September 9th Cut Flower Farm Tour Highlights

Belvedere Farm, Fallston, Maryland

Bill Harlan is the owner of Belvedere Farm which has been in the family for several generations (since 1823). The farm has evolved from a dairy operation to a pick-your-own pumpkin farm and educational farm site to the present-day as a cut flower operation that sells at farm markets, wholesale and on the farm.

We started the tour outside of their flower arrangement workshop on the farm. Employees of Belvedere Farm mentioned that their customers like a lot of variety of flowers and flower colors. They get bouquets to markets using one quart mason jars. Sometimes, they sell the jar with the bouquet. Otherwise, they wrap the flowers in green paper, provide a Floralife packet and tie a card (if there is time at the market) to the flower bouquet.

‘Pumpkin on a Stick’ is a species of eggplant that they grow; it’s both ornamental and edible.
Bill grows a variety of flowers including dahlias, zinnias, *Asclepias* species, gomphrena, rudbeckia, celosia, sunflowers, cotton, and a variety of eggplant called ‘Pumpkin on a Stick’ (*Solanum aethiopicum*, sometimes listed as *Solanum integrifolium*).

Flowers by Bauers, White Hall/Jarrettsville, Maryland

Charles, Richard and Matthew Bauer gave a tour of their greenhouse where the crops produced include snapdragons, sunflowers, dianthus, and sweet william. Richard discussed their computer crop monitoring and inventory system. Charles talked about their snapdragon production and his son Matthew focused on the sunflower crop. They are masters of utilizing every space for production. The Bauer family has been in cut flower production for over 30 years.

In recent years, they started growing lettuce above their snapdragons. They decided to move the lettuce to another location where they have a small greenhouse with gerberas. While we were there, we saw them currently making use of vertical space growing celosia and sweet william. They get about 6000 sq. ft. more of growing space by growing plants above their other crops.
To get more production out of their greenhouse space, celosia is one of the crops grown above the snapdragons.

Matthew Bauer goes over their methods of plug propagation.

Flea Beetles on Perennials
We are finding flea beetles damaging herbaceous perennials such as Itea, ornamental strawberries, and mums in a few greenhouses this week. Brian Kunkel, University of Delaware Extension, has been conducting control trials and has found that Safari, Talstar, and Flagship as foliar applications have provided the best control so far. His research group is looking at additional products, but that information is not available at this time.

Flea beetle damage on ornamental strawberry and Itea (above)
Redheaded flea beetle adult (left)
Photo: Brian Kunkel, University of Delaware, Bugwood.org
Whitefly on Poinsettia
We had two growers tell us banded winged whitefly are active on poinsettia. Banded winged whitefly feeds on button weed and soybeans and will migrate into greenhouses in September and October. Fortunately they are relatively easy to control.

Many people have pinched in the last 2 weeks and new growth is coming out and it is a good time to protect new foliage. One of the materials that many growers are turning to is spirotetramat (Kontos), made by Bayer Chemical Company and distributed by OHP. There are a couple of things growers need to understand about how to effectively use this material for whitefly control. Spirotetramat is a systemic insecticide and miticide. It is very water insoluble and can be applied as soil drench or as a foliar application. If applying as a soil drench, apply with just enough water to saturate the substrate in the pot but not run out the bottom. Try to avoid heavy watering for a couple of days after the application. Since it is somewhat water insoluble it will take about a week to uptake into foliage of treated herbaceous plants. When applied as a foliar application it is effective shortly after treatment. The spirotetramat is most effective on immature stages of whiteflies, aphids and spider mites. It does not impact eggs and does not work well for adult stages of insects.

The question has come up as to how long it last once it is applied to a plant. For foliar applications you can expect about 3 weeks of control of immature stages of whitefly. When applied as soil drench you can expect about 4 weeks of control of immature whiteflies.

Information for Poinsettia Growers
Electronic Grower Resources Online (also known as e-Gro) has posted several new fact sheets on poinsettias and nutrition, written by Dr. Brian Whipker of North Carolina State University.

Check them out at: [http://e-gro.org/alerts.php](http://e-gro.org/alerts.php)

Save the Date - October 23, 2014
The University of Maryland Extension and the Maryland Greenhouse Growers’ Association are organizing an afternoon to early evening greenhouse tour of Hillcrest Nursery in Millers and Radebaugh Greenhouses in Freeland. Details will be included in future reports.