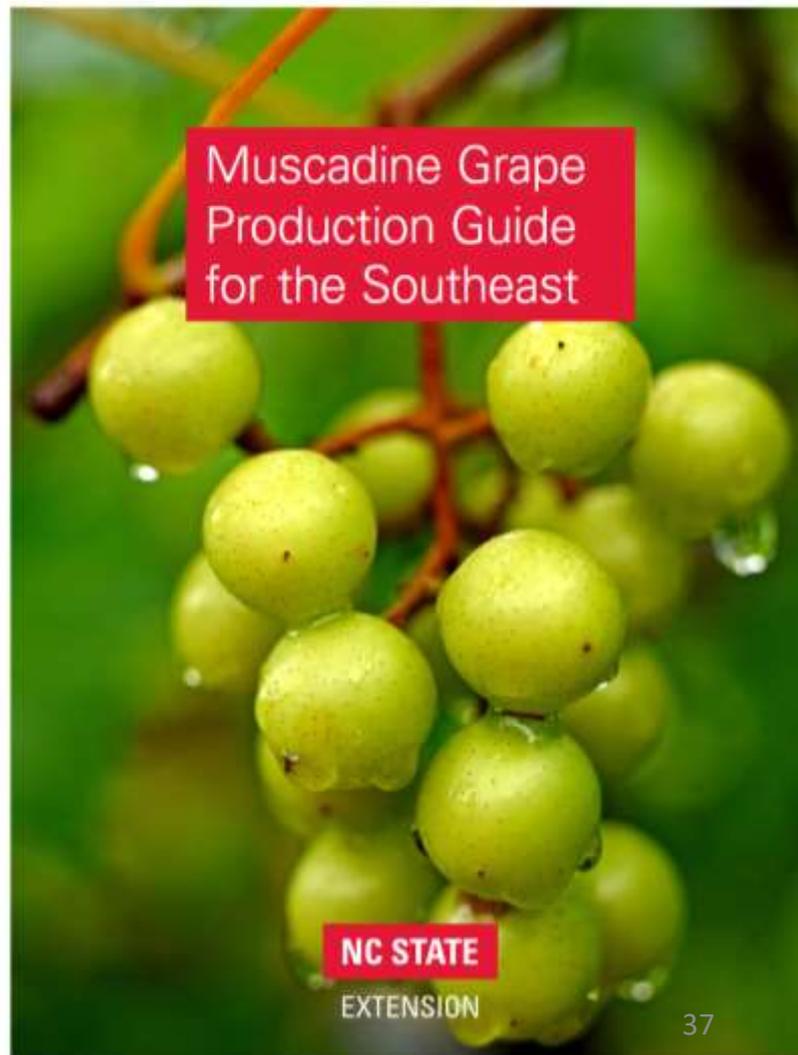
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**Thank You and Q+A**