WEEKLY CROP UPDATE
UNIVERSITY OF DELAWARE COOPERATIVE EXTENSION

Volume 25, Issue 17 **July 21, 2017**

Vegetable Crops

Importance of Leaf Cover in Fruiting Vegetables

– *Gordon Johnson, Extension Vegetable & Fruit Specialist;* gcjohn@udel.edu

July is the month that we see the highest temperatures and often have cloud free, high light intensity days and long day lengths. Under these conditions, good leaf cover is essential for producing high quality fruits. Lack of leaf cover will expose fruits to high levels of radiation and cause excessive heating of the fruit surface. This can lead to a variety of disorders including sunburn, sunscald, fruit yellowing, fruit cracking, and shriveled fruit.

Lack of leaf cover often occurs due to storm damage where high winds or hail damage leaves. After damaging storms, attempts should be made to promote new leaf cover as quickly as possible by sidedressing or fertigating with nitrogen fertilizer and by irrigating.

A second, temporary loss of leaf cover occurs during hot periods when plants are allowed to wilt. Just a few hours without cover under high heat and light can cause severe damage to fruits. This is most severe in dark colored fruit such as peppers and cucumbers. Irrigation management is critical to limit fruit damage due to wilting.

Lack of leaf cover can also be due to lack of plant vigor and poor plant growth which may have a variety of causes such as underfertilization, deficiencies, water stress, wet soil, compacted soil, hot soil conditions or other soil, water, or fertility related issues. Finding the root cause will be critical to address and correct these growth limiting factors and improve leaf cover.

Diseases that reduce leaf production, attack leaves, or cause wilting can reduce leaf cover and lead to fruit disorders. Leaf feeding insects can also contribute to leaf area losses. Protecting plants against expected diseases and insects along with scouting for signs of infections or infestations is critical to maintain canopies. Air pollution damage can also cause losses of leaf cover in sensitive crops and varieties.

Staking and pruning practices are also important to manage leaf cover. Excessive pruning of tomatoes can expose fruits to excess radiation leading to fruit damage. Single or double stem training systems, as are often used in greenhouses and high tunnels, are at most risk. Staking peppers has been shown to reduce fruit damage by maintaining leaf cover over developing pepper fruit.

One common problem in high radiation exposure conditions and lack of leaf cover is sunburn. We commonly see sunburn in watermelons, tomatoes, peppers, eggplants, cucumbers, apples, strawberries, and brambles (raspberries and blackberries).

There are three types of sunburn which may have effects on the fruits. The first, sunburn necrosis, is where skin, peel, or fruit tissue dies on the sun exposed side of the fruit. Cell membrane integrity is lost in this type of sunburn and cells start leaking their contents. The critical fruit tissue temperature for sunburn

necrosis varies with type of fruit. Research has shown that the fruit skin temperature threshold for sunburn necrosis is 100 to 104˚F for cucumbers; 105 to 108˚F for peppers, and 125 to 127˚F for apples. Fruits with sunburn necrosis are not marketable. Injury may be white to brown in color.

The second type of sunburn injury is sunburn browning. This sunburn does not cause tissue death but does cause loss of pigmentation resulting in a yellow, bronze, or brown spot on the sun exposed side of the fruit. Cells remain alive, cell membranes retain their integrity, cells do not leak, but pigments such as chlorophyll, carotenes, and xanthophylls are denatured or destroyed. This type of sunburn browning occurs at a temperature about 5˚F lower than sunburn necrosis (i.e. 115 to 120˚F in apples). Light is required for sunburn browning. Fruits may be marketable but will be a lower grade.

The third type of sunburn is photooxidative sunburn. This is where shaded fruit are suddenly exposed to sunlight as might occur with late pruning, after storms where leaf cover is suddenly lost, or when vines are turned in drive rows. In this type of sunburn, the fruits will become photobleached by the excess light because the fruit is not acclimatized to high light levels, and fruit tissue will die. This bleaching will occur at much lower fruit temperatures than the other types of sunburn. Damaged tissue is often white in color.

Sunburn necrosis on pepper.

Photooxidative sunburn on pepper.

Fruit yellowing in cucumber due to loss of chlorophyll with exposure due to inadequate leaf cover.

Grasshoppers in Vegetables – *Jerry Brust, IPM Vegetable Specialist, University of Maryland*; jbrust@umd.edu

This season keeps with the weird and unusual with reports of grasshoppers causing damage in many vegetables. I thought this was just an unfortunate farm in southern Maryland that was having problems with them, but I have gotten calls from growers in central and northern Maryland as well as the Eastern shore about grasshoppers. There are many grasshopper

species, some of the more common ones are: the American grasshopper *Schistocerca Americana*, Differential grasshopper *Melanoplus differentialis* and the Carolina grasshopper *Dissosteira carolina*. Normally I would expect some movement out of grain fields into meadows and along right-of-ways in July with more movement into vegetables in August. The August movement is due to everything often drying up and the only green lush growth available is vegetables and to a lesser extent soybeans. But as this has been a good year for mites, leafhoppers (which are still a problem in places) and hornworms it is also a good year for grasshoppers. Normally we just let the grasshoppers go as they usually move in and out of fields rather quickly. However on some farms they have taken up residence in some odd vegetables such as cantaloupe (Fig. 1) and peppers and need to be treated. Pyrethroids are probably the best control, but these should be sprayed in late evenings and even at night to avoid bee kills as most of our vegetables are in flower now. Organically there is not much that actually does any good; some of the baits that can be used work best on smaller (younger) grasshoppers, but poorly on adults.

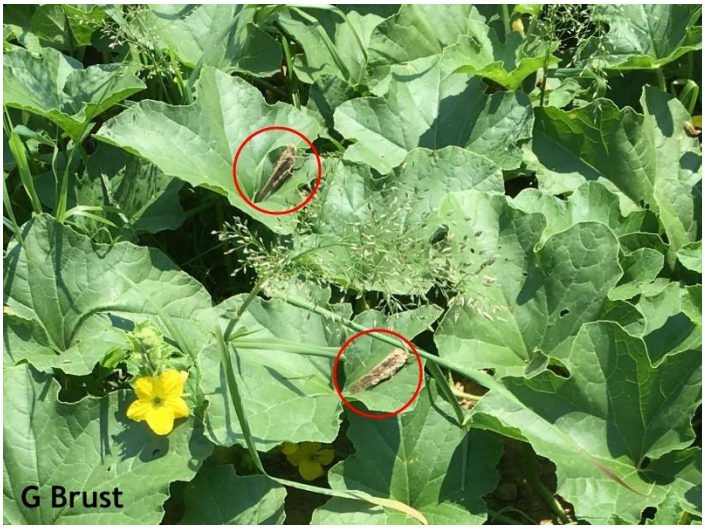


Figure 1. Grasshoppers in cantaloupe

Tomato Fruit Set Problems – *Jerry Brust, IPM Vegetable Specialist, University of Maryland*; jbrust@umd.edu

In tomatoes I am seeing reduced fruit set with few fruit on some flower clusters. In Figure 1 there was the possibility of nine tomato fruit developing on these two clusters, but only one third of that made it to viable fruit. This has to do with poor pollination and fertilization of the tomato flowers due to heat or other stresses (disease, field flooding, insect feeding damage, poor plant fertilization, etc.). Not much can be done about it now other than to keep the plant well-watered and free of foliar disease. If the flower/fruit abortion is severe, as it is in some cultivars, something that can be done earlier in July or late June is to use a 30% shade cloth over the tomato plants (Fig. 2). Using shade cloth after the first fruit clusters form can increase marketable yields by 30-50% depending on the season and cultivar.

Figure 1. Two fruit clusters with only 3 out of a possible 9 fruit developing.

Figure 2. Shade cloth over some tomatoes

Using the Maine Winter Grow-Out for Identification of Potato Seed Lots Suspected to be Affected by *Dickeya* -

Steve Johnson, Crops Specialist, University of Maine; stevenj@maine.edu

The Maine winter grow-out test (Florida Test) consists of a 400-tuber sample of each seed lot (larger than 1 acre in size). These are planted and evaluated for virus levels to ensure the levels present are within established certification tolerances. Plant emergence is also recorded. It is these plant emergence data that have potential for determining problem seed lots. Data from 2012 to 2015 were used to develop an algorithm to identify seed lots with high potential for *Dickeya* contamination.

Identifying seed lots with high potential for *Dickeya* contamination

Trace back in 2015 confirmed that seed lots with 25 percent or less emergence (100 or fewer emerged out of 400 planted) in the winter grow-out test have performed poorly when planted commercially. While nonemergence is not a symptom limited to *Dickeya*-infected seed, there is the high association with *Dickeya* presence in fields planted to these poor-performing seed lots. A 25 percent, or less, emergence is proposed for identification of seed lots with potentially high levels of *Dickeya* contamination. Seed lots with 25 percent or less emergence should be voluntarily flushed from the seed program, as there is a serious emergence problem with the lots.

Identifying seed lots that precurse those lots with potentially high levels of *Dickeya* contamination

Where more than half of the seed lots within a variety are over 75% germination (300 out of 400 plants emerged), 50 is subtracted from the mean number of emerged seed. Seed lots with emergence values less than the calculated mean minus 50 should be voluntarily flushed from the seed program, as there is a serious emergence problem with the lots.

Where less than half of the seed lots within a variety are less than 75% germination (300 out of 400 plants emerged) but more than half of the seed lots are over 50% emergence (200 out of 400 plants), 25 is subtracted from the mean number of emerged seed. Seed lots with emergence values less than the calculated mean minus 25 should be voluntarily flushed from the seed program, as there is a serious emergence problem with the lots.

Similar to above, if less than half of the seed lots within a variety have less than 50% germination (200 out of 400 plants emerged), subtract 12.5 from the mean number of emerged seed to identify seed lots that should be voluntarily flushed from the seed program.

This year's post-harvest grow-out data can be found at under the heading "2016-2017 Post-Harvest Test Book": http://www.maine.gov/DACF/php/seed_potato/index.shtml

Example for 2017 planting, Norwis variety:

From the link for the variety Norwis, there are 26 published emergences for seed lots greater than 1 A:

156	96	175	175	85
153	184	236	60	209
223	126	205	90	
132	120	200	220	
120	373	368	193	
174	200	357	188	

The mean emergence is 185 (out of 400) or 46%.

Four seed lots have less than 25% emergence (less than 100 out of 400) and are indicative of seed lots with potentially high levels of *Dickeya* contamination. These are candidates for voluntarily removal from the seed system.

Six seed lots have emergence values less than the calculated mean minus 25 (185-25 = 160) and are candidates for voluntarily removal from the seed system.

Example for 2017 planting, Reba variety:

From the link for the variety Reba, there are 13 published emergences for seed lots greater than 1 A:

390	400	177	380	160
350	375	380	330	390
375	325	380		

The mean emergence is 339 (out of 400) or 85%.

Two seed lots have emergence values less than the calculated mean minus 50 (339-50=289) and are candidates for voluntarily removal from the seed system.

Example for 2017 planting, Dark Red Norland variety:
From the link for the variety Dark Red Norland, there are 54 published emergences for seed lots greater than 1 A:

400	369	374	400	377
400	377	376	400	180
364	385	400	372	380
352	225	400	369	380
357	400	400	390	380
338	359	375	370	346
375	390	400	371	380
390	370	390	210	379
307	377	370	400	371
237	356	400	360	395
210	379	400	369	360
400	363			

The mean emergence is 363 (out of 400) or 91%.

Five seed lots have emergence values less than the calculated mean minus 50 (362-50=312) and are candidates for voluntarily removal from the seed system.

Agronomic Crops

Agronomic Crop Insects – *Bill Cissel, Extension Agent – Integrated Pest Management*; bcissel@udel.edu

Alfalfa
Continue to sample alfalfa for potato leafhoppers. Sample weekly starting seven days after cutting until final harvest. Ten sweep net samples should be taken in 10 random locations throughout the field when the alfalfa is dry. The threshold for alfalfa 3" or less is 20 leafhoppers per 100 sweeps, 4-6" tall is 50 per 100 sweeps, 7-10" tall is 100 per 100 sweeps and greater than 11" is 150 per 100 sweeps. If the field is more than 60 percent bud stage or if it has experienced "hopper burn", the alfalfa should be cut instead of sprayed.

For more information on the identification, biology, and management of potato leafhoppers, please review our fact sheet: http://extension.udel.edu/factsheets/potato-leafhopper-control-in-alfalfa/

Here is a link to our Insect Control in Alfalfa Recommendations (pure stands only): https://cdn.extension.udel.edu/wp-content/uploads/2012/05/18063238/Insect-Control-in-Alfalfa-final-for-2017.pdf

Here is a Youtube video discussing how to sample for potato leafhoppers: https://youtu.be/7ybclcNu2rA

Soybeans
Two-spotted spider mite populations are increasing in some fields. Despite the recent rain, Two-spotted spider mite (TSM) populations continue to increase. Scout for TSM by examining the underside of 5 leaflets in 10 locations for mites, noting the presence of mite eggs and the amount of leaf damage. The threshold for TSM during bloom to podfill is 20-30 mites per leaflet and 10% of plants with 1/3 or more leaf area damaged.

Concentrate scouting efforts on field edges for initial detection, especially edges bordered by grass and road ditches (it's not unusual to also find hot spots in the interior portions of the field). TSM typically develop on grasses and other plants on field borders before ballooning into fields. Once TSM are detected, scout the interior portions of the field to determine if they have spread throughout the entire field. If only concentrated on field edges, spot treating may

be an option. If spot treating on field edges, extend the treated area about 100 feet further into the field from the damaged area.

A hand lens is necessary when scouting for spider mites to see mite eggs and nymphs. Here is a short Youtube video demonstrating how to use a hand lens: https://youtu.be/lFz004Wl28E

Here is a link to our Soybean Insecticide Recommendations for chemical control options: https://cdn.extension.udel.edu/wp-content/uploads/2012/05/18063934/Insect-Control-in-Soybeans-2017-final.pdf

Also note that in 2016, two miticides were registered for use on soybeans; Zeal SC, (Valent U.S.A Corporation) and Agri-Mek SC, (Syngenta Crop Protection, LLC). These are the only labeled formulations of these products. Please consult the label for rates, additional restrictions, and adjuvant requirements.

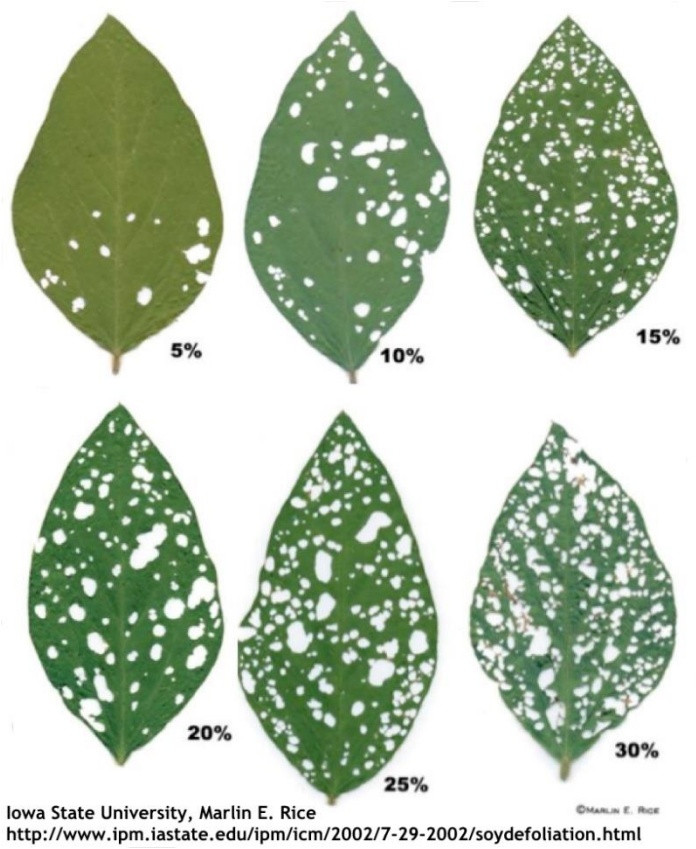
Zeal SC Supplemental Label for use on soybean: http://www.cdms.net/ldat/ldCCK003.pdf

Agri-Mek SC Label: http://www.cdms.net/ldat/ld9NL020.pdf

Continue to scout for defoliating insects. Continue to scout soybeans for defoliators including grasshoppers, bean leaf beetles, Japanese beetles, and green clover worms.

During reproductive growth stages (Bloom-Podfill), the threshold is 15% defoliation. Prior to blooming, the threshold is 30% defoliation. When estimating defoliation, randomly select leaves from the entire plant, not just the newest growth or leaves with the greatest amount of defoliation.

Here is an image to help in estimating the amount of defoliation:



Right on time, Dectes stem borer adults are beginning to emerge and can be found in soybean fields throughout the state. Dectes stem borers started showing up in soybean fields throughout the state and can be seen "hanging out" on leaves and easily captured with a sweep net.

Adult Dectes stem borer

Check out this week's Guess the Pest for information on the Dectes stem borer.

Plan to Attend the Maryland Commodity Classic on Thursday, July 27 - *Jarrod O. Miller, Extension Educator, Somerset County, MD*; jarrod@umd.edu

Farmers are invited to attend the **Maryland Commodity Classic** on Thursday, July 27, 2017, at Queen Anne's County 4-H Park. Hosted by the Maryland Grain Producers Association, Maryland Soybean Board, Maryland Grain Producers Utilization Board, and Mid-Atlantic Soybean Association, the annual meeting is the premier event for grain farmers in the region.

"This year's classic offers farmers a great opportunity to get the latest on farm research and current industry topics, from both the state and national levels," states Dr. Bob Kratochvil, Maryland Commodity Classic chairperson.

Starting at 9:30 a.m., you can learn first-hand how your grain and soybean checkoff dollars have supported research by hearing four research presentations in the air-conditioned Main Hall. Topics and speakers will be:

2017 Agronomic & Economic Evaluation of Prominent Varieties Recommended by Local Seed Dealers with Maryland State Variety Trials
Dr. Jason Wight, University of Maryland, Trials Coordinator.

Impact of Repeated Use of Neonicotinoid Treated Seed in Grain Crop Rotations on Non-Target Invertebrates & Soil Microbes
Dr. Kelly Hamby, University of Maryland Extension Entomologist.

Determining the Ideal Irrigation Strategy for High Intensity Corn Production
Mr. James Adkins, University of Delaware, Irrigation Specialist.

Evaluation of Nitrogen Rate and Fungicide Use on Wheat Yield and Quality
Dr. Nathan Kleczewski, University of Delaware Crop Pathologist and Dr. Bob Kratochvil, University of Maryland, Extension Agronomist.

After attending the research presentations, stop by the Exhibit Building to see exhibits and informational displays that present the latest innovations in technology, research and equipment.

The afternoon program begins at 1:00 p.m. and will include awarding college scholarships and a National Leaders Panel featuring four national farm organization leaders who call Maryland or Delaware their home. The afternoon program also features keynote speaker, Stephen Neidenbach, who will present ***"We Love GMOs and Vaccines . . . Biotech for a Brighter Tomorrow***." Neidenbach is a science teacher who combats misinformation and promotes science-based information on agricultural biotechnology.

The Classic will conclude with the famed Crab Feast, Pork and Chicken Barbecue. Event tickets are $10 before 2:30 p.m. and $20 after 2:30 p.m. No entry is permitted after 3:30 p.m. For more information, call 443-262-8491 or email lindsay@gmail.com.

General

Guess the Pest! – *Bill Cissel, Extension Agent – Integrated Pest Management*; bcissel@udel.edu

Congratulations to Mark Sultenfuss (Week #14 winner) and Mike Webb (Week #15 winner) for accurately identifying the pest as Dectes stem borer. Mark and Mike will not only have their name entered into the end of season raffle for $100 gift card not once but five times, they will also receive a FREE copy of A Farmer's Guide to Corn Diseases. Click on the Guess the Pest logo below to participate in this week's Guess the Pest! Guessing correctly will automatically enter you into a raffle for $100 gift card at the end of the season and one lucky winner will also be selected to have their name entered into the raffle five times. For Guess the Pest # 16, we will also be giving away A Farmer's Guide To Corn Diseases ($29.95 value) to one lucky participant.

http://www.plantmanagementnetwork.org/book/cornfarmersguide/

Guess the Pest Week #14/15 Answer:
Dectes stem borer

Adult Dectes stem borer

Dectes stem borer adults are starting to show up in soybean fields throughout the state. The adult beetle is a long horned beetle, approximately 3/8" in length, grey, with long antennae that are banded black and grey. Adult beetles begin emerging in late June and are present in soybean fields until mid-August. Female beetles lay a single egg into the pith tissue of a soybean plant by chewing a hole into the plant's epidermis and inserting her ovipositor into the plant.

Ovipositioning scar

Once the egg hatches, the larva tunnels up and down the inside of the plant, feeding on the pith tissue. If the egg is laid in the stem of a petiole, the petiole will wilt and drop from the plant when the larva tunnels into the main stem of the plant. This is sometimes referred to as "flagging".

Wilted petiole (flagging)

Once in the main stem of the plant, the larva will continue traveling up and down the inside of the soybean plant, feeding on the pith tissue. Once the plant begins to senesce, as early as late September, the larva will create a chamber to overwinter in by girdling the inside of the soybean stem several inches above the soil surface and depositing a frass plug immediately below the girdled area of the stem. Dectes stem borers overwinter as larvae, pupate in early summer and adults begin emerging in late-June, completing the life cycle.

Dectes stem borer larva in the "overwintering chamber" it created inside the soybean stem.

The overwintering behavior of Dectes stem borer larvae makes plants prone to lodging. Under heavy infestations and when harvest is delayed, lodging losses can be as much as 15 bushels per acre. Physiological losses due to the tunneling activity of the larvae during the growing season has been difficult to document but research has suggested that losses could be as high as seven percent.

Lodged Plant due to the overwintering habit of Dectes stem borer larvae

Plant lodging due to Dectes stem borer

There is not an established threshold for Dectes stem borer adults. However, sweep net sampling can be used from late June through mid-August to identify fields with adult infestations. Plants can also be visually inspected for ovipositioning scars and wilted petioles to identify fields with potential larval infestations.

To confirm that a plant is infested with a Dectes stem borer larva and to determine the risk for lodging losses, cut the plant lengthwise with a pocket knife, looking for larva and or feeding damage. This can be done as early as mid-September. Knowing if a field is infested with Dectes stem borers and the severity of the infestation is important because lodging losses can be minimized by timely harvest.

Insecticide applications, both foliar and at planting, have not been successful in significantly reducing larval infestations. Only the adult beetles can be targeted because the eggs are laid directly into the plant and the larvae never leave the host plant. We have been able to achieve temporary reductions of adult beetle populations with foliar insecticide applications; however, because the adult emergence occurs over a large window, fields can quickly become re-infested. We have had mixed results with multiple insecticide applications because it is not only difficult to time the applications, but it also is generally not economical.

Some cultural control practices that can reduce the risk of yield loss from Dectes stem borer include:

• **Early/timely harvest:** Scouting for Dectes stem borer adults and larvae can identify fields at risk and used to schedule harvest.

• **Crop rotation:** For this to be successful, a field would need to be isolated from other fields or would require an area wide adoption since the beetles can easily fly from their overwintering locations to neighboring soybean fields.

• **Fall plowing:** Research has indicated that plowing 2-3" deep can result in 60-70% reduction of beetle emergence in the summer. This would also likely need to be adopted area wide to have significant impacts.

• **Weed control:** Dectes stem borers also use some weeds as host plants including giant ragweed, common cocklebur, and wild sunflowers. Weed control within and around the perimeter of fields is also important.

• **Row spacing:** There are no differences in the severity of an infestation or number of lodged plants. However, in fields planted in narrow rows (7-15") lodging losses may be reduced because the lodged plants are held up to some degree by the surrounding plants.

• **Variety selection:** Experience in Delaware suggests that lodging loss is typically more severe in shorter season varieties (Group II, II and early IV's). Larvae will infest most varieties; however, some are more prone to lodging, especially in drought conditions.

Here is a link to our Dectes Stem Borer Management in Soybeans Fact Sheet: http://extension.udel.edu/factsheets/dectes-stem-borer-management-in-soybeans/

We are currently investigating what role plant populations can play in increasing stem diameter (strength) to reduce lodging losses from Dectes sem borers while maintaining yield potential under irrigated and non-irrigated soybean production. This research is being conducted at the University of Delaware's Warrington Farm and is funded by the Delaware Soybean Board.

Guess the Pest Week #16

Name this insect?

To submit your guess click the Guess the Pest logo below or go to: https://docs.google.com/forms/d/e/1FAIpQLSfUPYLZnTRsol46hXmgqj8fvt5f8-JI0eEUHb3QJaNDLG_4kg/viewform?c=0&w=1

Announcements

2017 Dickeya and Pectobacterium Summit

November 9, 2017

University of Maine staff are working to address Dickeya, a recent and potentially "devastating bacterial disease in Maine seed potatoes." Projects are being conducted in Maine and in collaboration with colleagues in other states. We have been successful in pursuing funding opportunities and hope to have news soon on additional pending grants.

Some of the efforts include:

• Chemical control of Enterobacteria
• Identifying seed lots with Enterobacteria
• Enterobacteria spread and epidemiological studies
• Enterobacteria identification
• Enterobacteria pathogenicity
• Enterobacteria levels in a seed lots related to stand loss
• Movement of Enterobacteria in a seed system
• Postharvest test for the presence of • Enterobacteria

Results from these studies will be presented at the 2017 Dickeya and Pectobacterium Summit November 9, 2017. The summit will be your chance to hear about improvements in the dormant tuber post-harvest test, among other topics.

For interest, please see a bulletin #482 entitled: "Factors Affecting Potato Blackleg and Seed Piece Decay."

The Introduction has this sentence:

"State potato seed certification officials discriminate against the presence of blackleg and many buyers refuse to purchase seed stocks known to have even a small percentage of the disease."

By the way, the bulletin was from 67 years ago, May 1950.

To register for this meeting and for additional information go to:
https://extension.umaine.edu/agriculture/programs/dickeya-and-pectobacterium-summit/

Cover Crops, Soil Health and On Farm Research

Thursday, August 10

Two Educational Programs are scheduled for August 10. In the morning there will be program on cover crops and soil health sponsored by the Sussex County Conservation District with University of Delaware and Delaware State University. In the afternoon, there will be a session on conducting on-farm research. More details will be provide in future newsletters, but this early notice is provided so you can mark your calendars.

Whole Farm Revenue Protection (WFRP) Workshop

Tuesday, August 22, 2017 9:00 a.m.-12:00 noon
University of Delaware
Carvel Research & Education Center
16483 County Seat Highway, Georgetown, DE

An emerging insurance product, Whole Farm Revenue Protection (WRFP), is now available throughout the U.S. In many cases, **WFRP can provide more actual income protection at a reduced premium cost**.

This workshop will include an introduction to WFRP. Every farm family should have someone in attendance to get an overview of how the Whole Farm coverage concept works.

Details are still being arranged. Save the date and watch future Weekly Crop Updates for further details. In the meantime, contact Laurie Wolinski at 302-831-258 or LGW@udel.edu.

Cut Flower Tour on the Eastern Shore

Tuesday, September 12, 2017

Save the Date! Details coming later this summer.

Organized by University of Maryland

2017 UD/DNLA Summer Hort Expo

Tuesday, August 15
University of Delaware Botanic Gardens
Newark, Delaware

UD/DNLA's 2017 Summer Turf & Nursery Expo will be held Tuesday, August 15, 2017 at the University of Delaware Botanic Gardens Newark, Delaware.

For more information or to register - http://www.dnlaonline.org or contact Valann Budischak at (888) 448-1203 or info@DNLAonline.org

The Delaware Nursery & Landscape Association (DNLA) is a non-profit association of green industry professionals.

Laurel Auction Market Tour

Wednesday, August 2, 2017 8:30 a.m.
10667 Georgetown Road
Laurel, DE 19956

A morning visit to the Laurel Auction Market in Laurel, DE to learn more about the process of selling through the market. Please join us at 8:30 a.m. at 10667 Georgetown Road, Laurel, DE for a tour of the market, to learn how sales take place, see baskets and other items for sale at the market to the public.

If you are interested in join us for this tour, contact Tammy Schirmer, tammys@udel.edu or 302-856-7303.

Weather Summary

Carvel Research and Education Center Georgetown, DE

Week of July 13 to July 19, 2017

Readings Taken from Midnight to Midnight

Rainfall:

1.29 inch: July 14
0.04 inch: July 15
0.01 inch: July 19

Air Temperature:

Highs ranged from 95°F on July 13 to 84˚F on July 17.

Lows ranged from 79˚F on July 13 to 66˚F on July 16.

Soil Temperature:

83.1˚F average

Additional Delaware weather data is available at http://deos.udel.edu/

Weekly Crop Update is compiled and edited by Emmalea Ernest, Associate Scientist - Vegetable Crops with assistance from Don Seifrit.