

Fireblight update

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Streptomycin resistance survey 2010-2012

	Only resistant isolates	Mixed populations	Only sensitive isolates	No fire blight
# of orchards surveyed	10	2	5	4

Orchards with no fire blight in 2011 were surveyed again in 2012

First resistant isolate detected at Kaysville Research farm in 2012

Alternate hosts in Utah Co.

- Collected blossoms from weeds including dandelion and bindweed, as well as from Wood's roses



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Alternate hosts in Utah Co.

- All weed blossoms were negative for *E. amylovora*
- Rose blossoms from two locations sampled did carry the bacteria
- More extended sampling next spring and isolated *E. amylovora* will be tested for strep. resistance

E. amylovora and pruning tools

- Different opinions if *E. amylovora* can be spread on contaminated tools
- We pruned infected shoots in August and rinsed the blades with sterile water
- The water was put on media and evaluated 24 h later
- We recovered *E. amylovora* from the blades every time we cut an infected shoot
- This spring we'll try to inoculate trees with contaminated tools

***E. amylovora* and pruning tools**

- Disinfecting blades after pruning infected shoots
- We sprayed bacteria on clippers and then cleaned them with Lysol and Chlorox disinfecting wipes
- We reduced bacteria 80-85%

Chemical trial in Kaysville

- 2011 and 2012 we tested Agress from an Innovotech for efficacy to control blossom blight
- 2011 – light fire blight year
- Agress at all concentrations tested (0.005%, 0.01%, 0.1%, 0.5% and 1%) were as effective as streptomycin
- 0.5% and 1% caused phytotoxicity

Chemical trial - # of fire blight strikes

TRT	2012
Untreated	1.8 a
Streptomycin	0.75 ab
Oxytetracycline	0.08 b
Agress (0.005%) (Innovotech)	1ab
Agress (0.01%) (Innovotech)	0.75 ab
Agress (0.1%) (Innovotech)	0.67 ab

Across three varieties

Chemical trial - # of fire blight strikes 2012 by cultivar

TRT	Gala	Golden	Fuji
Untreated	0.25 ab	5 a	0.25 a
Streptomycin	0.25 ab	0.25 b	1.75 a
Oxytertracycline	0 b	0.25 b	0 a
Agress (0.005%) (Innovotech)	0 b	1.75 b	1.25 a
Agress (0.01%) (Innovotech)	0.25 ab	0.25 b	1.75 a
Agress (0.1%) (Innovotech)	1.00 a	0.25 b	1.00 a

Average of for trees

Other chemical products

- Tim Smith from WSU tested two copper products for fire blight control in pears – Cueva (Certis) and Previsto (Gowan)
- Cueva is already available
 - Application recommendations for apple are for sprays at silver tip and bud break, repeat at 3-5 day intervals as necessary until petal fall, rate 0.5-1 gal per 100 gal water; 50-100 gal of diluted spray/acre
 - Tim did not see any russeting and trees were sprayed until June
 - Cueva was about 80% effective and strep. 85% in his trial

Other chemical products

- Previsto not available yet
 - There is no application information available
 - Tim did not see any russeting and sprayed trees until June
 - Previsto was about 85% effective control. Same as streptomycin in his trial