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ABCs of GAPs By Shari Plimpton, Food Safety Educator - Ohio Specialty Crop Food Safety Initiative

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The other day I paid a visit to a farm to work with a couple of growers on their Food Safety Program. These two gentlemen had attended the OFVGFS workshop and were indeed aware of the latest food safety information offered by the USDA, FSIS, FDA, CFSAN, CDC, National GAPs Program, OSCFS initiative, MAAHS, CIFT/EISC, and OSU's ABE Center. These men had listened carefully as we discussed GAPs, GHPs, SOPs, and SSOPs, as well as, GMPs, CFRs, HACCP, pH, ORP, UV and the ABC's. In the daily course of running their operation, they also were aware of labor, health and safety requirements from the FD&C Act, NRCS, CREES, U.S. EPA, and OSHA. Sure, they were informed and making a voluntary effort to bring their operation in line with buyer expectations. They were preparing for a third party audit. They just couldn't understand what the heck I was talking about.

In my role as a Food Safety Educator, I focus on GAPs, GHPs, GMPs, SOPs, SSOP's, CFRs, QA, QC and HAACP daily, so it becomes a habit for me to throw these letters around as if they were words used in everyday conversations. I am consistently aware of the time limits all of us face as we struggle to make a living in this world, so I tend to err on the side of speaking in shorthand to speed things along. Unfortunately, people start to feel confused and overwhelmed, silently wondering why I'm showering them with bowls of alphabet soup.

And yet, no one likes to waste time, least of all growers; so I thought it might be helpful if I made a list of these acronyms along with their definitions. Many of these acronyms (i.e. GMPs and HACCP) apply only if you are processing fruit and/or vegetables. A lot of them you already know, yet there may be a few that slipped by too quickly to remember, so here they are:

ABCs - You know - the alphabet song! For those who haven't heard, this is what you want to teach your workers to sing (silently is ok) while they wash hands to assure that they have scrubbed for twenty seconds and effectively removed microorganisms.

ABE Center - Agriculture Business Enhancement Center. Where you will find Mary Donnell, the Ohio Collaborator for the Good Agricultural Practices Project and Education Coordinator for the Ohio Specialty Crop Food Safety Initiative.

CDC - Center for Disease Control. People who work to track and overcome diseases. If we do our part, maybe we can here a little less from them.

CFRs - Code of Federal Regulations. These are the regulations that apply to processed foods.

CIFT - Center for Innovative Food Technology. Where I, a Food Safety Educator, work.

CFSAN - Center for Food Safety and Nutrition. A division of the FDA.

CREES - Cooperative State Research, Education, and Extension Services.

FDA - Food and Drug Administration. The agency that is charged with implementing the FD&C Act.

FD&C Act - Food, Drug and Cosmetic Act. The law from which certain food regulations have been developed.

FSIS - Food Safety Inspection Service. As most know this is part of USDA.

GAPs - Good Agricultural Practices. Recommended (not regulated) agricultural practices developed to help growers maintain a safe operation.

GHPs - Good Handling Practices. Recommended (not regulated) handling practices developed to maintain safety and sanitation of fruit and vegetables during storage and transportation.

GMPs - Good Manufacturing Practices. A set of regulations that define the practices a manufacturer of food products must follow.

HACCP - Hazard Analysis and Critical Control Points. A program used by food processors to detect and control potential hazards in food manufacturing.

MAAHS - Mid American Ag and Hort Services. Where you can leave a message for John Wargowsky to indicate interest in the Ohio Specialty Crop Food Safety Initiative and for assistance on labor issues.

NRCS - Natural Resources Conservation Service (Used to be SCS - Soil Conservation Service).

OFVGFS - Ohio Fruit and Vegetable Growers Food Safety Workshop. A program some of you attended back in March to learn all about this stuff.

ORP - Oxygen Reduction Potential. A measurement that indicates whether a water sanitation method

(i.e. copper ionization) is working properly.

OSHA - Occupational Safety and Health Act.

OSCFS - Ohio Specialty Crop Food Safety Initiative. The program that is providing us with the resources to teach about GAPs, and GHPs, as well as, help growers prepare Food Safety Programs.

OSU - You're breaking my heart! Certainly you know TBDTITL!

pH - pH. It's a measurement of how much free acid is present in food or water.

QA - Quality Assurance. The way you make sure you're selling at a certain quality level.

QI - Quality Improvement. What we all are striving for; some of us simply in life.

SOPs - Standard Operating Procedures. A step by step description of how you do things.

SSOPs - Sanitation Standard Operating Procedures. A step by step description of how you clean things.

UV - Ultra Violet. A type of light that can be used for water treatment amongst other things.

U.S. EPA - United States Environmental Protection Agency. The people who set the standards for water quality.

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Contact John Wargowsky at 614-246-8286 or labor@ofbf.org, or Mary Donnell at 419-354-6916 or donnell.8@osu.edu for more information.

Visit www.midamservices.org and click on 'projects' for more information about this initiative.



Crop Reports

Brad Bergefurd, Hal Kneen, R. Precheur

Southeast, From June 4: The word from Southern Ohio is we need more sunlight and warm temperatures and less rainfall. Torrential rains continue to fall every other day causing erosion and flooding. Bedded plants- tomatoes, peppers, vine crops are doing better than most flat ground plantings due to better drainage and warmer soil temperatures.

The bright spot is that cabbage, broccoli, cauliflower are loving this weather. Cabbage is being

harvested for the wholesale market. The rest of the cole crops are finding their way into the farmers markets in the area.

Pumpkins and sweet corn continue to be planted in the hours of open weather. Some cultivation in the sandier soils is occurring. Some sidedressing of nitrogen fertilizer occurred on Sunday. Sweet corn is beginning to tassel and the European Corn Borer and Corn Earworm moths are showing up in our helio traps. Some spraying will be needed to keep the worms out of the forming ears.

Washington/Meigs Vegetable Tour June 10

[Pictures and highlights from the tour should be available next week at the VegNet website].

Cabbage: Excellent weather for this crop and it looks beautiful. Several growers were near the end of harvest or about to start on their last plantings.

Sweet Corn: If the warm weather holds, the first sweet corn harvest may occur this weekend. This is in one of the earliest plantings on plastic. Silks were already turning brown and drying down. At several farms, other plastic plantings had ears just beginning to show silk and harvest is about 2-3 weeks away. Many bare ground plantings were showing tassels. Some early April plantings and certain varieties were showing herbicide damage to standard herbicides due to the extreme cold. Typical symptoms include the buggy whip appearance with leaves tightly wrapped up and bent over. Plants were growing out of the problem. Maize Dwarf Mosaic Virus (MDM) could be found in certain fields. This virus disease causes severe stunting and loss of yield with early infections or blanking and skipping of the kernels on the ear at later stages.

Melons: The earliest melons were already softball size. These plants were under plastic and row covers. Even watermelon vines were flowering and about to set fruit.

Potatoes: Again, ideal weather for this crop and most plantings look excellent. New harvests of red potatoes have nice shape and size.

Squash: Zucchini and yellow summer squash harvest is under way and fruit are looking good.

Tomatoes: This crop is at various stages depending on location. Some have fruit about 3-4 inches in diameter and are putting on the second string on the trellis. In later plantings, growers are placing stakes and starting the first string. No major diseases yet due to the cold weather. An occasional early blight lesion can be found.

COLD: Biggest problem in central and southeast OH has been the frequent rains and temperatures that barely made it to 70 in the day. Early last week, field corn was turning purple but by last weekend and some warmer temperatures, crops started to look normal. Some crops planted in late April look better than early and mid-may planted crops.

Southwest; from June 3:

Weather: Over the last week the area received some amount of rainfall just about every day, for a total of about 2 +/- inches for the week. Temperatures continue to be below normal with highs only into the mid-60's and lows on Friday (5/30) and Saturday (5/31) mornings near 40+F.

Commodity reports

Dry conditions on Sunday (6/1) and Monday (6/2) have allowed field preparation, spraying and planting to proceed. Conditions have been good to minimize transplant shock. Despite Cool temperatures plant continue to grow especially those planted on black plastic mulch and under tunnels. Asparagus harvest is just about complete with some PYO operations still allowing customers to harvest. Harvest began around April 15.

Vine crop- squash and cucumber direct seeding continues; transplanting is mostly complete. Pumpkin and gourd direct seeding began during dry spells last week.

Cucumber harvest inside tunnels has begun with prices averaging at the Bainbridge Produce Auction \$15- 25 per half bushel. Early, direct-seeded cucumbers with no protection are still at the first and second leaf stage and are showing some cold injury symptoms at some locations. Cucumber beetle pressure remains high.

Transplanted summer squash and zucchini have flower buds evident and will be in flower by next week. Harvest of summer squash and zucchini transplanted under tunnels has begun with prices at the Bainbridge Produce Auction averaging \$15-20 per 1/2 bushel.

Tomato, eggplant, and pepper transplanting continues. Tomatoes under tunnels have begun harvest. Staking, suckering and tying continues. Some tomatoes planted April 19 near the Ohio river have golf ball sized fruit.

Early potato plantings look good, except in flooded out areas.

Early-planted sweet corn under clear plastic is tasseling. Bare ground planted sweet corn has emerged and continues to grow slow. Plant color is yellow-green, again due to cold temperatures. Replanting in flooded out portions of the field are being replanted.

Harvest of kohlrabi, mustard greens, kale greens, collard greens is in full swing, with very good quality and good wholesale and retail prices.

Harvest of radishes and green onions continues.

Harvest of Plasticulture Strawberries is about 50% complete, many growers strated harvest Mothers Day weekend. Strawberry quality and yields have been good despite wet weather. Matted row strawberry harvest began last week (5/28). Wholesale strawberry prices at the Bainbridge Auction have averaged \$1.10 - 1.60 per pint. Retail prices have averaged \$2.50-3.50 per quart.



What's New At The VegNet Web Site

● Problem Of The Week

A pictorial comparison of Squash Vine borer damage and Bacterial Wilt in pumpkins. While the symptoms are similar, there are some key differences. Check it out. Click on the 'Problem of the Week' button of the left side.

● **Highlights From the Pumpkin and Muck Crops Field Days**

Couldn't make it to Celeryville on July 25th or forgot about The Pumpkin Field Day on August 7th, then take a look at just a few of the highlights from these two field days. Click on the 'Talk Between The Rows' button on the VegNet homepage.

● **2001 Slide Presentations**

Pepper Variety Slides 2001 | HTML Slide Show

Pumpkin Variety Slides 2001 | HTML Slide Show

Go to the Library Section under Research Reports.

● **VegNet Vegetable Schools**

A series of slide presentations are now available in order to update you on the latest pumpkin and sweet corn research. We begin with 6 pumpkin topics in Pumpkins 101 and have 10 slide presentations available in Sweet Corn 101. In sweet corn. Powerpoint presentations and html online slide shows are available now. Go to the VegNet homepage.

Pumpkins 101

The use of trap crops and Admire for cucumber beetle control and New varieties for 2001. We have presentations on cover crops for disease control and pumpkin fungicide use.

- **Perimeter Trap Cropping. Online html slide show | Perimeter Trap Cropping. PPT, 7 Mbytes**
See also the Research Results section on the home page for text version of the report.
- **Pumpkin Variety Slides 2001 | HTML Slide Show**

Sweet Corn 101

Presently only Powerpoint presentations available. Coming Soon: Online HTML slide shows. Check back often Nine topics including:

- **Aspects of Variety Selection based on Disease Control [ppt 40 KB]**
- **Internet Link To "Reactions of Sweet Corn Hybrids to Prevalent Diseases" Dr. Jerald Pataky www.sweetcorn.uiuc.edu**
- **Producing Early Sweet Corn [ppt 3.5 Mbytes]**
- **Managing Weeds in Sweet Corn [ppt, 9 Mbytes]**
- **Sweet Corn Herbicides & Variety Sensitivity. [ppt 2Mbytes]**
- **Sweet Corn Development and Critical Periods for Irrigation Management [ppt 1.6 Mbytes]**
- **Flea Beetle Management in Sweet Corn [ppt 510 KB]**
- **How To Keep Worms Out of Sweet Corn Ears [ppt 8.3 Mbytes]**

- **Role of Bt Transgenic Hybrids in Sweet Corn Pest Management. [ppt 21.2 Mbytes]**

Bt Sweet Corn Efficacy in OH, 1999-2000 [ppt, 208 KB]



[Return to Vegetable Crops Homepage | Ohio State](#)

[University Extension](#)

We appreciate very much the financial support for this series of vegetable reports which we have received from the board of growers responsible for the Ohio Vegetable and Small Fruit research and Development Program. This is an example of use of Funds from the "Assessment Program".

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