



Prune Brownline Disease

Jaime Ott, UCCE Tehama County

Why the fuss?

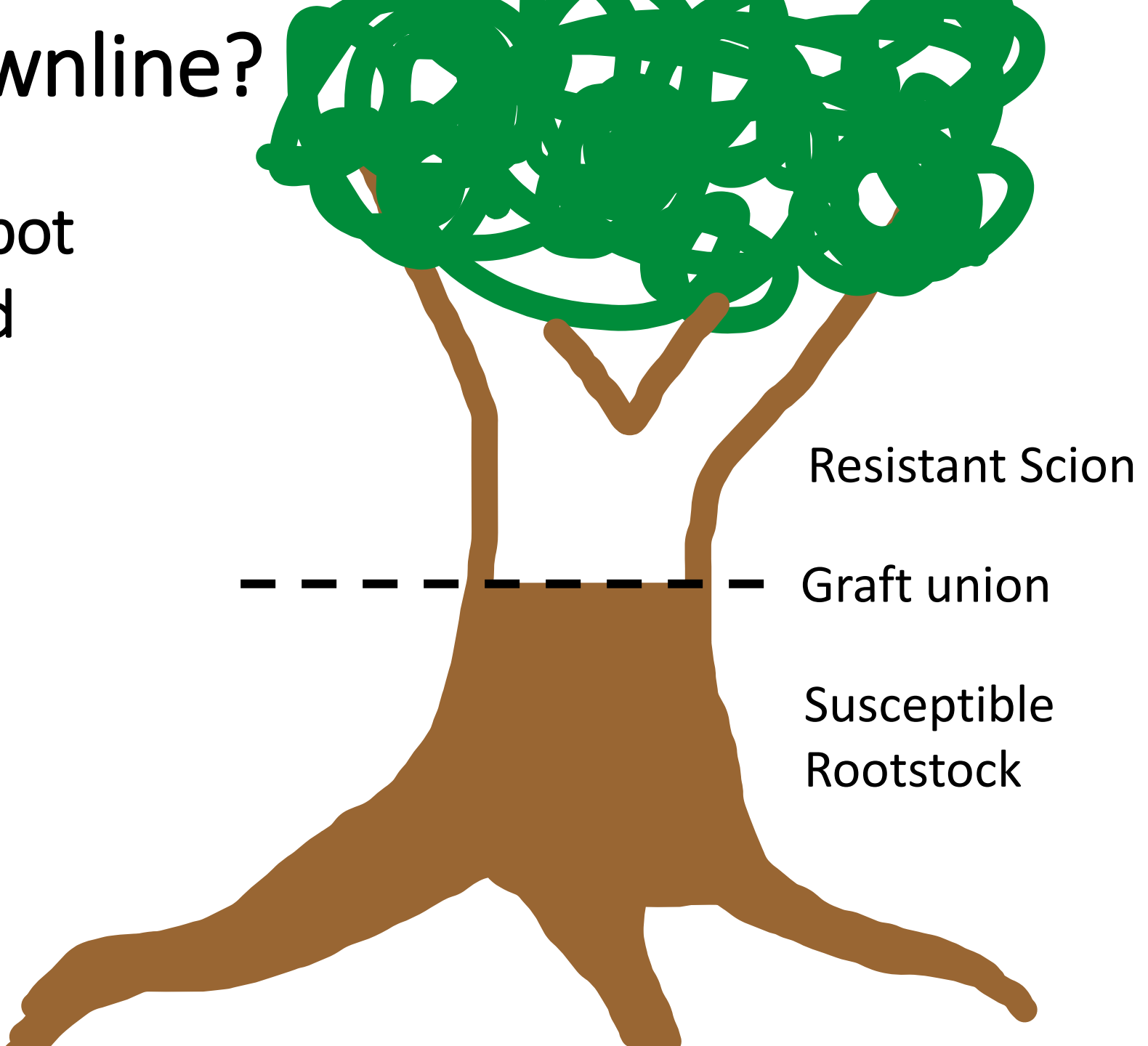
This summer, found Prune brownline in 4 orchards
3 of those were on Krymsk86

Very rare for the last 30 years

Susceptibility of other modern rootstocks (Viking,
M40, Atlas, etc.) unknown

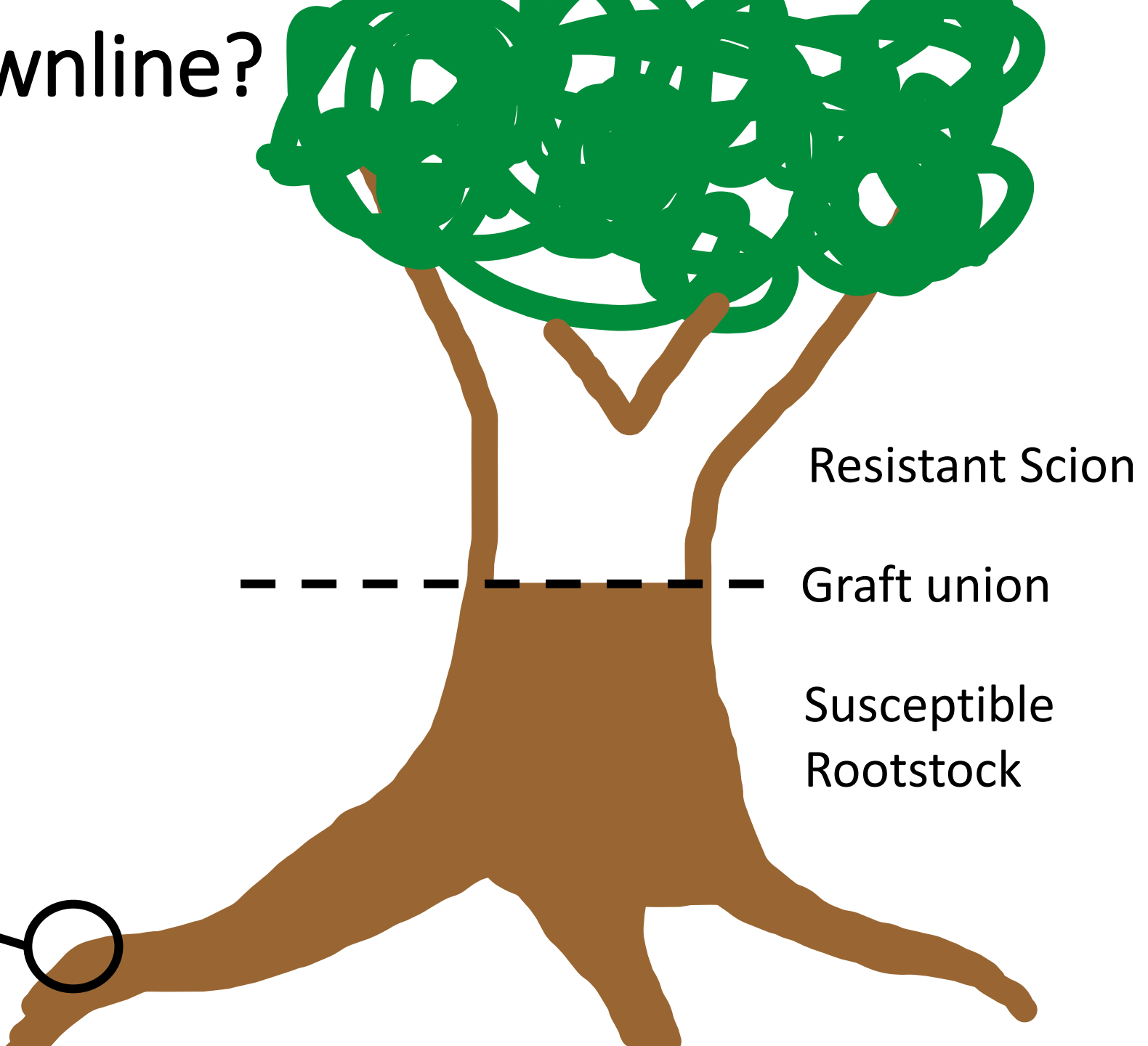
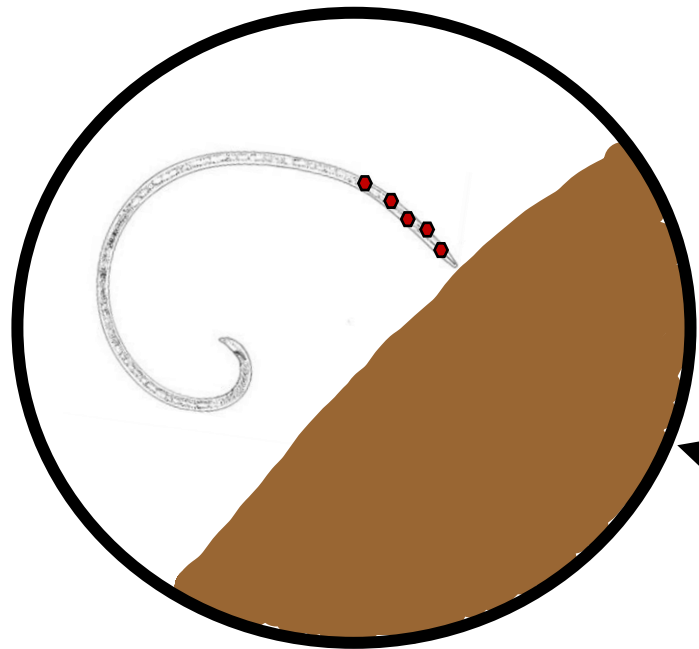
What is Prune Brownline?

Caused by Tomato Ringspot Virus (ToRSV) transmitted by dagger nematodes (*Xiphinema* species)



What is Prune Brownline?

Virus-infected nematode feeds on roots of susceptible rootstock



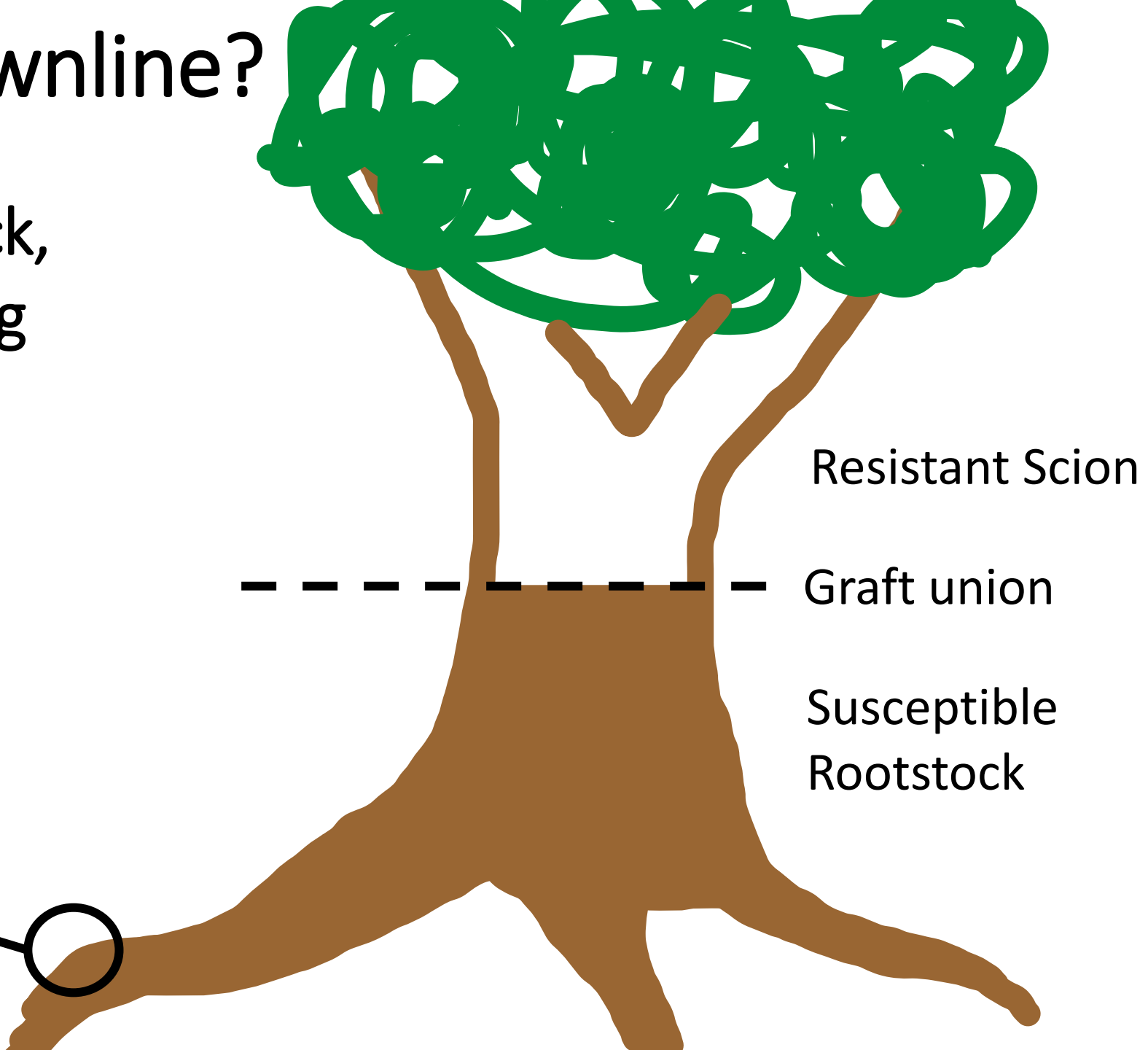
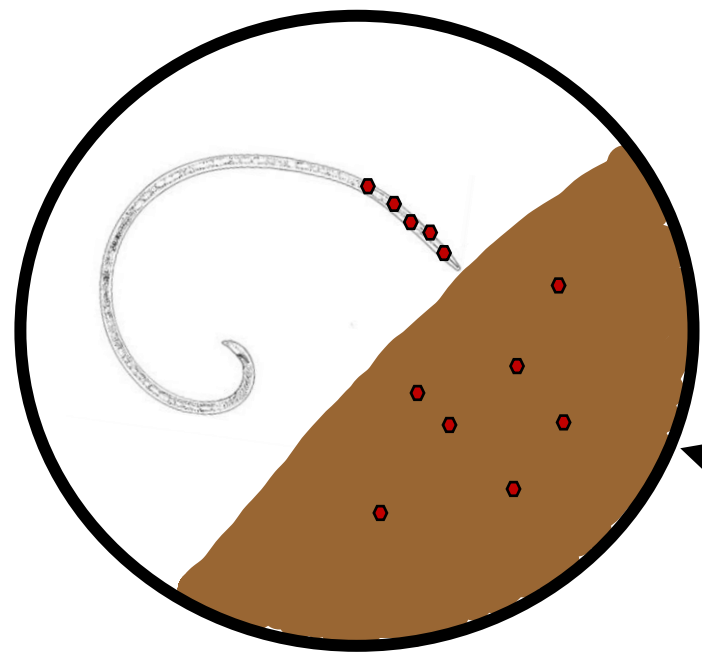
Resistant Scion

Graft union

Susceptible
Rootstock

What is Prune Brownline?

Virus infects the rootstock, multiplying and spreading



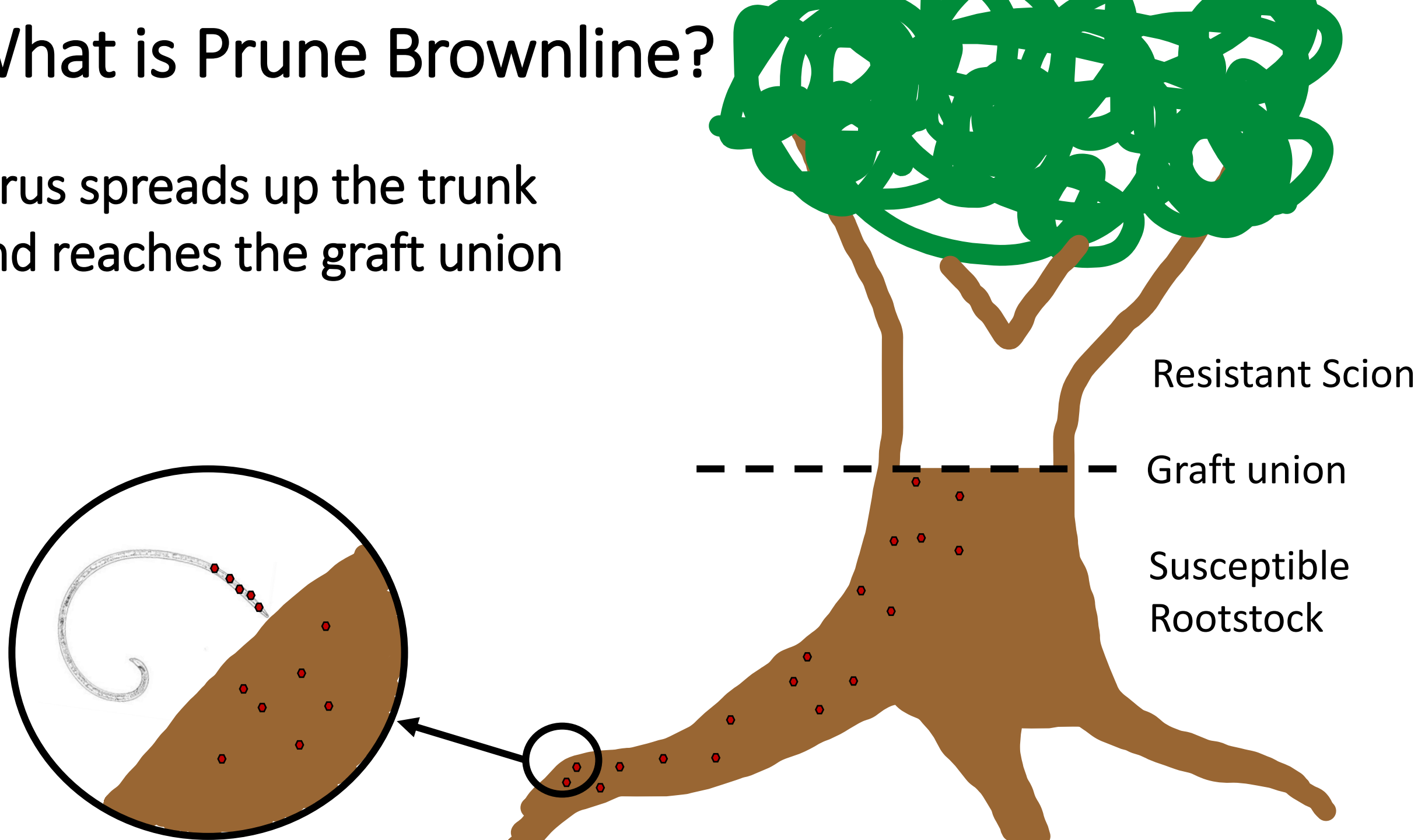
Resistant Scion

Graft union

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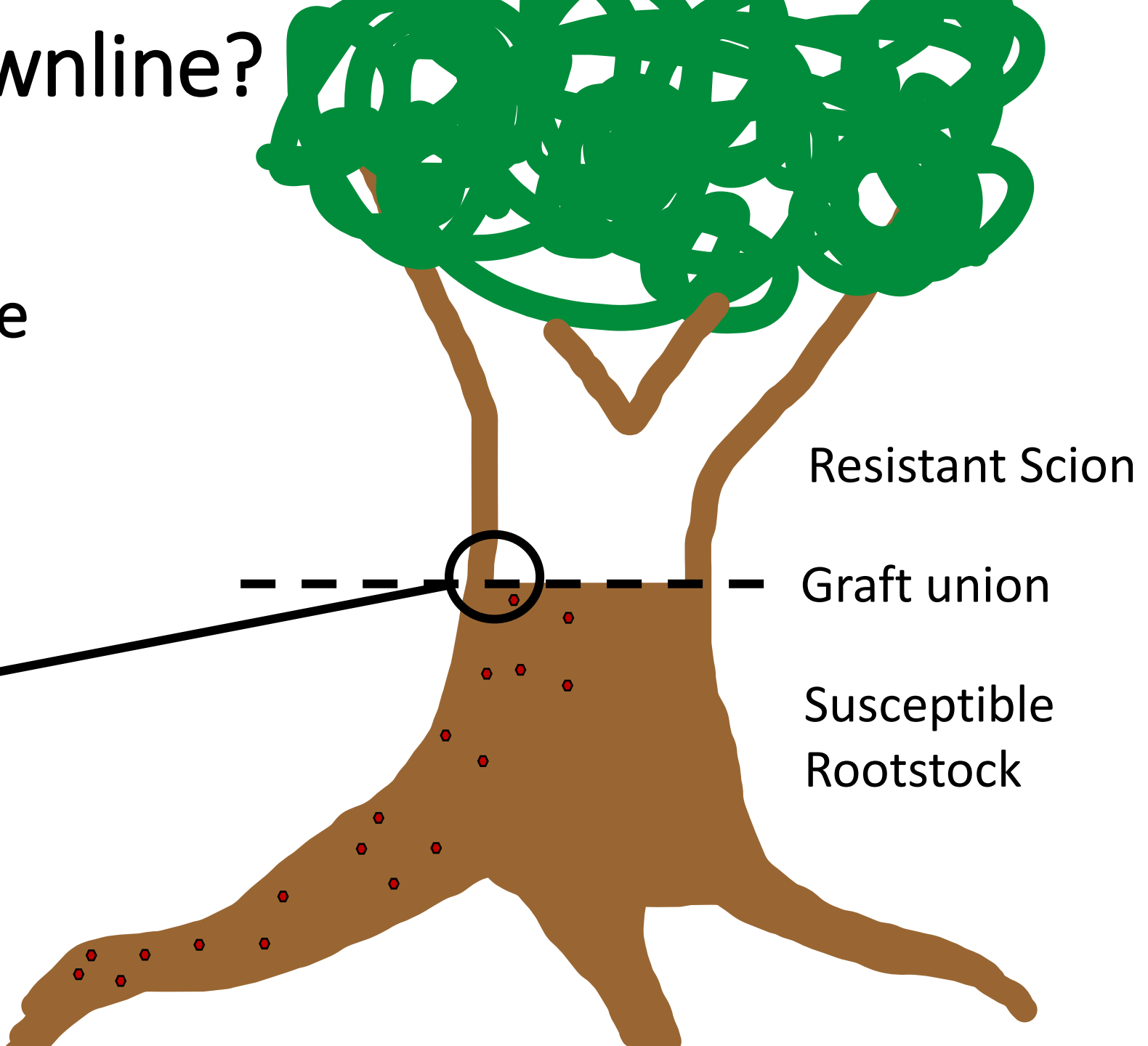
What is Prune Brownline?

Virus spreads up the trunk
and reaches the graft union



What is Prune Brownline?

Resistant scion reacts to the virus, killing the tissue at the graft union



What is Prune Browline?

As the tissue at the graft union dies, flow of water, nutrients, and sugar is interrupted, killing the tree



Some History:

“Prune brownline, a recently-recognized disease of prune trees, is widespread in northern California, causing considerable losses in Solano, Yolo, and El Dorado counties. The disease has also been found in Sutter, Tehama, Yuba, and Placer County orchards, but the extent of its occurrence in other California prune-growing areas has not been determined.” CalAg, 1984

Susceptible rootstocks: Lovell, Nemaguard, 29C, Myro seedling

Resistant rootstock: Marianna 2624

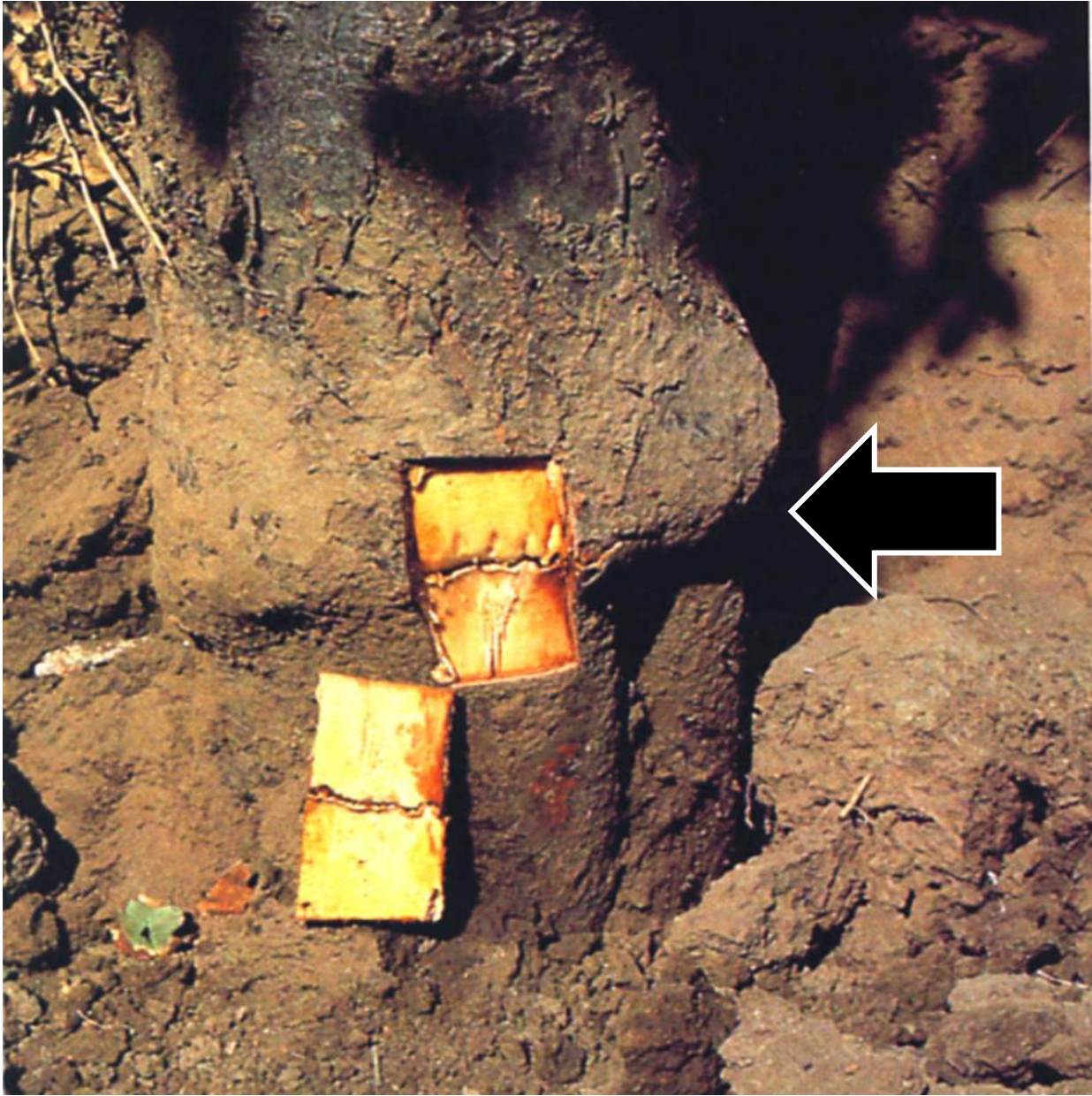
Symptoms



Symptoms



Symptoms



Symptoms



Symptoms



Action Items:

Contact me if you think your trees might have Prune brownline!

how widespread?

why now?

Working with Mysore Sudarshana to test some modern rootstocks for resistance (first results end of next year)

For now, Marianna 2624 is the best option for replanting



Questions?

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