



Stone fruit brown rot (monilinia) and spray nuance

Posted by [Josh Willis](#)

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[Josh Willis](#)

[Stone fruit brown rot \(monilinia\) and spray nuance](#)

April 05, 2023 08:18PM

Registered: 6 years ago

Posts: 133

I was surprised to see there is not a topic thread on stone fruit brown rot, yet, or at least not that I could find. Here in MD, it is hard to find organic, or holistically grown, or even low spray peaches that do not rot quickly both on the branch and on the counter. I assume the brown rot pressure is even more so further south.

What are the nuances that growers are working on? What's working, and what is not?

The tools available as I understand them are:

- Sanitizing dormant sprays, be it copper, sulfur, or a FAK
- Biological sprays such as Serenade, which may work ok as a sanitizer of sorts, or Regalia, which is labeled as best for prevention
- Competitive colonization sprays, boosted with EM-1, Spectrum, MicroLeaf, etc., along with fish food or other fatty acids for the little buddies
- Boosting cuticle defense via silica and/or calcium foliar applications
- Other trace mineral boosts during bloom, which marks the first infection period, if I understand correctly.

We are dipping our toes in the copper waters for the first time this year with Cueva, as a dormant spray only. We'll see what effect that has in this regard.

We are also trying out Serenade, mostly for its effect on peach brown rot. Reducing cherry rot would be a bonus. As would any effect on, if I remember the label correctly, white rot aka bot rot in the apples.

Some of the nuance I'm trying to figure out is balancing the Serenade label's recommendation of weekly sprays vs. the competitive colonization boost. These two methods presumably work in opposite directions to some degree. We've found the holistic recipe only gets us so far with brown rots, which is why we are trying out some Serenade this year. We of course do not want to give up on the microbial populations. Do other growers balance these two sprays in some way?

Any other recommendations or ideas worth discussing?

Earthworks

Zone 7a in West-Central MD

Non-commercial, ~100 fruit trees, dwarf to MM106

Edited 2 time(s). Last edit at 05/18/2023 05:21PM by Josh Willis.

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[Mike Biltonen](#)

[Re: Stone fruit brown rot \(monalinia\) and spray nuance](#)

April 05, 2023 09:06PM

Registered: 10 years ago

Posts: 298

To your last question, it's all worth discussion because there are no easy solutions (or even hard ones at this time). Brown rot (*Molonia fructicola*) is a tough beast to tackle. You can get blossom infections. You can get infections throughout the season. But it is the biggest problem around harvest as 1) fruit cracking increases, 2) sugars rise, 3) humidity, and 4) hot temperatures and accumulation of seasonal issues converge. To me the two biggest issues to solve are insect damage and fruit cracking. Keeping the fungus at bay is also an issue, but this a bigger IPM problem than just solving the fungal piece. Or course, this brings us back to PC, TPB, p/s insects, fruit cracking from rain, wind, or other weather event. Once the fungus gets into the "wound," it comes into contact with the fruit juices and sugars, and has a nice warm place to grow and grow. The only "advice" I can offer is to be pretty solid with your insect damage early in the season AND keep brown rot fungal populations low starting very early in the season. Brown rot, like many disease issues, can come in from all around, so you won't solve within the orchard itself. There are some new peach varieties that are less suscepible to brown rot. And there are numerous cherry varieties that are less prone to rain cracking. But still, these are not solutions unto themselves, it still requires vigilance from the beginning of the season to the end. I will say that you don't need to shoot for zero tolerance with insect damage, and you can't control the weather, but the better insect control you have and the better you manage the physiology of tree to resist fruit cracking, my theory is the less brown rot you'll have. Of course, if you live is a very hot dry environment, you're already at advantage. But that isn't Maryland or anywhere east of the Rockies for that matter.

[Mike Biltonen, Know Your Roots](#)

Zone 5b in New York

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[Brittany Kordick](#)

[Re: Stone fruit brown rot \(monalinia\) and spray nuance](#)

April 05, 2023 09:18PM

Hey Josh,

Registered: 4 years ago

Posts: 209

I just wanted to quickly add a physical protection option against brown rot, etc. in peaches in case some growers aren't aware of it: fruit bags. There is a separate thread entitled 'Japanese Apple Bags' under Sensible Equipment that talks about physically bagging fruit to protect against pathogens and pests. We did a small scale trial in our apple orchard last year with great results. As such we were planning on seriously expanding our use of double-walled fruit bags, obtained from OVS in Oregon, this season. Unfortunately, OVS has lost their supplier and we have searched high and low for a domestic source of Japanese style double-walled fruit bags to no avail. There appears to be a Chinese company, Agrow-Tek, producing all sorts of fruit bags with many different spec options as far as color of material and size, and the company appears to be legit, but neither we nor the folks at Seven Springs Farm Supply, who are also interested in carrying them, have succeeded in making contact.

So the only domestic option that we are aware of for fruit bags this season is Clemson University. Dr. Guido Schnabel championed the use of single thickness Chinese-made peach protection bags for the organic production of peaches in the Southeast U.S., and Clemson offers bags for sale each year. We have found them to be a bit smaller than we'd like for many of our apple varieties, but just wanted to let people know that you can buy them via the Clemson website, ordering info here: [\[www.clemson.edu\]](http://www.clemson.edu).

In the past, it's been possible to purchase larger quantities of peach bags from Clemson, but this year they are only selling in top increments of 1,000 bags (\$150 plus about \$15 shipping). We inquired about ordering 10,000 bags and were told that they could swing it, but that they could not change their online ordering system for us, so we would have had to separately input 10 orders for 1,000 bags each, and would have been charged \$15 shipping for each order . . . and we just couldn't stomach that.

Anyway, fyi. And brown rot sucks, indeed. We have consistently lost almost every peach on our pit-grown Georgia Belle trees every year (we've never bagged them, but have been desperate enough to try intensive every other week lime sulfur spray regimens in past years, which led us to conclude that if that's what it takes to grow peaches "organically," and we had as much brown rot as ever with that program, we will just have to do without peaches). We are hoping to try our luck with 'Indian Blood' peaches, supposedly extremely resistant to brown rot, going forward.

[Kordick Family Farm](#)

Westfield, NC

Zone 7a

Edited 1 time(s). Last edit at 04/05/2023 09:22PM by Brittany Kordick.

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[Mike Biltonen](#)

[Re: Stone fruit brown rot \(monalinia\) and spray nuance](#)

April 05, 2023 10:57PM

Registered: 10 years ago

Posts: 298

I've been meaning to ask what the reusability or recyclability of these bags are? Are they compatible with organic certification? It seems like an awful lot of plastic, even though the intended use seems reasonable.

[Mike Biltonen, Know Your Roots](#)

Zone 5b in New York

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[Brittany Kordick](#)

[Re: Stone fruit brown rot \(monalinia\) and spray nuance](#)

April 06, 2023 12:19AM

Registered: 4 years ago

Posts: 209

Definitely can't reuse them (you have to tear the single layer (Clemson bags) or consecutively tear the outer and inner layers weeks apart (Japanese double wall bags). The Clemson bags are akin to a piece of deli paper -- just a single layer of waxy paper. The Japanese style bags we used had some sort of paper outer layer, then an inner waxy paper layer. We spent some time trying to trace the bags we got from OVS last year and they're definitely not OMRI-listed, don't know if they would qualify. OVS couldn't tell us much about them. I don't know anything about the Clemson bags besides what they look like. They have some info and videos on their site and perhaps Dr. Schnabel could tell you specifics. You could, of course, use some sort of reusable bags if you wanted to experiment; the internet is full of do it yourself versions, but we just don't feel like you get the protection from mesh bags, paper lunch bags, ziploc bags, etc.

What you get from the manufactured bags is 100 percent fruit protection (not saying that stuff won't get through, you won't have some flaws, but the fruit is night and day, and often flawless if the bags are put on correctly), so in theory, you would not have to spray much or anything, depending on your target issues, for fruit protection, thus saving on tractor fuel, as well. Of course, many of us are probably still going to spray our canopies for general protection (just because my fruit doesn't get infected with bitter rot, don't want the leaf version, glomerella leaf spot, flourishing in the tree and potentially defoliating it), overall goodness (beneficial microbes, etc.), and nutrient supplementation.

[Kordick Family Farm](#)

Westfield, NC

Zone 7a

Edited 3 time(s). Last edit at 04/06/2023 12:31AM by Brittany Kordick.

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[Josh Willis](#)

[Re: Stone fruit brown rot \(monalinea\) and spray nuance](#)

April 06, 2023 12:42AM

Registered: 6 years ago

Posts: 133

Thanks, Brittany, for reminding me about the bags as a tool. In fact, it was on my to do list this spring! Hopefully I'll remember to look at this list.

For others who didn't see, Brittany had a great write up of her use of fruit bags earlier, here is the link.

[\[groworganicapples.com\]](http://groworganicapples.com)

And thank you, Mike, for reminding me of the importance of pest damage. That is actually where I started my PC efforts a couple years ago, as our PC love our peaches first and foremost. I want to say we've reduced PC pressure on the peaches somewhat, and perhaps some of the brown rot pressure. But we've got a ways to go.

Earthworks

Zone 7a in West-Central MD

Non-commercial, ~100 fruit trees, dwarf to MM106

Edited 1 time(s). Last edit at 04/06/2023 12:43AM by Josh Willis.

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