Cornell Cooperative Extension | Northwest NY Dairy, Livestock and Field Crops Program

AG FOCUS

Collecting Harvest Data from 2022: What Next? by Jodi Letham

The past few months we have all been busy capturing yield from our 2022 crop. For those of you who like to measure and know your yield for the whole farm, field and within field, what are your thoughts? Were you happy or discouraged with what you saw? If you were discouraged, let me ask, are you discouraged with the overall production level of the whole farm, a field or portion of a field? At the whole farm production level let's reflect back on abiotic factors like weather. Were you in an area that did not receive adequate amounts of rainfall at critical growth periods for the crop? How may have that impacted your farm's performance? Unfortunately, we can't control the weather and I know many of us prayed for rain. If you had a handful of fields or sections underperform, did timely scouting occur to identify additional biotic stressors like insect or disease? Were measures taken to prevent or control the issue? Was it in your budget this year? All valid questions and some hard truths to acknowledge.

You made calculated decisions regarding where to invest your time and money in crop rotations, inputs, equipment etc., and now that you have collected yield data, it's time to learn from it! Whether this is your first year measuring yield or you have been doing so for several years, what does that data show us?

Using yield data, we can optimize field management and increase the return on investment for crop and inputs such as fertilizer, seed, and crop protection products. This information can assist a farm in identifying and planning which crops to produce and where, as well as determining whether higher seeding rates or fertilizer applications will be advantageous. Determining yield trends over time at the whole farm and field levels will help to assess the effect of management changes on farm productivity and profitability. Yield trends can guide management decisions and help highlight year-to-year variability in yield. Knowledge of predicted yield and yield variability over time is necessary for variable rate nutrient prescriptions and determining if it would increase crop yield or reduce cost of production.

Yield data cleaned using Yield Editor compared to a Google Maps satellite image and raw yield monitor data. Image Source: CCE Agronomy Fact Sheet Series, Factsheet #107 *How and Why to Clean Corn Yield Monitor Data*.

How can I get this information from my yield data? If you used a yield monitor, data cleaning can be done in one to two hours per farm per year by selecting ten fields with known within field features, determining delay values for flow, moisture, start and end passes, and batch cleaning to correct errors in all harvested fields.

If you are interested in learning more about the data cleaning process or if you would like to participate and have your yield data cleaned, please email me at Jll347@cornell.edu or call 585-689-3423. I look forward to working with you!

Resources:

How and Why to Clean Corn Yield Monitor Data http://nmsp.cals.cornell.edu/publications/factsheets/factsheet107.pdf

Importance of Knowing Yield http://nmsp.cals.cornell.edu/publications/factsheets/factsheet111.pdf

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Remember To Check Out The NWNY Team Blog!

The blog will feature **Crop Alerts, Dairy Alerts, Bilingual (Spanish) Resources, Upcoming Events** and more from our team members. You can visit the blog at: https://blogs.cornell.edu/nwny-dairy-livestock-field-crops/

For more information about our program, visit us online at: https://nwnyteam.cce.cornell.edu/

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Inside This Issue

Economics of Growing Hemp for Cannabidiol (CBD) in NYS: Expected Costs, Revenues and Returns for Three Hemp CBD Production Systems, 2022

by J. Hanchar, S. Shelnutt, D. Vergara, L. Pashow, Cornell University/CALS & CCE

Summary

- Estimated variable costs of production per hemp plant equal $9.84, $9.64, and $4.42 for the greenhouse, high tunnel, and outdoor scenarios, respectively, while fixed costs per plant total $33.95, $9.36, and $0.26 for the three scenarios, respectively.
- Initial value of production (revenue) estimates equal $6 per plant, but value of production varies by output price and % point CBD per pound of plant material.
- Estimated returns above variable costs per plant equal negative $3.84, negative $3.64, and $1.78 for the greenhouse, high tunnel and outdoor hemp CBD production systems.

Acknowledgements

The project team thanks the following farm business owners for contributing time and valuable information.

A. Gandelman, Owner, CEO, Main Street Farms, President, New York Hemp Oil

J. Allyn, CEO, Tap Root Fields

P. Elfstrum, CE0, Wheatfield Gardens, LLC.

C. Devine and T. McDowell, Director of Labs & Product Development and COO, respectively, Bristol Extracts, Hemp Wellness Co.

Also, the project team acknowledges the valuable financial and other support provided by the New York Farm Viability Institute, Syracuse, NY.

Introduction

Currently in New York State (NYS), the economic viability of hemp production, processing, and marketing are subject to considerable risks and uncertainties – production, marketing, legal, human resources and financial (March 2022, Ag Focus). The NYS Office of Cannabis Management is working to establish the legal framework in which hemp industry firms will operate <https://cannabis.ny.gov/>

As risks and uncertainties are addressed, industry firms will evaluate hemp enterprises for viability. What are the conditions for entry or exit? What enterprises, at what sizes make sense? For farm business owners, information needed to best understand the situation, and make decisions include the expected costs of production for various enterprises – fiber, grain, CBD, multipurpose, and others.

The purpose of this work is to estimate expected costs, revenues and returns for three hemp CBD production systems in NYS. The work adds to previous analysis from NY <https://hemp.cals.cornell.edu/> and other states.

Methods and Data

The project team:

- Identified three hemp CBD production systems for analysis: 1) greenhouse; 2) high tunnel; 3) outdoor, land based, horticultural setting similar to tomatoes
- Established a time period for the analysis -- transplant operation (including the cost, expense paid for transplants) through plant material hung to dry
- Collected and summarized use information for variable and fixed inputs

Project team members provided information based upon completed and/or ongoing research. In addition, project team member Vergara gathered information from farm business owners regarding production and harvest practices, costs and outputs.

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Economics of Growing Hemp for Cannabidiol (CBD) in NYS Cont.

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Results

For the greenhouse production system, estimated value of production, variable input cost, total costs, and return above variable costs total $6.00, $9.84, $43.79 and negative $3.84, respectively. Sensitivity analysis suggests that 11 of 35 output price, % point CBD per pound of plant material combinations yield positive returns above variable costs per plant. For this and other sensitivity analyses, the percentage point CBD per pound of plant material ranged from 2 to 10, while the $ per % point CBD per pound of plant material ranged from $0.50 to $2.00 .

For the high tunnel production system, estimated value of production, total variable input cost, total cost, and return above variable costs total $6.00, $9.42, $18.78 and negative $3.42, respectively. Sensitivity analysis suggests that 11 of 35 output price, % point CBD per pound of plant material combinations yield positive returns above variable costs per plant.

For the outdoor production system, estimated value of production, total variable input cost, total cost, and return above variable costs total $6.00, $4.22, $4.48 and $1.78, respectively. Sensitivity analysis suggests that 23 of 35 output price, % point CBD per pound of plant material combinations yield positive returns above variable costs per plant.

Given methods and assumptions, estimates suggest that the outdoor setting generates the greatest return. However, a less favorable production risk and uncertainty environment likely is characteristic of the outdoor setting. Sampling and testing fees – heavy metals, pesticide residues, THC and others – can be substantial over a growing season. Uncertainty regarding how fees will be assessed adds to their importance. Depending upon testing specifics, the outdoor setting in some situations will spread costs over a considerably greater number of plants compared to other settings. Lastly, labor costs are substantial for all settings with estimates equaling $4.49, $4.42, and $2.32 per plant for the greenhouse, high tunnel, and outdoor settings, respectively. Availability of labor resources of sufficient quantities and skill levels can be uncertain. Managing human resources risks helps to mitigate risks.

For greater detail regarding this work please visit the team's blog at <https://blogs.cornell.edu/nwny-dairy-livestock-field-crops/>

Ask Extension: What is Ovine Progressive Pneumonia?

by Nancy Glazier

There are several lentiviruses that may infect sheep and goats. They can lead to chronic diseases that have significant economic impact on flocks or herds. Two closely related lentiviruses are Ovine Progressive Pneumonia (OPP) in sheep and Caprine Arthritis Encephalitis (CAE) in goats. Both diseases progress slowly, often with an animal not showing symptoms until two years of age. This article will provide an overview of OPP.

Infected animals may present with a laundry list of symptoms or no symptoms at all. Visible signs are primarily seen in the udder (hard bag), lungs (cough, labored breathing), body condition (wasting and failure to gain), joint swelling or lameness (less commonly seen), or poor wool quality in wool breeds. According to Cornell College of Veterinary Medicine the virus causes "chronic active lymphoid infiltration in one or more of the organ systems including lungs, central nervous system, mammary glands, and joints". Multiple systems may be affected in an animal or the flock.

Young lambs may do poorly due to low milk supply from the ewe having a firm udder or having poor body condition. Ewes may also birth only single lambs after carrying multiple lambs previously. Sometimes the ewes are culled from the flock and sold, which spreads the disease to another farm. Infected sheep may have breathing problems with pneumonia suspected and not respond to antibiotics.

The disease can spread through fluids such as coughing, which is how most cases are transmitted. According to the OPP Concerned Breeders Society (https://oppsociety.org) nursing accounts for 10-30% of the transmission cases. This is another example of the importance of biosecurity. Isolate sick sheep and quarantine new sheep brought to the farm. These animals need to be farther than a cough away from healthy animals, at least 10 feet or a solid wall. Fortunately, the virus is short-lived in the environment.

If you suspect the virus in your flock, it is critical to work with your veterinarian to develop testing protocols for your farm. Any death losses can be necropsied and the lungs, chest cavity lymph nodes, mammary tissues, and mammary lymph nodes examined. Sick animals can be tested via serology. Your vet can work with the Cornell Animal Diagnostic Center for frequency of testing and number of animals to test.

If animals test positive you will need to work with your vet to develop an eradication plan for your farm. Asymptomatic sheep can test positive and may shed the virus.

There are no treatments for OPP, though symptoms can be managed, and secondary infections can be treated. An aggressive approach is to test all animals and remove all positively infected animals from the flock. A conservative approach is to separate infected and noninfected animals. If ewes are productive, they can be kept in the segregated flock with lambs moved and bottle or group fed. It can take several years of testing and animal removal to achieve an OPP free flock. Maintain a closed herd by growing your own replacements or only purchase new animals from OPP negative flocks.

This is a brief overview of Ovine Progressive Pneumonia. For more information visit https://oppsociety.org.

The only sure way to know a flock is OPP negative is to test. Photo: Leith MacKenzie

Bedding Management: Focus on Recycled Manure Solids

by Kaitlyn Lutz

One of the many challenges that comes along with freezing temperatures is proper bedding management. This might be rather easy in the arid environment of Southern California, but cold overcast winters of New York can present a challenge. While bedding management systems vary widely across farms and there are no definitive rules, here are some findings from a few regional studies over the past decade.

In 2010, when RMS was becoming more popular as a cost-effective bedding option, the Cornell Waste Management Institute compared management techniques. Their case study included 6 farms with different manure solid separation systems and bedding frequencies.

A few conclusions from this study were:

1) Bedding characteristics (particle size) and bacterial levels were not seen to have an effect on SCC or number of mastitis events.
2) Season had a stronger effect on bacterial levels than bedding frequency. Higher coliform levels were seen in the summer and higher Streptococcal species were seen in the winter.
3) Surprisingly, pens with stalls bedded daily with RMS had lower dry matter and finer particle size than those bedded weekly. We generally correlate wetter and finer particles with mastitis, but they did not find that correlation and rather questioned the need for increased labor for daily bedding.

Another study (Husfeldt et al., 2012) of 38 midwestern dairies using recycled manure solids found that there was little correlation to bacterial count in bedding entering the stalls compared to used bedding. Most of the bacteria accumulating in stalls is due to fresh manure and stall management. As such, investing in employee training, management, and equipment to improve stall hygiene is a better use of resources than buying a drum composter. If I could tell you how many times I have farm employees asking for new scrapers during monthly meetings…

More recently, in 2020, a study was published in *Animal* by Robles et al investigating bacterial counts associated with different bedding types and management on 70 dairy farms in Ontario, Canada. Each farm was sampled once a week for three weeks from October to February. The average herd size was small compared to what we see in western NY at 100 head; however, the results are relevant to our climate and management systems. There was diversity in management style, with approximately half of the farms using a robotic milking system. Two thirds of the farms housed their cows in free-stalls and the other third in tie-stall barns.

When comparing bacterial counts in the bedding, there were significant differences. Unused RMS bedding had the highest level of strep species and straw had the highest level of gram-negative and Klebsiella species.

Farms using RMS had the highest bulk milk bacterial counts (BMBC), followed by wood products, straw and then sand. They also found that wetter bedding was associated with higher BMBC.

Interestingly, stall size was correlated with BMBC, with wider and longer stalls being associated with lower BMBC. I found this somewhat surprising since longer

A poorly bedded and maintained stall with moisture pooling at brisket board. Photo: K. Lutz/CCE NWNY Team

Well managed RMS deep bedded stalls. Harrison et al, 2008

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Bedding Management: Focus on Recycled Manure Solids

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stalls (measured in this study from neck rail to rear curb) are often thought to catch more manure and urine. The stall widths ranged from 41-48" inches and the stall length 65-122" in this study. Recommendations from the Dairyland Initiative for 1600 lb cows are 50" wide and 64" or 70" length for deep beds and mattresses, respectively. The authors found that farms with wider stalls also scraped beds more frequently, suggesting this as a possible explanation.

So, while correct stall sizing is important, it may not be easy to up and change your stall width. An easier starting point is to take an inventory of broken or twisted stall loops and torn mattresses. This came up in a recent farm visit I was doing with QMPS on a farm struggling with bacterial counts. The employees noted that the cows were much dirtier in the pens with poor pen maintenance because although they used the same amount of bedding, the cows were able to lie sideways and soil the stalls and holes in the mattresses pooled manure and urine.

If you have historically struggled with clinical mastitis, bulk tank SCC, or bacterial counts during the winter, don't forget about bedding management as part of the puzzle. Bedding cultures and dry matters are commonplace in our regional labs and your veterinarian or QMPS can help you correctly collect samples and interpret the results. Target dry matter for RMS is over 34%. Lastly, include bedding management in your next milker meeting to make sure that your employees understand the effect this has on milk quality and cow health! A bit of knowledge and some extra scrapers just may make a difference!

New York Labor Roadshow VI: November 9, 10, and 22

offered by New York's Ag Workforce Development Council

New York's Ag Workforce Development Council (AWDC) is organizing Labor Roadshow VI. The event heads back out on the road with the following stops (plus an online option):

- **November 9, 2022** - Genesee Community College-Batavia Campus, One College Road, Batavia, NY 14020-9704. Room T119 Lecture Hall, Conable Technology Building.
- **November 10, 2022** - Cayuga-Onondaga BOCES, 1879 West Genesee Street Rd, Auburn, NY 13021. Conference Room 1, 2, 3.
    - **Online Option -** On November 10, 2022 only, the event will be broadcast via Zoom for remote audiences and recorded for paid registrants to view later.
- **November 22, 2022** - CCE Saratoga Auditorium, 50 West High Street, Ballston Spa, NY 12020

Labor continues to be the primary challenge for many farm businesses and this event tackles those challenges head on with these topics:

- Attracting and retaining your farm workforce
- Management strategies in a union eligible work environment
- TN Visas: Introduction to the program and best practices for using
- The H-2A Program: Accessing guest workers for all types of farms
- Producer's real world experiences with H-2A
- Farm Safety: Real world tips for building a strong safety culture
- Farm-provided employee housing management and development

Full Agenda is available online, visit: https://agworkforce.cals.cornell.edu/labor-roadshow-v/

Link to Register for the New York Labor Roadshow VI

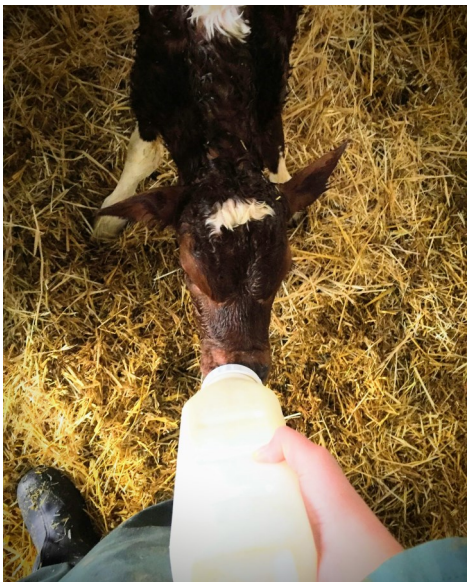
Colostrum in Short Supply… Why Might that be? by Margaret Quaassdorff

The fall is a typically a time when we start to see colostrum in short supply, but there are many factors associated with colostrum production and quality. To try to sort out some of these factors, researchers at Cornell University's veterinary school conducted a recent observational study. This field study looked at cow and dry-period nutrition and management strategies associated with colostrum production on 18 commercial farms in New York and analyzed over 18,000 cow records over one year of data collection.

In addition to colostrum records, environmental sensors were placed in the dry cow pen on each farm to collect temperature, light intensity, and temperature humidity index. Diets were also analyzed, but I may go more into that in another article.

Colostrum production is variable throughout the year, but is typically at its highest in the late spring and summer months of May, June, and July and decreases into the fall and winter months. This makes sense in nature as typically cows would calve in the spring and summer and feed their calves through to weaning in the fall. This doesn't really help us in the year-round calving style of the dairy world. Brix % readings (indicating quality) are lowest in the summer months, but increase in the fall and winter months. "Lowest" here does not mean poor, just lower than those readings in the winter. Why?…maybe it is just a simple dilution effect? Ok, but why less volume? An educated guess…heat stressed cows (cows that would be heavily pregnant in the hot summer months) give birth to smaller calves that are more inefficient and poorer at immunoglobulin absorption (Dahl et al., 2016). Could fall colostrum production and quality be a result of heat stress? (Cow heat stress measurements or cooling strategies were not recorded in the present field study).

Back to the Cornell field study. First calf heifers and mature cows produced more colostrum when giving birth to a bull calf or twins versus a heifer calf (Westhoff et al., unpublished). This may be more related to birth weight rather than sex. (If we think about the Dahl et al. study in 2016, I would like to see the birthweights of all calves in the fall/early winter, and compare to those from earlier in the year). The study also said that cows that have stillborn calves also produce less colostrum though there may be several reasons. The researchers guess that either the stress from a difficult calving (resulting from a stillbirth) could inhibit colostrum let-down, or possibly if the calf never developed properly, colostrum production may be limited earlier during the colostrogenesis phase (the time when the cow's body starts producing colostrum). Reasons for stillbirth were not recorded in the data, only that the calf was dead on arrival. Stillborn calves don't need colostrum, but this lost colostrum would have been great for live calves who could use a little extra. If you are having a lot of stillborn calves or hard calvings, it is worth looking into, not only from a colostrum supply point of view, but also for cow health and reproduction management choices.



Many factors affect colostrum production and quality. Identifying some of those factors will help ensure each calf receives quality colostrum in the quantity they need. Photo by M. Quaassdorff/CCE NWNY Team

According to the field study, cows that are entering their second or third lactation produce the highest yield of colostrum. However, Brix % typically increases linearly as lactation number increases. This is usually attributed to older cows having been exposed to more pathogens and a better developed immune system throughout their years. It is important to note that high quality colostrum can come from animals entering all lactations including 1st calf heifers. Therefore, it is important to test all of your colostrum, especially in times of the year when it is in lower supply, because a cow entering her first lactation could still make high quality colostrum (over 22% on the Brix scale). Don't assume the worst.

More research around dry period length and its effects on colostrum yield has been done where we see a longer dry-period associated with an increased yield (Maysari et al., 2015; Grusenmeyer et al., unpublished; Westhoff et al., unpublished); with 60 days providing more yield versus

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Colostrum in Short Supply… Why Might that Be?

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30 or 40 days dry. Quality of the colostrum measured by its IgG concentrations can be similar whether a cow is managed with a 30- or 60-day dry period (Maysari et al., 2015), but yield will suffer. Good things take time.

Colostrogenesis happens about 3-4 weeks before calving, so the research group started to measure light intensity around 3 weeks prior to calving, and found that in mature cows it was associated with an increase in colostrum yield, but not necessarily in IgG concentration. This conflicts with some other research where there was no difference in IgG or yield with increased light intensity (Morin et al., 2010). Cornell's research group concluded that more work needs to be done in the area of temperature humidity index as there are mixed results as to the effects of it on cow colostrum yield and quality.

In this observational study, days on a close-up diet was not associated with colostrum yield or Brix %, but in another study in 2017 by Farahani et al., 19-lb versus 15-lb yield was observed with a 21- vs 10-day close-up period, respectively. Remember that other management factors before calving like where the cows are housed, group changes and when they occur and how many times within a time period, along with stocking density could also affect cow behavior and colostrum production. Post-calving factors also apply, such as udder prep, oxytocin/cortisol balance, and harvest time. It is important to harvest colostrum within 9 hours of calving as the IgG concentration starts to become more diluted thereafter (Conneely et at. 2013). For this last one in particular, take a look at how many of your calvings are taking place overnight when no one is there to take her to the parlor.

Many management and environmental factors affect colostrum production and quality. Think of a few that you can identify with on your dairy. Are there changes that can be made to have a positive impact on yield or quality to help ensure that you have colostrum available when your calves need it?

What's Up with Some of These Poor-Quality Soybeans?

by Mike Stanyard

It has been a roller coaster for field crops in 2022. Drought conditions were evident over most of the NWNY region this summer. The Drought Monitor had us in the yellow (abnormally dry) most of the growing season and even areas of brown (D1 Drought) in lower Seneca County and where Genesee, Livingston and Wyoming Counties meet. Chest high tasseled corn and rolled soybeans were an unfortunate but common site. We did finally get some decent rainfall at the tail end of August and into September which really saved a lot of the soybean crop and perked up the corn.

Don't get me wrong, there were some areas of our region that crops looked good all summer. Heavier soils and reduced tillage helped, and some areas were blessed with rainfall when they needed it. Most of the early soybean yields look good and some of the Group 1 NY yield contest entries are fantastic. I have not seen any corn grain harvested here as of early October, but corn silage yields look decent for the conditions.

Let's talk soybeans. The Northeastern Regional Field Office of the National Ag Statistics Service (NASS) has predicted soybean yields at 50 bushels/acre in their October 1 estimate. They are also estimating the NY soybean crop as 16% Poor, 22% Fair, 32% Good and 30% Excellent as of October 3. So, you can see that there are plenty of Good to Excellent beans out there. However, I am receiving pictures of harvested soybeans that fall into the Poor to Fair range that are ugly. Why are some fields so bad and what caused it?

A lot of this starts with the drought stress this summer followed by a warm and wet September. I'm seeing more of this injury on the lighter soils that were hurt the most by the lack of rainfall. When we finally did get rain into September, the conditions (warm and wet) were perfect for a couple of late-season diseases to take hold. Severe yield reductions have been observed in infected fields this year.

Cercospora Leaf Blight (CLB) and Purple Seed Stain can be seen at low levels most years in NY. Cercospora infection causes upper leaves to turn a dark purple with a leathery appearance. I commonly see it late in the season (late August) and predominately on the outside edge of rows that get more sunlight and low wetter areas. Rain with high humidity and long dew periods favor this fungus. The fungus itself is not usually an economic factor and it is not recommended to spray for it in NY. However, the disease will infect and stain the seeds with mottled purple blotches. This does not affect the nutritional quality of the seeds, but the purple color will be undesirable for buyers who manufacture food products. If the percentage of purple seed is high enough, it may cause loads to be rejected or highly discounted.

Stem and Pod Blight and Phomopsis Seed Decay can usually be found at low levels in NY soybean fields particularly in wet lowlying areas. Like CLB, it is favored by warm wet conditions during the reproductive stages.

Signs of infection appear as rows of small black dots on the stem and pods as the plant nears maturity. Severe infection can result in premature plant death. Seeds infected with Phomopsis seed decay become shrunken, moldy and turn white. Disease severity usually becomes worse as harvest is delayed. Infection reduces seed quality, but no toxins are produced. To read more about these diseases visit the Crop Protection Network resource, https://crop-protection-network.s3.amazonaws.com/publications/cpn-1007-pod-and-stem-blight-and-phomopsis-seed-decay.pdf

Both Cercospora leaf blight and stem and pod blight overwinter in infected soybean residue and seeds. When conditions are favorable, they will grow from the residue and form spores that will spread throughout the canopy. Fungicides are usually not recommended for management, but cultural practices such as crop rotation (not planting continuous soybeans) and burying crop residue are helpful.

Phomopsis seed decay and purple seed stain in soybeans. Photo: Rick Padgham, Ontario County

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2011 KENWORTH T800 WATER TANKER TRUCK; Cummins 425 HP; w/9,225 Gallon Advance Steel Tank and Pump; 250" WB; 16K Front Axle; 46K Full Locking Rears on Hendrickson Air Ride; 4.30 Ratio; We Will Separate the Tank from the Chassis; 21' Frame Behind Cab; 172" CT; 48,978 Miles; Stk. # 6354 - **$58,900**

2007 PETERBILT 357; 475 HP CAT C15; 18-Spd Manual; Clean Daycab w/Tulsa Winch; 20K F/A; 46K Full Locking Rears; Chalmers Susp.; 224" WB; 496,503 Miles; Stk. #6241 - **$39,900**

2003 KENWORTH T800; 475 HP CAT C15 6NZ Turbo; 8LL Manual Trans.; Clean Daycab w/12,800# Front Axle; 46K Rears On KW 8-Bag Air Ride; 4.11 Ratio; 186" WB; Wetline; 447,898 Miles; Stk. #5925 - **$49,900**

2004 & 2003 PETERBILT 378 TRI-AXLE DUMP TRUCKS; 475 HP CAT C15 Single Turbo; 18-Spd. Manual; 20K F/A; 44K R/A; Air Trac Susp.; Double Frame; 21' Aluminum Box; Airlift Tag; 540,000 Miles; Stk. #6345/6346 - CALL FOR PRICE

1999 MACK RD688S DUMP TRUCK; 400 HP Mack E7; Engine Brake; 8LL Trans.; Rubber Block Susp.; Tri-Axle; 19' Steel Body; 20,000# F/A; 46,000# R/A; 22.5 Tires; 248" WB; Spoke Wheels; EXPORT PRICED!!!!; 777,148 Miles; Stk. #5902 - **$19,500**

2009 KENWORTH T800 FLATBED; CAT 335 HP; 10-Spd. Manual; Clean Double Frame Flatbed Truck w/Palfinger PK11001 Rear Mounted Knuckleboom; 42" Forks; 20K Front Axle; 44K Full Locking Rears on Neway Air Ride; 23' x 96" Aluminum Deck; 4.63 Ratio; 270" WB; 192" CT and 28' Frame Behind Cab; Flatbed & Knuckleboom Can Be Removed; 278,458 Miles; Stk. # 6308 - **$48,900**

2005 PETERBILT 357 6x6; Clean Double Frame 348" Flatbed Truck; CAT 350 HP; 8LL Trans.; 23K F/A; 46K Full Locking Rears; 425/65R22.5 Tires; Hendrickson Haulmaax Susp.; 5.65 Ratio; 288" WB; 218" CT; 30" Frame Behind Cab; Will Separate Bed From Chassis; 174,108 Miles; Stk. #5701 - **$49,900**

2005 KENWORTH T800 FLATBED; CAT 335 HP; Double Frame Flatbed Truck; 20K F/A; 44K Full Locking Rears; 21'6" x 96" Steel Deck; 5.29 ratio; 244" WB; Hendrickson Susp.; Flatbed Can Be Removed; 19' Frame Behind Cab; 162" CT; 12,584 Hours; 137,760 Miles; Stk. # 6323 - **$49,500**

2005 PETERBILT 357 CAB & CHASSIS; Cummins 370 HP; Engine Brakes; 8LL Manual Trans.; Quad-Axle w/Double Frame; 18K F/A; 44K Full Locking Rears; (2) 11K Steerable Lift Axles; Air Trac Susp.; 22' Frame Behind Cab; 212" CT; 302,500 Miles; Stk. #6331 - **$43,500**

2008 PETERBILT 367; Cummins ISX 485HP; Allison Auto. Trans.; Clean Single Frame Dump Truck w/15' Steel Body w/3' Sides and 1' Sideboards; Tarp; 14,300# F/A; 46K Locking Rears on Air Trac Susp.; 204" WB; Plumbed for Pup Trailer; Engine Had Complete Rebuild (Paperwork Included); 383,992 Miles; Stk. #6264 - **$62,900**

2008 PETERBILT 340 DUMP TRUCK; Paccar PX8 330 HP; 13-Spd. Manual; Double Frame; 19' Heated Steel Body; 20K Front Axle; 20K Lift; 46K Full Locking Rears; 246" WB; Tarp; 5.25 Ratio; Air-Trac Suspension; Hitch and Plumbed for Pup Trailer; 214,987 Miles; Stk. # 6342 - **$49,900**

2007 MACK CTP713; 370 HP Mack MP7; Clean, Low Hour Double Framed Feed Mixer Truck w/Supreme Int'l, Inc. 1400T Feed Mixer; Digi-Star EZ3400 Scale System; Allison Auto. Trans.; 20K F/A; 46,400# R/A; Camelback Susp.; 264" WB; 198" CT; 24'6" frame; 79,280 Miles; Stk. #6363 - **$104,900**

2010 WESTERN STAR 4900FA; Detroit Diesel Series 60 14.0L 495 HP; 18-Spd. Manual; Clean Fuel Tanker Truck w/3,550 Gal. Hannitt Steel Tank & Pump; 245" WB; 14,700# Front Axle; 44K Full Locking Rears on AirLiner Susp.; 3.90 Ratio; We Will Separate Tank from the Chassis; 20' Frame Behind Muffler; 158" CT; 223,505 Miles; Stk. # 6384 - **$53,900**

2007 MACK CTP713; Mack MP7 370 HP; 10-Spd.; Clean Cab & Chassis; 18K Front Axle; 46K Locking Rears; Air Ride Susp.; 270" WB; 172" CT; 21' Frame Behind Cab; 118,186 Miles; Stk. # 6369 - **$47,250**

2012 KENWORTH T400 FEED MIXER; 330 HP Paccar PX-8; Allison Auto. Trans.; Clean Double Frame Feed Mixer Truck w/Kuhn Knight Profeed 7011D Feed Mixer; Digi-Star EZ3600 Scale System; 18K F/A; 46K Locking Rears; Hendrickson HN Susp.; 244" WB; 176" CT; 23'3" Frame; 7.17 Ratio; 59,926 Miles; Stk. # 6364 - **$79,900**

2006 WESTERN STAR 4900 TANDEM TRI-DRIVE CRANE; 550 HP CAT C15; Double Frame; Tri-Drive; Twin Steer Truck w/Terex Stinger TM7571 Crane w/House; 37.5 Ton Capacity; 71' Reach; 36" Bunk; (4) Stabilizers; 36K F/A; 57K Triple Locking Rears; Fifth Wheel; 408" Bridge Measurement; 4.56 Ratio; 32.5 Ton Lift Block; 221,495 Miles; Stk. #6361 - **$72,900**

2004 KENWORTH W900; 335 HP CAT C10 Engine; 8LL Trans.; Cab & Chassis; 20K F/A; 46K Full Locking Rears; 252" WB; 21' Frame Behind Cab; 150" CT; 4.89 Ratio; Haulmaax Susp.; 118,703 Miles; Stk. #6075 - **$29,900**

2001 INTERNATIONAL 5600i 6x6 CRANE; 435 HP Cummins N14; 10-Spd. Manual; Double Frame; Pitman Hydra-Lift HL1580 7-Ton/ 65' Crane; 4-Outriggers; 20'x8'6" Flatbed; 20K F/A; 46K R/A; Hendrickson HN Susp.; 244" WB; 184" CT; 25'3" Frame Behind Cab; 158,174 Miles; Stk. #6299 - **$49,900**

$$$$$ WE BUY MACK, FREIGHTLINER, PETE, KENWORTH, Etc. TRUCKS and CAT, KOMATSU, CASE, HYUNDAI, IR, Etc. CONSTRUCTION EQUIPMENT for $$$$$

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Ag Energy NY Robbie Colville, Ag Energy NY Program Manager, CCE Tompkins County

Would you like to save on your farm energy bills? Farms are often full of opportunities to reduce energy use through efficiency measures that save money, labor and maintenance costs. Energy efficiency also helps buffer farms from volatile, high costs in energy market fluctuations. In addition to these benefits, farm energy efficiency is an important part of New York's Climate Leadership and Community Protection Act, reducing emissions and making it easier to transition to electric power and renewable energy. Energy inputs are required at every stage of farm production - from soil preparation and harvesting crops, to heating and lighting livestock housing. Farms can get substantial energy savings and enhance productivity through equipment maintenance, fine-tuning equipment and fertilizer rates, improving building efficiency, and installing high-efficiency motors or lighting when old equipment needs to be replaced.

What is Ag Energy NY?

Ag Energy NY is a program by Cornell Cooperative Extension, developing a resource hub to support farm energy efficiency in New York. AgEnergyNY.org includes mobile-friendly web pages and print-friendly factsheets to help farmers learn about potential energy use and savings specific to their farm sector. Ag Energy NY focuses on the following farm sectors: crops and vegetables, beef, swine, poultry, grain drying, maple, orchards, berries and vineyards. Ag Energy NY is part of a broader NYSERDA program, Energy Best Practices in Agriculture, which also provides support for dairy and greenhouse operations. Technology content for Ag Energy NY was developed by Daylight Savings Company based on their experience conducting agricultural energy audits in New York since 1991, along with review of technical references, peer-reviewed research, and industry standards. Other program content, such as web development and outreach materials are developed and reviewed by extension educators, NYSERDA staff and engineers with a focus on farm energy efficiency.

AG ENERGY NY

A Project of Cornell Cooperative Extension

After reviewing energy efficiency measures online, you can reach out to our team with questions and to connect with a NYSERDA FlexTech Consultant for farm-specific advising. NYSERDA offers no-cost, no-commitment energy assessments to help farmers prioritize areas for improvements and identify incentives to help with implementation. To get started, visit www.agenergyny.org.

Staffing and Organizing Your Team

Weekly Zoom discussions each Tuesday from November 15 through December 20, 2022 | 3:00pm - 4:00pm

Cornell Agricultural Workforce Development has opened registration for Managing Performance, a six-week course in the Supervisory Leadership Certificate program. Staffing and Organizing Your Team materials release November 9, 2022 and live weekly Zoom discussion will be held from 3 to 4 PM each Tuesday from November 15 through December 20, 2022. Participation in the live sessions is highly encouraged and provides a valued opportunity for peer-to-peer learning and networking. Registration is $275 and closes November 9. Continuing education credits are now available for this course and the Supervisory Leadership Certificate program. Course topics include:

- Develop job descriptions
- Learn how to find potential employees. Interview and select the right people.
- Implement new hire documentation, employment authorization, and onboarding: bringing new employees into the business successfully and productively.

Cornell Cooperative Extension
AGRICULTURAL WORKFORCE DEVELOPMENT

Registration link for **Staffing and Organizing Your Team** Agricultural Supervisory Leadership Course

Program overview link for the **Agricultural Supervisory Leadership certificate** program

Cornell Cooperative Extension of Livingston County
NWNY Dairy, Livestock & Field Crops Team
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Mount Morris, NY 14510

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>> UPCOMING EVENTS <<

November 2022

NY Labor Roadshow IV: **November 9, 10 and 22** from 8:30am - 4:00pm at various locations and an online option. See page 10 for details. Register online at: https://agworkforce.cals.cornell.edu/labor-roadshow-v/

Feeder School - **November 10, 2022** from 10:00am - 3:00pm at Old Acres Farm in Perry, NY. Offered in both English and Spanish. Cost is $50 per person. Register online at: https://nwnyteam.cce.cornell.edu/events.php

Feeder School - **November 11, 2022** from 10:00am - 3:00pm at Bonna Terra Farm in West Bloomfield, NY. Offered in both English and Spanish. Cost is $50 per person. Register online at: https://nwnyteam.cce.cornell.edu/events.php

December 2022

Dairy Day - **December 6, 2022** from 9:30am - 1:30pm at Terry Hills Golf Course and Banquet Facility. The NWNY Team will be bringing the latest in dairy research to you with this one day in-person event. More information coming soon!

January 2023

Save the Date: Corn Congress - **January 5, 2023** at the Quality Inn & Suites, Batavia, NY. More Details Coming Soon.

Save the Date: Corn Congress - **January 6, 2023** at the Quality Inn, Waterloo, NY. More Details Coming Soon.

February 2023

Save the Date: Soybean & Small Grains Congress - **February 15, 2023** at the Quality Inn & Suites, Batavia, NY. More Details Coming Soon.

Save the Date: Soybean & Small Grains Congress - **February 16, 2023** at the Quality Inn, Waterloo, NY. More Details Coming Soon.