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Pest Alerts: Basil downy mildew –<u>how are new resistant varieties performing for you</u>??; lots of **brassica flea beetles** out, protect younger fall crop plants; **Swede Midge** seems to be a growing problem in New England– finally trapped this year in MA; **cucurbit downy mildew** let us know if you see it!; If your **winter squashes** are ripe and hard, you might want to start picking them up to avoid late **squash vine borer** and **cucumber beetle** attack; **peppers** nearing maturity (coloring) may have **blossom end rot** if you have not been able to keep up with watering– remember that calcium deficiency (from water stress) early in fruit development shows as fruits ripen; apparent **anthracnose** on **CELERIAC**, which supposedly doesn't get it...; super high **potato leafhopper** populations may be causing hopper burn on crops that don't typically get it, including carrots and celery...

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

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

Is it too late to plant Fall Cover Crops??

Hopefully that scared you a little bit... no, of course it's not too late to plant fall cover crops, but you should be ordering your seed right away. But if you're ready to clear out a space and **cover it now**, there are some really good late-summer options that can do more than plain ol' (but good ol') winter rye planted alone. Furthermore, winter rye planted where next spring's early vegetables are going will deny your field of rye's most important biomass production period, late April to mid May. The following

is a list of individual species that, if planted in the appropriate time window, will provide some excellent benefits. Because of our relatively clement climate zone, we have a big planting window. Here are species options:

-Buckwheat. In our part of the world, buckwheat can do very well if planted by the first week of September. We nearly always have a warm and frost free month of growing, and this is the perfect time for the cover crop to suppress germinating and rapidly growing winter annuals. It can also supply good bee forage, though you don't want to let it go to seed. Depending on conditions, it could frost-kill before that happens. It is probably best to follow this with cereal rye, given that you'd be planting that rye in early October. Bear in mind also that late buckwheat, while seed is cheap and establishment is easy, does not produce as much biomass as when it is planted in the summer.

-Field Peas. Research by Thomas Bjorkman at Cor-



Stay tuned for Video Farm Tour/Interview Series

Because of the COVID situation, we will unfortunately not be having our annual twilight meeting at the Agronomy Farm on the URI campus. Instead, we will feature a series of farm tours, including the Agronomy Farm, over the next two months, which will be uploaded and available for viewing beginning on Saturday, September 5. While no New England vegetable farm looks like a showpiece at this time of year, now is the time to celebrate the hard work that you all do in order to produce the crops. Andy operates the camera and prompts your touring and discussion.

If YOU would like to create a video tour of YOUR farm with Andy, please get in touch immediately. Feature your great accomplishments, and we can discuss anything. So far, two have agreed. More is better. Videos will

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.

be edited to approximately 30 minutes.

Should we follow this up with a Rhode Island Vegetable Grower on-line meeting? You decide! **If we get 10 YES votes, it's a go.** This will take place in the mid-Fall if YOU want to be part of it. Registration information to follow...



nell showed that early planting is essential to get good biomass. The coldest parts of RI probably still have a longer growing season than where those trials were conducted, so that gives us a little more leeway. Even so, field peas (variety '4010') should be planted by September 1. This is usually planted in combination with at least one grass, often oats or rye, and also with hairy vetch. If you are in a milder location, the peas may very well survive the winter.



-<u>Hairy Vetch.</u> Research has shown that the maximum benefit to be gained from this highly-regarded cover is when it is planted earlier rather than later (mid-September at the latest). Because it is often planted in combination with cereal rye, it winds up getting sown later because it's acceptable to get the rye on up until October 15, though again, rye also provides much more "catch crop" benefit when seeded earlier. Earlier-sown hairy vetch establishes more strongly and comes back better in the spring, which is when maximum biomass accumulation and nitrogen fixation takes place.

-<u>"Tillage" Radish (a.k.a. Daikon).</u> Has anyone tried this yet in RI? People may be shy of it if brassicas are in regular crop rotation— flea beetles love this stuff. But if you can get it established, flea beetles begin to fade out by mid-September. Establishment is not difficult, either. It germinates and grows rapidly, like all radishes. It has the ability to penetrate hardpans and gathers phosphorus from down deep like no oth-

er, as shown in research at UMD and Penn State. Daikon winter-kills eventually— in our region, that may not even be until January, depending on conditions. What it leaves are lots of holes filled with decomposing gook, which is a GOOD thing. These are channels that conduct early-spring rain and snow melt down into the soil, rather than allowing run-off. Furthermore, these are broadleaf plants that produce lots of biomass and shade out winter annuals as they try to dominate your field in the fall (think chickweed, wintercress, etc.)

-<u>Crimson clover.</u> If well established in the fall (by planting by the first week of September), this legume can put on lots of biomass and fix a lot of N in the spring. It's also good bee forage in early May and spectacular to behold (think roadside visibility!) This can do well in mixes with oats.

-<u>Yellow sweetclover.</u> Only grow this if you are planning for NEXT summer's **late** cash crop, like fall cauliflower, broccoli or cabbage. When given the right window for growing, sweetclover, a biennial, can produce fantastic amounts of biomass along with lots of N fixation, but it has to be allowed to grow into mid summer. The visible taproot alone can go down



Photo High Mowing Seeds

a foot, while feeder roots can reach 5 feet. In the sec- using the right inoculant to go with the legume speond year, top-growth can be 5 or more feet. Mowing before it gets to that height can increase biomass production. If allowed to continue to grow and bloom in the second year for too long, stems will get woody, which is fine if you are only trying to build organic matter, but can be a problem for planting a succeeding cash crop.

-Oats. This inexpensive cereal grain might just overwinter in the warmer spots of RI, but growing a big fat stand of it late into the fall (when planted by late summer) produces good biomass, shades out winter annuals, provides "nurse crop" benefit for establishing smaller-seeded covers like clover, and creates good vertical climbing space. If it doesn't winter-kill, it's much easier to put down than cereal rye during the following spring.

-Annual ryegrass. While this is sometimes used in grass mixes for starting lawns, there's a lot of research on using it as a cover crop and the findings have been very positive. It is grown as a winter annual and if planted before October 1 in order to get well established- it can mop up nutrients very well, like cereal rye. An advantage it has over rye is that it doesn't grow up into a high carbon monster in the spring, which is often hard to manage in vegetable cropping schemes. Because of it's dense but shallow root system, it is very good at breaking up surface compaction. Hot and dry conditions at the time of seeding could inhibit germination so make sure the soil moisture is recharged before planting. Remember that like any regrowth in a spring cover crop, the closer you get to bloom, the more lignification occurs in the plants and as a result, will take more soil N to decompose and leave residue for longer. Finally, allowing annual ryegrass to go to seed could cause a weed problem.

Remember to inoculate! The research has long been clear: it boosts productivity. Just make sure you are

cies you are planting.

Mixing species. Multi-species cover crop mixes take advantage of the gualities of each component. Grasses are good at holding soil together and putting on biomass, broad leaf plants have taproots that scavenge nutrients deeply and create a canopy quickly, shading out weeds, and legumes fix nitrogen. There are some who promote diverse cocktails of more than half a dozen species. It's possible that under certain circumstances, perhaps where grazing is involved, this can have benefits. In vegetable crop rotations, keeping it relatively simple probably makes sense. If you want clover to be part of the mix, remember that clovers generally come into their best growth later in their second year. If you are planning to keep some land out of production for a year, clover should be in the mix. It's very important to use mixing proportion guidelines that are recommended. Mixing in the wrong proportions can result in a waste of money. Not enough of some species can be the same as not having added it all, and too much of another can negate the effects of the others in the mix.



Hairy vetch, crimson clover, and cereal rye in Spring. Photo Johnny's Selected Seeds