UPPER MARLBORO, Md. — The Maryland Department of Agriculture, University of Maryland Extension and Future Harvest-CASA put on a workshop April 15 on implementing GAP plans on farms.

The workshop, geared toward young and beginning produce farmers, took place at the University of Maryland’s Terp Farm.
According to the USDA’s website, “GAP is a voluntary audit that verifies that fruits and vegetables are produced, packed, handled and stored as safely as possible to minimize risks of microbial food safety hazards.”

GAP certification, though, can be a requirement to sell produce to certain wholesalers. For this reason, GAP plan writing and certification has become a focus of Future Harvest-CASA’s Beginning Farmer Program.

“Future Harvest-CASA is interested in providing more information about GAP because we’re beginning to understand how much of an obstacle food safety certification is for farmers who want to sell to the wholesale market, and increasingly, direct to the consumer,” said Dena Leibman, executive director of Future Harvest-CASA. “I think that over the next five years it’s going to be more and more important for farmers, even small farmers who are exempt, to be certified because the buyers will require it.”

David Martin, University of Maryland Extension agent, gave an overview of the GAP certification process. He outlined physical, chemical and biological hazards to food safety.

Biological hazards, such as microbes, are the most difficult to detect, he said, which is why the GAP process examines those factors closely.

“The most important thing about microbes is that they can grow,” Martin said. “A piece of broken glass that falls into a basket cannot grow and multiply. It’s the same as when it went down there. But if you look at a microbe in that basket, what’s in there right now could be multiplied by tens, hundreds or thousands in the next day or two.”

He also said that to examine microbial risk factors, GAP auditors observe the four Ws.

“Waste, wildlife, workers and water,” he said.

“If we take the first one, waste, it can be several different things, but for the most part we are talking about animal waste, including manure, and we also can be looking at some compost,” he said.

Martin said that both manure and compost have value in the fruit and vegetable production process, but they also come with some risks, which are examined during a GAP audit.

“The next piece we look at is wildlife,” he said. “This is a wide spectrum of animals, including the critters we don’t have control over.”
According to Molly Gillingham, agricultural inspector at the Maryland Department of Agriculture, this means keeping a regular log of the wildlife you see, or don’t see, in your fields.

“A key part of the GAP audit is looking at your worker,” Martin said. “Handwashing is a critical element and having the proper facilities and having things available is a critical part when you do the GAP audit.”

According to Guy Kilpatrick, lead agricultural technician at the Terp Farm who has implemented a GAP plan on his operation, this means “building your GAP plan into the culture of your operation.”

“The final W is water,” Martin said. “Water is a required nutrient for things to grow, but it’s a great vehicle for transporting a lot of these microbes.”

The GAP audit process includes a strong focus on water testing. If an operation does not regularly test their water, it may result in an automatic failure of the audit.

The final portion of the GAP audit process examines field to harvest to handling.

“During the final portion of the MDA’s GAP audit process, it examines handling practices,” Martin said.
“During this time we are dealing with soil, which contains microbes.”

He said that means looking at how the operation is able to sanitize equipment including floors, dump tanks, baskets, tractors, trucks and more.

“It also means examining the water used post-harvest,” he said. “It has to be potable, so you have to get the water tested that you are using.”

Martin also discussed packing requirements, specifically that all containers that are re-used need to be easy to clean and sanitize.

“Our job is trying to keep the produce as clean as possible so we can reduce the contamination,” Martin said.

Following the GAP overview, Justine Beaulieu, UMD faculty research assistant and GAP educator, walked attendees through a GAP audit report.

Deanna Baldwin, program manager for Maryland’s Food Quality Assurance Program, gave tips on GAP plan writing.
“Do not include actions that are not required for safety,” Baldwin said. “For example, one farmer included in his plan the goal to refrigerate produce at 41 degrees to preserve quality. It was not required, and on the day of his audit, the cooler was at 46 degrees. Even though the refrigeration would not be required for food safety, since it was in the plan, points were deducted.”

The half-day program wrapped up with a tour of the Terp Farm. During the tour, attendees were able to observe how the Terp Farm was able to implement a GAP plan.

“The tour today really teaches you to think about your own operation,” said Susan McQuilkin, marketing executive with the Southern Maryland Agricultural Development Commission. “All GAP plans are distinctly unique to you, and while templates are a great guide, you have to think about your own process.”


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