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Bacterial canker in peach

Posted by <u>Peter Fisher</u> Forum List <u>Message List New Topic</u> <u>Peter Fisher</u> <u>Bacterial canker in peach</u> May 26, 2015 05:27AM

Registered: 10 years ago Posts: 82

I have 22 peach trees in their seventh growing season. About half of them show evidence of bacterial canker this spring; one has it on the fruiting shoots, but the rest only in one or two spots on the trunk, about 16 to 24 inches above ground where scaffold branches join the trunk. The canker is oozing translucent reddish gunk. Some of the trees that have the disease also have dead or dying limbs, and most have little new growth (from last year) or fruiting spurs, with one exception.

The trees have been protected in winter with white plastic spiral tree guards, but only up to the first branches --- that's the limitation of that approach (sometimes it takes two 24" guards to get that high on trees this old). We had a brutally cold and long winter in 2013-14 and none of the peaches blossomed. Last winter was better, but we still had 20 below in late March. Only the Reliance blossomed this spring, not surprisingly. So winter damage seems likely.

The trees that have bacterial canker are all the PF24C (C for cold hardy -- hah) and PF27A, plus two Hale Haven and one Canadian Harmony.

From what I have read, there is no effective treatment. The recommendation is to prune infected branches well below the canker, but when the canker is on the trunk that means cutting down the tree.

I have a number of questions that I can't find answers for:

Does the root stock have anything to do with it? The Reliance and Starfire trees that I have are healthy, and they are all on Lovell. The infected ones are seedlings, or on Bailey. But some seedlings and some on Bailey are fine. Are some varieties more susceptible, which seems to be the case though I have a pretty small sample here.

Does it spread from tree to tree? One university ag extension source reported that they could not transport the disease with pruning shears when they tried, which implies that this is not contagious to an otherwise healthy tree, but an opportunistic bacteria that finds a lesion, perhaps created by winter injury.

I assume I should simply remove all infected trees as soon as possible and burn them.

If I remove a tree, is there any reason to avoid planting another peach in that spot next spring? Or is it just a matter of being more careful to protect trunks from winter damage, presumably by painting with white latex higher up the trunk?

Turkey Creek Orchard Iowa, Zone 5A

Turkey Creek Orchard Solon, Iowa (zone 5A) <u>Reply Quote</u> <u>Paul Weir</u> <u>Re: Bacterial canker in peach</u> June 30, 2015 07:22PM Hi Peter,

Registered: 11 years ago Posts: 187

I feel your sadness. **Pseudomonas syringae** is the main cause of bacterial canker you are describing. It can manifest itself in other forms too, including a spring bud kill called "dead bud" where the new buds fail to open and simply blacken and die in place.

Before I went 'all in' with Apples, I was focused on Cherries and Peaches. 'Bacterial Blast' and 'Gummosis' caused by Pseudomonas syringae began showing itself in the 2nd year in the orchard. By the end of the 3rd season, it had gotten pretty obvious that most of my trees were infected and after getting some decent peaches harvested in the 4th year, I decided to remove 100% of the trees, including the root balls from the soil.

My trees most likely were infected when I got them from the nursery and the disease simply took some time to show itself.

It is said that Pseudomonas syringae bacteria can be up to 20ft away from a visible infection in seemingly healthy tree tissue, so I wonder if you can truly 'prune' this bacteria out. Once in the tree, this bacteria goes systemic and moves fairly freely within the tissue of the tree and may or may not cause debilitation while some other environmental trigger sets off the cankering, the oozing, the die backs, etc..

Personally, I would not replant into those same holes until I assessed the situation better. In my case, I knew that Apples and Pears were less

susceptible to the complete death that can come with Pseudomonas syringae infection -- as the stone fruits are. If you are determined to replant that area into stone fruit, definitely look into rootstocks and cultivars that are proven to be highly resistance to this infection. I understand that this infection is more likely in a sandy soil than a clayey one and that certain nematodes can be a problem in helping to spread the infections. All things to consider.

Be careful of the pruning you do on the stone fruits too and avoid winter pruning and any pruning that is going to be followed by a rain within a week of making your cuts. Lastly, use limb spreading and tie down training when you can and/or make the cuts earlier in your summer training (when possible) when the branching has a smaller diameter, to help the tree to heal faster.

Here in California, UC Davis has done some extensive research on Pseudomonas syringae and the infections it creates and methods for dealing with it. <u>Here is a link to one of their IPM sites that is dealing with PS</u>.

I found my cherries to be a little more susceptible to the bacterial cankering than my peaches, but most cherries and peaches are at risk and the methods for addressing the infection are similar. <u>Here is a link to a nice write up on Bacterial Canker Management</u>.

The PNW Plant Disease Management Handbook has a really good overview document on PS too

Mechanical damage, susceptible times, seems to be high on the list of likely infection portals for this pathogen. Painting your young tree trunks to avoid winter injury and trunk splitting makes sense and is a good practice, in general. When I plant a young tree, I have now begun just painting the entire tree vs just the trunk with a 50/50 interior latex paint mixture -- as all of that young exposed tissue is subject to scald before the canopy fills out in the years to follow. Hail and high wind damage can also be just the opportunity needed for an infection to get a foothold into a tree too. Also, PS is ubiquitous in most of our orchard environments, and infection can take off as a result of high bacterial counts in plants growing within the drip line, and up against, your young trees. Keep that competition at bay for the general health of your young trees and to keep those potential infection sources from being right up against your young trees too.

In my opinion, if you are seeing the rust colored gummy ooze coming from trunk, your trees are in decline and will likely be dead within a few years. It is a source of infection, even if the jury is out on how well the gummy ooze travels from one spot to another. When we removed our trees, we had them hauled to a dump as burning was not going to be an option until the rainy season which was still several months away at that point. If you wish to burn them; you can.

Good luck!

Gopher Hill Apples Zone 8 in California <u>Reply Quote</u> <u>Prairie Sundance</u> <u>Re: Bacterial canker in peach</u> April 06, 2021 11:14AM

Registered: 2 years ago Posts: 47

We have just two peaches in our homestead orchard, but more in the nursery to be planted in our small community orchard. Last year I applied tree paste (equal parts sand, clay, manure, 1/2 part slaked lime) everywhere, including to a horribly cankered (seeding) peach. The cankers appear to have completely disappeared. Last week I noticed a canker on our other peach, (contender). I applied tree paste and will update on the results. Has anyone else tried paste on canker?

Edited 1 time(s). Last edit at 04/06/2021 11:20AM by Prairie Sundance. <u>Reply Quote</u> <u>Newer Topic Older Topic</u> <u>Print View RSS</u> Sorry, only registered users may post in this forum.

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