compiled by Vern Grubinger, University of Vermont Extension (802) 257-7967 ext. 303, vernon.grubinger@uvm.edu

(Orwell) Navigating the mud has been the biggest challenge of the past couple of weeks--we haven't been able to get the tractor into, or even near, the high tunnels for soil prep. The tomatoes are very ready to go into the ground, so this week we will be busy prepping and planting. With the addition of another high tunnel this winter, our goal is to have better crop rotations in the tunnels to manage diseases and pests.

We've had great advice from UVM's Entomology team in managing aphids and other

Eric Boire, Consultant, Crop Production Services, Addison VT (Eric.Boire@cpsagu.com)

With

Meg McGrath, Cornell University

I am aware of 16 occurrences of downy mildew in spinach in the northeast since 2014 (NJ, CT, MA, NY, VT, and ME). That doesn't sound like a disease to be concerned about, but I am because the pathogen is related to pathogens causing basil downy mildew and late blight, it also produces wind-dispersed spores, and it has equal destructive potential. This is being documented in the west, especially in organic crops with half overall going unharvested I hear, which equates to \$3 million/week. Losses are due to pathogen's ability to overcome genetic resistance in spinach (there are now 16 known races) and inability to effectively control the disease with organic fungicides.

What we know about this disease in our region: Races 12, 14 and a 'novel' type have been identified, but samples from most occurrences were not tested. Most cases have been in winter high tunnels; rest were spring plantings. Based on observations from growers, conditions in high tunnels are not very favorable for downy mildew (likely too cold) except during long periods of leaf wetness (such as when row cover put over wet plants). Resistance to downy mildew can be very effective. Past spring occurrences were promptly destroyed, thus the pathogen did not have much opportunity to spread.

Management recommendations for the Northeast:

- 1. Select varieties with resistance to at least races 12 and 14.
- 2. Check plants carefully for symptoms at least once a week including winter plantings that so far have not been affected. Conditions are becoming more favorable as temperature and humidity increases.
- 3. For crops not managed organically, apply conventiona0000912 0 612 792 reW*nBT/F1 12 Tf1 0 0 1 287.09 23

NOFA-VT has a USDA Farmers Market Promotion Program grant to provide one-on-one technical assistance to 12 direct market farms, helping them implement new business and marketing strategies. Farms will have access to two years of support from a farm service provider with up to four on-farm visits in year 1 and up to two on-farm visits in year 2, along with regular check-ins. Farms receiving this TA will commit to contribute to our collection of Vermont direct market benchmark data and provide feedback on the tools and resources we are developing for the direct market farm community. Eligible direct market farmers must have been in business for at least three years, and must complete an application by April 16. Contact Jen Miller at jen@nofavt.org or 434-4122.

http://www.uvm.edu/vtvegandberry/newsletter/datenavbar.htm