



continuous wetting period

Posted by [Michael Phillips](#)
[Forum List](#) [Message List](#) [New Topic](#)

[Michael Phillips](#)
[continuous wetting period](#)

May 27, 2013 01:11AM

These last six days have brought us six inches of rain here in northern New Hampshire and thus a continuous wetting period with constant ascospore release. Wowser. And all this during the second half of apple bloom! So ... a holistic grower ideally enters into this with a pink application of both competitive colonization and a focused goal to stimulate acquired resistance (a phytochemical immune boost of terpenoids and flavanoids) just as flowers on early varieties opened. Several days pass; the rain begins. Then the rain continues. And then even more rain falls. About now I seriously contemplated whether an "allopathic touch" of micronized sulfur in the midst of this particular bloom period would be valid given the continuous wetness. I think possibly, yes, given my expectation that micronized sulfur wouldn't entirely wash off (despite not given a chance to dry onto the leaf surface) and thus make moisture on the leaf more acidic. Neem oil is not an option on open bloom (the azadiractin content might impact pollinators) and thus why I was looking for a means to alter scab prospects in the midst of a very long wetting period. On the other hand, now with bloom essentially behind us, tomorrow I will be back out there with the effective microbes, liquid fish, seaweed, and the pure neem oil mix ... never having played the sulfur hand. This massive wetting period will certainly reveal if resorting to old school ways in extenuating circumstances still has validity.

Many ask ... if minimal organic fungicides work when precisely timed to serious wetting events ... and if holistic sprays also do similar good ... why not do both? Think about the "action scene" for both methods. Does one spray of sulfur undermine competitive colonization? Possibly not. And yet several sprays probably do. A good twenty sprays of sulfur definitely destroy important fungal connections. I've taken the no-sulfur route for several years now but was admittedly considering this past week as extreme. I will report in as anything becomes evident a couple weeks from now.

[Lost Nation Orchard](#)

Zone 4b in New Hampshire

Edited 4 time(s). Last edit at 06/20/2013 07:34PM by Michael Phillips.

[Reply](#) [Quote](#)

[Claude Jolicoeur](#)
[Re: an allopathic touch](#)

May 27, 2013 03:35AM

Lots of rain, yes, Michael, but so cold.... Last night, 3-4 inches of snow fell just a couple of miles away from my orchard (at higher elevation). Is there any ascospore release at such low temperature?

Here, first flower bloom on the earliest blooming varieties this weekend (Dolgo). Most apples still at pink!

Claude

[Jolicoeur Orchard](#)

Zone 4 in Quebec

Author, [The New Cider Maker's Handbook](#)

[Reply](#) [Quote](#)

[Michelle and Chris McColl](#)
[Re: an allopathic touch](#)

May 27, 2013 03:41PM

Michael, we wonder if six days of continuous rain is much worse than one day of continuous rain? Wouldn't all the mature spores be released soon after the initial wetting, and there would be few spores maturing in the cool(?) wet weather to be released on the 2nd, 3rd, 4th, 5th and 6th days? If your trees are in good shape, they should be okay? Or would lack of sunlight stress the trees? (Please note these are questions, not statements!)

Kalangadoo Orchard

On the "other side" in South Australia

Edited 1 time(s). Last edit at 05/27/2013 03:42PM by Michelle & Chris McColl.

[Reply](#) [Quote](#)

[Michael Phillips](#)
[Re: an allopathic touch](#)

May 27, 2013 08:22PM

Agreed ... more questions than we have answers! The first days of this weather event were warmer, averaging more like 60F. We gained 100 degree days over this period which does indicate additional mature ascospores ready for release each and every day. I doubt that massive rains quells such

Moderator

Registered: 11 years ago

Posts: 621

Registered: 11 years ago

Posts: 226

Registered: 11 years ago

Posts: 49

Moderator

Registered: 11 years ago

Posts: 621

action. The NEWA monitoring stations show 2% to 3% to 4% gains in spore maturity each of these days, which would support continual release occurring. We indeed ended with a wet inch of snow and are now much cooler. My sense is that scab was active on more than just day one. It's all a question of what the other microbes were doing on that leaf surface and the degree the trees remained primed for immune response.

Edited 1 time(s). Last edit at 07/09/2013 06:14PM by Michael Phillips.

[Reply](#) [Quote](#)

[Michael Phillips](#)

[scab cometh](#)

June 20, 2013 04:56PM

Moderator

Registered: 11 years ago

Posts: 621

Some scab in a *high fungal year* like this one will show up on particular varieties about now. Here in northern New Hampshire we had rain / continuous wetness from May 19 -26 and then again from June 7-12. Talk about extreme opportunity for spore intrusion! I first noticed leaf lesions on June 2 on a crab apple in the yard, then on certain varieties in my north block on June 7 ... which tells me that that first major rainy spell needed more attention. Which I knew, as I made the pink application late, thus bloom had begun, thus I did not include neem oil in the tank mix for the 2nd holistic spray because of pollinator exposure. (This was the price to be paid for a week-long speaking trip made to Virginia and Pennsylvania during this time.) Scab on fruitlets takes a bit more time to become evident, so what I've seen since on Gravenstein and interior apples here and there would still seem to be a result of that first rain event.

I did indeed consider a sulfur application in the midst of that May rain to make up for lacking the immune stimulation of neem oil in the face of unrelenting wetness. Making the "moisture puddles" on leaf surfaces more acidic would have allopathic value even if it was raining when making such a sulfur application. I didn't do it ... but do recognize that was exactly the kind of situation where this might be warranted, especially on one's susceptible varieties given extreme circumstances. But I've also realized something else that's been staring me in the face for years. Ahimsa Organics also offers [Karanja Oil](#), rich in fatty acids and flavanoids but lacking the azadiractins of neem that impact the insect molting cycle (including pollinators). That's the holistic ticket for future years during the bloom period.

I have pulled several dozen scabby Gravenstein fruitlets off this past week. That's a variety I typically "rethin" as the first thinning to one apple per cluster really isn't enough ... thus leaving me extra on those several trees to *edit the crop*. One thing to understand is that by continuing with summer holistic sprays, spread apart to every 10-14 days, we will limit secondary infections by conidia. Tree growth right now is robust. Nutritional sprays making for stronger cell membranes enforce this. So unless we face a sodden July and/or August, a "little scab" is not to be as feared as some make it out to be.

[Lost Nation Orchard](#)

Zone 4b in New Hampshire

[Reply](#) [Quote](#)

[Newer Topic](#) [Older Topic](#)

[Print View](#) [RSS](#)

Sorry, only registered users may post in this forum.

[Click here to login](#)

This [forum](#) is powered by [Phorum](#).