

July 11, 2020

**Pest Alerts...** As **Garlic** begins to mature, watch for plants that die out extra early– may not have clean bulbs; **Cucurbit Downy Mildew** verified in NJ– this is early– protectant fungicide is a good first step, and will also slow the start of **Powdery Mildew**, which hasn't been seen yet in RI; **Squash bug eggs** have been seen, could be a few nymphs around; **Squash Vine Borers** have been flying for a few weeks now, probably now boring into vines; Don't be surprised to see **Bacterial Wilt** in cucumbers and melons; **Potato leafhoppers** should be controlled– hopper burn seen on snap beans and potatoes; **Potato Flea Beetles** are attacking eggplants– can be very destructive in hot, dry weather; if you are protecting potatoes from Colorado potato beetles using row cover, better check underneath to make sure there isn't stem rot– maybe time to uncover; risk of **foliar diseases is high** (see article below); very humid conditions favor **powdery mildew of tomatoes in high tunnels, along with leaf mold and botrytis**; **Corn earworm** moths are now being trapped in New England... also **Fall Armyworm**– spray schedule should start shortly

**The Latest COVID-19 Resources:** <https://web.uri.edu/coopext/coronavirus-resources/>

--> Need to discuss? Got something you need looked at? URI Extension: 401-874-2967/andy\_radin@uri.edu, hfaubert@uri.edu

## Summer Heat + Rain = Disease Risks

Rain is much needed. A deep soaking rain at this time of year gives you the opportunity to watch your crops grow in front of your eyes. That's very satisfying. And it's here.

Unfortunately, so are the perfect conditions for some key diseases, including Early Blight and Septoria Leaf Spot of tomatoes, Bacterial Spot of Pepper, Phytophthora crown rot of Pepper and Cucurbits (in poorly drained spots), bacterial blight of beans, anthracnose fruit rots, and more. But furthermore, this rain system is coming from the south, from where cucurbit downy mildew, basil downy mildew, and powdery mildew of cucurbits blow in from.

Now is the time to look around and see what needs to be done to create good drying conditions following the rain.

- 1) **Weed Management.** Weeds grow really fast in this weather. Weeds on the edges of plastic mulch can create a hedge of humidity down your rows of tomatoes and squash, and prevent air from moving through your crop rows. Mow them down in the pathways, yank 'em out along the mulch edges. Makes for easier squash harvesting.
- 2) **Pruning.** It may be time for ruthlessness. [Or not. I see that some growers let things go wild and wouldn't have it any other way. It's a free country!] Keep a sane number of leaders on your plants. Foliage dries faster, and fewer fruits will
- 3) **Tend the trellises and stakes.** Make sure they are structurally sound. If they are beginning to



**Common Blight (bacterial) of Bean:** spread by splashing rain. Usually carried in seed– if you grow and save heirloom beans, be careful of perpetuating this disease.

be in the deep interior where fruit rots easily develop. Ripening speed will be increased, too. Removal of the oldest leaves, exposing the ankles of tomato plants, removes the sources of leaf spot inoculum.

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## ★ STAR FARMER: Foggy Notion Farm, Johnston ★



cost-shared high tunnels and are hoping for more. They employ part-time workers for both on-farm and market help. While they primarily grow vegetables, they have a one-year old raspberry patch, along with a sizeable planting of flowers for events, though 2020 is, sadly, not a big year for events. Looking around at their plantings, it's clear that they operate with spirits of experimentation and practicality. Here's to their hard work, and the next five years!

This week's Star Farmer(s) are Nathaniel (Than) Wood (L) and Adam Graffunder (R), who have been operating Foggy Notion Farm at Snake Den Farm (a RI state park) since the 2016 growing season. While they started out using a CSA model, they are now marketing through farmer's markets (Mt. Hope and Armory) and through Market Mobile. This year, due to COVID-19, they are taking per-orders for the markets, and this has been adopted by other growers in an effort to (unfortunately) limit in-person contact time. [We all know that the beauty of the Farmers' Market lies in regular community interaction. May we all be wise enough to cooperate with one another in the spirit of respect and safety.] This seems to be an effective model. Demand is high and sales are up for Adam and Than.

Historically, both men have been busy growing in urban settings over the last 10 years. Snake Den has given them an opportunity to stretch out onto about two acres and expand their market. They have been obviously honing their farming skills, as well as their cooperative management and ownership processes over this period of time— every year looks (and is) better than the last. They currently use two NRCS

**Right: White GH cuke 'Itachi'; Below: what you see when you pull in to Foggy Notion**



## Summer Heat + Rain, cont...

lean over, either your stakes aren't sunk deeply enough or you are allowing too many branches to grow out. You may need to add guy wires. Keeping things neat improves air flow and ripening.

Staking of pepper plants, especially in windy areas, can really improve fruit quality.

- 4) **Maintain adequate nutrient status.** Plants that are nutritionally poor are much more susceptible to foliar leaf spots starting on the oldest leaves.
- 5) **Keep an eye on overall color.** I often see field tomatoes that are laden with green fruit looking pale. Unless it's an early, compact determinate variety like 'Glacier' or 'Manitoba', it's not time to give up on the plants. Hungry plants ripen fruit prematurely before they develop full flavors and sugar. So plan on topdressing (organic sources of N have to have good soil contact in order to mineralize), or better still, fertigate if you are equipped. If using a liquid fish product, calculate what you are actually putting on. Applying 10 to 20 lbs N per acre 2 or 3 times (if indeterminate tomatoes) is in the ballpark. This obviously needs to be boiled down to a much smaller weight in order to cover your growing area. And don't forget the potassium ( $K_2O$ ) for good fruit ripening. It should be 1.25X to 1.5X your N application.
- 6) **Protectant fungicide.** The idea of protectants is that they need to be coating the leaf surfaces *before* the rain. Coverage should be thorough. (See biofungicide options in TWIV May 3, 2020.) Reapply before the next rain.

Late Update: Tragically, barely a drop of rain fell in Rhode Island or Eastern Connecticut...

## Your Input is Welcome

Please submit updates from your farm— a paragraph or two in an email is all it takes. Also, please submit suggestions for articles, meeting topics, and research needs from us at URI.

## Report from Portsmouth: The Local Patch

Happy to welcome an update from Andrew and Amy Smith, in Portsmouth, who've been operating their CSA since 2016. Here is their message:

Firstly, we experienced the novel garlic scape thing (Anthracnose of Garlic, see TWIV June 27).  
Second, here's what else is happening...

For the first time ever here at the Local Patch we have no leaf miner pressure and a wait list for our CSA. We experienced a 200% growth in membership this year and we are thrilled to be meeting more neighbors and members of the community. With said growth, we changed our garden planning to accommodate what is now four harvest days per week. We also hired our first employee because our two and a half year old wasn't pulling his weight. Potato plants are taller and stronger than ever! We're also growing raspberries for the first time which is proving to be a fruitful learning experience to say the least! Biggest threat to the berries so far has been the crows. Just got all the garlic out of the ground in time to focus on Fall plantings. We hope everyone reading this is safe, healthy and grounded. Back to weeding!!



Besides Raspberries, Andrew and Amy have another perennial: Frankie!



## Update from Middletown: Heat, Leafhoppers, and the High Season Approaches

The weather continues to be excessively dry over here on Aquidneck Island. Yesterday (Friday) as we refreshed the weather apps we saw the predicted rainfall drop from more than an inch to 0.06 of an inch over the course of the afternoon. Today it is dry and dusty as ever, and it's back to irrigating everything in its course.

Cucumber beetle pressure continues to be unusually low here for some reason. We have yet to see bacterial wilt on the first round of squash and cukes, but it is inevitable. Squash vine borer moth was observed early last week, and now we are scouting the winter squash for its eggs, which are similar to those of squash bugs but lack the precision and order and tend to dribble down the stem toward the base of the plant. The winter squash and pumpkins are look-

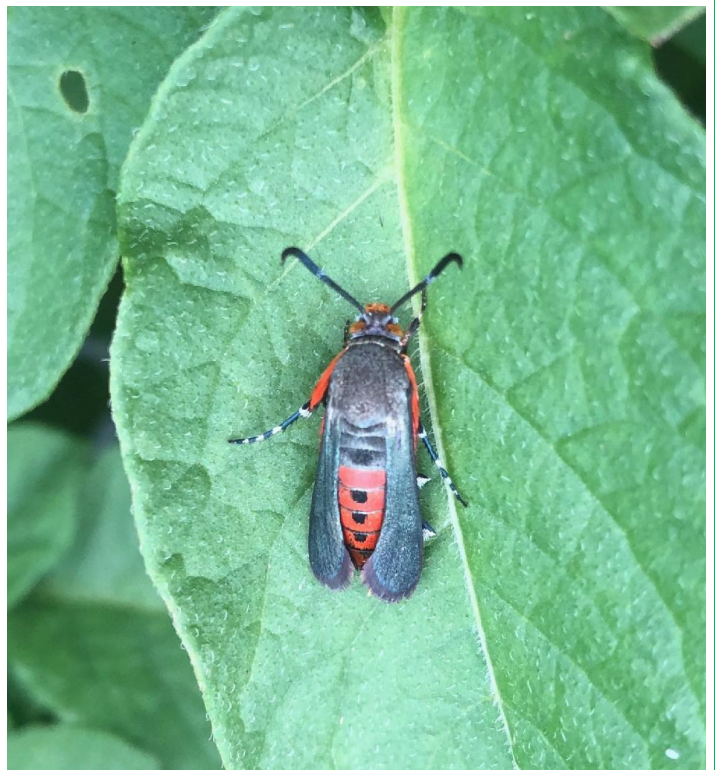


SVB eggs. Photo: UW-Madison Coop Ext [my alma mater]

ing strong right now, and we would hate to lose any to the borers. Potato leafhopper pressure on beans, potatoes, and eggplants was so high that it finally warranted spraying with Pyganic 5.0 (not Pyganic Lite, which we have found totally ineffective). Coverage for PLH is challenging but not impossible, and the plants looked visibly relieved the next day. An advantage to Pyganic 5.0 is that it is effective on Colorado potato beetle larvae, even the larger ones, though not on adults or eggs. [Note: Local populations of CPB can be resistant to pyrethrum and pyrethroids. To avoid future resistance problems, ALWAYS rotate insecticide groups, especially on CPB.] On the plus side: heat-loving crops are thriving, as long as we can get water to them. We are having

very good yields on squash and cukes this season. This will be old news to many of you, but after years of fooling around with open-pollinated zucchini, "Green Machine" was a total revelation to us, and is, for once, an accurately named variety. On the other hand, after a couple of years growing the incredibly expensive "Bristol" and "Corinto" cukes, we went back to "Marketmore 76", and it is taking over the field in these conditions.

We hope your sales are strong. Right now our grocery accounts are carrying us, as the restaurant trade continues to be dismal. We have seen one account drop from a solid \$700 a week average in 2019 to less than a quarter of that, which is partially a response to their lower sales and undoubtedly a cost cutting measure as well. We are working on selling everything out of the field and keeping the CSA members happy during this chaos. Hope your Colorado potato beetles are finally gone, and best wishes for the high season!



SVB Adult. Photo: Garman Farm. Elaine Calderone, who CO-gardens at the Charlestown Community Garden in Ninigret Park (all produce is donated), has been trapping moths. She is now catching one or two daily at her home in Ashaway, RI. Thank you Elaine!



## July Pest Gallery...



Top left: Rhizoctonia aerial stem rot on potatoes kept under row cover for CPB protection; Above: tomato yellow shoulders and sunscald—too HOT in this tunnel!; Upper right: Don't let Onion Thrips get this bad on your onions!; Middle right: hopper burn from potato leafhopper on Dark Red Norland; lower right: "Black Plastic Mulch Stem Scorch" on late pepper planting—hundreds were affected, but the grower is experimenting with white plastic on the same field, also with peppers, and there was exactly ZERO plants afflicted. LESSON LEARNED!