



Disease/Pest Updates

VT Vegetable and Berry Growers

Online January 25, 2021

Ann Hazelrigg

ann.hazelrigg@uvm.edu

'Carmel'-likely Race 14



Infected crops were direct seeded late Sept./ early Oct.

'Kolibri' and 'Platypus' are clean so far.

No row covers but lots of ambient humidity inside with all of the gray weather

Carmel-Hi resistance to races 1–11, 13, 15, 16.

Kolibri- High resistance to races 1–9, 12–15, 17 and int resistance to races 10, 11.

Destroy infected crop, resistance is not immunity, not able to rescue with fungicides.

Spinach Downy Mildew-cool, cloudy, wet or high rh

Yellow on upper leaf surface



Diagnostic purple/brown spores on undersides-Wet paper towel



- Reduce humidity and leaf wetness
- Use of resistant varieties will minimize the incidence of the disease.
- Mix cultivars
- Seen higher incidence of Race 14. Select resistance to Races 1-15 if possible. Once infected, there is little that can be done.
- Rotate out of spinach for at least two years.
- Fungicides applied preventatively are best-several conventional.
- Hard to rescue, best to destroy.

Arugula with downy mildew-Any brassica



Meg McGrath



Gerald Holms, Bugwood



Rob Wick, UMASS

Cutworms/armyworms? on high tunnel spinach and other crops

- Lots of comments this fall, MA, NH, VT
- No positive ID, need to rear acc to ent
- Dipel if small and still warm out and feeding, if large, will pupate soon and/or die from cold, Spinosad, Nematodes?



November high tunnel spinach-crown mite and green peach aphid- reproduce more slowly than other aphids, natural enemies don't do well over winter. Population will slowly grow over the winter and likely explode in the spring so scout and be ready.



5556246

Early season-usually abiotic!



EDEMA



ETHYLENE

Shin Cheong Gang rootstock on right



Black dot root rot?-Colletotrichum



Corky root is generally a problem in early plantings under cool conditions. Disease development is optimal at 60° to 68°F (15.5–20°C). Corky root usually does not kill plants, but may reduce yields.



Wilting in Plants-look lower!



Fruit Issues-abiotic



Flower drop > 85 F day or >70 at night
Poor pollination <40% RH and >70% RH



Daytime temp > 88 F, night >68 F with high RH, cultivars may be prone



Anthracnose fungus-overripe fruit
or ripe fruit over 80F

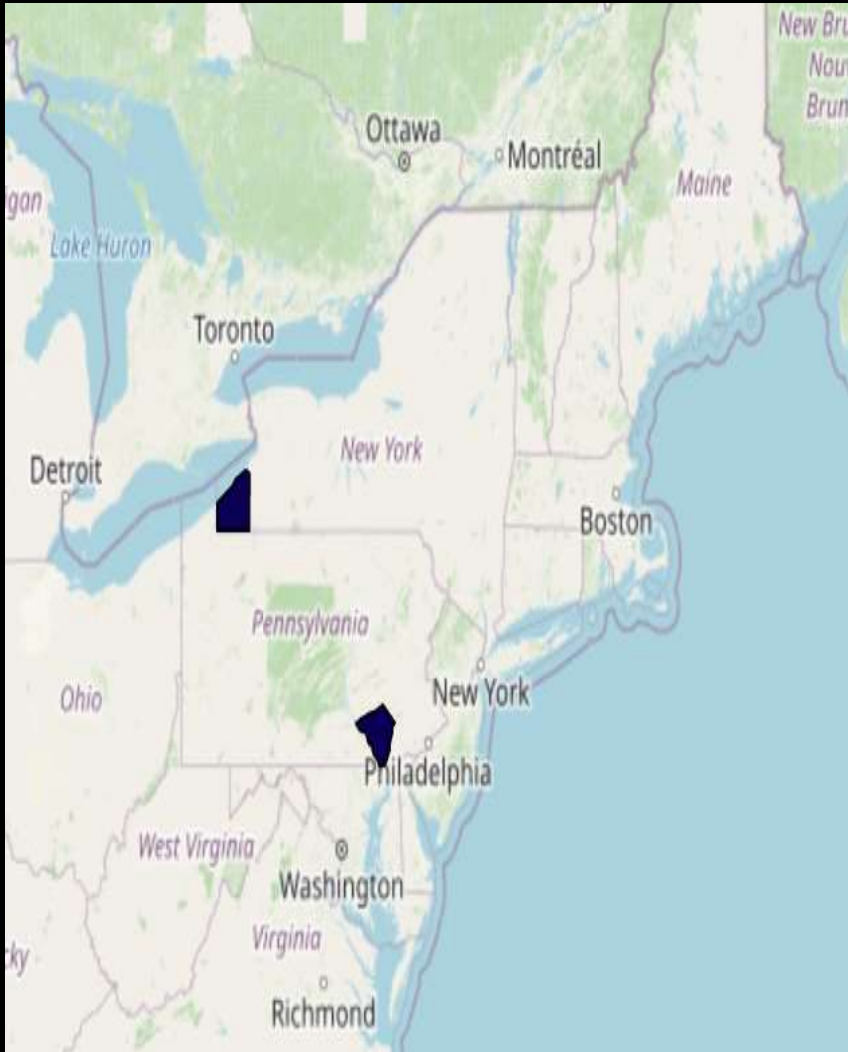


Tomato Brown Rugose Fruit Virus



- 1st reported in tomatoes in 2014 in Israel
- Fruit loss in tomatoes and peppers-wrinkling, stunting, roughened fruit, brown calyx
- Virus was detected/eradicated from a CA and AZ gh in 2018 and 2019.
- Spread: contaminated tools, hands, seed, plant-to-plant contact
- MTM thought it may be widespread in the tomato industry but growers not reporting it.
- USDA testing seed/transplants from any country that has the virus

Late blight 2020



Dr. M. Babadoost



McGrath, Cornell

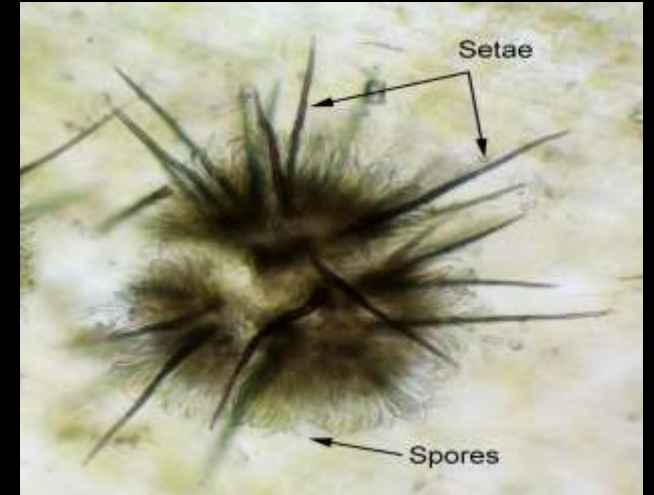
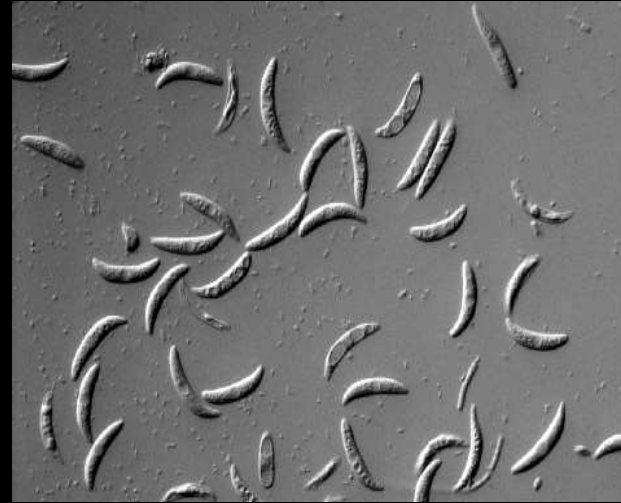


Reuters

Allium leaf miner-Albany, NY



Plant Diagnostic Clinics



Ann.hazelrigg@uvm.edu

802.656.0493