

August 24, 2019

PEST ALERTS: Brassicas– flea beetles are around, so are ALL of the caterpillars, so protect your young fall crop plants, and get rid of all spring and summer brassicas that are diseased; summer cucurbits are looking beleaguered... remove tired, powdery-mildewed crops, maintain protectant fungicide coverage– it's humid and damp; harvest eggplant and pepper fruits GENTLY to prolong productivity; anyone see Pepper Maggot damage yet?- none reported in New England so far... Potatoes: if you've dug and washed, don't hold them long, they turn green mighty fast!; Tomatoes in the field: there have been worse years for Septoria and Alternaria (early) leaf blights... Tunnel Tomatoes: seems to be less powdery mildew and leaf mold, this year, too; Yellow Striped Armyworm on URI tunnel tomatoes, bad enough to spray with B.t.; Corn earworm trap catches very high, low 2nd generation European Corn Borer, Fall Armyworm not bad; If you are growing HEMP, let us know if you have pests and diseases! --> Need to discuss? Got something you need looked at? URI Extension: 401-874-2967/andy_radin@uri.edu, hfaubert@uri.edu

SAVE THE DATE: ANNUAL URI TWILIGHT MEETING

WEDNESDAY, SEPTEMBER 11, 2019, 4 PM, Agronomy Farm, URI

Keeping Produce Fresh

You probably don't have much time or energy to read up on this right now, but if you haven't seen this extension publication from Penn State, you should take a look: <https://extension.psu.edu/keeping-produce-fresh-best-practices-for-producers>. It's comprehensive and excellent. It's especially important on these hot days to bring the temperature of your produce down. So if you have a chance, follow the link and verify that you are using the best practices.



Goodbye, Summer Cover Crop...

This Sorghum-Sudangrass cover is doing well, and depending on fall cover plans, could be mowed shortly. Mowing should be high to prevent annual weeds in the canopy from breaking through.



Hello, Fall Cover Crop!

Radish, mustard, and peas can be planted now for abundant fall growth, or a hay mix like timothy and red clover. It took 60 hours for the clover to pop!

Report from Middletown

Everything's on fast forward here now as we race through the end of the summer. Our winter squash vines are starting to go down; next week we will start bringing in the Delicata, Long Pies, and "Honeybaby" butternut for a couple weeks of curing. It's looking like a decent but slightly light year for some of these crops – it would have been nice to keep the vines alive for another couple weeks or so, but it just wasn't in the cards. Still, we will have plenty, with "Bush Delicata" averaging about eight per plant. The real winner was a nondescript "Vegetable Spaghetti" from Otis Twilley, which has left us buried in spaghetti squash of all sizes.

These days have been humid (more like saturated), and a lot of crops are looking rough. Nothing out of the ordinary, just the run of the usual fungal suspects. Fall plantings are starting to take off – flea beetle pressure continues to be relatively low here, but cabbage moth activity is high. No sign of cabbage aphids yet, but it is probably imminent.

Speaking of aphids, we had a guest appearance of corn aphids on a relatively small number of stalks as our popcorn tasseled on August 11th. The aphids were packed in around the tassels as they unwrapped. They worked their way down toward the ears on just a few stalks in our modest planting. It certainly wasn't worth spraying, and the ladybugs moved in quickly to snack on the aphids. A week later, we noticed more and more wings on the aphids and yesterday they were more or less gone, off on the wind to wreak havoc elsewhere. That's the kind of pest we like here. Hope you got to the Washington County Fair last week, and that your tomatoes are holding their own against every tomato issue there is out there!

From Rebecca Brown, Dept of Plant Science and Entomology:

Basil Downy Mildew Got You Down?

Basil downy mildew has taken out a lot of basil over the last few weeks. But in the URI Basil Variety Trial we have five varieties still standing tall and green, with no fungicide applied. They are interplanted with susceptible Italian Large Leaf, which has completely defoliated. Come to Twilight Meeting on September 11 to learn all about these new downy mildew resistant basil varieties!



“Never Let ‘Em Set Seed”

At this time of year, most of you are too busy reaping what you intentionally sowed to take control of your maturing weeds. They know this. And they are busy dropping lots of new seeds. For next year. And the year after...

The title above comes from Dr. Robert Norris, retired UC-Davis weed scientist. Early in his career, he studied seed output of individual weed plants. The table below shows some examples. Black Nightshade is appearing on more and more farms. Before you know it, those green berries have mature seeds. Also seeing lots of Oakleaf Goosefoot, which is a sort of micro-Lamb’s Quarters. Foxtail grasses are in their full, seed-dropping glory right now. Seeds of most annual weedy grasses die after two or three years, but some broadleaf seeds can last for decades. Norris claims that, on average, the bulk of your weed seed bank will be depleted after FIVE years of obsessive weed control. And then, of course, you must obsessively maintain that discipline.

If you are looking at serious annual weed problems, year after year, it may make sense to take a patch out of production and grow a heavy duty, weed-smothering cover crop. This is something you would plant in early to mid June, depending on soil temperature. Waiting until the soil is fully warmed is im-

portant for two reasons: 1) you will allow a major flush of summer annual seeds to germinate, which you can then erase with a shallow tillage implement like a Perfecta; 2) Your cover crop seed will germinate very fast, outgrowing the weeds. Good options are buckwheat, Japanese millet, Sorghum X Sudangrass, and forage varieties of cowpea and soybean.

Cover crop seed isn’t free, but neither is the time and space you decide to set aside to grow a good cover. Don’t skimp on seed, particularly if you are only setting aside a 1/2 acre-solid cover is the goal. The worst that excessively high seeding rate can do is waste a little money for no added benefit, except the peace of mind that you won’t have bare patches that fill in with weeds– and that’s actually a big benefit. So go for the high end of the recommended rate.

Remember, also, that cover crops are plants that require nutrients, just like the crops that we harvest. While cover crops are often used to “mop up” excess nutrients to make them available to the next crop, the object of a smothering summer cover crop is to produce a cover that is impenetrable to sunlight so that annual weeds can’t grow up enough to produce seed. So fertilize– just 40 to 50 lbs of N/ac for grasses. If growing legumes, INOCULATE!

Sometimes, it makes sense to intensify your vegetable production on a smaller space while improving some other patches of ground.

Examples of Weed Seed Production per Plant*

Weed name	Seeds per plant	Where the plant was located
Barnyardgrass, <i>Echinochloa crus-galli</i>	750,000	Davis, CA
Purslane, <i>Portulaca oleracea</i>	> 2,000,000	Davis, CA
Black nightshade, <i>Solanum ptycanthum</i>	>800,000	Rosemount, MN
Puncturevine, <i>Tribulus terrestris</i>	> 100,000	Pullman, WA
Powell amaranth, <i>Amaranthus powellii</i>	268,000	Freeville, NY
Shepherd's purse, <i>Capsella bursa-pastoris</i>	40,000	Sheffield, UK
Chickweed, <i>Stellaria media</i>	25,000	Rothamsted, UK

* Data collected by various researchers around the globe.



Above: Pepper with bacterial fruit rot (photo C. Confreda); Above right: yellow-striped armyworm; Center: Cross-striped cabbage worm; lower left: Corn aphid (photo Garman Farm); Lower right: tomato fruit from plant infected with Tomato Spotted Wilt Virus.

YOUR PHOTOS ARE ALWAYS WELCOME

