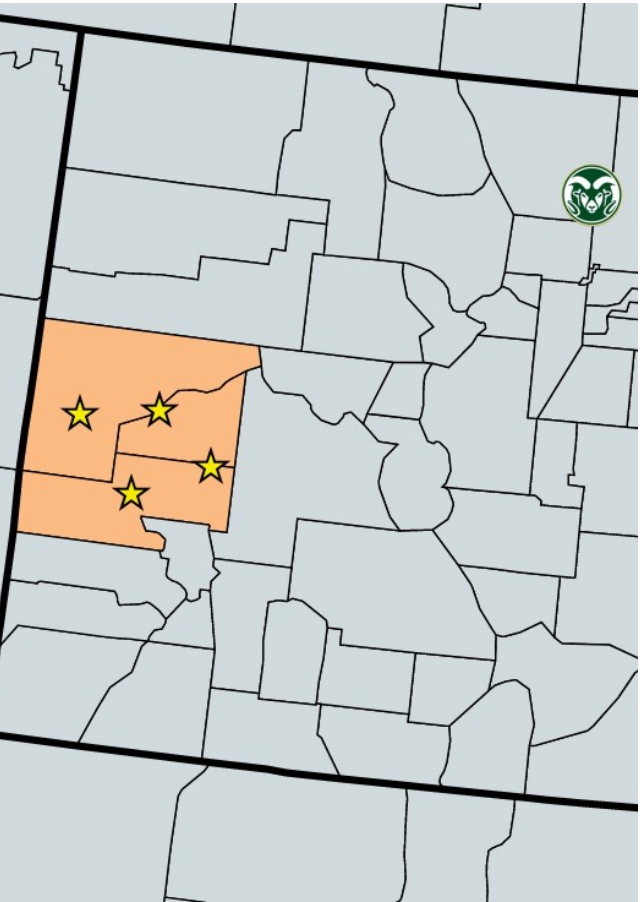
Host	Total Trees Evaluated	Years Evaluated	Cultivars Evaluated	Rootstock Evaluated	Year Planted	Irrigation Method
Apple	42	2022	1	2	1963	Micro Sprinkler
	91	2022	2	1	2000	Micro Sprinkler
	3	2022	?	?	Before 2015	Micro Sprinkler
Cherry	24	2021 and 2022	?	?	?	?
	45	2022	1	?	1995	Micro Sprinkler
	11	2023	?	?	?	?
	127	2022	1	1	1998	Micro Sprinkler
	64	2022	3	?	2018	Micro Sprinkler
	49	2022	6	11	2016, 2017	Micro Sprinkler
	65	2022	1	?	2006	Micro Sprinkler
Peach	83	2021	2	1	2006	Micro Sprinkler
	26	2022	?	?	?	?
	54	2023	?	?	?	?
	97	2022	13	?	2015-2021	Micro Sprinkler
	590	2021	7	6	2019-2021	Drip, Micro
	367	2023	6	1	1999, 2000, 2005, 2009, 2019	Micro Sprinkler
	49	2023	4	1	2007	Furrow
	95	2023	7	?	2012, 2015	Furrow
	164	2022, 2023	8	0	2010, 2012, 2014, 2015	Micro
	40	2023	?	?	?	?
	211	2022	3	1	2000, 2013	Micro Sprinkler

Interested in participating?

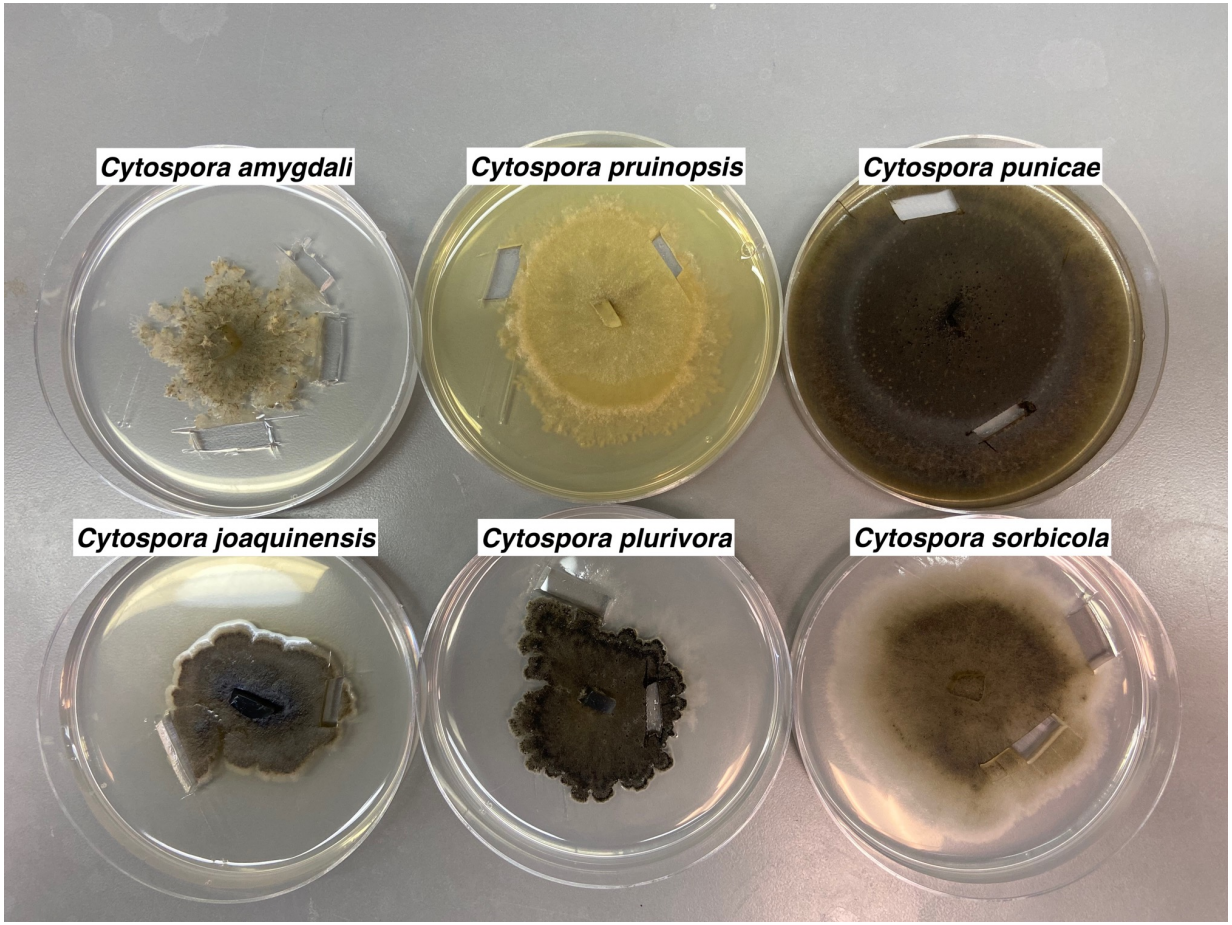
Please contact:
Claudie.Bertin@colostate.edu
Jane.Stewart@colostate.edu

Thank you!

Winter 2021/2022 and Summer 2022 Sample Collection



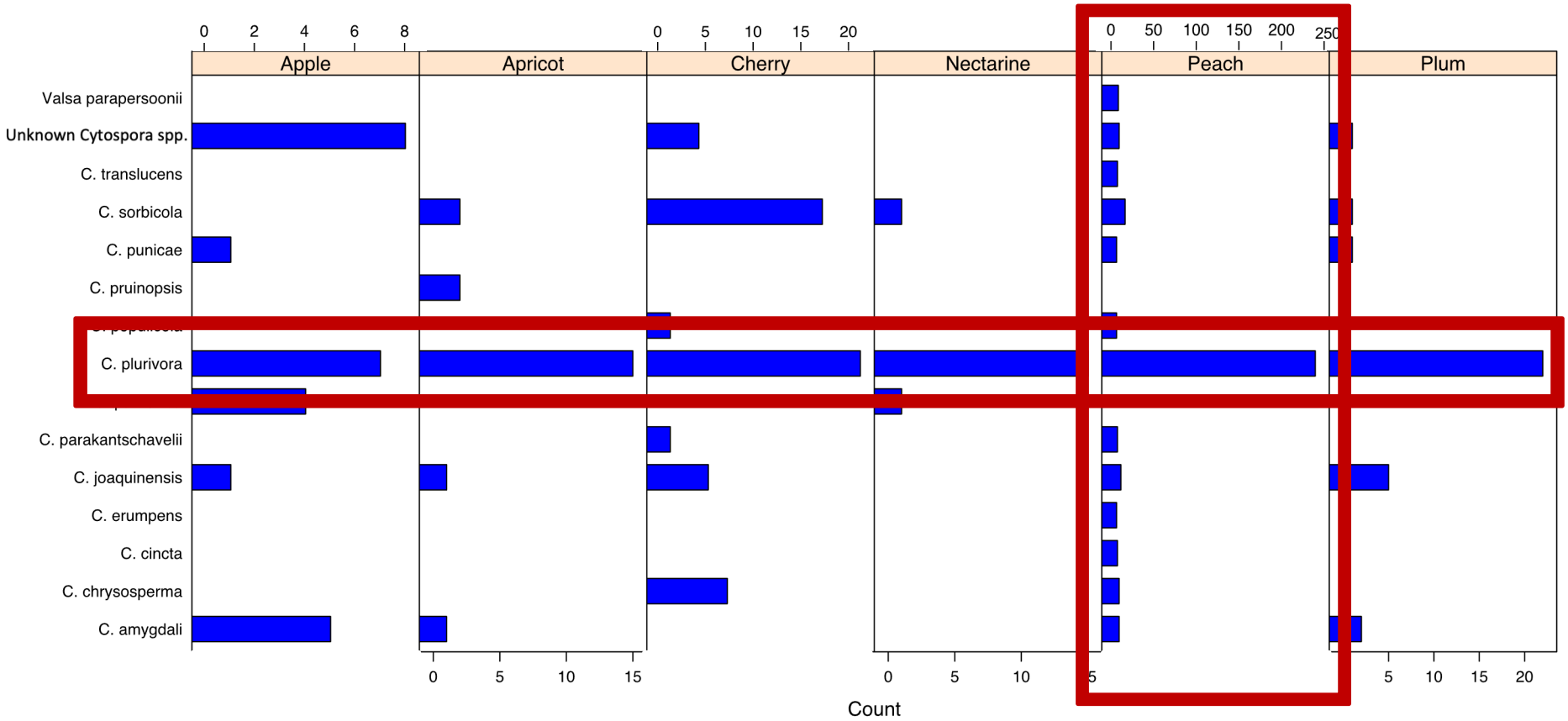
Apple – Apricot – Cherry
Nectarine – Peach – Plum


Cytospora amygdali
Cytospora pruinopsis
Cytospora punicae
Cytospora joaquinensis
Cytospora plurivora
Cytospora sorbicola

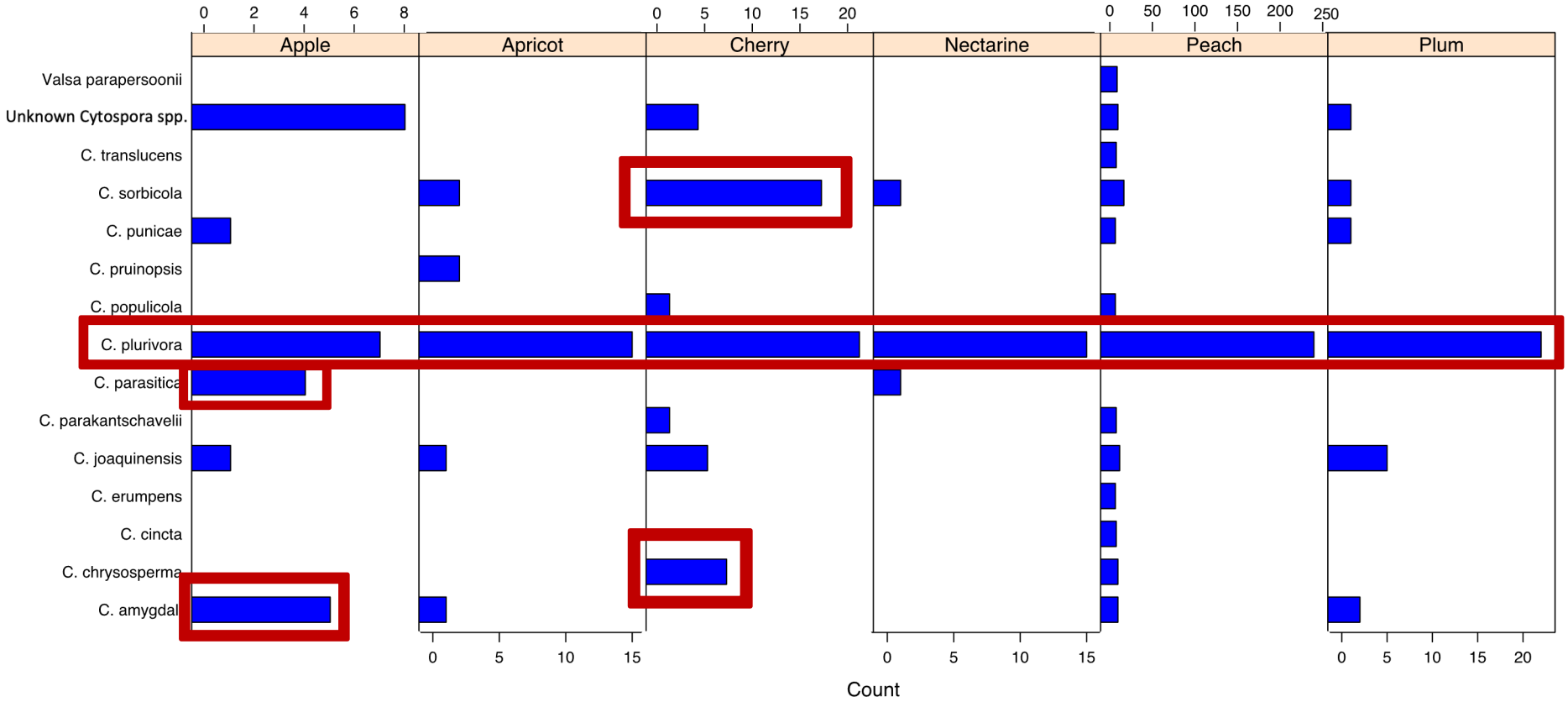
Number of *Cytospora* spp. isolates collected by host in each field

	Field	**Apple**	**Apricot**	**Cherry**	**Nectarine**	**Peach**	**Plum**	Total (Field)
Paonia	1		3		3	10	4	20
Paonia	2			4	12	15		31
Cedaredge	1	2				13		15
Cedaredge	2					8		8
Cedaredge	3	1						1
Austin	1	1		3		9		13
Mesa	2					11		11
Mesa	3					2		2
Grand Junction	1		8			11		19
Grand Junction	2					5		5
Grand Junction	3					2	9	11
Olathe	1		3			11	7	21
Olathe	2	4		4		14		22
Olathe	3			5		4		9
Palisade	1					38		38
Palisade	2					1		1
Palisade	3			3		35		38
Palisade	4					37	2	39
	Total (Host)	8	14	19	15	226	22	**304**

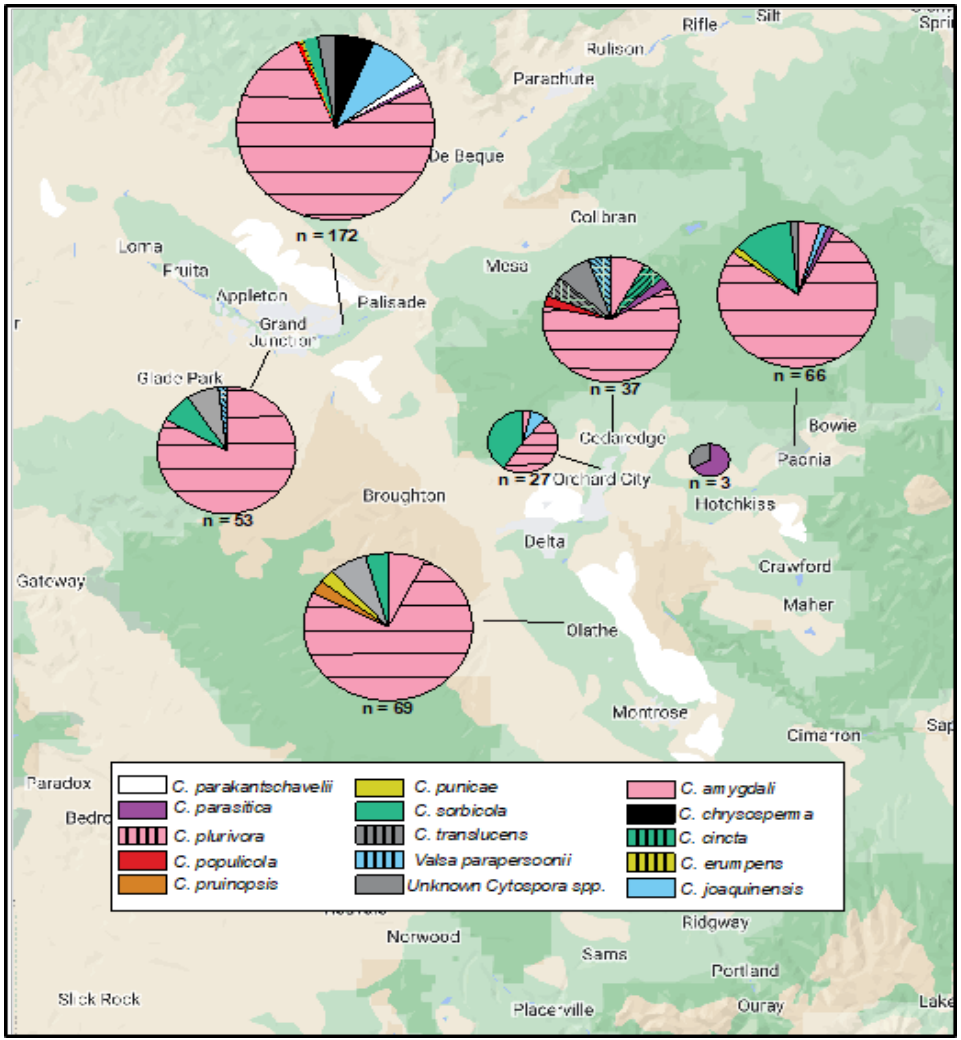
Cytospora plurivora is the Most Common Species Causing Disease Across Hosts



Additional Minor *Cytospora* species in Apple and Cherry

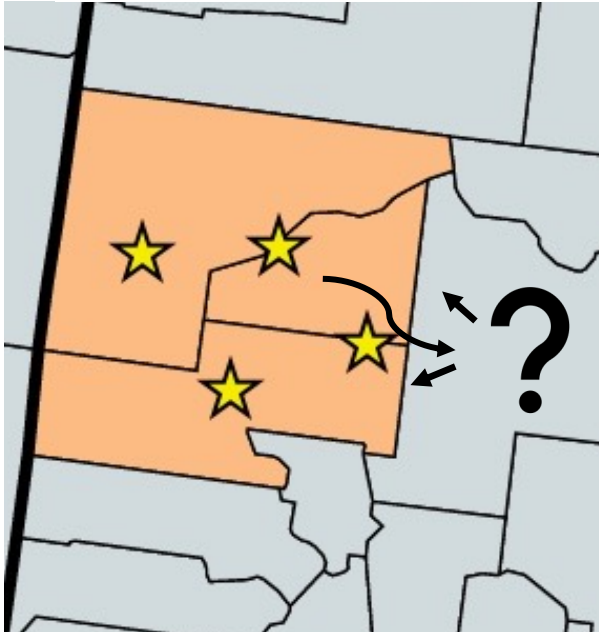


Geographic location of *Cytospora* spp.

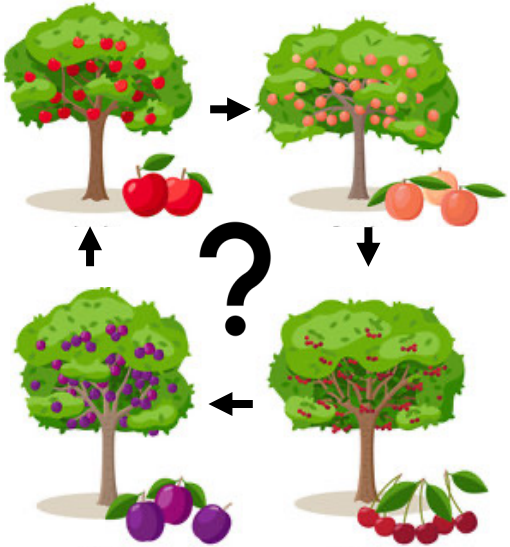


Current Work: Molecular epidemiology of *C. plurivora*

Can we interrupt the spread of *C. plurivora*?

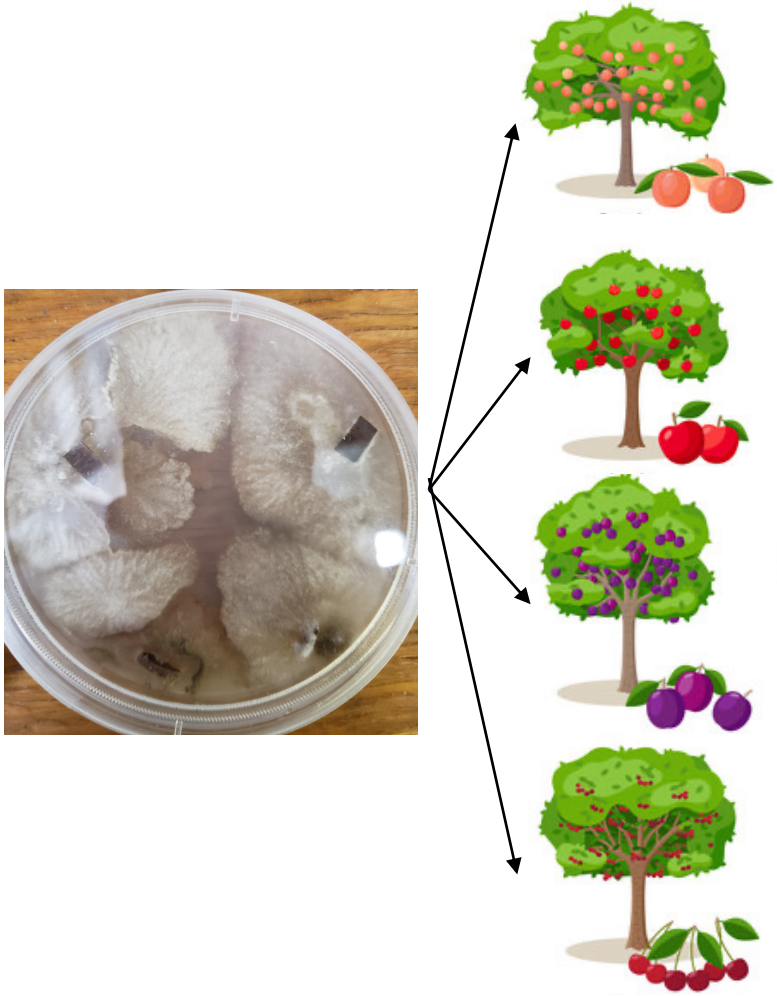


Are other fruit trees secondary hosts for peach *C. plurivora* populations?



Does C. plurivora from different hosts cause disease on other hosts?

Are these other minor *Cytospora* species host specific?



Stewart Lab Ongoing Cytospora Projects – 2024

Root stock Cytospora tolerance trial

Rogers Mesa - with Brad Tonnessen



Sean Toporek, Camden Meyer, Stephan Miller,

Cultivar Trials – 2018-2020

Previously tested 13 cultivars on Lovell

5 trees per cultivar

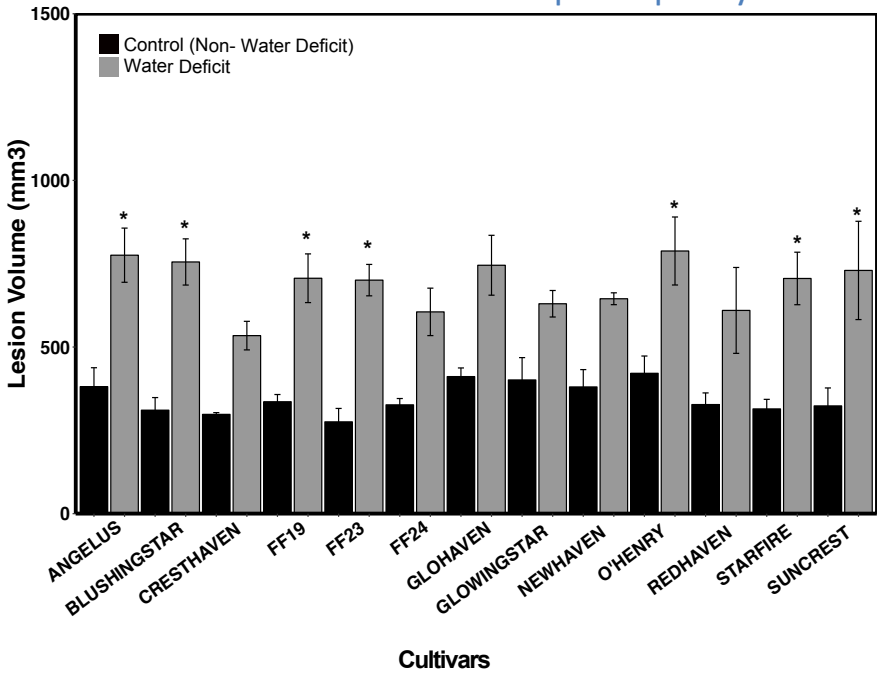
Well watered and droughted (60% field capacity)

Trees inoculated and cankers were measured 8 days post inoculation

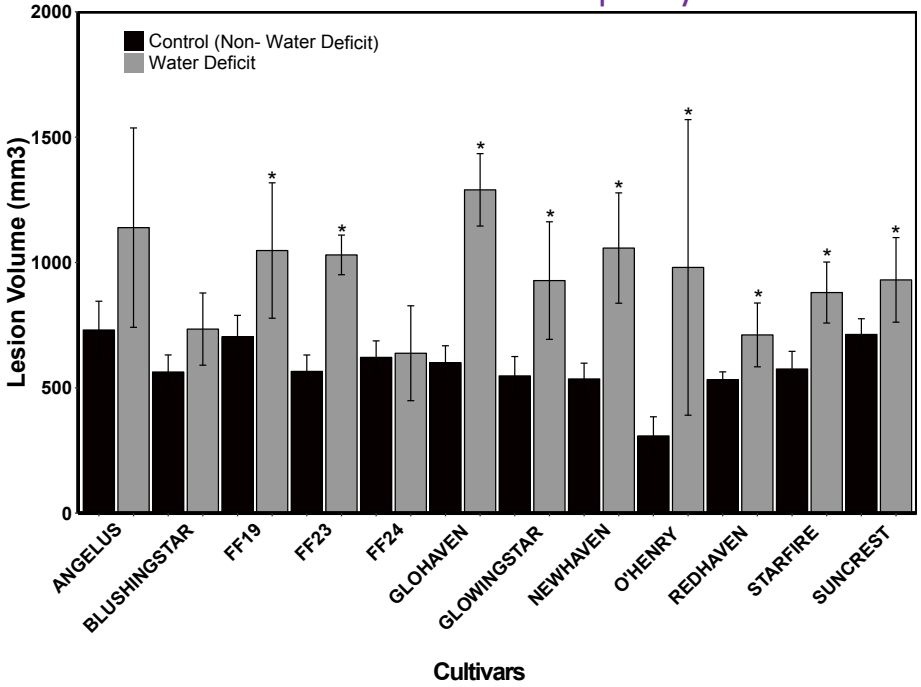
Greenhouse vs. field trials

No statistical difference in cultivar susceptibility to *Cytospora*

Greenhouse –60% pot capacity



Field – 60% field capacity

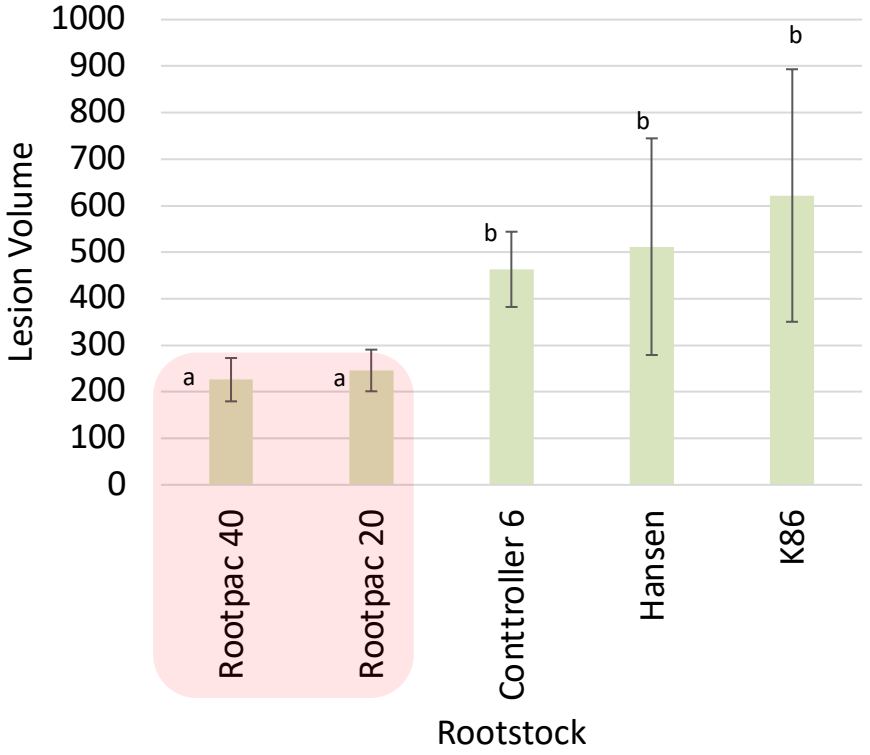


Do different peach rootstocks confer tolerance to *C. plurivora*?

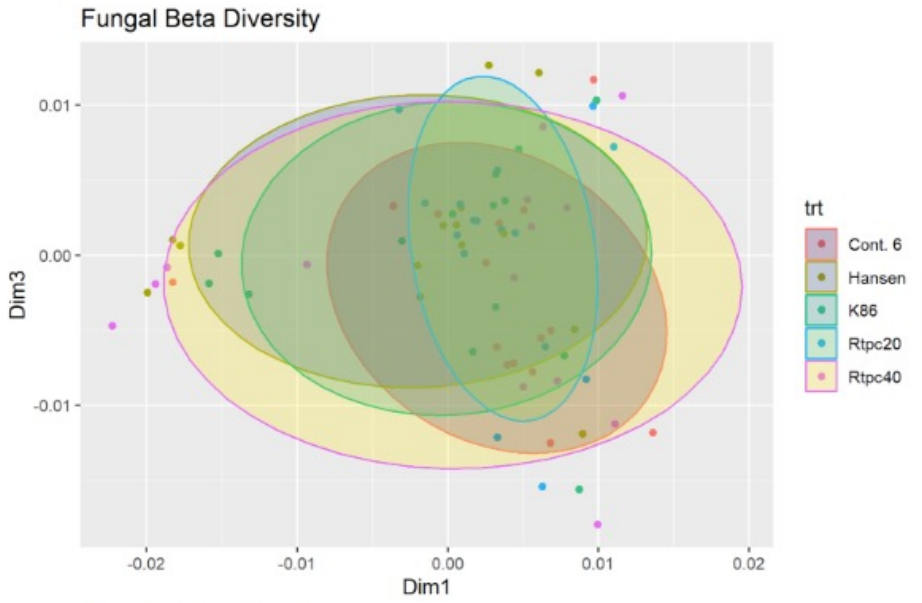
- 4 rootstocks - Cresthaven
- 5 trees per rootstock
- Trees inoculated and cankers were measured 2 months post inoculation
- Collected soils to examine microbial communities associated with rootstocks

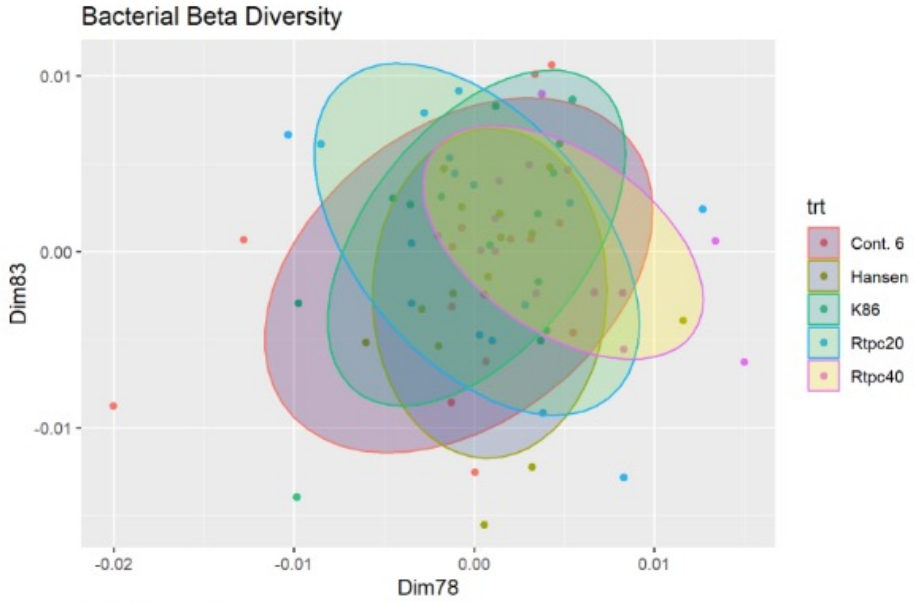
Preliminary Results: Differences did occur across root stocks

Rootstock choice **affects** Cytospora canker disease severity in peach cultivar ‘Cresthaven’ in the **field**



Preliminary Results: Few differences among microbial communities





Thank you for your time!

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Western Colorado Research Center

Cytospora Host Tree Specificity

Camden Meyer