



VIRTUAL VITICULTURE

ACADEMY

Vine Pruning & Training to Promote Vineyard Longevity

VinCO 2025

Fritz Westover | Viticulturist
Virtual Viticulture Academy



Vine Pruning & Training to Promote Vineyard Longevity



PennState



TEXAS A&M
UNIVERSITY.



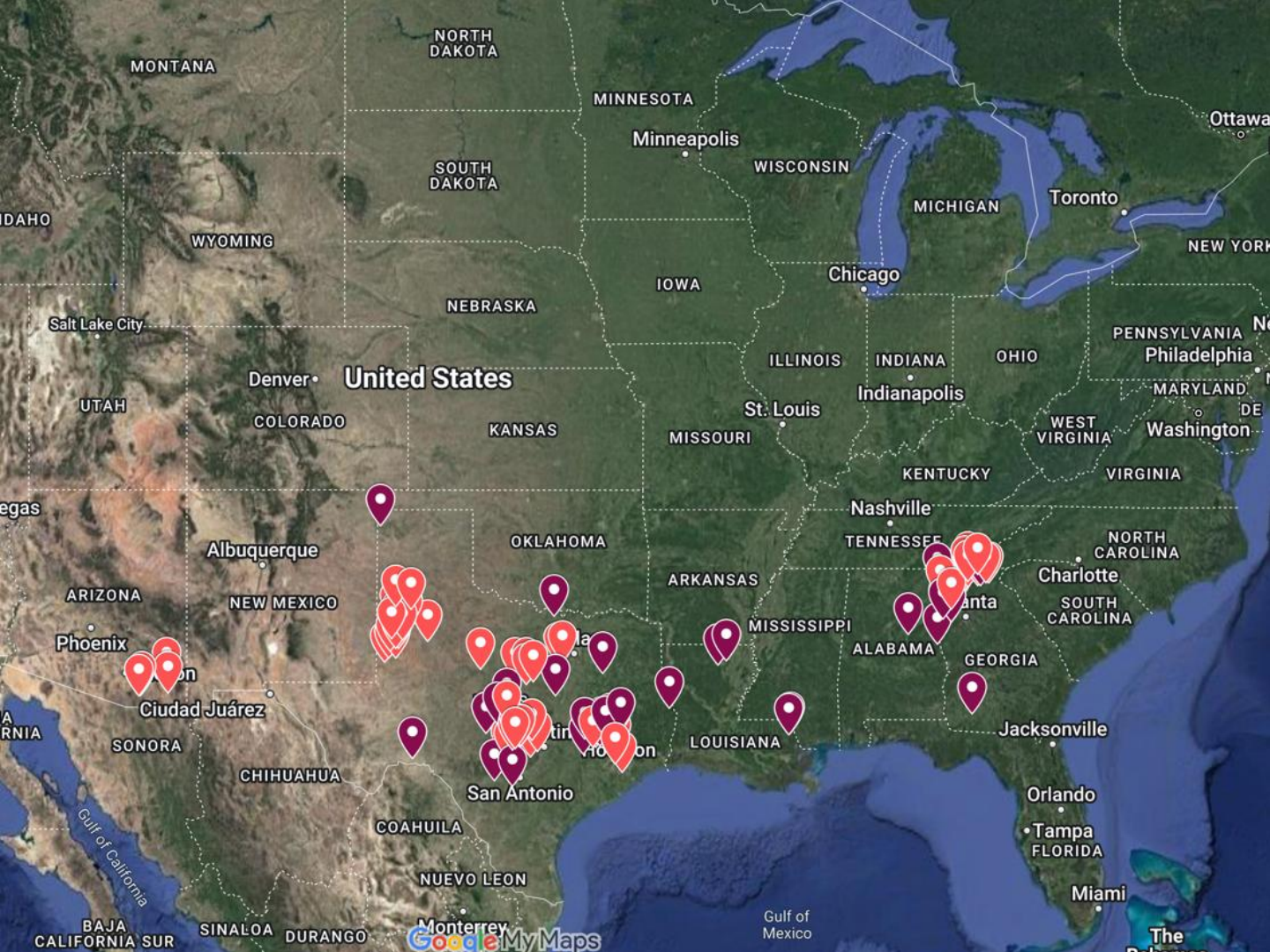
VINEYARD TEAM
Promoting Sustainable Winegrowing



WESTOVER
vineyard advising



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ACADEMY



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The



Vine Pruning & Training to Promote Vineyard Longevity

Factors Influencing Vineyard Longevity

- Vineyard establishment protocols (soil, water, nutrition)
- Environmental conditions (drought, heat, cold)
- Management (water, nutrition, training, pruning)
- Water (quality, availability, timing)
- Diseases (GTD)
- Vine balance (crop load x season)





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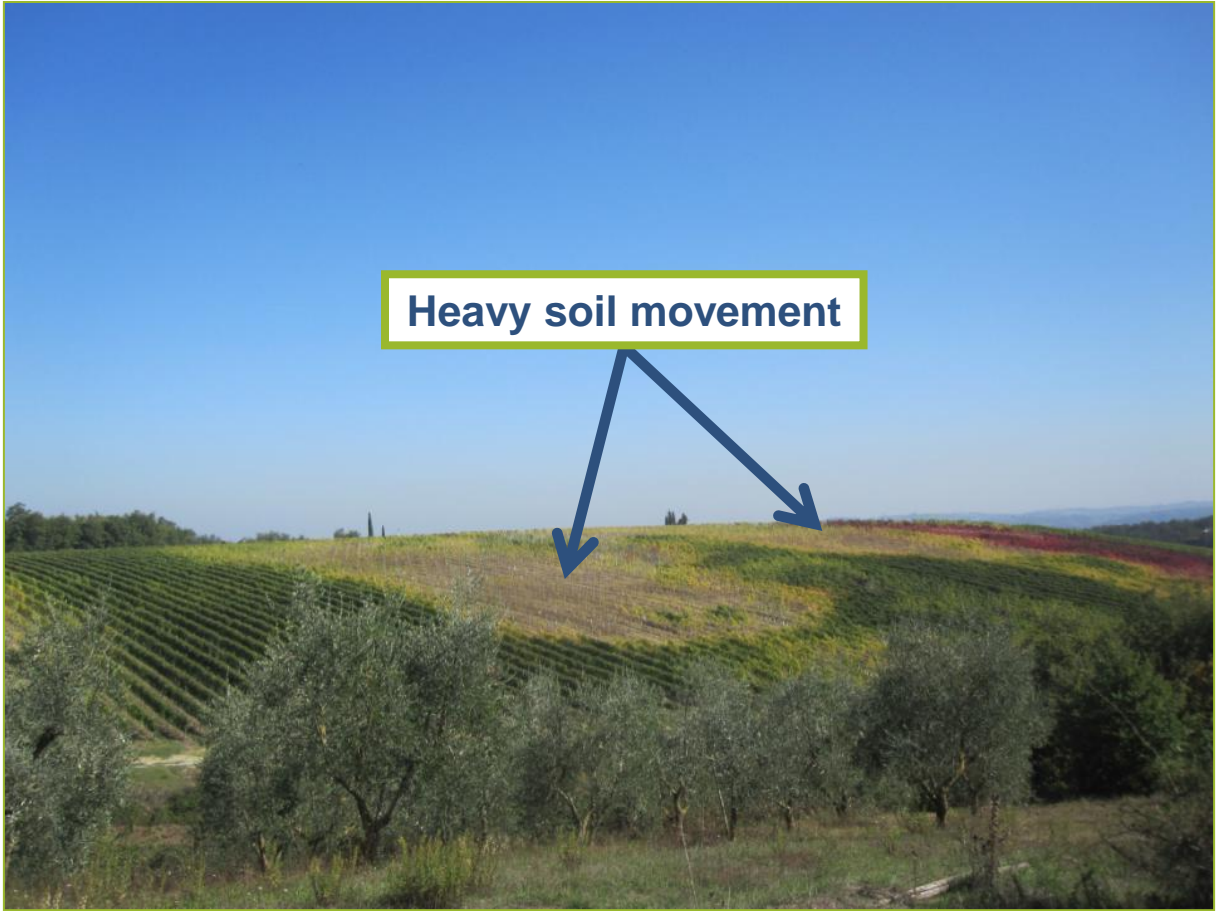


**Vineyard
longevity
starts before
you plant**



Vine Pruning & Training to Promote Vineyard Longevity

Heavy soil movement



Young Vines Should NOT Struggle...



No Wimpy Wood!



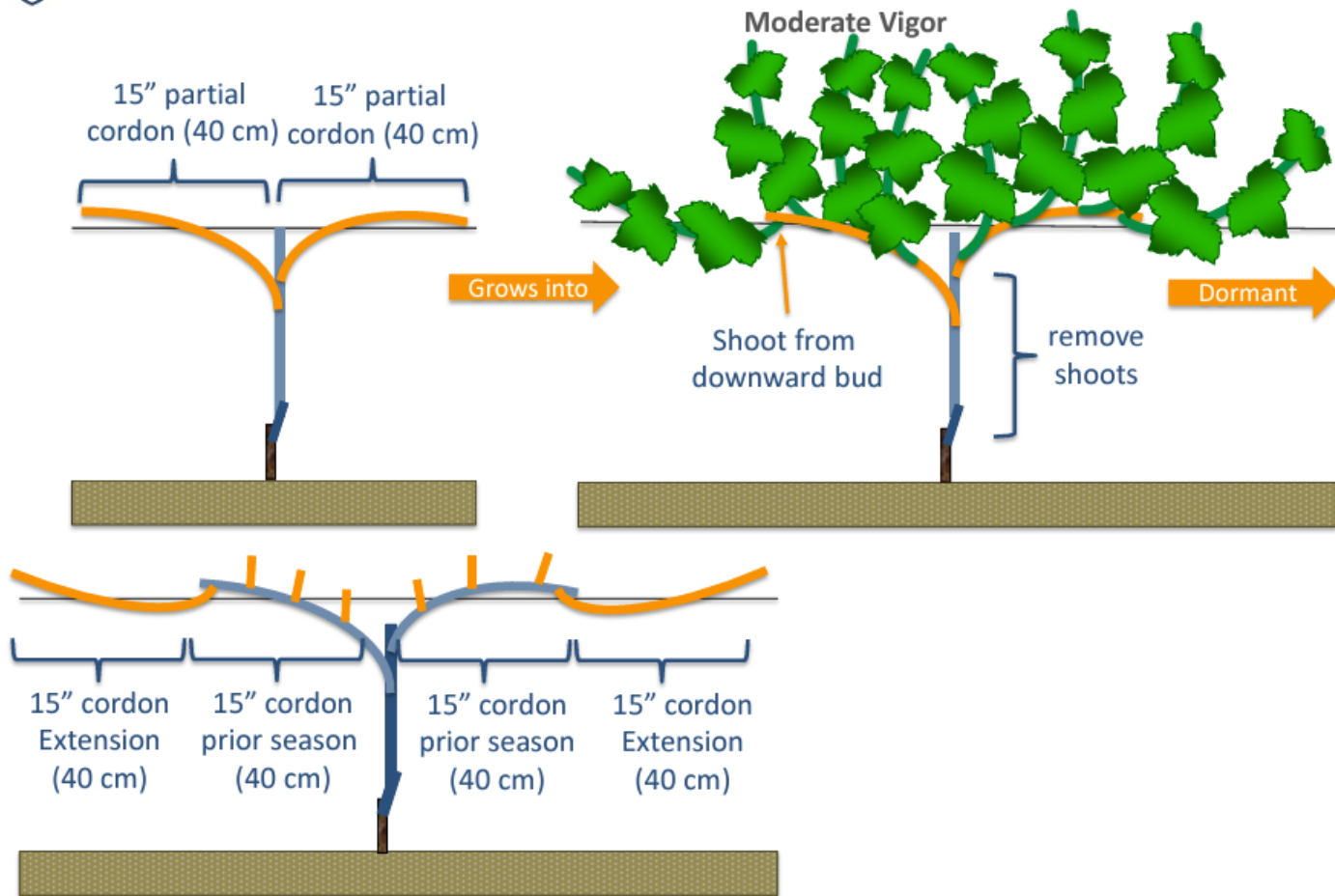
Out of Balance





Scenarios from a Trunk and Partial Cordons

3rd or 4th Year Growth – Develop Cordons from Trunks and Partial Cordons



'Killer Cuts'

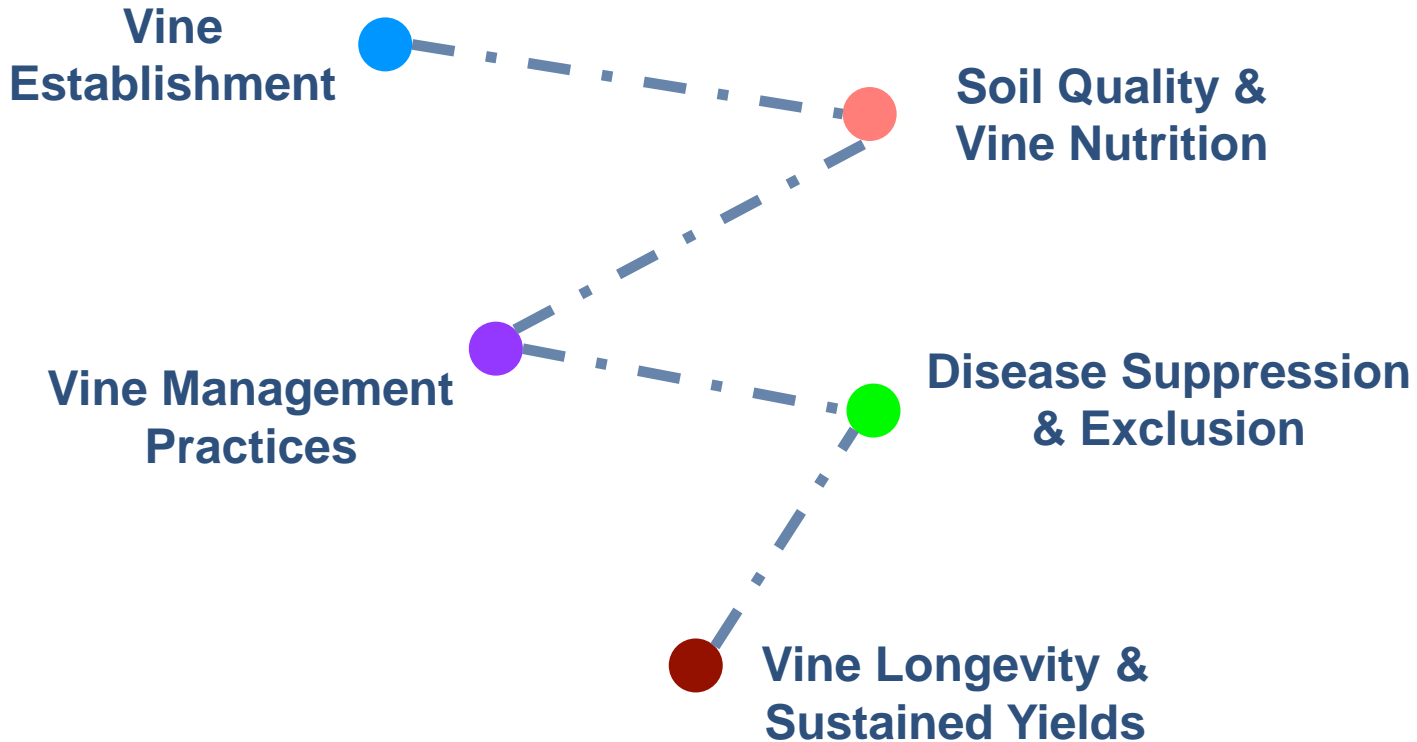


GTDs





Pathway to Longevity





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Young Vine Training:

A “Closed System” Approach



Vine Pruning & Training to Promote Vineyard Longevity

Remove Shoots = Reduce Dormant Pruning Wounds



Dormant first year
vine

Thin to one strong
shoot (or 2)

Prune back to two buds in winter
(one bud if less than pencil size wood)



Vine Pruning & Training to Promote Vineyard Longevity

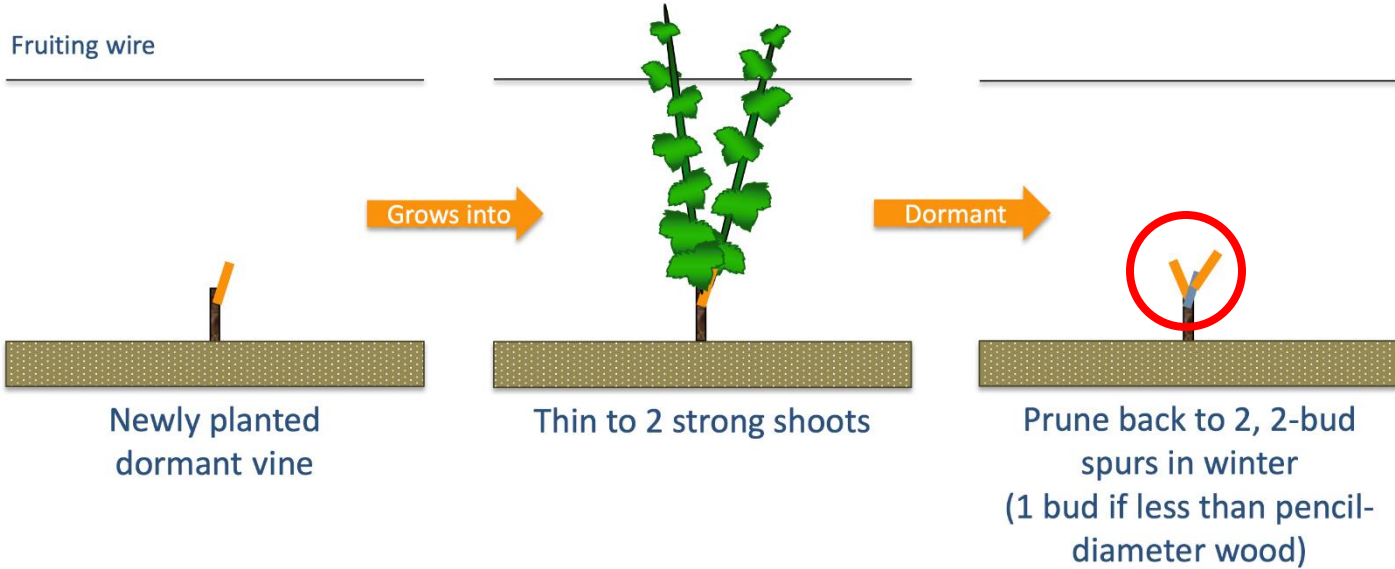
Young Vine Training & Pruning Wounds



Scenarios from the Ground Up

1st Year Growth – Double Shoot
Moderate to High Vigor

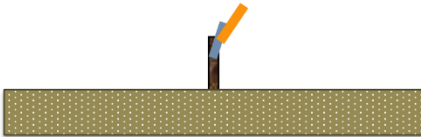
Fruiting wire



Trunk Development

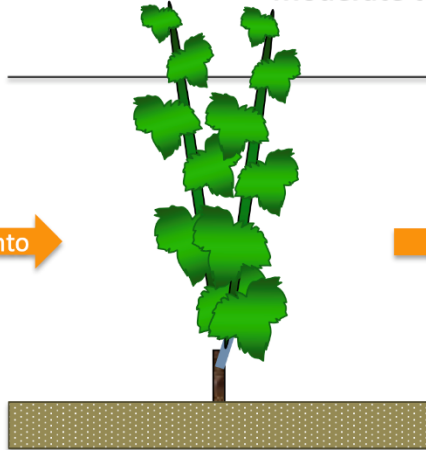
1st or 2nd Year Growth– Double Shoot to Double Trunk
Moderate to High Vigor

Fruiting wire



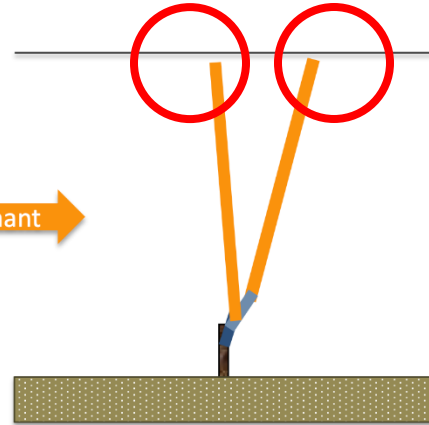
Dormant vine

Grows into



Thin to 2 strong shoots

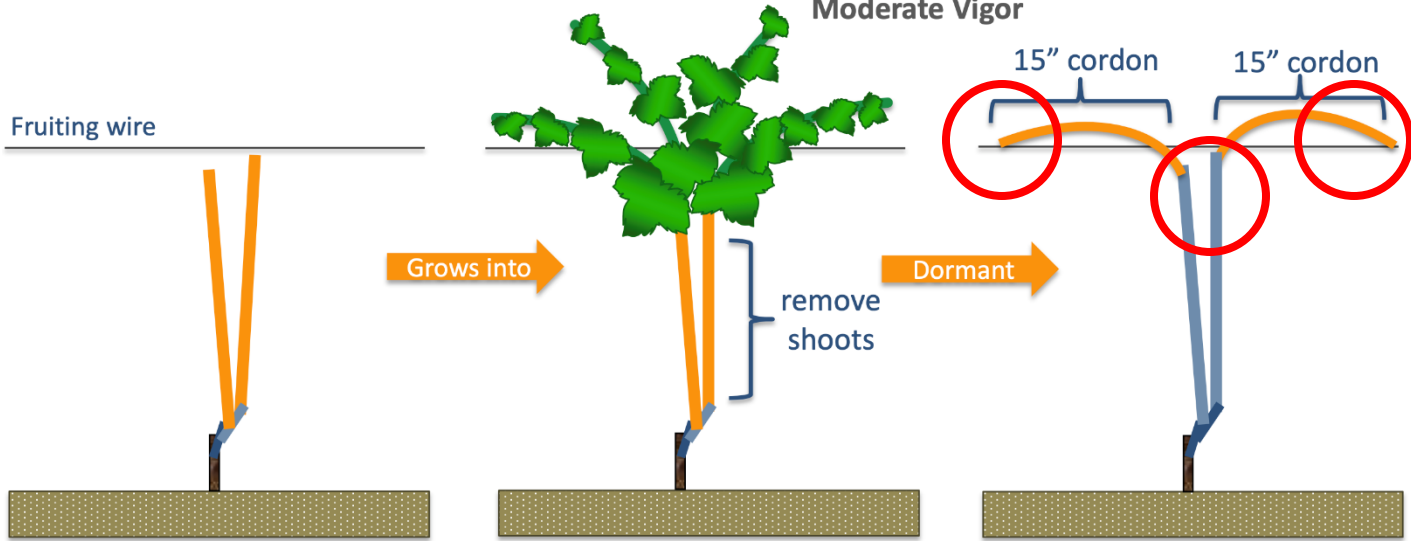
Dormant



Retain 2 trunks – cut each trunk just below the fruiting wire (cut back to 2 buds if less than 3/8" [9-10mm] wood)

Cordon Development

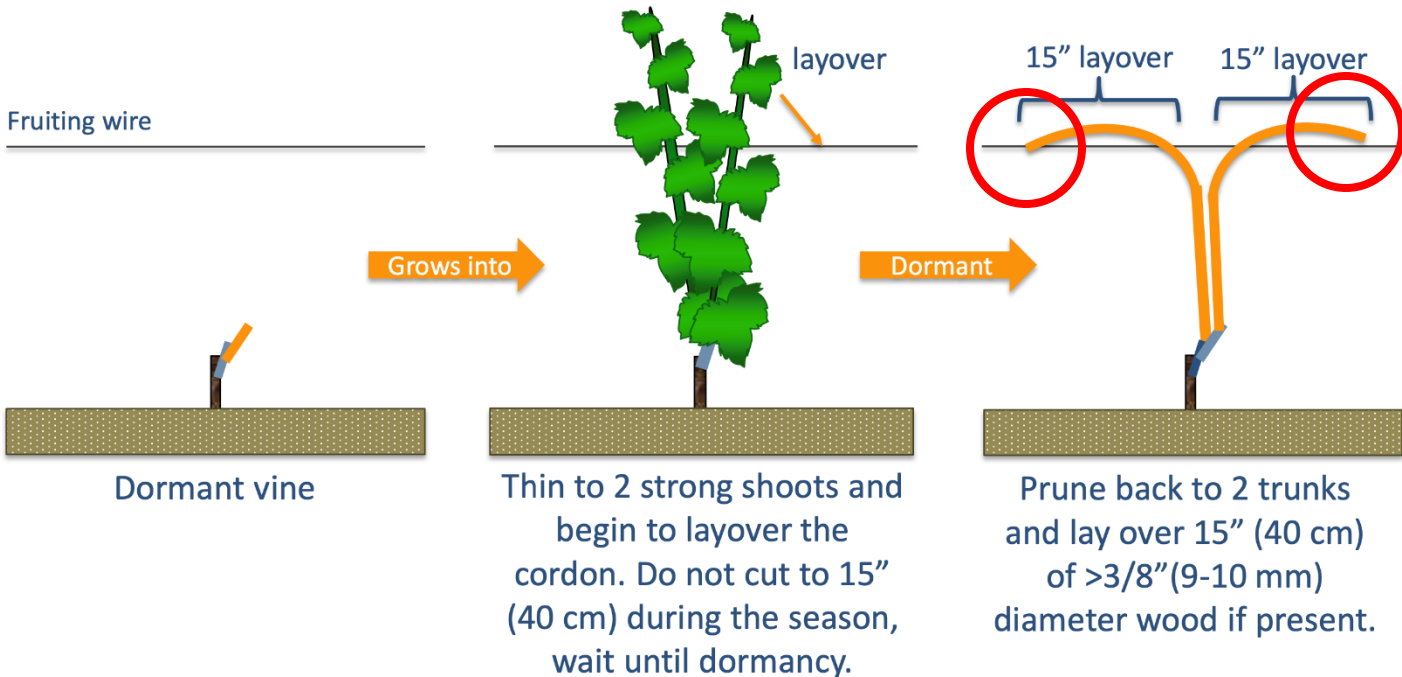
2nd or 3rd Year Growth – Develop Partial Bilateral Cordons
Moderate Vigor



Thin to 4-6 strong shoots and begin to layover the cordon. Do not cut to 15" (40 cm) during the season, wait until dormancy.

Trunk Development

1st or 2nd Year Growth– Double Shoot to Double Trunk
High Vigor





Vine Pruning & Training to Promote Vineyard Longevity





Bio-Tam[®] 2.0 1019.45

SePRO Ag

FOR ORGANIC PRODUCTION

For protection of crops from attack by certain fungal diseases (i.e., *Ascochyta* spp., *Fusicladium* spp., *Phytophthora* spp., *Pythium* spp., *Rhizoctonia* spp., *Botrytis* spp., *Sclerotinia* spp., *Sclerotium rolfsii*, *Thielaviopsis basicola*, and *Verticillium* spp.)

Active ingredients:
Trichothema sparsum (CC-E12)¹ 2.0%
Trichothema sparsum (CC-386)² 2.0%
Other ingredients 96.0%

Net weight: 5 pounds (2.27 kg)

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PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
Caution: Harmful if absorbed through skin or swallowed. Avoid contact with skin, eyes, or clothes. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet. Avoid contact with food, feed, and animal products.

FIRST AID
If on skin or clothing:
- Take off contaminated clothing.
- Wash skin thoroughly with plenty of water for 15-20 minutes.
- Get medical attention if serious or if irritated.

If swallowed:
- Call a poison control center or doctor immediately for treatment advice.
- Have the product name and amount eaten or drunk.
- Do not induce vomiting unless told to do so by a poison control center or doctor.
- Do not give anything by mouth to unconscious persons.

NOTICE NUMBER
Have the product container or label with you when calling a poison control center or doctor, or going to a hospital, or if you are called by a poison control center or doctor. Do not give anything by mouth to unconscious persons. Call a poison control center at 1-800-555-SEAL.

KEEP OUT OF REACH OF CHILDREN
CAUTION / PERCAUCION
Refer to inside of label booklet for additional precautionary information and directions for use.

Notice: Read the entire label before using. Use only according to label directions.

OMRI
Listed
www.omri.com

SePRO Ag, Inc. 1019.45 (2.27 kg)
1019.45 (2.27 kg)
1019.45 (2.27 kg)

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SePRO Ag, Inc. 1019.45 (2.27 kg)
1019.45 (2.27 kg)
1019.45 (2.27 kg)

Net weight: 5 pounds (Non-refillable)





Vine Pruning & Training to Promote Vineyard Longevity





Vine Pruning & Training to Promote Vineyard Longevity

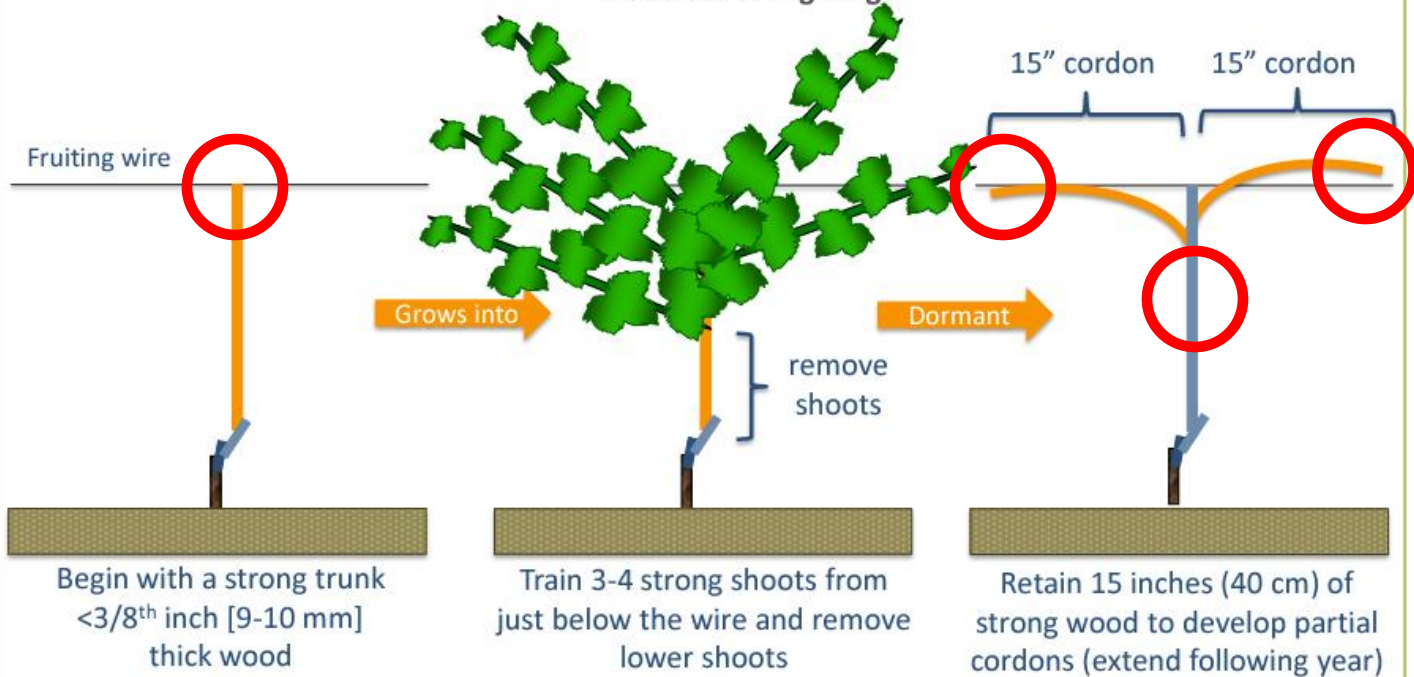




Cordon Development

3rd Year Growth – Single Shoot to Single Trunk

Moderate to High Vigor





Vine Pruning & Training to Promote Vineyard Longevity

Canes longer than 15" can cause gaps





15"

3/8"

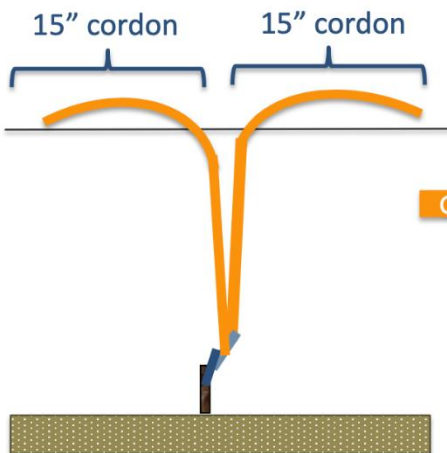
CU.
DEM



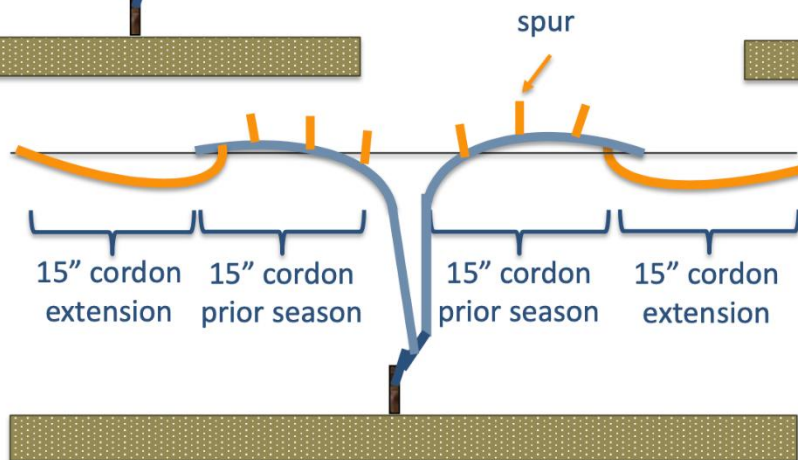
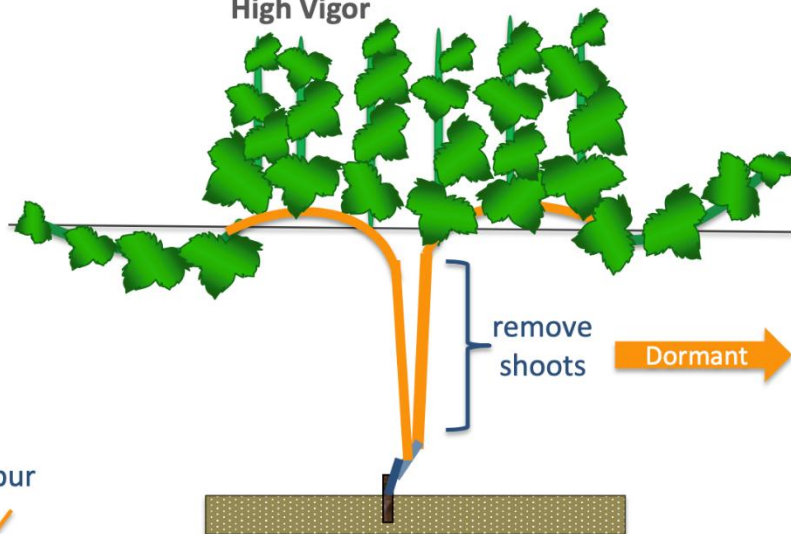
Cordon Development

2nd or 3rd Year Growth – Develop Cordons from Lay Over

High Vigor



Grows into



If partial cordons were developed using the "layover" method the previous season, shoots should be removed on the trunk unless a backup is needed to replace a poorly developing cordon (buds not pushing, blank spaces, damage to developing cordon, etc.). Shoots that develop on the partial cordons from the previous season will be used to develop permanent spur positions.

Note: Do not use a cane that developed from a lateral shoot the previous season as they are often weak and create inferior cordons and spur positions.



Vine Pruning & Training to Promote Vineyard Longevity

Spur spacing & pruning wounds







Vine Pruning & Training to Promote Vineyard Longevity

Shoot thinning newly developed cordons to create well-spaced spur positions

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Shoot thinning newly developed cordons to create well-spaced spur positions

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Pruning Rules!

Pruning Established Vines for Longevity



Factors Influencing Vineyard Longevity

- Bad cuts or “Killer Cuts”
- How vines heal (CODIT)
- Reduce large pruning wounds & diseases
- Preventing “killer cuts” vs. protecting cuts
- Good cuts + strategic wound treatments
- Best management practices (fix bad habits)





Vine Pruning & Training to Promote Vineyard Longevity

GTD & Vine Decline



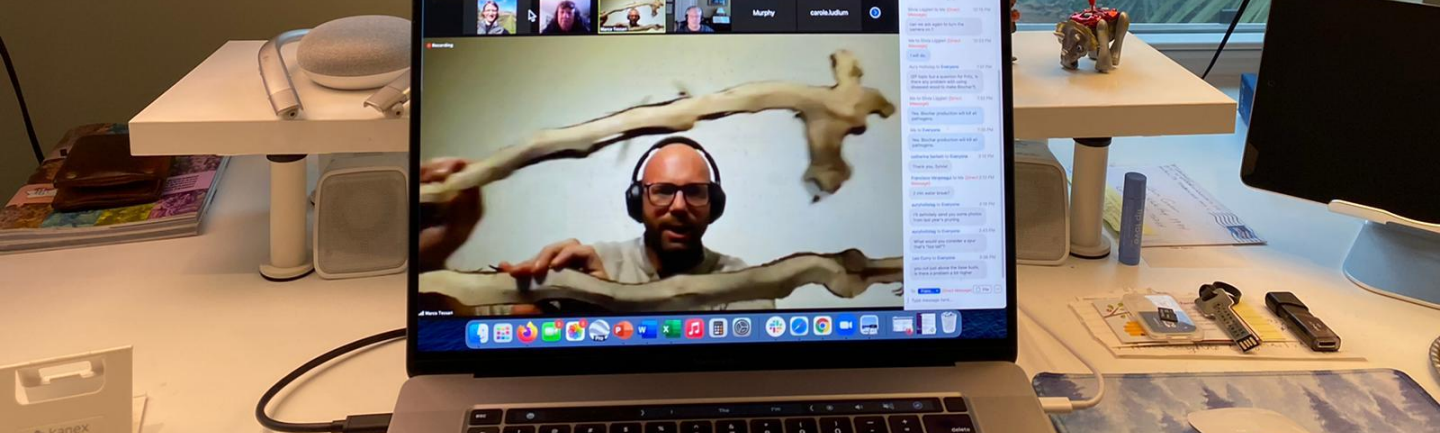
Is it the disease or the pruning?

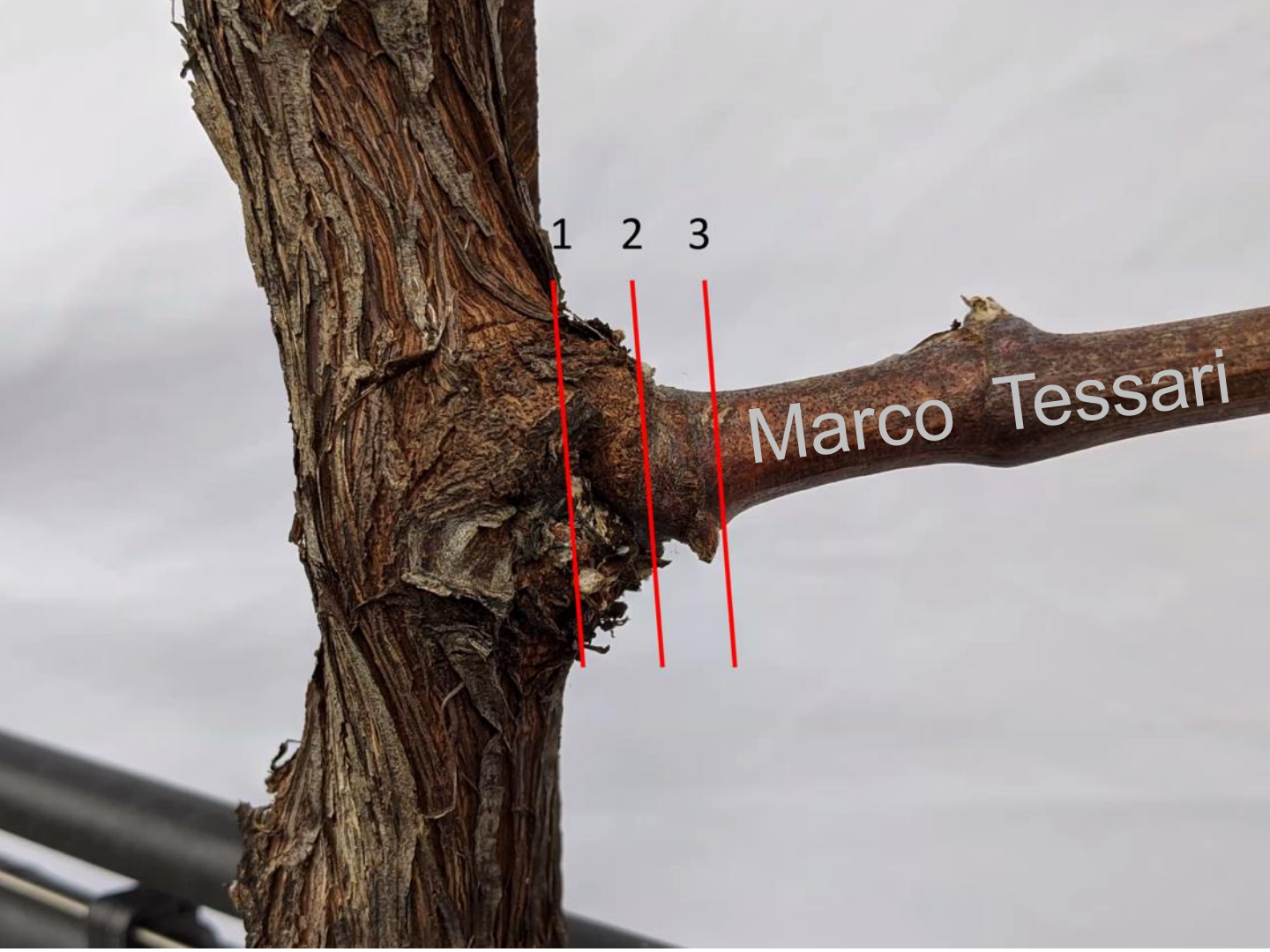




Global Vineyard Perspective







1 2 3

Marco Tessari



Marco

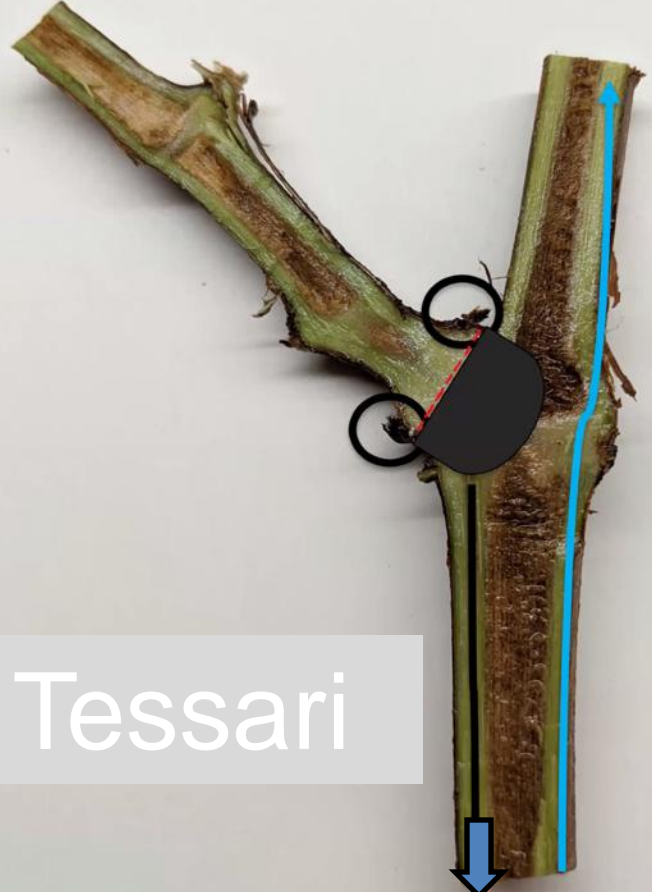
Tessari



Vine Pruning & Training to Promote Vineyard Longevity



Marco



Tessari

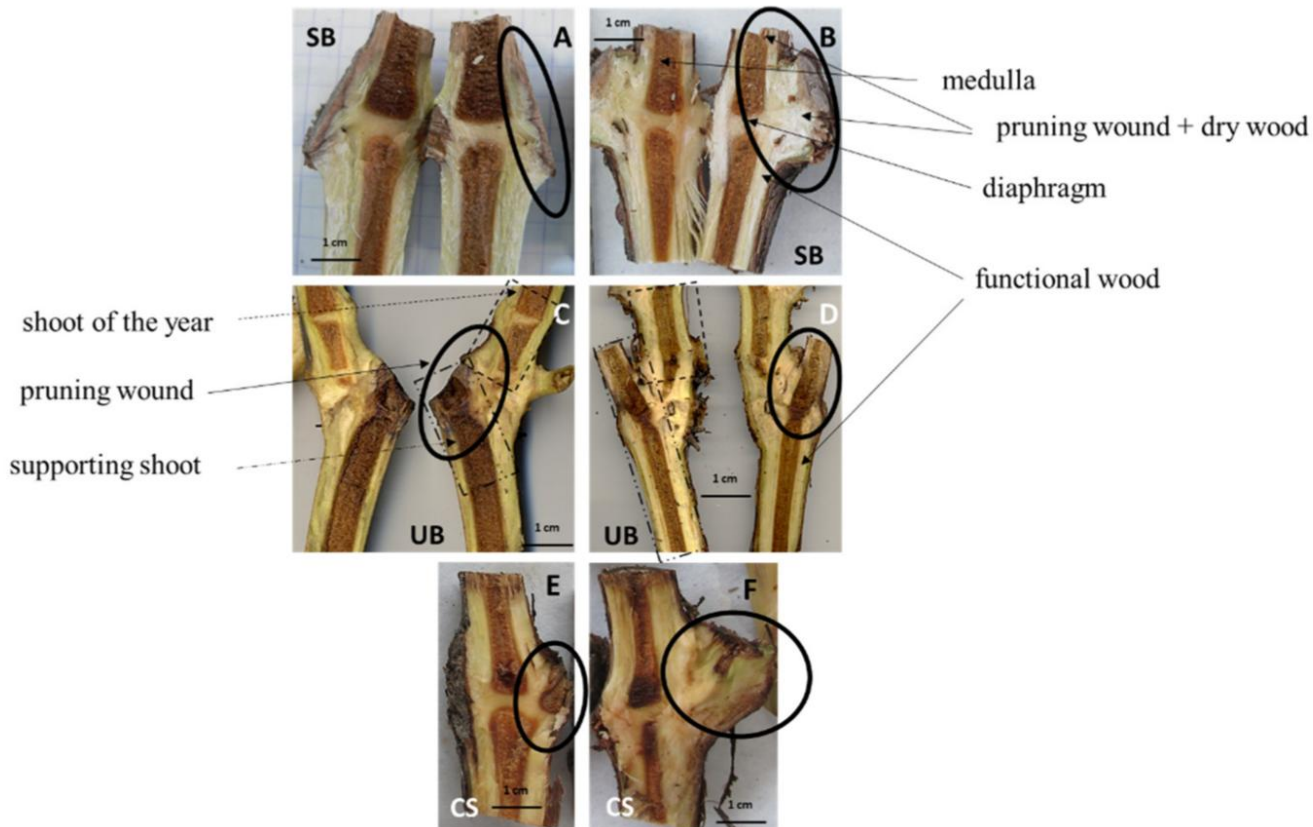


Figure 1. Description of the tissue types of Sauvignon Blanc (SB) (A,B) and Ugni Blanc (UB) (C,D) and Cabernet Sauvignon (CS) (E,F) according to pruning mode: short (A,C,E), or high (B,D,F).

Bruez, et. al.



Vine Pruning & Training to Promote Vineyard Longevity



Botryosphaeria dieback



Eutypa dieback



Phomopsis dieback

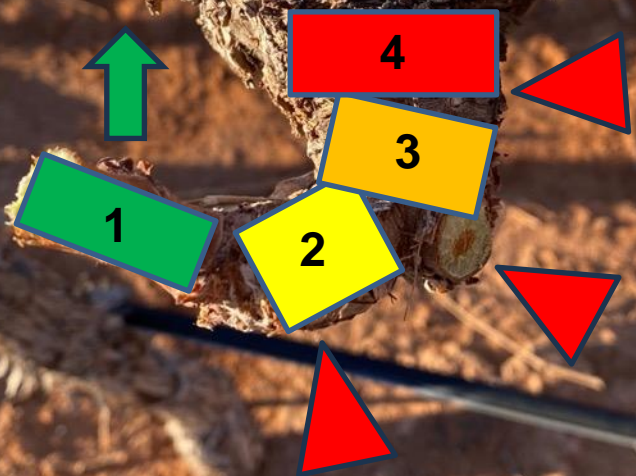
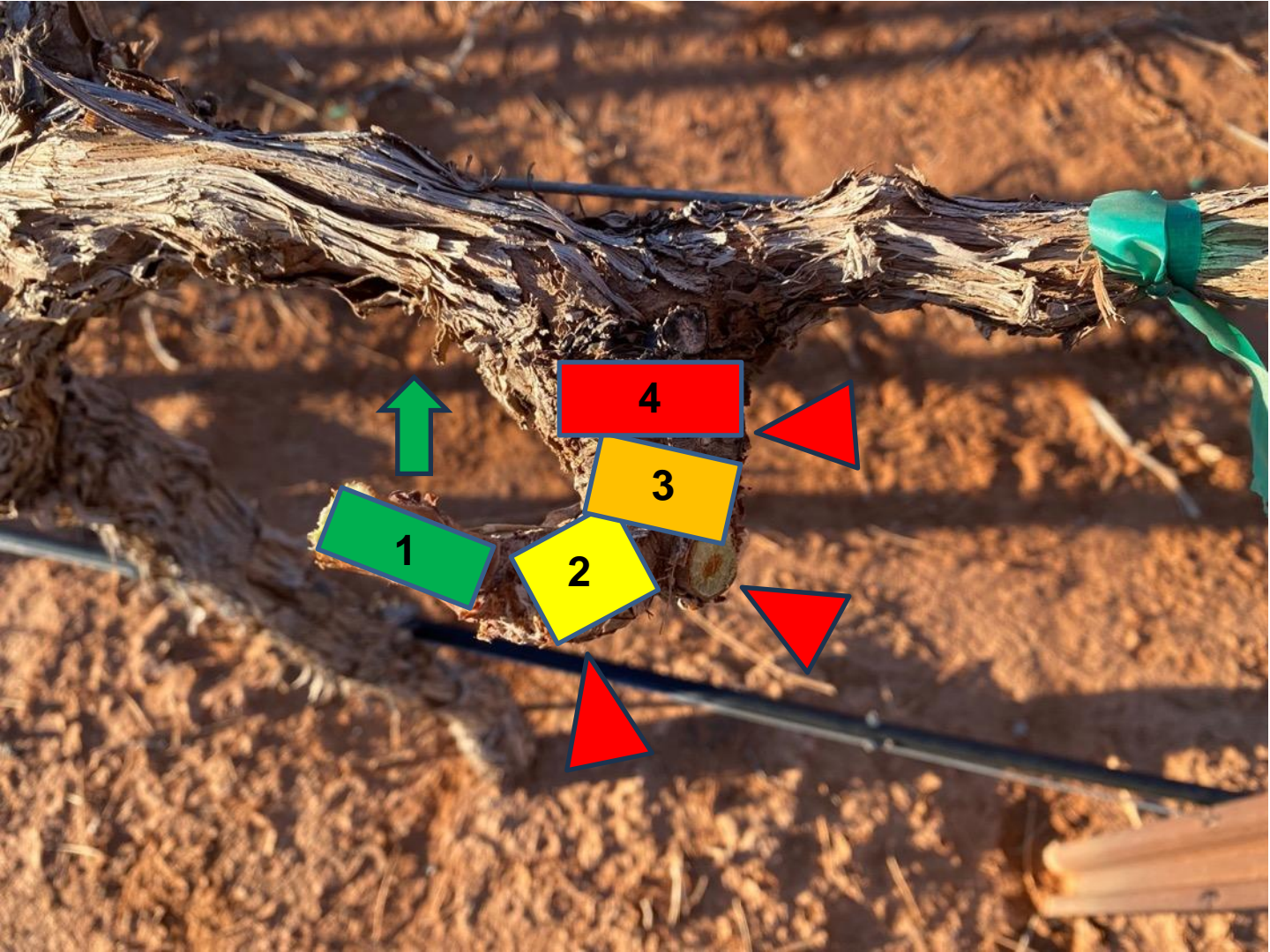


Esca



Dead spurs





'Spur Sandwich'





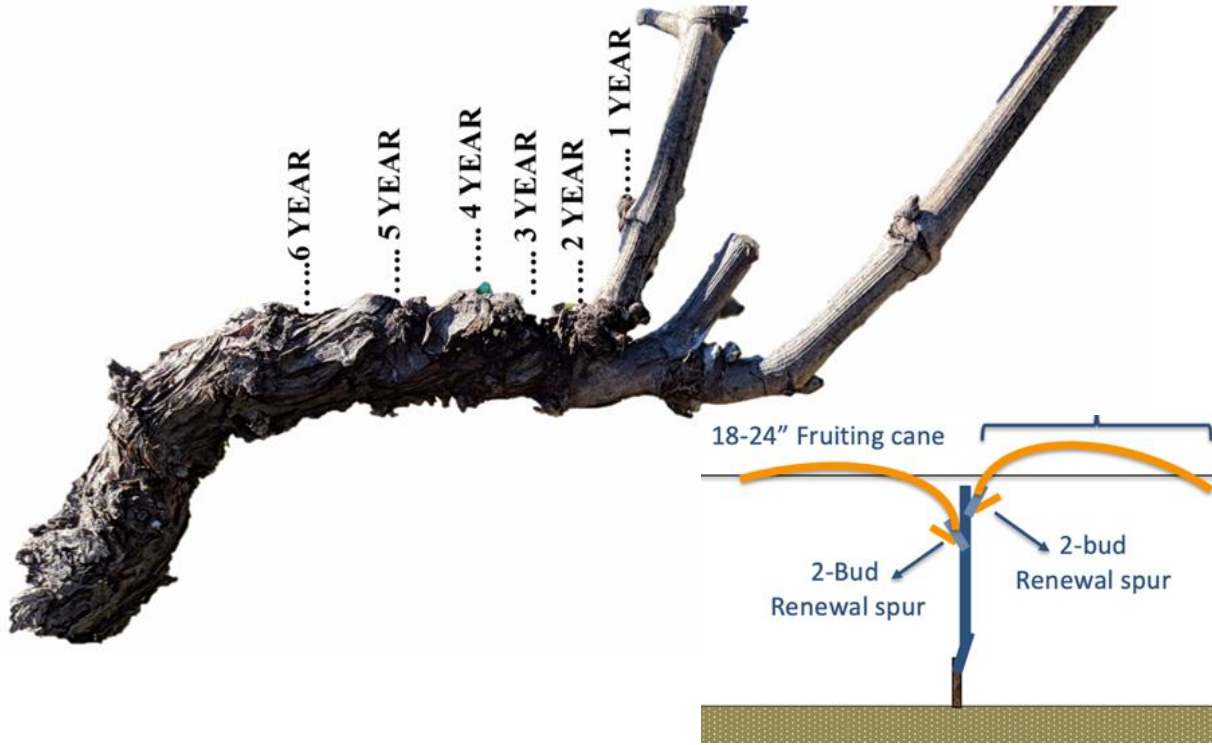
Marco Tessari



Marco Tessari



Controlled Branch Development











Vine Pruning & Training to Promote Vineyard Longevity

Avoid cuts like this!





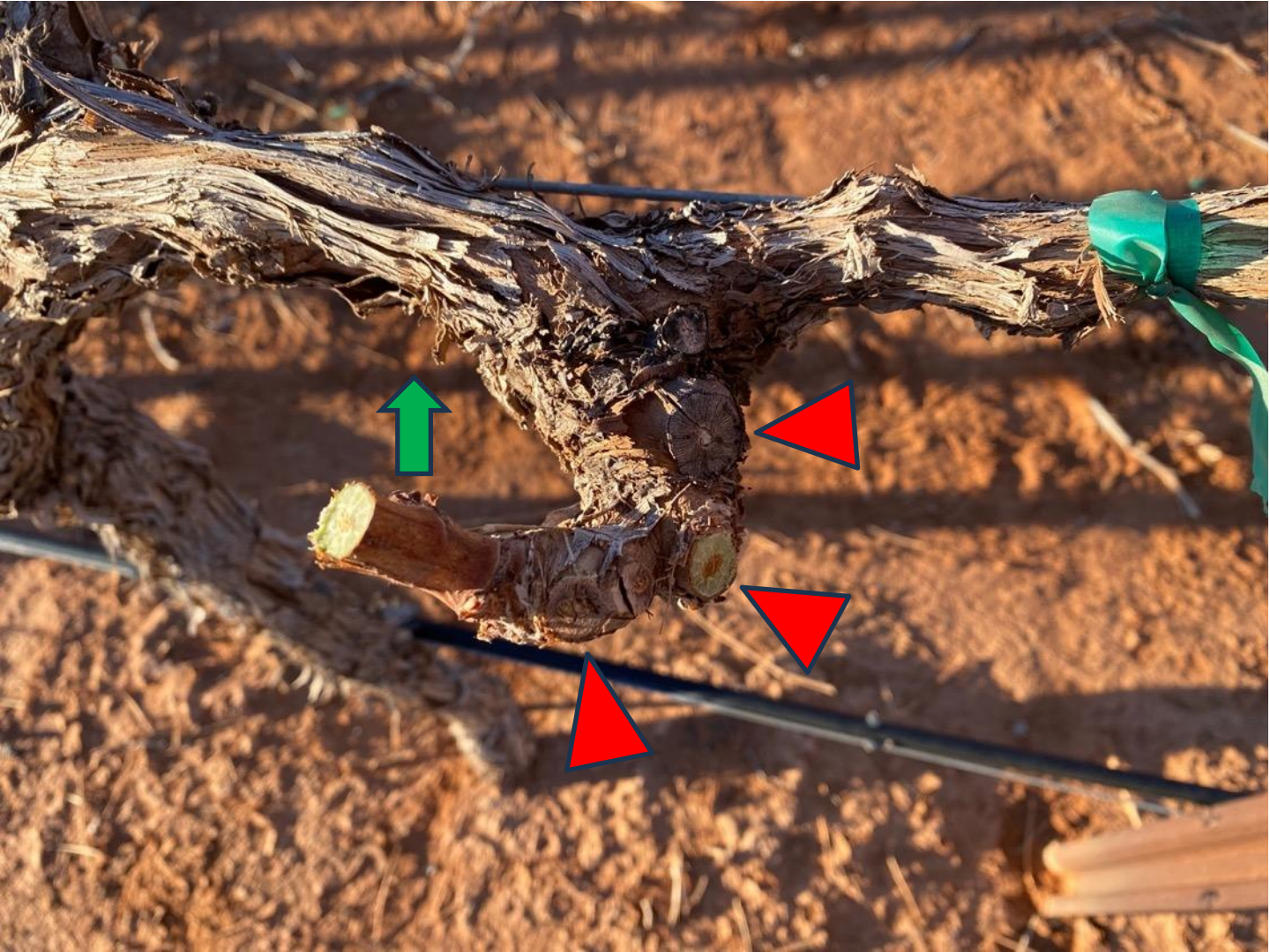
Vine Pruning & Training to Promote Vineyard Longevity





Vine Pruning & Training to Promote Vineyard Longevity





'Spur Creep'





Vine Pruning & Training to Promote Vineyard Longevity

Every vineyard needs “some” shoot thinning





Shoot thinning

- Role in “closed system” vine training
- Adds labor - then reduces hand pruning labor
- Reduces the number of dormant pruning wounds
- Removes basal buds compared to dormant pruning (less sucker shoots)





Vine Pruning & Training to Promote Vineyard Longevity

Double or Twin Shoots



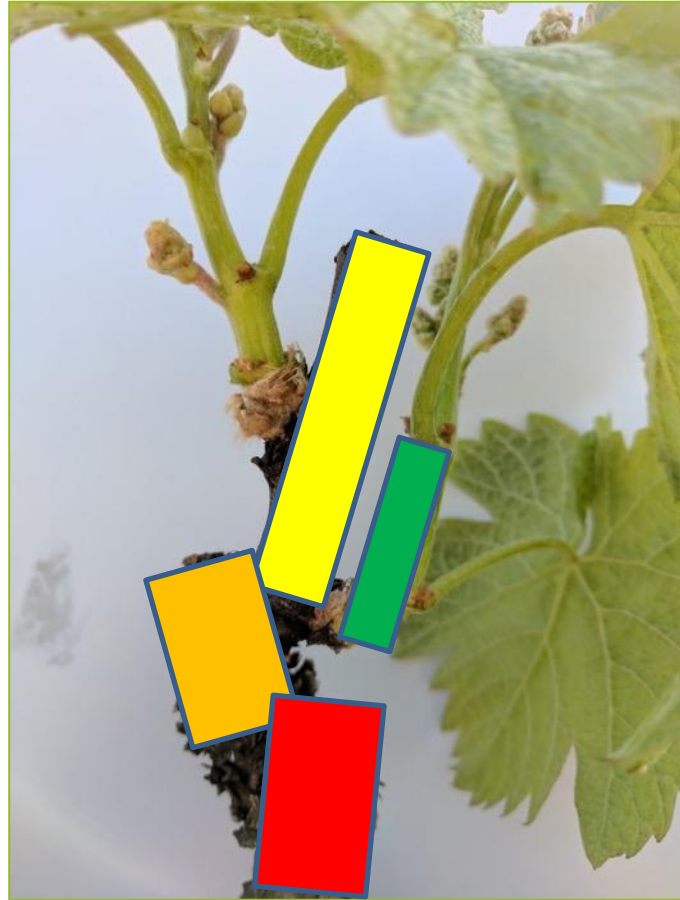


Vine Pruning & Training to Promote Vineyard Longevity





Vine Pruning & Training to Promote Vineyard Longevity





Vine Pruning & Training to Promote Vineyard Longevity

The Consequences of Late Thinning





Vine Pruning & Training to Promote Vineyard Longevity





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Let your pruning be your guide!





Vine Pruning & Training to Promote Vineyard Longevity

Where do we go from here?

- Worker training
- Vine dissection & education
- Stop the “Killer Cuts” (electric pruners)
- Rethink the spur creep dilemma
- Maximize live wood



These techniques are covered in the videos.



Watch How-To Videos

Pruning



Search Grower Guides



Assess, Purchase, and Plan: Are You Doing These ...

 Video Course

 Webinar

 Free Content



Converting Unilateral Cordons to Bilateral Cordons

 Video

 Free Content



Cutting Small Wood Back to a Strong Trunk

 Video

 Free Content



Effectively Managing Sheep in Vineyards

 Video Course

 Free Content



Preventing Grapevine Trunk Disease

 How-To-Guide

 Free Content



Pruning Shear Sharpening

 Video

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THE PODCAST

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Be a Better Grape Grower

Learn the art and science of growing exceptional wine grapes in a way that fits your life and vineyard.

GET STARTED



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ASK FRITZ WESTOVER

Unearth what it takes to Be a Better Grape Grower
Host Fritz Westover shares best practices for being a successful winegrower, how to manage your vineyard, and answers questions from growers.

VINEYARD UNDERGROUND

with
Fritz Westover



EPISODE 063

Pruning Wound Disease
Myth Busting

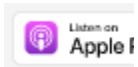
063: PRUNING WOUND DISEASE MYTH BUSTING

posted on **JANUARY 21, 2025**

When you grow up in the country with the most acreage of grapes, it only makes sense that you grow up to be a plant pathologist and research scientist in the world of viticulture. That was the case ...

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Resources for you...

Download Slides + More Pruning Resources



www.VirtualViticultureAcademy.com/vinco