

Cornell Cooperative Extension

Eastern NY Commercial Horticulture Program

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We've reached that point in the season where new pests and diseases slow and the maintenance of crops is more or less on autopilot. For this reason we'll be switching from doing a weekly to a bi-weekly newsletter, and will no longer start each newsletter with crop notes. Starting in October we will switch back to longer monthly newsletters with more research reports and including tree fruit, berry, and vegetable information.

As always, if you have pressing questions, don't hesitate to reach out.

Maybe It's Time to Plant the Garlic Earlier

Crystal Stewart Courtens, CCE ENYCHP

This isn't going to be a research-based recommendation, because I haven't done this work in multiple sites or multiple years, so consider this brief article more of a suggestion. If the fall weather of previous years is any indication (and we know that it may well not be—that's the joy of weather!) we'll be having hurricanes/numerous storms which saturate the fields and make planting things....unpleasant by late September/early October. The conventional wisdom is that we should plant on or around October 15th so the garlic can root but isn't out of the ground yet. Given the saturated soils of our recent falls, do we have to keep doing that? To start to answer this question, I did what a lot of garlic growers are reporting doing. I planted my garlic earlier. But to see if it was actually a good idea, I also held some back and planted when I normally would.

Last year I planted garlic September 15th-30th. The year before I planted garlic every week for 4 weeks starting on September 23rd of last year. The last garlic was actually planted October 2nd (yes, it was snowing, I don't know why). Both years the differences between the different planting dates at harvest was indiscernible. Granted, they were mild winters, so the bit of garlic that was sticking up wasn't treated to the harsh conditions it might see some years. But it was enough of a positive result to make me feel that planting earlier might just be a really smart move, if it fits into the rhythm of your farm. Since there were no differences in yield from planting in late October, if that's what you are doing there is no reason to stop.

Last year we did have six inches of garlic up in the earliest beds going into winter, and that felt like too much. We did see a little more damage to the first leaves than I'd like to. We'll move our planting date a week later, but will still start in September so that if we do hit a very wet patch, we can hopefully not plant through it.

Tomato Cracking and Russeting

Teresa Rusinek, CCE ENYCHP

Many areas in eastern New York have received significant rainfall over the past two weeks, after a prolonged period of dry weather. This condition has led to cracking problems in tomatoes. Cracking and splitting in tomatoes often occurs when rapid changes in soil moisture levels occur. This typically happens after heavy rains as fruit grows faster than the skin can expand resulting in a split. Splits can be vertical starting from the stem scar or they can be concentric. This can happen in both green and ripe tomatoes. Green tomatoes with splits and cracks will rot before they ripen.

Cultivars vary in their ability to withstand cracking. Splitting is often observed on cultivars producing few but large fruits with high soluble sugars. High nitrogen and low potassium levels as well as temperature fluctuations (hot days/cool nights) may also be responsible for splitting. Adequate nutrition, timely irrigation, and mulching may help reduce cracking.

Russeting (numerous hair-like cracks) on the shoulder of the tomato occurs when water from irrigation, rain, or dew sits on the surface of the fruit for extended periods. Cool mornings later in the summer are ideal conditions for russeting to develop. Good air circulation around plants by growing on trellises can help. Feeding damage from the insect thrips may cause similar damage to fruit during periods of dry weather when populations build up in the field. Thrips damage is also common in high tunnel production.



Left: Vertical splits from tomato stem scar. Middle: Tomato russeting. Right: Thrips damage to tomato fruit.

Basil Downy Mildew on Resistant Varieties

Ethan Grundberg, CCE ENYCHP

Downy mildew pressure on basil has been high throughout much of the region for months. Planting downy mildew resistant varieties such as Prospera, Devotion, Obsession, and Thunderstruck is a critical first step in an integrated management plan for the disease. When weather is less conducive to downy mildew development and spread, the resistance traits in those varieties are often sufficient to maintain symptom-free basil through August. However, there are increasing reports this year of downy mildew developing on these resistant varieties, especially on the Rutgers varieties Devotion and Obsession. In addition to planting resistant varieties, implementing an effective fungicide program that rotates through different modes of action, or FRAC groups, is necessary under heavy disease pressure. Cornell University Plant Pathologist Dr. Meg McGrath recently wrote the following recommendation for managing basil downy mildew with fungicides:

“There are 4 fungicides in different chemical groups to use in alternation on field-grown crops: Orondis Ultra (FRAC 40 + 49), Ranman (21), Presidio (43), and Quadris (11). There is a FIFRA 2(ee) recommendation enabling use of Quadris for basil downy mildew because this disease is not specified on the Quadris label. Revus (40) is no longer recommended because it has the same FRAC 40 AI as Orondis Ultra. Phosphorous acid fungicides (P 07) are recommended used in a tank mix with the other fungicides.”



Prospera, left, showing no downy mildew symptoms while Devotion, right, succumbs to the disease under high pressure despite genetic resistance.

Stemphylium Leaf Blight and Purple Blotch on Leeks

Ethan Grundberg, CCE ENYCHP

Heavy morning dews, high humidity, and excessive rain through much of the region has increased the incidence of both *Stemphylium* leaf blight (SLB) and Purple Blotch (PB) on fall leeks. PB is caused by the fungal pathogen *Alternaria porri*. SLB is caused by the fungal pathogen *Stemphylium vesicarium* and often appears as a series of dark oval shaped lesions on damaged leaf tissue. Both pathogens thrive in warm weather with long periods of leaf wetness. The diseases are both opportunistic and typically colonize already-damaged leaf tissue.

Though a number of different fungicides are labeled for use for management of PB on leeks, field trials have found that Scala (pyrimethanil, FRAC group 9) at 18 oz/acre and Bravo (chlorothalonil, FRAC group M5) at 1.5 pts/acre are most effective. Scala has a 7 day pre-harvest interval (PHI) and Bravo has a 14 day PHI. Keep in mind that chlorothalonil products have special stipulations for PPE and worker safety during the extended 6.5 day REI to avoid eye irritation. Little research has been done to evaluate the efficacy of OMRI-certified fungicides for purple blotch management. However, several *Bacillus subtilis* products, such as Cease and Serenade, are labeled for purple blotch suppression. Many copper formulations are also labeled, but take caution to avoid phytotoxicity.

SLB can be difficult to distinguish from PB in the field and the two diseases are often both found colonizing the same leaf. Fungicides with active ingredients in FRAC group 3 like Tilt, Inspire Super, Viathon, and Quadris Top are the most effective options for managing SLB. If you are uncertain whether you are PB or SLB in the field, Inspire Super would be an excellent option to target both diseases as it combines the FRAC 3 difenoconazole with the FRAC 9 cyprodinil. Few OMRI-listed fungicides have shown promise in managing SLB, but Howler (*Pseudomonas chlororaphis* strain AFS009, FRAC BM02) and Oso (Polyoxin D zinc salt, FRAC 19) in combination with a labeled copper

formulation may help slow the spread of both PB and SLB.



Stemphylium leaf blight causing excessive leaf dieback in fall leeks.

Corn Trap Counts

County	ECB-E	ECB-Z	FAW	WBC	CEW
Clinton 1	2	0	15	4	20
Clinton 2	1	0	43	0	5
Dutchess	0	0	10	3	2
Essex	0	0	1	0	0
Orange	0	0	86	2	125
Ulster 1	0	0	3	0	3
Ulster 3	0	0	4	0	4

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