Cornell University Cooperative Extension

Eastern NY Commercial Horticulture Program

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Vegetable News

Sweet Corn Update

Teresa Rusinek, ENYCHP

Dry field conditions persist across eastern NY and growers all over are irrigating corn. A few heavy down pours in the lower hudson valley ealrier this week provided some relief. So far we've seen low levels of ECB and CEW in our traps, and growers are reporting low levels of infestation in most fields. Keep an eye on those western bean cutworm (WBC) trap counts. WBC, also a pest of corn, continue to be caught in traps around the state including Columbia and Washington counties. WBC larvae and feeding damage can be confused for ECB. Unlike ECB, WBC have only one generation per year. Moth flight begins late June and continues through August. WBC emergence is predicted to be at 25% when degree day accumulations reach 1319. We are currently still below 25% moth emergence for most of the sites. Scout late whorl and early tassel-emergence fields as these are most at risk. After hatching larvae will spend a few days feeding on the tassel before moving down to the ear.

I want to remind growers who have the heliothis traps (including the ones ENYCHP staff set up) that in order to get accurate counts, they need to keep the area under and around the trap free from weeds to the point that moths can move into the traps after they are lured to them with phermones. Phermone lures need to be replaced every other week and not cross contminated by the phermones lures of other species especially during handling while servicing traps. Cross contamination will confuse the moths and keep them from entering the traps. Lures should be kept in the refrigerator until you are ready to use them. Keep the traps spaced at least 40 feet from each other along field edges. Also make sure the velcro fastener to the top portion of the trap is completely sealed so moths are actually trapped.

We've had questions about short

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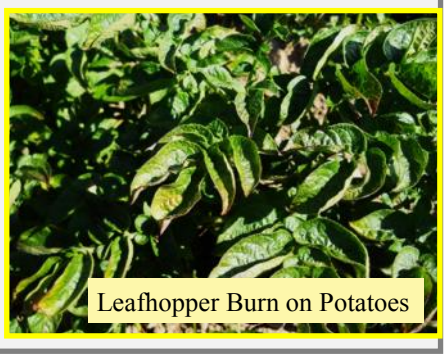
Leafhoppers Keep on Coming!

Amy Ivy, ENYCHP

Almost everyone is reporting raging leafhopper infestations this year. The hot, dry weather really favors them. Below are pictures of classis hopper burn symptoms on eggplant and potato, but they also common on beans as well.

By the time you see even this much damage the crop yield has been affected. The population explodes if not kept in check so this is a pest you can't suppress with just one spray. They also come in after nearby hayfields are mowed. Keep those sprays coming and alternate between pesticide groups to avoid building resistance. Check the labels carefully to time the intervals between sprays.

Leafhopper Burn on Eggplant



Leafhopper Burn on Potatoes

Elba, Prince Harry and King Harry are some potato varieties that have some resistance to leafhopper. It's common to see a big difference in damage between varieties of any of their host crops. Make note of which varieties you grow that were more resistant.

Velcro fastener needs to be fully sealed

Keep the area around the base of the trap weed free.

corn over the past week. Usually the earliest sweet corn we see is on the short side but this year it looks like environmental factors resulting in short corn persisted longer than usual. Below is an article written for Indiana growers a few years back but it does a good job explaining how plant physiology and environmental factors affect stalk elongation.

Short Corn at Tasseling

R.L. (Bob) Nielsen, Agronomy Dept., Purdue Univ.
edited by Teresa Rusinek

Early-planted corn in Indiana is well into, if not beyond, the pollination stage. Some folks have noticed that the height of plants in these fields is noticeably shorter than they normally expect to see. The causes of shorter than normal corn can be traced back to planting date and temperature during stalk elongation.

Remember that stalk elongation begins at about the V5 stage of development (five visible leaf collars). Prior to that stage, most of the plant's energy is directed to root development and leaf initiation. After that stage, the plant enters its so-called grand growth phase wherein above- and below-ground growth accelerates to an exponential pace that peaks near tasseling.

Elongation of the stalk occurs primarily by cell expansion near the bases of the internodes at what are called the intercalary meristems. Stalk elongation is influenced by a number of factors, among which are light/shade relationships, daylength and temperatures. Shade tends to increase levels of the plant growth regulator auxin, which, in turn, encourages greater elongation of internodes. The 'shading effect' contributes to the greater plant heights of densely planted corn. Intense solar radiation is thought to result in photodestruction of auxin, which leads to less internode elongation, which results in shorter plants. Interestingly, though, longer daylengths tend to increase internode lengths and overall plant height. Cold temperatures are thought to increase the rigidity of basal internode cell walls, thus limiting cell expansion and internode elongation.

Early-planted corn normally reaches the V5 stage at dates earlier than does later-planted corn. Stalk elongation in early-planted corn, therefore, begins in a time period that is characterized by shorter day lengths and generally cooler temperatures than corn planted later in the season. As described above, both of these factors contribute to shorter internodes and plant heights.

Now consider the two- to three-week period beginning in mid-May when temperatures were significantly lower than normal throughout much of the state. Much of the early-planted corn was beginning or well within the stalk elongation period while most of the later-planted crop was younger than V5. This extended period of cool temperatures influenced the elongation of internodes in the lower third of the stalk and accentuated the expected typically shorter heights of early-planted corn.

Are there yield consequences of unusually shorter corn? There are probably no negative consequences, unless the short height is dramatic enough to significantly reduce crop canopy cover and harvest of sunlight. Conversely, shorter corn is usually a benefit from the standpoint that the risk of stalk lodging is decreased due to the lower center of gravity.

Dickeya Blackleg: New Potato Disease Causing Major Impact

Margaret Tuttle McGrath, Cornell University
Long Island Horticultural Research and Extension Center

Dickeya blackleg, often just called Dickeya, is a new disease in the USA. It is caused by the bacterium, *Dickeya dianthicola*. This aggressive pathogen has the potential to cause more severe losses than species of *Pectobacterium* (aka *Erwinia*) causing the type of blackleg that has been occurring. High temperatures (exceeding 77 F) are favorable for Dickeya, consequently the greatest losses have been in the southern portion of the northeast (especially the mid-Atlantic region) and further south. Total crop loss has occurred. Dickeya was severe in 2015 at least partly reflecting hotter weather than previous 2 years when the pathogen likely was present. This new disease is developing again in 2016.

Symptoms. First symptom is poor emergence (skips in a production field) due to rotting seed. Plants that emerge from contaminated seed wilt and typically have black stems extending upwards from rotting seed piece. Occasionally, especially late in the season, only internal stem tissue will be discolored. The fact stem symptoms start at the seed and progress upward illustrates that *Dickeya dianthicola* is in potato seed. Symptoms typically develop following a period of hot weather especially when plants are also

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stressed. In 2015 on Long Island a lot of plants dropped out during flowering. Blackleg caused by *Pectobacterium* differs from Dickeya in that it starts on the outside of stem tissue, infects through wounds, and then moves downward as well as upward causing stem rot that is dark brown. Affected tissue typically has an offensive odor and is slimy. In contrast, plant tissue affected by Dickeya typically has an earthy smell; occasionally it has an offensive smell indicating soft rot bacteria are also present. Plants affected by Dickeya can just appear unthrifty if they have a sub-lethal titer of the bacterium. No symptoms may develop when the temperature never becomes hot during the growing season.. *Additional photographs are at:* http://livegpath.cals.cornell.edu/gallery/potatoes/potato-blackleg-caused-by-dickeya/

Management. *Dickeya* is a destructive pathogen that cannot be managed when present in production fields. There are no resistant varieties and no effective fungicides. This bacterium is not known to be able to survive in soil more than about two months, which is not long enough to be able to serve as a source of inoculum the following growing season. Potato seed that is free of *Dickeya* is the best management practice for this disease. One challenge is that symptom development is limited by cool temperatures that are typical in seed producing areas: the pathogen can be present in a plant but cause no symptoms (wilt or black stem). Unfortunately there is not a reliable seed testing procedure identified yet. Infected seed can appear healthy. Dickeya is developing in crops established in 2016 with seed that tested negative with the dormant tuber test. Most affected seed was produced in Maine; some lots came from New Brunswick or Wisconsin. There is differing opinion about whether there should be no tolerance for Dickeya, similar to bacterial ring rot, in certified potato seed or whether a low percentage of contaminated seed can be tolerated as is the case with other diseases such as late blight. A major difference is that there are resistant varieties and effective fungicides for managing late blight.

Dickeya dianthicola affecting potato growers throughout Mid-Atlantic region and elsewhere – Updated 7/11/16 by Andy Wyenandt, Rutgers Cooperative Extension Plant and Pest Advisory

In addition to *Dickeya dianthicola* being found in 'Superior', 'Reba', 'Snowden', and 'Norwis' on 3 farms in New Jersey this year, the pathogen has also been detected in fields with seed originating from Maine on 5 farms on Long Island in 'Reba', 'Vivialdi', 'Superior', 'Norwis', and 'Waneta'. Other varieties such as 'Yukon Gold' have also tested positive for *Dickeya.* The pathogen has been detected in MA, DE, PA, MD, VA, NC, WV, and FL this summer on seed from Maine and New Brunswick, Canada (NJ and VA). Maine potatoes are currently shipped to over 20 states across the country (CA, CT, **DE**, **FL**, ID, IN, KY, **MD**, **MA**, MS, NH, **NJ, NY, NC**, OH, **PA**, RI, TN, VT, **VA**, WA, **WV**, and WI). Potato growers, crop consultants, and Extension personnel in states which grow Maine potatoes should remain vigilant by scouting their fields for *Dickeya* symptoms on a regular basis and by submitting any suspect samples for diagnostic testing. *Dickeya dianthicola* has been detected in the US in the past, and because of this, APHIS just recently announced that the pathogen has been designated as a non-reportable/non-actionable pathogen despite its potential to cause 100% crop loss. A link to the USDA/APHIS website for information on *Dickeya dianthicola* detection and control can be found here.

Cucurbit Powdery Mildew

Chuck Bornt, ENYCHP

The question for this week so far has been "when should I start spraying my pumpkins for powdery mildew?". Although Powdery Mildew has not been found yet in pumpkins or winter squash, it can be found in summer squash plantings which is a great indicator crop. PM is a "opportunistic disease" or a stress induced disease and one of the greatest stresses a plant has is fruiting. When a plant starts to fruit it becomes the priority for the plant as this is what it is programmed to do: fruit, set seeds and procreate! For this reason, fruiting becomes a huge sink for the plants resources (water, nutrients etc.) and I think allows PM to get started. It's a good reminder too that if you are done harvesting an early yellow/zucchini planting, please disk it under, burn it off with an herbicide or continue to spray it with a fungicide program until you can destroy it. These plantings only serve as a reservoir or source of inoculum.

The following excerpted information is from "Managing Cucurbit Powdery Mildew in 2016" from Meg McGrath, Cornell Plant Pathologist in regards to managing Powdery Mildew. The full article can be found at http://vegetablemdonline.ppath.cornell.edu/NewsArticles/Cuc_PM_2016.html The information below will be critical in the control of powdery mildew:

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"**Fungicide program.** The most important component of an effective management program is an effective fungicide program. And the key to that is using mobile fungicides targeted to powdery mildew. Mobile fungicides are needed for control on the underside of leaves. Because these fungicides have targeted activity, additional fungicides must be added to the program when there is a need to manage other diseases such as downy mildew and Phytophthora blight. Alternate among targeted, mobile fungicides and apply them with a protectant fungicide to manage resistance development and avoid control failure if resistance occurs, and also to comply with label use restrictions (most mobile fungicides are not permitted used exclusively). The powdery mildew pathogen has a long history of developing resistance to fungicides (it was the first occurrence of resistance in the USA), thus a diversified fungicide program applied to resistant varieties when possible is critical for success. Always implement a resistance management program; do not wait until there is a problem. The goal is to delay development of resistance, not manage resistant strains afterwards.

When to apply fungicides: The action threshold for starting applications is one leaf with symptoms out of 50 older leaves examined. Examine both surfaces of leaves. Starting treatment after this point will compromise control and promotes resistance development. Powdery mildew usually begins to develop around the start of fruit production. Protectant fungicides applied before detection will slow initial development. **After detection, continue applying fungicides weekly. Conditions are favorable for powdery mildew throughout the growing season.**

Recommended targeted fungicides: Alternate among targeted, mobile fungicides in the following five chemical groups (principally the first two), and apply with protectant fungicide to manage resistance development and avoid control failure if resistance occurs, and also to comply with label use restrictions. The first two products are the newest and thus are the most important ones to have in a fungicide program. The pathogen population has been subjected to more pressure to develop resistance to the other three fungicide groups, which are listed in order based on product efficacy in recent fungicide evaluations. The first three fungicides are the only ones in these chemical groups available in the USA. See "Mobile Fungicides for Mildews and Phytophthora Blight" for more information about these and other targeted fungicides. Federal pesticide labels can be viewed and downloaded at: http://www.cdms.net/labelsmsds/lmdefault.aspx. New York state labels are available at: http://pims.psur.cornell.edu/ProductName.php.

Vivando (FRAC Code U8) is a new fungicide with a new mode of action. Cucurbits are on a supplemental label (click here for copy of supplemental label). It has exhibited excellent control in fungicide evaluations conducted recently. Activity is limited to powdery mildew. Do not mix with horticultural oils. It can be applied three times per year with no more than two consecutive applications. REI is 12 hr. PHI is 0 days. 365 day plant back restriction for non-labeled crops.

Torino(FRAC Code U6) is a new fungicide with a new mode of action. It has exhibited excellent control in fungicide evaluations conducted recently. Activity is limited to powdery mildew. It can only be applied twice to a field in a 12 month period. Consecutive applications are not recommended. REI is 4 hr. PHI is 0 days.

Quintec(FRAC Code 13) has been consistently effective in fungicide evaluations. However, insensitivity to a high concentration of Quintec (similar to the dose when applied in the field) was detected in several of the pathogen isolates collected from fungicide treated research and commercial fields at the end of the 2015 growing season. Therefore Quintec is now recommended used less than the label permits, which is a crop maximum of four applications. Aerial applications are not permitted and no more than two consecutive applications. Activity is limited to powdery mildew. It is the only mobile fungicide that does not move into leaves: it redistributes to foliage where spray was not directly deposited, including the underside of leaves, through diffusion and a continual process of absorption and desorption in the cuticular waxes of foliage. REI is 12 hr. PHI is 3 days.

DMI fungicides (FRAC Code 3) include Proline, Rhyme, Procure, Rally, and Inspire Super. Additional products are registered for use outside NY. Resistance is quantitative. Highest label rate is recommended because the pathogen has become less sensitive to this chemistry. Efficacy has varied in fungicide evaluations. Proline is thought to have the greatest inherent activity and Inspire Super the least. Procure applied at its highest label rate provides a higher dose of active ingredient than the other Code 3 fungicides. Five applications can be made at this rate. REI is 12 hr. PHI is 0 days, 7 days for Proline and Inspire Super. Powdery mildew is the only labeled cucurbit disease for Procure and Rally. Proline is also labeled for Fusarium blight and gummy stem blight. Inspire Super, which contains another active ingredient(Code 9), is also labeled for Alternaria blight, anthracnose, gummy stem blight, Plectosporium blight, and Septoria leaf spot.

Carboxamide fungicides (FRAC Code 7) registered in NY are Pristine and Merivon. Both also contain the same QoI fungicide (Code 11), which is no longer effective for powdery mildew. Only Pristine is permitted used on Long Island. Strains of the powdery mildew pathogen resistant to Pristine have been detected and likely are the reason its efficacy has var-

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ied. REI for Pristine is 12 hr and PHI is 0 days. Cross resistance was documented between Pristine and Merivon, but not Luna. Therefore, Luna will be the best choice if registered in NY (Luna is not currently labeled in NYS for Vine crops). *(Editor's note: I have heard from several local growers that Pristine was no longer effectively controlling Powdery mildew. However, it is labeled for other cucurbit diseases such as Alternaria blight, Cercospora leaf spot, Gummy stem blight and Anthracnose).*

No longer recommended. Resistant pathogen strains are sufficiently common to render the following fungicides ineffective: Topsin M (FRAC Group 1; MBC fungicide) and QoI fungicides (Group 11), which include Quadris, Cabrio and Flint. Resistant strains continue to be detected commonly every year on Long Island where monitoring is being conducted. *Recommended protectant fungicides*. Many fungicides have contact activity for powdery mildew; mancozeb is an exception. They include chlorothalonil, sulfur, copper, oils (mineral and botanical), potassium bicarbonate, and biologicals. Many of these products are approved for organic production (see list below). Sulfur is one of the most effective and least expensive products. Its activity is limited to powdery mildew, thus it is especially useful early in disease development when other diseases are not a concern, including as a preventive application. Melons are sensitive to sulfur especially when hot; there are tolerant varieties.
Organic fungicides. Products labeled for cucurbit powdery mildew, in addition to several formulations of copper and sulfur, include: Actinovate

More notes from the editor: Dr. McGrath, has had very good success using sulfur as part of her fungicide program. However, there are a couple things to remember if you decide to go that route. First, not all sulfurs are the same—you want to make sure you select one that is meant to be used as a foliar spray, not a dust! Hopefully your crop protectant supplier will be able to get you the correct formulation. The one most commonly used is Microthiol. Be sure to check the rates as they vary as well depending on the material and formulation. And lastly, **do not use it under hot (above 90 degrees) humid conditions as injury might occur.** Also be careful using this on certain cucurbits such as watermelon. The other thing to keep in mind about sulfur is that it will really only help protect against Powdery mildew—if you are combining your sprays for PM and Cucurbit Downy Mildew, be sure to use a chlorothalonil containing protectant to get the best value for your money and efficacy!

Organic Powdery mildew control has a lot more effective options then does Downy mildew. For organic squash, getting on them early with JMS Stylet Oil (3 – 6 quarts per 100 gallons of water) has seemed to work fairly well in the past and again there is a 0 days to harvest and a 4 hour restricted entry interval makes it nice for harvesting. **Do not tank mix JMS Stylet Oil with spreader stickers, Nu-Film-P or Nu-Film-17 (pinolene based products). Wait at least 10 days between an oil application and spraying pinolene-based products with fruit present.** JMS Stylet oil rotated with a potassium bicarbonate (Armicarb, MilStop, Kaligreen etc.) at 2.5 – 5 pounds per acre plus a spreader sticker may extend your harvesting period if your next plantings are not ready (Preharvest interval and restricted entry interval depend on product used). **You can also use a good sprayable grade sulfur when the temperatures and humidity are low but you must wait at least 10 days between a JMS Stylet Oil application and sulfur application!** Because these materials are contact protectants, coverage is essential. Use as much volume as you can and high pressure to make sure to penetrate the canopies. Another management tool for all growers: DESTROY OLDER PLANTINGS WHEN YOU ARE DONE HARVESTING! This will help reduce inoculum levels for new plantings. If you can't destroy them, continue to spray them if nothing else.

Cooling Vegetables in the Heat of Summer

Erik Kocho-Schellenberg, ENYCHP

Every vegetable cut for market must be brought down to the appropriate storage temperature as rapidly as possible after harvest to ensure longevity of product, highest quality, and lowest risk of microbial contamination. For example, sweet corn picked out of the field during the heat of the day may have a pulp temperature of just a few degrees below ambient temperature, but the ideal storage temperature is just above the freezing point. After harvest, even a few hours spent significantly above 40 degrees will rapidly begin to change the simple sugars into complex starches, making the corn much less sweet and giving it an unpleasant chewy and mushy texture. The shelf life of sweet corn is maximized by bringing the temperature down to 32 as fast as possible. At a farmer's market, it is actually best for quality to keep the sweet corn on ice. Below is a list of ideal storage temperatures for a variety of vegetables. http://www.gardening.cornell.edu/factsheets/vegetables/storage.pdf

This brings up a few important considerations. First off, how can you cool vegetables rapidly and economically? Cooling by convection is relatively inefficient in terms of both energy and time. Putting large volumes of hot produce into a pre-chilled walk-in cooler will heat up the cooler significantly, and depending on air movement, volume and temperature of produce, and cooling capacity, it may take half a day or even a full day to bring the core temperature down to spec. If this is the method you use, it is critical that you harvest crops with large thermal mass as early as possi-

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ble in the morning, or at night so that the initial temperature is low. Leafy greens, for example, have a low thermal mass and a high surface area to volume ratio. Thus, convection cooling can work fairly well for them provided that there is good air circulation and humidity is very high. If humidity is low, convection cooling can cause significant water loss and wilting. Remember that every pound of water you remove from your produce is a pound less to sell. Crops with large thermal mass are those with low surface area to volume ratio. Think of crops that are round and dense, like melons, cabbage, and tomatoes, or other crops that have significant bulk like broccoli, cauliflower, cucumber, sweet corn, some root crops. All of these crops have a lot of thermal mass and will warm up your cooler.

The default alternative cooling approach for many growers is to dunk vegetables into large tubs of cold water. The concern with this practice is infiltration. We know that crops with a low surface area to volume ratio (the ones you really want to cool this way) are susceptible to infiltration, a process by which a temperature difference between the vegetable and water results in suction of water into the pulp of the vegetable. Infiltration becomes more significant as the temperature difference increases, so when you take a melon at 90 degrees Fahrenheit and put it into freezing cold water, a vacuum will be created in the fruit and infiltration of water into the melon will be great. The USDA GAPs program tells us that a temperature difference of more than 10 degrees Fahrenheit is unacceptable. This creates a problem for growers because it doesn't allow for proper cooling. For this reason, crops susceptible to infiltration should be air cooled, or hydro cooled with misted water. Crops that are not as susceptible to infiltration can also be cold-water dunked, provided that the water is tested and of drinking water quality, and has had an appropriate sanitizer added such as bleach labelled for use in washing fresh fruit and vegetables. Other common sanitizers include sanidate, and tsunami. Use these in accordance with their labels.

Icing is another way of cooling vegetables. Top-icing involves simply picking the crop, packing it into boxes, and topping it off with ice before putting it in a cold room. This cools the produce rapidly, does not reduce shelf life, and will not cause infiltration. However, ice is heavy and will increase the weight of the load, which will increase shipping cost. Additionally, ice melting can cause microbial contamination during transport or storage with inadequate air temperature. When making ice, it is critical to use tested water of drinking quality.

Whichever method of cooling you use, it is important to consider the food safety implications as well as cost, logistics, and effects of the cooling method on shelf life of the product. Please feel free to contact me if you have questions about your cooling systems.

Erik Schellenberg, jk2642@cornell.edu

Thoughts on Farmers' Market Prices

Jesse Strzok, ENYCHP

For those that have been following along this summer, you have seen that we now have average farmers market prices of different commodities available each week. How is this information we have collected and analyzed useful to us (you and me)? Most notably this is not available anywhere else – the USDA collects and provides key wholesale and retail data but not for famers' markets in our region (yes, it is available in certain areas - https://www.ams.usda.gov/market-news/local-regional-food).

In the economics field of industrial organization, we approach the behavior (production, pricing, employment, etc.) of the firm/individual in a marketplace with mathematical rigor. A rational, self-interested, profit-maximizing firm will, in game theory, make its decision based solely on this given information, generally giving us elegant equations as answers. Market structures of producers range from perfect competition (defined as a situation in a market where many firms are producing the same good) to monopoly (defined as a situation where only one firm is producing the good). What kind of market structure are you facing? How should the firms participating in each market structure price their product? How much product should be brought to the market?

In light of this election year, I'm going to skip monopoly and suggest we look at two parties in this section; let's take a look at a duopoly (two producers in the market). How should the two firms compete in the market with their product? We have two principal models; Bertrand and Cournot.

⇒ In the Bertrand model the firms compete on price. The best-response solution to this repeated game model is to price the product equal to the cost (technically the marginal cost) of the product. Side note: this is a Nash equilibrium – think John Nash and *A Beautiful Mind*.

⇒ In the Cournot model, firms compete on the amount of output they will produce; quantity. Who wants to think about this model and give me an answer? Hint: it's not the same as the Bertrand solution and it's a bit more complex!

Next, when it comes to perfect competition, firms/producers (I've used these words interchangeably) are "price-takers." They sell their product at the market price and their quantity has no influence on that price. I would argue this is not something we're seeing at most farmers'

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markets. So, in industrial organization, as in the real-world, we often see complicated and interesting market structures. What these basic economic models don't generally take into account is any product differentiation (difference of quality in the product for example) where with most of the products offered I see a range. Does this mean we shouldn't use these models? I believe they can still be very useful, good for thought, and used as an educational tool. We also have models for product differentiation which become very complex.

What would I suggest to you?

1. **Know your costs of production. This might be the single most important piece of information to help you determine and maximize profitability when using the farmers' market pricing we're giving you. This can help you when you revisit your business plan, when optimizing/choosing markets, and when you're planning for next year.**
2. **By knowing the costs of production we can also figure out if you are optimizing with your current capital.**
3. **Finally, pay attention to what the other markets are doing – pay attention to USDA wholesale and retail prices, weather, and trends.**

Maybe you don't solve your quantity or pricing problem for a market by solving a Cournot model; by forcasting demand from last year's sales, weather, fuel prices, etc.; or by selling at some percentage above your cost; but remembering to farm from the "shoulders up" can make a world of difference.*I need feedback from you, the farmers. Have you changed your prices? How have you changed your prices? Has this been helpful? Is there interest in more market structure or best-response models? What kind of analysis do you want to see? I will be working with this data and will present at some of the schools after the growing season. Please let me know your questions, comments, and concerns – I would love to hear some feedback – please email me at js3234@cornell.edu*

New Farm Bill Roundtable at Fishkill Farms

Over the next few years, Congress will be debating a new Farm Bill, Senator Gillibrand is hosting a listening session on Friday, July 22, at Fishkill Farms. You are invited to this roundtable discussion focused on key areas of the Farm Bill that will have a major impact on New York. This includes access to financing, new market opportunities, assistance for specialty crops, investments in renewable energy, as well as other issues and priorities you want to see written into the bill.

When: Friday July 22nd at 2:15 pm
Where: Fishkill Farms, 9 Fishkill Farm Road, Hopewell Junction, NY 12533
RSVP: HVRSVP@gillibrand.senate.gov

Average Weekly Farmers' Market Prices

Product (NC = nonconventional)	Unit	Mid-Hudson	Capital	Saratoga - Lake George	Northern
Beeftsteak Tomatoes	1 lbs.	$3.25	$3.99	$3.75	$2.50
Beeftsteak Tomatoes NC	1 lbs.		$4.49	$4.47	
Blueberries	pint	$6.00	$4.39	$4.00	$3.17
Blueberries NC	pint	$5.00	$5.33	$6.00	$3.81
Carrots	bunch	$2.00	$2.00		$2.25
Carrots NC	bunch	$3.00	$3.50	$3.35	$2.00
Cherry Tomatoes	1 lbs.	$3.00	$3.69	$4.00	$3.25
Cherry Tomatoes NC	1 lbs.	$4.06	$5.00	$3.38	$3.00
Heirloom Tomatoes	1 lbs.	$3.75	$4.99	$3.00	$2.50
Heirloom Tomatoes NC	1 lbs.	$3.50			
Raspberries	1/2 pint	$5.00	$6.06	$4.00	
Raspberries NC	1/2 pint		$3.50		
Red Potatoes	1 lbs.	$1.48			
Red Potatoes NC	1 lbs.	$2.50			$3.00
Russet Potatoes	1 lbs.				
Russet Potatoes NC	1 lbs.				
Salad Mix	1/2 lbs.				$3.25
Salad Mix NC	1/2 lbs.	$5.00	$5.50	$5.29	$4.33
Shelled Peas	pint				$3.75
Shelled Peas NC	pint				
Strawberries	pint	$3.75	$3.50		
Strawberries NC	pint		$3.00		$2.50
Sugar Snap Peas	pint	$2.50		$3.50	$3.00
Sugar Snap Peas NC	pint		$3.75	$4.00	
Sweet Corn	dozen	$7.00	$5.00		$4.00
Sweet Corn NC	dozen				$4.00
Yellow Potatoes	1 lbs.	$1.00			
Yellow Potatoes NC	1 lbs.	$5.00			

Site	2016 Weekly Total 7/12-7/18	2016 Season Total 3/1-7/18	2015 Season Total 3/1-7/18	2016 Weekly Rainfall (inches) 7/12-7/18	2016 Total Rainfall (inches) 3/1-7/18	2015 Total Rainfall (inches) 3/1-7/18
Albany	184.8	1399.5	1449.5	0.24	10.00	14.04
Castleton	177.9	1350.3	1358.9	1.16	12.54	14.49
Glens Falls	168.7	1242.2	1223.5	6.42	19.31	13.72
Griffiss	162.6	1129.4	1148.0	1.51	18.92	21.43
Guilderland	167.5	1254.5	1294.0	0.42	14.00	20.11
Highland	189.2	1479.4	1464.5	0.7	13.32	18.04
Hudson	188.9	1465.6	1461.5	0.29	16.24	17.29
Marlboro	183.6	1405.7	1396.1	0.98	12.96	13.73
Montgom-ery	184.7	1399.9	1442.0	0.54	10.59	15.52
Peru	160.2	1142.4	1144.0	0.27	8.43	16.09
Red Hook	182.6	1393.0	1387.5	0.48	11.26	14.18
Willsboro	158	1123.6	1113.9	1.12	11.34	19.27
N. Adams, MA	142	1107.6	1101.0	0.69	13.26	15.70

Sweet Corn Pest Chart (week ending 7/18)

Location	CEW	ECBZ	ECBE	FAW	WBC
C. Clinton	0	0	0	0	0
S. Clinton	0	0	0	0	0
N. Washington	0	0	0	0	0
S. Washington	0	6	0	3	4
Albany	0	2	1	0	0
Rensselaer	0	0	0	0	4
Saratoga	NA	0	2	NA	1
Fulton	0	0 0	0	0	0
Schoharie	NA	4	5	NA	NA
Greene	0	0	0	0	2
Orange	2	1	2	2	1
N. Ulster	0	1	1	0	0
S. Ulster	0	1	0	0	0
N. Dutchess	0	0	1	N/A	N/A

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DATE CHANGE

Produce Auction Growers Meeting

DATE CHANGE: Wednesday, July 27th

Time: 5pm– 7pm

Location: Ray Zimmerman's High Tunnel
429 Brookmans Corner Road
Fort Plain, NY 13339