OREGON WINE SYMPOSIUM
PORTLAND

Grapevine Trunk Diseases: What have we learned so far?

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PROGRAM PRODUCER OREGON WINE BOARD

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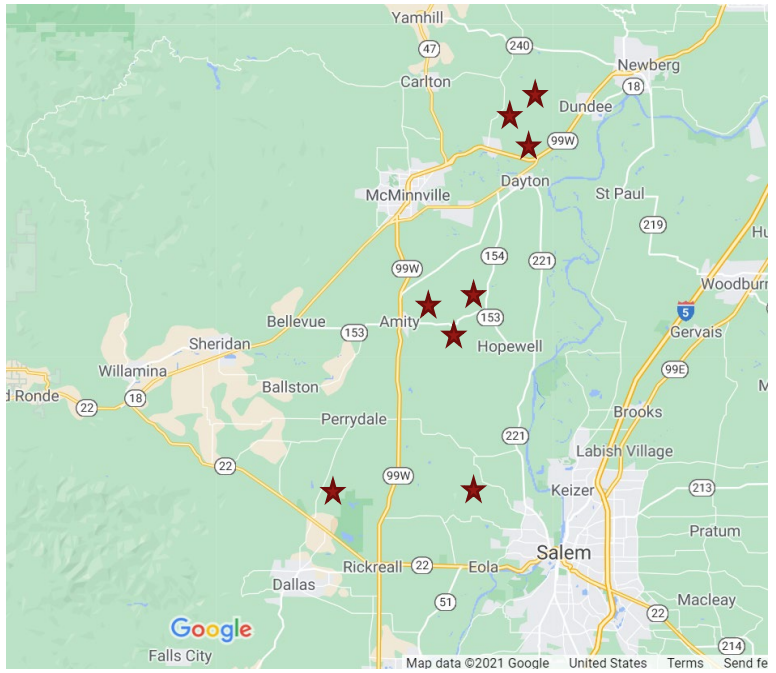
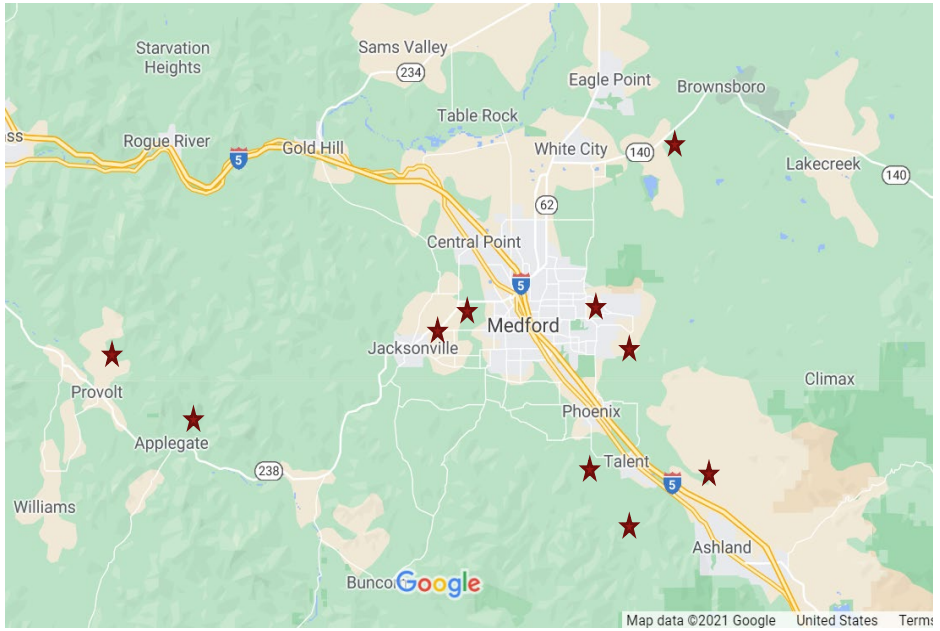
Botryosphaeria die back and Esca are the most common GTDs present in Oregon vineyards

Surveyed regions

https://www.oregonwine.org



Northern Willamette Valley
(15 vineyard blocks)



Southern Oregon
(16 vineyard blocks)

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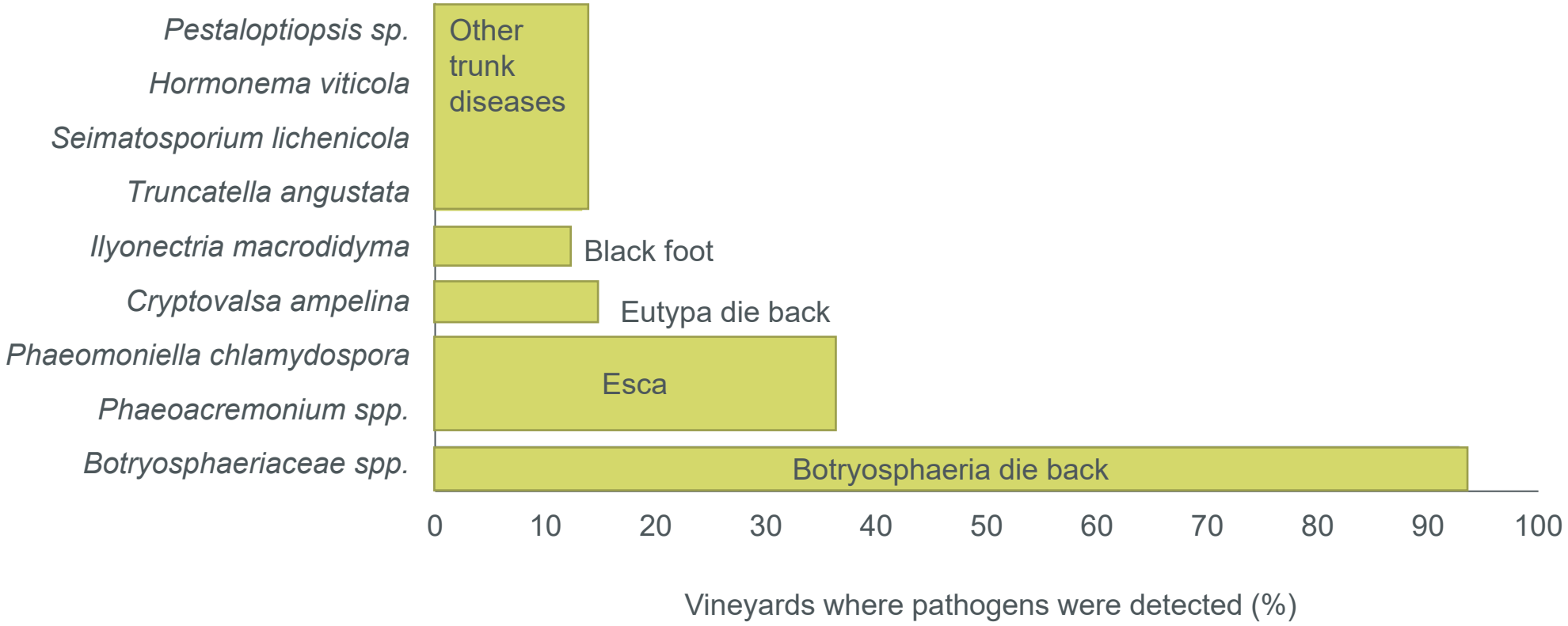
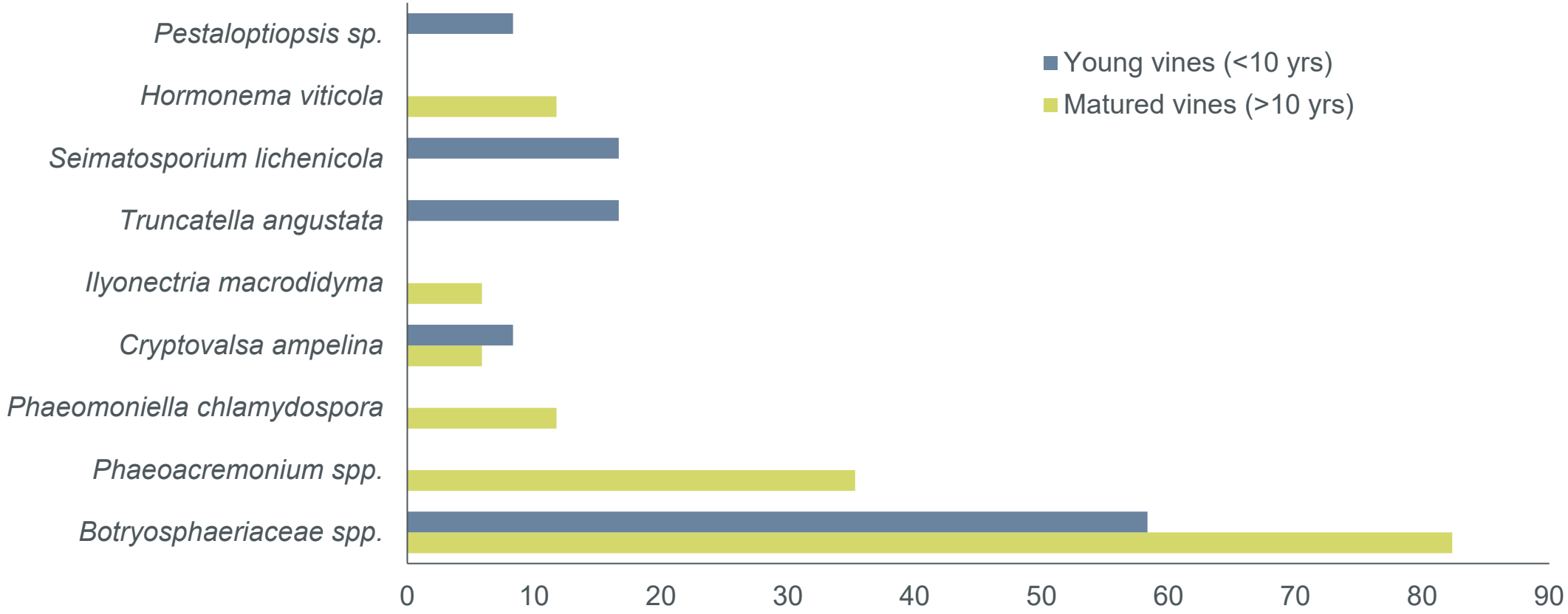
RESULTS


Pestaloptiopsis sp.
Hormonema viticola
Seimatosporium lichenicola
Truncatella angustata
Ilyonectria macrodidyma
Cryptovalsa ampelina
Phaeomoniella chlamydospora
Phaeoacremonium spp.
Botryosphaeriaceae spp.
Other trunk diseases
Black foot
Eutypa die back
Esca
Botryosphaeria die back
0
10
20
30
40
50
60
70
80
90
100
Vineyards where pathogens were detected (%)

RESULTS



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Under favorable weather conditions, the maximum spore release of Botryosphaeriaceae spp. in Oregon vineyards occur between early December to early February

Spore trapping sites

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Trichoderma application under Oregon conditions require further research

Recovery of *Trichoderma* spp.

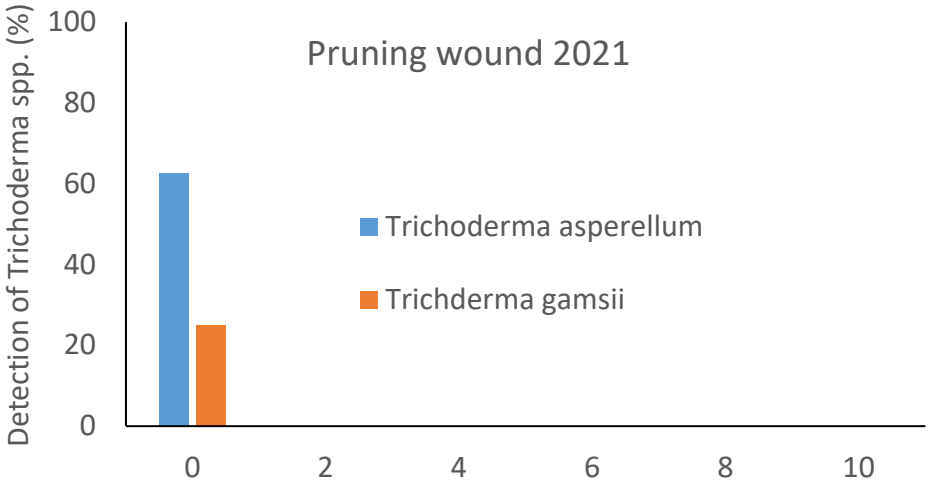
1) Bio-Tam soil application @1 lb per acre

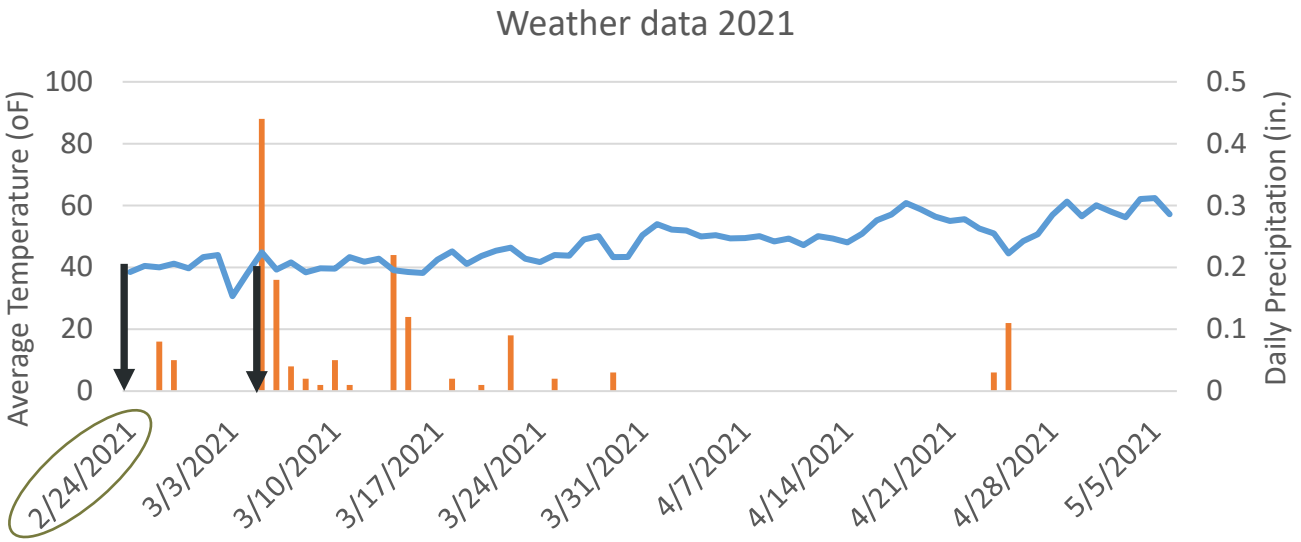
Repeated over two years in 2021 and 2022

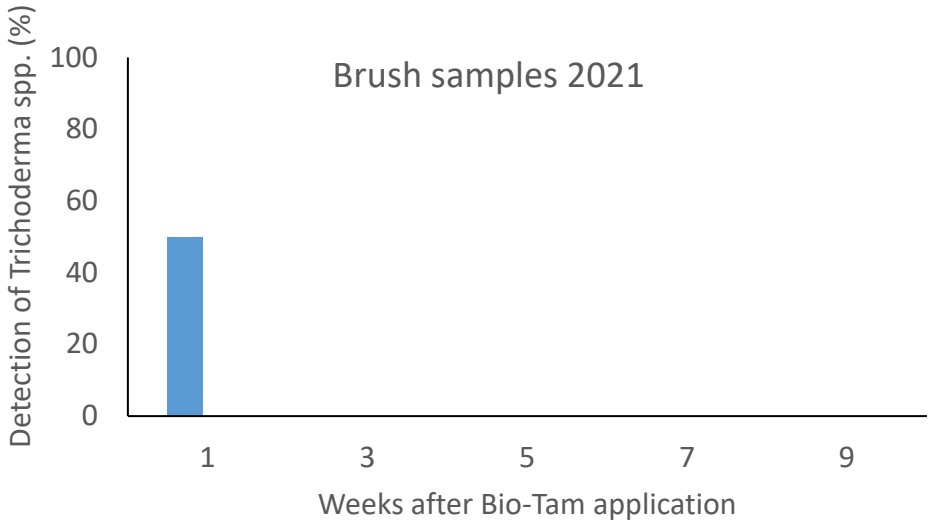
Bio-Tam:
Trichoderma asperellum
Trichoderma gamsii

2) Bio-Tam pruning wound application @1 lb per acre

RESULTS - 2021







Pruning wound application on 2/24/2021 and soil application on 03/05/2021

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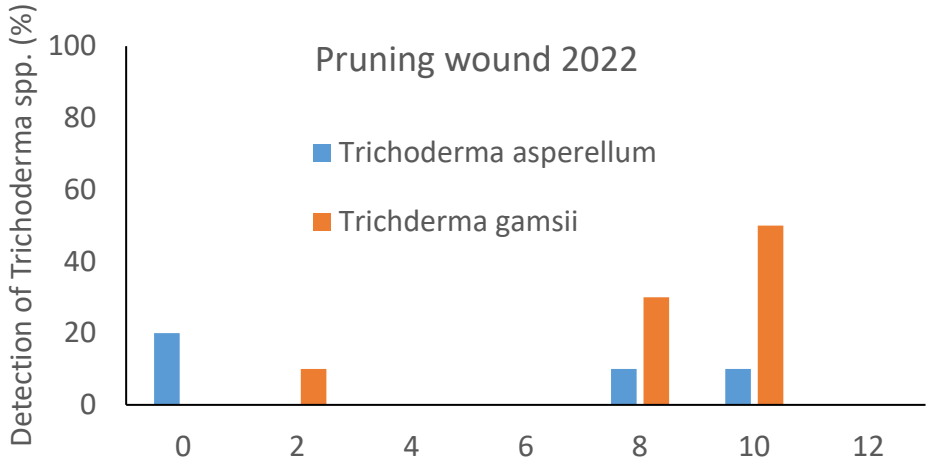
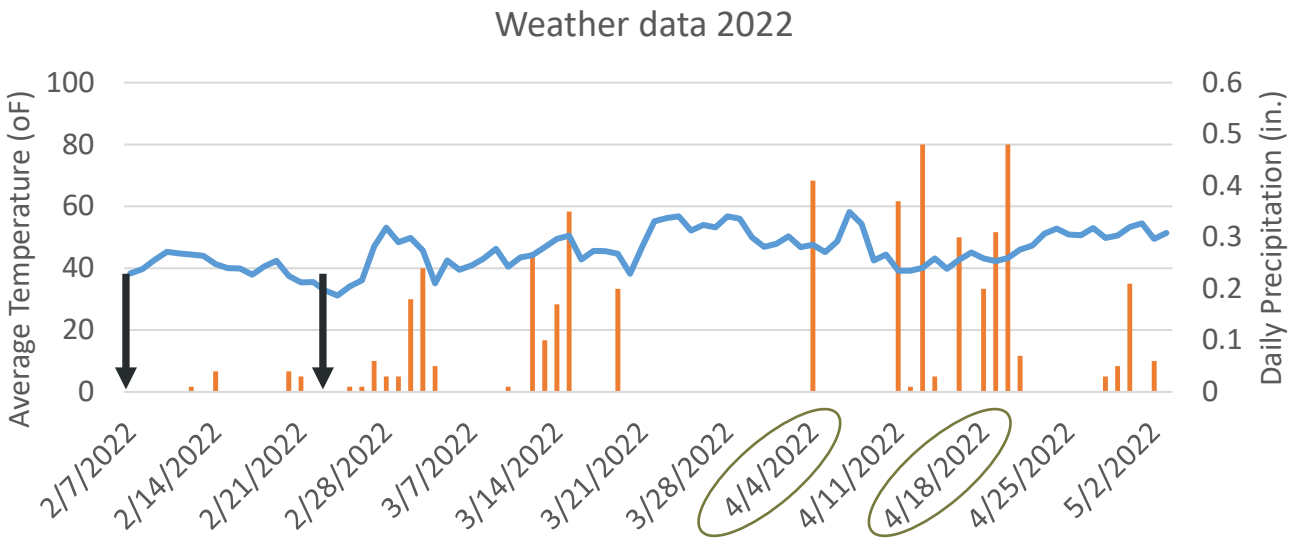
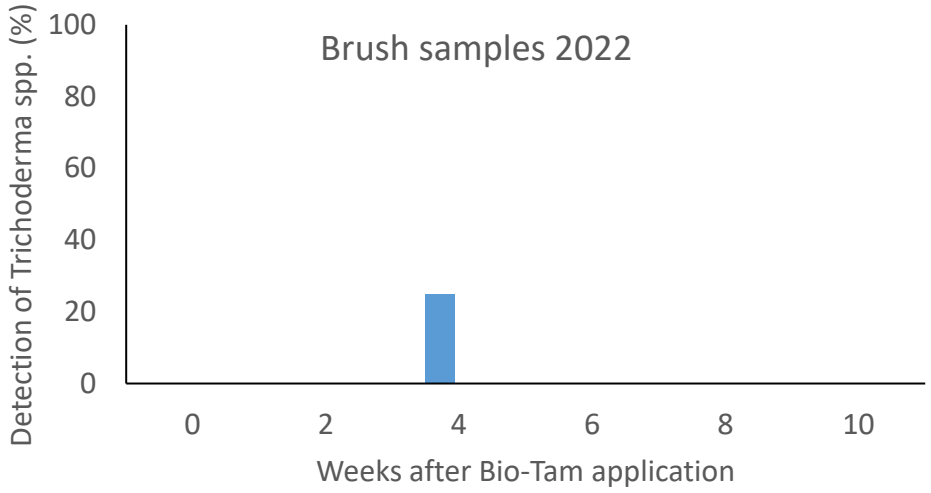
RESULTS - 2022





Pruning wound application on 02/07/2022 and soil application on 02/24/2022



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What next?

Grapevine trunk disease management for conventional and organic production

- OWB Funded Research 2022-2024

- Objectives:
  - Compare the efficacy of fungicides and sealants in protecting pruning wounds
    - (Topsin; Rally; Vitiseal; Topsin + Rally, followed by Vitiseal; BioTam; BioTam followed by Vitiseal

  - Test the effect of pruning time and subsequent wound protection length of both conventional and organic registered fungicides

Acknowledgement

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