

VegNet

The Vegetable and Fruit Crops Teams Newsletter

<http://vegnet.osu.edu>

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OSU South Centers Field Update

From Thom Harker, Research Assistant OSU South Centers

There is a lot going on in the research plots this week despite the rains. Hop vines were removed in the quarter-acre hop yard. This is common practice in hop yards, the first shoots of the season are called bull shoots. Bull shoots are hollow vines which aren't suitable for training up the hop yard trellis. Weekly fertigation of both matted-row and plasticulture strawberries continues. We took the first strawberry harvest of the season; this is the earliest we have ever harvested plasticulture strawberries in our 15 years of conducting field research on plasticulture berries. The matted-row strawberries are at 10 to 20 percent bloom. Fungicide applications are being applied on a 7-10 day schedule. Some varieties of fall planted malting barley are starting to head out. (article continued on the next page)



A. Fertilizer injector

OSU South Centers Field Update Continued...



A



B



C

- A. Ripe strawberries in plasticulture
- B. Matted row strawberries
- C. Malting Barley

Calibrate your sprayer now—Here is an easy way to do it

From Erdal Ozkan, Professor and Extension Agricultural Engineer, The Ohio State University

Spraying season is just around the corner. Now is the time to pay attention to your sprayer. First, check all the components of the sprayer to make sure they are in working order. The next step in preparations for the season is to calibrate the sprayer. The only way you can achieve maximum accuracy from a sprayer is by calibrating it once before the spraying season starts, and recalibrating it frequently throughout the spraying season. While applying too little pesticide may result in ineffective pest control, too much pesticide wastes money, may damage the crop, and increases the potential risk of contaminating ground water and environment. The primary goal with calibration is to determine the actual rate of application in gallons per acre, then to make adjustments if the difference between the actual rate and the intended rate is greater or less than 5% of the intended rate. This is a recommended guideline by USEPA and USDA. Before starting calibration, make sure you have a good set of nozzles on the sprayer. Nozzles wear off through extended use, causing over application, or some nozzles may become plugged. Clean all the plugged nozzles. Check the output of all the nozzles for a given length of time at a given spray pressure. Compare output from each nozzle's output with the expected output shown in the nozzle catalog for that nozzle at the same pressure. Replace the nozzles showing an output error of more than 10% of the output of the new nozzle. Once you do this, now you are ready to calibrate your sprayer.

Calibrating a boom sprayer is not as difficult as it sounds. There are several ways to calibrate a sprayer. Regardless of which method you choose, only three things are needed: a timer (or watch or smart phone timer app) showing seconds, a measuring tape, and a jar graduated in ounces. Here, I will describe perhaps the easiest of all the methods to calibrate a sprayer. (article continued on the next page)

Calibrate your sprayer now—Here is an easy way to do it

To calibrate a boom sprayer for broadcast applications using this method, follow these steps:

1. Fill the sprayer tank (at least half full) with water.
2. Run the sprayer, inspect it for leaks, and make sure all vital parts function properly.
3. Measure the distance in inches between the nozzles.
4. Measure an appropriate travel distance in the field based on this nozzle spacing. The appropriate distances for different nozzle spacing is as follows: 408 ft. for a 10-inch spacing, 272 ft. for a 15-inch spacing, 204 ft. for 20-inch spacing, 136 ft. for a 30-inch spacing, and 102 ft. for a 40-inch spacing.
5. Drive through the measured distance in the field at your normal spraying speed, and record the travel time in seconds. Repeat this procedure and average the two measurements.
6. With the sprayer parked, run the sprayer at the same pressure level and catch the output from each nozzle in a measuring jar for the travel time required in step 5 above.
7. Calculate the average nozzle output by adding the individual outputs and then dividing by the number of nozzles tested. The final average nozzle output in ounces you get is equal to the application rate in gallons per acre. For example, if you catch 15 ounces from a set of nozzles, the actual application rate of the sprayer is equal to 15 gallons per acre.
8. Compare the actual application rate with the recommended or intended rate. If the actual rate is more than 5 percent higher or lower than the recommended or intended rate, you must make adjustments in either the spray pressure or the travel speed or in both. For example, to increase the flow rate you will need to either slow down, or increase the spray pressure. The opposite is true when you need to reduce the application rate. As you make these changes, stay within proper and safe operating condition of the sprayer. Remember increased pressure will result in increasing the number of small, drift-prone droplets.
9. Repeat steps 5-8 above until the recommended application error of +5% or less is achieved.

Strip Tillage and Grafting in Vegetable Production Results from 2015 and New Study in 2016

From Zheng Wang, Postdoctoral Researcher, Department of Horticulture and Crop Science, The Ohio State University

In 2015, we compared a “flat-bed” strip tillage approach with different cover crops to a standard “raised-bed” approach with cover crops or plastic in producing tomatoes and peppers at OARDC in Wooster. The study was supported by The Ohio Vegetable & Small Fruit Research & Development Program (OVSFRDP), the OSU Center for Applied Plant Sciences (CAPS), and the USDA-SCRI program. Yield data from each treatment were analyzed and a final report was submitted to the OVSFRDP. Briefly, 1) tomato fruit yield and fruit number were similar between plastic-raised plots and strip-till plots, but total and marketable fruit number and yield were greater in plots with dead compared to living mulch; 2) pepper data were more affected by system as marketable fruit number and yield values in strip-till plots tended to be 25% of those in plastic-raised plots; and 3) for both crops, the harvest at which yield was greatest occurred later in strip-till than plastic-raised plots. (article continued on the next page)



A. Tomato grown in strip tillage with dead residue and living mulch after the last harvest in 2015.

Photo by Zheng Wang

Strip Tillage and Grafting in Vegetable Production Results from 2015 and New Study in 2016

Cool soils, competition with living mulches (if used), and nutrient deficiencies are associated with strip tillage approaches in vegetable production and are some of the reasons why they are not used as often as standard, plastic-covered raised beds, which have their own limitations (e.g., need for plastic and intense soil disturbance).

Grafting takes advantage of the superior root systems of rootstock varieties. So, in 2016, we will test whether strip tillage systems can be made more productive using grafted plants. With OVSFRDP, CAPS, and USDA support, we will place grafted and ungrafted tomato plants into strip-till and no-till plots at OARDC in Wooster. The field was sown with winter wheat in Fall 2015. Tomato scion 'BHN 589' was grafted onto three different but commonly-used tomato rootstocks (Estamino, SuperNatural, and Maxifort) in mid-April, 2016. The field will be prepared in early May and we expect to transplant grafted and ungrafted tomatoes soon thereafter.

Check 2015 Vegnet Newsletters (April 20, June 15, and August 10) for more information, and contact me (wang.2735@osu.edu), Dr. Matt Kleinhenz (kleinhenz.1@osu.edu), or Jennifer Moyseenko (moyseenko.2@osu.edu) for further updates.



B. Pepper grown in strip tillage with dead residue and living mulch after the last harvest in 2015

C. Field to be used in 2016 is currently covered with winter wheat

D. Grafted tomato seedlings are healing in the healing chamber

Photos by Zheng Wang

SUMMER *field* tour & day



SAVE THE DATE!

Quarry Hill Orchards
8403 Mason Rd
Berlin Heights, Ohio

June 22, 2016

Established in 1931, **Quarry Hill Orchards** is a family-owned farm in the rolling hills of Berlin Heights, Ohio. At the heart of every Quarry Hill harvest lives a strong bond with the land and our customers. We're passionate about cultivating quality fruit and meaningful relationships, inspiring people to enjoy fresh, wholesome tastes that spark engaging conversations and memorable experiences.

Join us!

...in the field!

...at the tradeshow!

...with *yummy* food trucks!

...for *fun*, live music!

Research Enhancing Fall-to-Spring High Value Leafy Vegetable Production

From Susie Walden, Sonia Walker and Matt Kleinhenz, Department of Horticulture and Crop Science, The Ohio State University

Growing and selling leafy vegetable crops, including lettuce, fall-to-spring is increasingly important to more and more growers. Demand for locally-grown and freshly-harvested leafy vegetables September to May (actually, year-round) is strong. As a result, traditional views of fall-to-spring as the time to suspend sales are being replaced by the recognition that they can be lucrative, as long as products are appealing in terms of price, appearance, taste/flavor, potential nutritional value, and other factors.

Achieving yield and quality targets fall-to-spring is difficult because growing conditions change significantly and can be extreme. We are investigating ways to help growers be more effective fall-to-spring, especially when they use high- or mid-tunnels. Updates on this research are available anytime; additional articles will be included in VegNet, and summaries will be shared in presentations and plot tours and at our website and Facebook. Please call or email us if you want more information. An example of what is available is below.

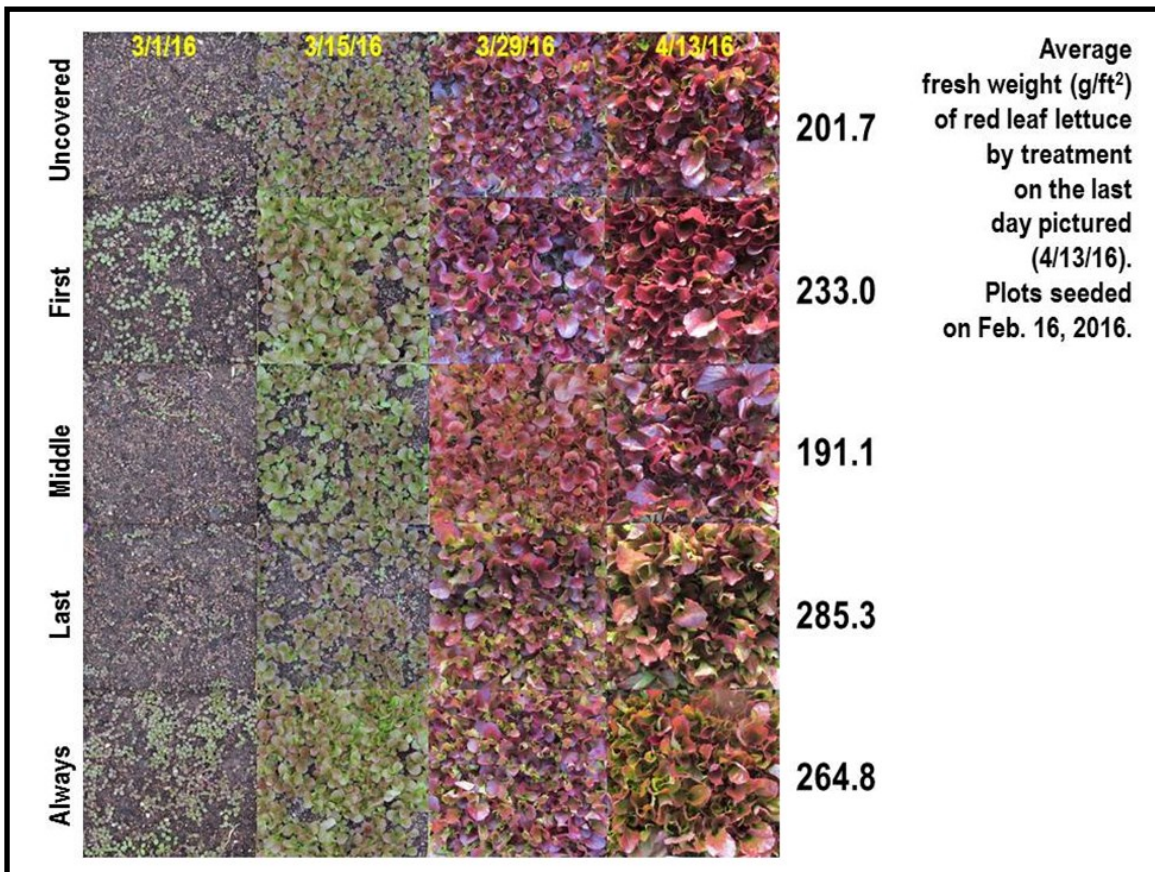
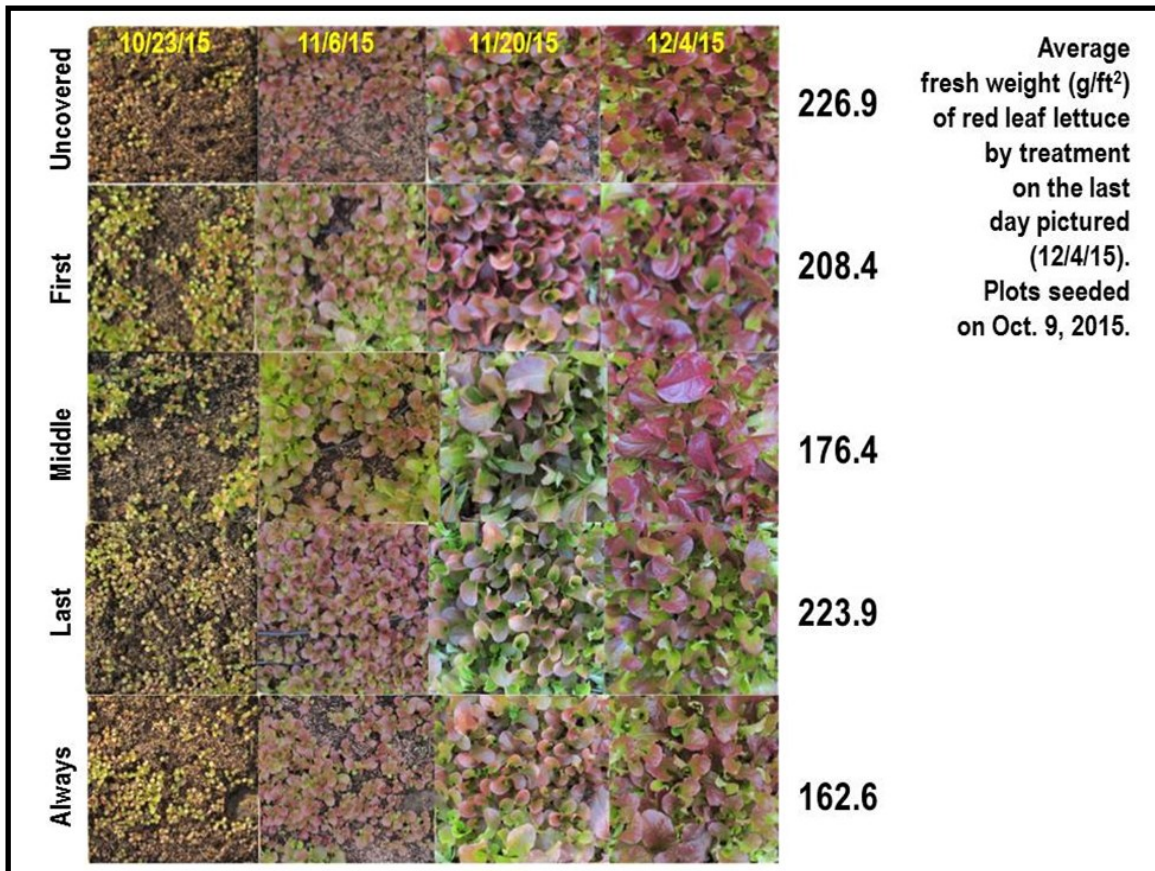
We seeded (360 seed/sq. ft.) 'Outredgeous' lettuce and 'Red Pac' choy in a single-layer, unheated, 30 ft. x 80 ft. high tunnel at OARDC on October 9, 2015 and February 16, 2016. The tunnel contains twenty, 4 ft. x 12 ft. wood-framed raised beds and half of each bed was seeded to each crop on each day. The crops were grown for eight weeks and harvested and evaluated four times between seeding and final harvest (i.e., Oct. 9-Dec. 4, 2015 and Feb 16-Apr 13, 2016). More important, individual beds were covered with a 1.1 mil vented film for four weeks between seeding and final harvest but at different times during that period. One set of beds (control) was never covered. Four other sets of beds were covered for either: a) the first four weeks after seeding, b) the middle four weeks between seeding and final harvest, c) the last four weeks before final harvest, or d) from seeding to final harvest. All covers were put in place over standard low tunnel hoops.

The appearance and yield of the lettuce at different points in the eight-week growth period are shown in the pictures on the following page. Each column is labeled with the date the pictures were taken. Each row is labeled with the experimental treatment (when the cover was in place). The numbers to the right of each row represent the average yield (grams/sq. ft.) of the treatment the date the picture was taken. Note the different color and amount of leaf mass by seeding and picture date. Similar trends were noted in the choy, although treatment effects on color were slightly less dramatic.

Why is color important? It is often the first criterion a buyer uses to assess product quality AND it is related to a key component of a food's potential nutritional value. In short, where there is color (especially blue, purple, red, yellow, orange, pink), there is antioxidant capacity. Where there is antioxidant capacity, there can also be health benefits. That said, historically, growers have often had to choose to either increase yield (biomass) or enhance color (visual appeal, potential nutritional value). Overall, this research is designed to help eliminate the need to choose between these two goals. We partner with growers to develop methods offering high yield and quality. Brix was also measured on these crops and will be reported another time. **(article continued on the next page)**

Contact Matt Kleinhenz (ph. 330.263.3810; kleinhenz.1@osu.edu) for more information.

Research Enhancing Fall-to-Spring High Value Leafy Vegetable Production Continued...



Photos by Susie Walden

VegNet

Urban Agriculture-Focus on Dayton

From Jim Jasinski, Department of Extension, IPM Program Coordinator

Urban Agriculture is the production, processing, and distribution of vegetables, fruits, herbs, etc. in or around an urban area, and has seen considerable growth in cities such as Cleveland, Columbus, Cincinnati, and Dayton.

While many urban agriculture projects exist in Dayton, this article will highlight the recent activities at the site of an abandoned factory in downtown. Several years ago, students, community members, and leaders began growing vegetables in plastic barrels and a handful of elevated raised beds in the parking lot of an abandoned factory to sell to local residents and businesses. Like many start-up projects, The Urban Renewal Farm (TURF), lacked capacity to build infrastructure to satisfy the demand for fresh produce in the area.

The IPM Program became involved with this urban farm in 2016, and on April 16th, along with a dozen TURF members and volunteers, helped build 15 raised beds covering 720 sq. ft., more than doubling their previous production footprint. In addition to helping build infrastructure, the IPM Program is also conducting basic pest management training with the members and volunteers working on the farm.

Upcoming projects at the farm include planting the beds to various vegetable crops and installing a solar powered pump to run drip irrigation throughout the raised beds.

If you are in the Dayton area and want to volunteer or visit the farm, contact James Bongey, farm manager (jbongey@turfdayton.org).



A. Logistics, materials, and staging area for project.

B. Raised bed assembly.

C. More raised bed assembly.

D. Ten of the 15 raised beds complete.

Photos by Jim Jasinski

Southern Ohio Vegetable and Fruit Update

From Brad Bergefurd, OSU Extension Educator and Horticulture Specialist, OSU Extension Scioto County and OSU South Centers

Field work continued in full swing with plowing, bed shaping, plastic laying, fertilizer and compost applications, pre-emergent herbicide applications, burn down herbicides applied, apple trees planted, asparagus harvest and planting in the field until storms approached on Tuesday April 26, 2016 with areas receiving $\frac{1}{2}$ to 5 inches of rain throughout the region. The South Solon and Jeffersonville areas reported the highest rainfall amounts and golf ball-sized hail. Near the Bainbridge Produce Auction, cherry-sized hail was reported on April 26, with $\frac{3}{4}$ to 1 inch of rainfall. Apples and peaches continue to be pruned with late apple varieties at full bloom and petal fall. Hop plantings are being fertigated, bull shoots and freeze damaged bines are being hand-removed, strings are being dropped and new bines are being trained. New planting of hops are being made and new high trellis systems are being installed. Deer fence continues to be repaired and new fence is being erected on several fruit and vegetable farms. Plasticulture strawberry harvest has begun at Piketon with very high quality and size. Matted row strawberries are at 50 to 60% bloom and bloom fungicides are being applied. Field planting of tomatoes, red beets, radishes, lettuce, onions, sweet corn, beans, potatoes, and cabbage is in full swing. Growth regulator type of herbicide drift injury has been reported in orchards and high tunnels this week. Floating row covers and hoops have been installed on tomato plantings.

(article continued on the next page)



A. Apples are at full bloom and petal fall this week. Photos by Paige's Produce

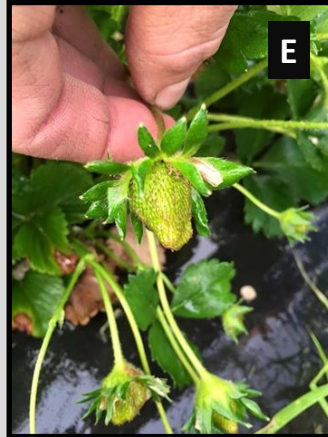
B. Where sprinkler protection was deployed during freeze events, the peach crop is looking fantastic. Photo by Paige's Produce

C. & D. Transplanting of all crops was in full swing until storms entered the area on April 25 and 26. Photos by Brad Bergefurd and Paige's Produce

Southern Ohio Vegetable and Fruit Update Continued...



E



E



E



F



G



H

- E. Plasticulture strawberry harvest began at Piketon this week with high quality fruit being harvested and a great fruit set being reported throughout the area. Photos by Thom Harker and Jones Produce Farm
- F. With night temperatures in the low 40's, hoops and floating row covers have been applied to newly planted tomatoes. Photo by Brad Bergefurd
- G. Raised beds and plastic mulch continues to be laid. Photos by Brad Bergefurd
- H. Sweet onions continue to be planted. Photo by Brad Bergefurd

(photos continued on the next page)

Southern Ohio Vegetable and Fruit Update Continued...



- I. Field work and planting was almost non-stop until storms rolled through southern Ohio April 25 and 26.
 - J. High-tunnel tomatoes are sizing up nicely with visual differences between grafted (left) and non-grafted (right) tomato plants in continuous tomato tunnels being reported J. Plastic planted sweet corn had to be slit April 24th through the 26th when air temperatures exceeded 80 degrees.
 - K. Plastic planted sweet corn had to be slit April 24th through the 26th when air temperatures exceeded 80 degrees
 - L. Transplanting of all crops was in full swing until storms entered the area on April 25 and 26.
- Photos by Brad Bergefurd and Paige's Produce

What Should You Do With Fruit and Vegetables After Pesticide Drift?

From John Masiunas, University of Illinois

It seems that the pesticide drift injury season has begun on Ohio fruit and vegetable crops earlier this year. This week I have received several reports of herbicide injury-like symptoms on high tunnel tomatoes and tree fruit. A common question County Educators get is "What should I do with the crop if it was injured by herbicide drift"? In last week's VEGNET, Jared Shaffer with the Ohio Department of Agriculture alerted us to the Ohio Sensitive Crop Registry and in his article he also stated "A pesticide application that damages or contaminates nearby property, including plants and bees, is not only a violation of Ohio regulations, but can be a very costly mistake for all parties. Certified Organic farms can be put out of business for three years or more if their fields are exposed to pesticides."

In this article from 2012, Dr. John Masiunas from the University of Illinois addressed the issue of what to do when vegetable or fruit crops are injured from pesticide drift. Even though Dr. Masiunas references Illinois Department of Agriculture, our Ohio Department of Agriculture performs the same analysis. However, the timing of this analysis is very important for accurate lab detection. If you suspect a pesticide drift incident or have questions about the use or application of a pesticide, please contact the Ohio Department of Agriculture (phone number: 614-728-6987), or <http://www.agri.ohio.gov/apps/odaprs/pestfert-prs-index.aspx>.

A common question that we get after a garden, vegetable field, or orchard is damaged by pesticide drift is whether or not it is "safe" to harvest and consume the produce. This is a very difficult question to answer. Re-entry time and worker protection information on the pesticide label will provide guidance on when the garden, field, or orchard can be re-entered, but it provides no information about the residue that might be on or within the produce. To answer conclusively the question about whether or not it is "safe" to harvest and consume the produce requires knowledge of the pesticide involved, the amount of residues within the plant, the health effects of the pesticide, how the harvested part of the plant has changed, and laws regulating pesticides.

When herbicide drift damages your plants, it is an indication that the herbicide has entered the plant. To legally sell the produce, there has to have been an established tolerance for the particular herbicide causing the injury. Some herbicides such as glyphosate (active ingredient in Roundup, Touchdown and others) are used for spot or stale seedbed treatments in a wide range of fruit and vegetable crops. These herbicides have established tolerances (Table 1). Other herbicides do not have an established tolerance for most fruit and vegetable crops. If the concentration of the herbicide in your fruit or vegetable is above the established tolerance or there is no tolerance, then

you have a tainted crop that is illegal to sell and is subject to seizure. The website to check for tolerances is: www.epa.gov/pesticides/food/viewtols.htm. (continued on the next page)

Table 1. Examples of some tolerances for herbicide residues in apple and tomato fruit.

| Apple | | Tomato | |
|-----------|-----------------|-----------|-----------------|
| Herbicide | Tolerance (ppm) | Herbicide | Tolerance (ppm) |
| Casoran | 0.50 | Dacthal | 1.0 |
| 2,4-D | 5.0 | Dual | 0.1 |
| Gramoxone | 0.05 | Poast | 24 |
| Karmex | 1.0 | Sandea | 0.05 |
| Liberty | 0.05 | Select | 1.0 |
| | | Sencor | 0.1 |

What Should You Do With Fruit and Vegetables After Pesticide Drift Continued...

Tolerances are not the only factor that should go into your decision on whether or not to sell or consume produce. The U.S. EPA tolerance levels are the best scientific information we have, but you or your customers may not trust that information completely, and if your customers have heard of the drift problem, selling affected produce may damage your farm's reputation. Concentrations detected by analyzing selected plant tissues, usually leaves, may have little relationship to the concentrations of herbicide occurring in the harvested portion of the plant, often the fruit. Because there are so many unknowns, I advise not consuming the fruit or vegetable when visible herbicide injury occurs to the plant. Herbicide drift can kill flowers and damage fruit and leaves. The damage makes the harvested fruit or vegetable unsightly and may affect storage life and taste. Instead of trying to use the fruit or leaves from damaged plants, I recommend that gardeners purchase locally grown produce at a farmers market or roadside stand.

If you are interested in harvesting some undamaged fruit or vegetables from a garden or field with areas having drift damage, get as much information as possible. What herbicide(s) drifted? Many herbicides that commonly cause drift injury are absorbed by the leaves and translocate to the growing points, fruit, and seed where they concentrate. Some herbicides such as 2,4-D degrade in plants, others such as glyphosate degrade only slightly in plant tissues. Over time, the herbicide concentration in the plant may be diluted due to plant growth and herbicide loss in dead shoot and root tissue.

I feel that having the fruits or vegetables analyzed for herbicide residue is critical to making an informed decision in herbicide drift situations. Several private laboratories will analyze plant tissues for herbicide residues for a fee; that fee can be several hundred dollars per herbicide per sample. Talk to the applicator who caused the drift problem; they may be willing to pay for the analysis. Some manufacturers will analyze plant tissues for their products. The Illinois Department of Agriculture, as part of a pesticide misuse investigation, will collect plant samples and test for herbicide residues. For the Illinois Department of Agriculture to be involved, you must file a formal written complaint alleging herbicide misapplication. Contact the Illinois Department of Agriculture as soon as possible after discovering herbicide injury. In Pennsylvania, pesticide misuse complaints are filed with the Pennsylvania Department of Agriculture's Bureau of Plant Industry: http://www.agriculture.state.pa.us/portal/server.pt/gateway/PTARGS_0_2_24476_10297_0_43/AgWebsite/OrganizationDetail.aspx?name=Bureau-of-Plant-Industry&navid=34&parentnavid=0&orgid=22&.

In addition, whoever collects samples for residue analysis must collect them correctly and in a timely manner for it to be useful for you in the decision making process. If the harvested part is present, collect that tissue. If fruit are not present, then collect samples of recently formed leaves and the shoot tips. Translocated herbicides will concentrate in those tissues. Ask that fruit samples be collected later to help you in deciding whether or not to sell or consume the fruit. Make sure that samples are collected from the crop plants showing injury and as close as possible to the site of herbicide application. (continued on the next page)



A. Herbicide drift on tomatoes
Photo by Brad Bergefurd

What Should You Do With Fruit and Vegetables After Pesticide Drift Continued...

What does information of herbicide residue concentrations tell you? Sometimes it may not tell you much. Obviously, the lower the herbicide concentration, the better, and a concentration below an established tolerance is better than one above, but there are no clear-cut answers. Low or no residues can mean a variety of things. The herbicide may be absent from the parts you wish to harvest and eat, or the herbicide concentration may be below the limits of detection for the equipment or procedure being used. Another possibility is that your sampling procedure was not careful enough to find fruit or vegetables with residues, and the herbicide may have degraded between the time of the drift and when you sampled (or during sampling, handling, shipping, or storage). Be conservative in how you interpret the residue information.

If herbicide residues are detected, the scientific literature suggests that for the concentrations likely to occur from drift and subsequent absorption into fruits and vegetables, acute poisoning effects are very unlikely. Questions about the possible chronic effects (including cancer, the endpoint that is always debated in questions about pesticide safety) from multiple exposures from repeated incidents of herbicide drift, along with many other routes of exposure, remain the subject of research.

John Masiunas, (217-244-4469, masiunas@uiuc.edu); Illinois Fruit and Vegetable News
June, 2012



B. Several reports of possible herbicide drift injury were reported this week on orchards and high tunnel tomatoes. Photos by Brad Bergefurd

OHIO AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER
OHIO STATE UNIVERSITY EXTENSION

High Tunnel Integrated Pest Management Training

OSU Waterman Agricultural & Natural Resources Farm

Hosted by Brad Bergefurd & OSU EIPM



June 1, 2016

Topics include:

High tunnel basic and advanced IPM techniques & tools, insect management and identification, plant grafting, disease management, anaerobic soil disinfestation for disease control, spotted wing drosophila management

High Tunnel Tour:

The tour will consist of OSU research facility tunnel, and various local farm locations.

Registration Deadline

Thursday, May 26, 2016
To register email
Charissa Gardner at
Gardner.1148@osu.edu

Wittmeyer Conference
Room
2490 Carmack Road
Columbus, Ohio 45661

For the agenda and more
information go to
go.osu.edu/hightunneltraining2016

Cost: \$35.00* per person

*the cost includes: breakfast, lunch, snacks, educational handouts, tours of various tunnels, high tunnel manual, & flash drive with presentations

Space for participating in this training is very limited.



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OHIO AGRICULTURAL RESEARCH AND DEVELOPMENT CENTER
OHIO STATE UNIVERSITY EXTENSION

Strawberry Field Night

At OSU South Centers

Hosted by Brad Bergefurd

Wednesday,

May 25, 2016

5:30 — 8:30 P.M.

Location: OSU South Centers
1864 Shyville Rd., Piketon, OH

Cost: \$20.00 per person

(Includes handouts and dinner served from 5:30 to 6:00)

To Register:

You must register

Contact Charissa Gardner at

Gardner.1148@osu.edu

740.289.2071 ext. 132

DEADLINE to Register:

May 23, 2016

For more information go to

<http://go.osu.edu/strawberryfieldnight2016>



Plasticulture and matted row strawberry field research will be showcased

Topics to be covered will include:

- winter protection techniques
- israeli drip irrigation demonstration and management
- fertigation and nitrogen management
- row cover management
- June bearing, day-neutral, ever-bearing cultivar evaluations
- pest and disease control
- integrated Pest Management (IPM) techniques
- petiole sap analysis demonstration



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OHIO STATE UNIVERSITY EXTENSION, SANDUSKY COUNTY NORTH CENTRAL AGRICULTURAL RESEARCH STATION

OSU Vegetable Workshop Series

Join the staff at the North Central Ag Research Station near Fremont and OSU Extension on the 2nd Thursday of each month, April through October for catered breakfast, industry updates, and in-depth tips, tricks, and information from researchers to help make your 2016 growing season a profitable one! Attend when the topic suits you, or come each month and stick around after the speaker to view the OARDC field trials or network with peers and industry reps.

2nd Thursday: April – Oct.

"Bring your plant disease and insect samples for identification and same day delivery to the OARDC lab, free of charge!"

7:00 a.m. Breakfast

with OSU and industry updates

7:30 a.m. Featured speaker

8:00 a.m. Field walk / networking

Held at NCARS office, No rsvp, No cost!

For more information contact:

Allen Gahler, OSU Extension Sandusky County
419-334-6340
gahler.2@osu.edu

Matt Hofelich, North Central Ag Research Station
419-332-5142
hofelich.4@osu.edu

April 14: *New Fungicide Strategies with Orondis*
Dr. Sally Miller, OSU/OARDC Plant Pathologist

May 12: *Scouting Cucurbits with drones*
Jim Jasinski, OSU IPM Coordinator

June 9: *Alternative Crop Enterprises – Is Malting Barley an option for you?*
Dr. Eric Stockinger, OSU/OARDC Department of Horticulture & Crop Science

July 14: *The OSU Food Safety Program – what it can do for you*
Dr. Beth Scheckelhoff,
Extension Educator – Greenhouse Systems

Aug. 11: *Sweet Corn Evaluation, field walk, and taste it for yourself*
Mike Gastier, Extension Educator – Huron County

Sept. 8: *Pepper Evaluation and field walk*
– Bells, Bananas, Jalapenos
Allen Gahler, Extension Educator – Sandusky County

Oct. 13: *Soil Health and Water Quality - How does it affect me?*
A look at edge of field studies and NCARS water samples
Libby Dayton, OSU Soil Scientist



THE OHIO STATE UNIVERSITY

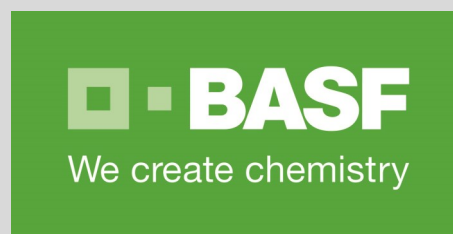
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Bayer CropScience





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VegNet Newsletter

COLLEGE OF FOOD, AGRICULTURAL, AND ENVIRONMENTAL SCIENCES

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Submit Articles:

To submit an article to the VegNet newsletter please send the article and any photos to Charissa Gardner at gardner.1148@osu.edu. For questions regarding the newsletter contact **Brad Bergefurd** at bergefurd.1@osu.edu or call 740.289.2071 ext.132

About the editor

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Bergefurd is an Extension Educator, Agriculture and Horticulture Specialist with Ohio State University Extension, with statewide responsibilities for outreach and research to the agriculture and commercial fruit and vegetable industries Brad has offices at the OSU Piketon Research & Extension Center in Piketon and at OSU Extension Scioto County in Portsmouth.



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