GrowNYC’s FARMroots provides aspiring and established farmers with business technical assistance and training designed to ensure the long-term viability of farms and farmland.

Farm sales: Cash or credit? Choice brings in more market 'lettuce'

Adopting credit technology is always a win-win for farmers and customers, as Kara Lynn Dunn explains in her article published on the American Agriculturist.

New technologies like a Point of Sale (POS) system are bringing in more credit card sales to Greenmarket farmers.

What is a POS?
It is a combination of software and hardware that allows retailers to process transactions and simplify day-to-day business operations.

For example, as a farmer, can you accurately describe the size of your average sale? Do you know how much a discount increases gross sales of one of your products? What time of the day/week/year do you make the most gross sales? Which are your most/least profitable products? POS is the key to answering these critical questions.

Learn more about how modernizing your farm sales with mobile POS systems in this report by Chris Wayne, Maria Rojas and, Jack Hornickel.

Are you a Greenmarket farmer interested in POS support? Please reach out to Erik Hassert for more information.

Soil microbiomes for sustainable agroecosystems

Over the last 10,000 years, farmers have been identifying elements that drive agroecosystems dynamics. By doing so, they’ve learned to untangle webs of interactions formed among animals, plants, insects and countless microorganisms in the soil, making agriculture an economically sustainable business.
Nowadays, however, agroecosystems dynamics changed dramatically by unbalanced interactions between their components, and agriculture is increasingly threatened by novel pest/pathogen strains, climate extremes and limited supply (and environmental costs) of chemical fertilizers.

Deploying microorganisms to increase plant nutrient uptake and resistance to both climate extremes and pest/pathogens offers an untapped reservoir of opportunities to confront sustainability issues in agriculture. Despite the huge potential, in the Northeast we are just beginning to explore opportunities in which soil microbiomes can be integrated into 'climate smart' farming practices.

Read more about how agriculture could pull carbon out of the air and into the soil in the article Can Dirt Save the Earth? by the NYT

---

**Allium Leafminer Active in the Hudson Valley**

by Ethan Grundberg (CCE Commercial Horticulture Program)

A new invasive insect pest in the Northeast known as the Allium leafminer (ALM), *Phytomyza gymnostoma*, damages crops in the *Allium* genus (e.g., onion, garlic, leek, scallions, shallots, and chives) and is considered a major economic threat to *Allium* growers. Originally from Europe, ALM was first detected in Lancaster County, Pennsylvania in December of 2015 and in New Jersey and New York in 2016. As of fall 2017, ALM activity has been confirmed throughout eastern Pennsylvania, New Jersey, Delaware, southeastern New York, as well as Tompkins and Suffolk counties.

ALM is currently active in Lancaster, PA where the first signs of adult fly emergence were detected on Friday 4/13/18. Based on our observations from last spring in the Hudson Valley, we expect emergence in our area in the next week or so. ALM will continue to emerge, feed, and lay eggs in alliums over 3-4 weeks. Leaf mining from larvae will begin to show up within two weeks after first adult emergence and intensify over the duration of the flight. The larvae mine their way toward the base of the allium plant where they will pupate.

Growers who have alliums with green tissue growing in the field or in high tunnels now in southeastern New York should consider protective measures soon, especially in Orange, Ulster, Dutchess, Columbia, Sullivan, and Schoharie counties where significant infestations were observed last year. If you have small plantings that can be covered with row cover to exclude emerging ALM flies, now is the time to do so as long as you didn’t have infested alliums (including wild onion grass) in the same space last season. Growers with larger plantings may consider applications of insecticides if and when significant ALM activity is observed in the allium crop. There are both organic (OMRI approved) and conventional insecticides labeled for allium crops to control this type of leafminer. Insecticide efficacy tests are currently being conducted in both New York and Pennsylvania.

It is important to carefully observe your allium crops over the next few weeks. ALM oviposition/feeding may initially be observed along field edges. There is also anecdotal evidence of preference for chives, but not in all cases. Be vigilant and please call or email either Teresa Rusinek at 845 389-3562, or Ethan Grundberg at 617 455-1893, if you see evidence of ALM feeding or have any questions about management.

---

**Resources**
In the Podcast of the month Nina Prather and Hannah Smith-Brubaker discuss the economic benefits of organic and sustainable agriculture in Pennsylvania.

Land Opportunity:

In Bloomingburg, NY, 15 acres available, 7 open acres for farming and 8 wooded acres

Books/Reading:

Vegetable News by CCE, Commercial Horticulture Program, Vol 6, Issue 3

How to Add Compost on your Small Farm by NCAT Staff and published by ATTRA

Cultivating Climate Resilience on Farms and Ranches by Laura Lengnick published by SARE

Webinars:

Budget Building for Farm Operations by Kitchen Table consultants

Ag Labor Tips and Tools by Cornell Farmworker Program. Do you hire H2A, migrant farmworkers, or farmworkers whose primary language is not English? Join this webinar on May 9th, 11:30 AM

Events:

Cultivation Innovation for the Small-Scale Farm, May 7th [Beaver County, PA] and May 9th [Chester County, PA]

Small Ruminant Parasite Control, May 8th, 10 AM - 1 PM. CCE Ulster, Kingston, NY

Congresswoman Chellie Pingree at the Kirschenmann Lecture, May 14th, 7 PM -8:30 PM. Are you a FARMroot Beginner Farmer interested in this talk? Please reach out to Gabby Pereyra for more information about free tickets.

Niche Berries: Elderflower and Haskaps, May 22nd, 6:00 PM - 8:00 PM. Pitspone Farm, Kendall Park, NJ

GrowNYC

By shopping at your neighborhood Greenmarket farmers market, you are directly supporting small family farms and ensuring continued access to fresh local food for all New Yorkers.

Farmroots is a program of GrowNYC, a 501(c)3 nonprofit.

Learn more about GrowNYC's community
gardens, recycling and hands-on education programs and make a donation to support small family farms here.