Coordinator Weekly IPM Report:
Stanton Gill, Extension Specialist, IPM for Nursery, Greenhouse and Managed Landscapes, sgill@umd.edu. 301-596-9413 (office) or 410-868-9400 (cell)

Regular Contributors:
Pest and Beneficial Insect Information: Stanton Gill and Paula Shrewsbury (Extension Specialists) and Nancy Harding, Faculty Research Assistant
Disease Information: Karen Rane (Plant Pathologist) and David Clement (Extension Specialist)
Weed of the Week: Chuck Schuster (Extension Educator, Montgomery County)
Cultural Information: Ginny Rosenkranz (Extension Educator, Wicomico/Worcester/Somerset Counties)
Fertility Management: Andrew Ristvey (Extension Specialist, Wye Research & Education Center)
Design, Layout and Editing: Suzanne Klick (Technician, CMREC)

Welcome Back From Stanton Gill
It is good to be back into the weekly writing mode and our IPM, Nutrient Management and Weed Management team (Karen, Chuck, Ginny, Paula, Nancy, Suzanne, Andrew and Dave) is ready to go. First off, thanks to each of you who approached me at winter conferences to let us know that the IPM Alert is benefiting your companies and organizations. It is always great to get positive feedback. We need you to continue to help us improve by sending pictures and notifications if you are seeing insect, mite or disease activity in landscapes and nursery operations. Please call at 410-868-9400 or send emails to sgill@umd.edu

Snow – Go Away
Many of us in Maryland woke up to the latest unwelcomed snow event. Hopefully it is the last one of the year. We know that spring officially starts today so this snow has to be the last for 2015... maybe.
Winter 2015 - Another Tough One
By: Stanton Gill
Well, we thought the winter of 2014 was bad, but this winter is in the running for at least second worst. In Pennsylvania they recorded the coldest winter on record in February. Some of the orchard experts from Penn State are saying that many peach blooms froze in February in Central and Northern PA. Boston can take pride in beating their all-time record for snow this winter with well over 8 feet. That’s a lot of snow removal and salt going down.

If you did snow removal in Maryland then January, February and March were profitable months. If you are a nursery owner, it was frustrating because the ground was frozen to a 12” depth and nothing could easily come out of the ground in late February and the first half of March. I visited one nursery owner in the first week of March and he had a spray can in one hand and a file in the other. He said they were spending the winter sharpening tools and painting equipment. He was tired of this routine and was ready to start digging trees and planting new liners. This sort of winter makes “the push of spring” that much more difficult to schedule and accomplish all of the things that have to be done.

2014 - Looking Back in History
By: Stanton Gill
The 2014 season started off horribly with extended cold and wet periods in March and April. No one in the landscape industry seemed to be happy because all of the maintenance projects could not be completed with the inclement weather. Great money was made by anyone doing snow removal, but the snow removal rolled into the time when maintenance needed to be done in landscapes. There just was not enough time in anyone’s schedules. Does it sound like 2015 is shaping up the same way?

Last year, the season stayed cool and somewhat rainy through the end of June. The summer was one of the coolest we have had in a long time which gave everyone time to catch up and landscape installations continued with the cool summer weather. Mowing was hard to keep up with since the grass did not go dormant as usual in July and August. In the fall months, sales were strong for nurseries and landscape companies. Most of the large landscape companies reported that their employees received generous holiday bonuses in 2014 because sales were so strong. So, what can we learn from this bit of history? Even when it looks the darkest it just might not be as bad as you thought. Corny, maybe, but true.

Everything looks upbeat for 2015 with the economy, and gas is much cheaper. I think people are ready to spend money on their landscapes and gardens.

Ambrosia Beetles
By: Stanton Gill
Several people have asked me what I foresee for ambrosia beetle damage in 2015. The answer is they were bad after the severe winter of 2014. I will be surprised if they are not bad in 2015 after the low temperatures. We will be placing out alcohol baited traps at key locations and will let you know what we are finding in the weekly IPM Alerts. The good news is that the adults are still hiding in the leaf litter and have not ventured out yet. The cold is good for one thing, so far.

Monitoring for Iris Borers - A Request from Stanton Gill
There is a new pheromone that is available to track iris borer. I need a couple of good sites and volunteers with large plantings of iris that could place out pheromone traps. We would like you to record male flight activity and send the data to me. Don’t worry – it just attracts the males not the females so it will not increase your population at the site. If interested call me at 410-868-9400 or email me at Sgill@umd.edu.
Beneficial of the Week
By: Paula Shrewsbury

What “benefits” do beneficial arthropods provide?
As we start the 2015 growing season I would like to discuss the importance and role of arthropods as they relate to ecosystem services and health which ultimately can affect how we live and do our business of growing and maintaining plants. First let’s start with insects in general. There are lots of them and there are many different kinds. Right now, there are about 1 million described species of insects with an estimated 4 – 6 million still to be described. Insect abundance is estimated to be around 10 quintillion. Insects perform diverse roles in our ecosystems. Many are herbivores that rely on plants as their food resource. This brings forth the question - If there are so many herbivores then why don’t they eat all of the plants in the environment? Actually less than 1% of known insects are estimated to be serious pests of plants which is not surprising since plants have chemical (alkaloids, terpenoids) and morphological (thorns, thick leaves, etc.) defenses that prevent insects from consuming them. In addition, many insects are natural enemies that consume herbivores, suppressing their abundance and impact on plants. Natural enemies provide biological control services and play a major role in shaping animal and plant communities in natural and managed environments. In addition to eating other insects they are also eaten by other animals so they are critical links in food webs. Many natural enemies are omnivores and in addition to eating insects, they eat plant resources such as seeds, nectar and pollen. Omnivores consume weed seeds suppressing weed growth, and nectar and pollen resulting in pollination of plants. Many insects are pollinators. Other insects are decomposers. Imagine what the world would be like if we didn’t have the diversity and abundance of insects around that we do to eat dead things (ex. road kills), or dung, or break down plant material. Insects not only remove these things but they recycle them into a form that can be used again in the environment.

In general, especially in natural ecosystems, communities of plants and insects are in balance and communities function efficiently. Unfortunately, increased urbanization, farming, etc., and the associated practices and changes that come with managed environments, often disrupt ecosystems. Many practices threaten the health and sustainability of beneficial insects and the ecosystem services they provide. Some of the features of managed environments that can disrupt ecosystems include: simplification of the plant communities in terms of plant species diversity and vegetation abundance; greater use of exotic plants; more impervious surfaces; maintenance practices such as fertilization and pesticides; and urban stress such as pollution or construction. Many of these features can result in herbivores performing better and/or disrupting natural enemies thus increasing the likelihood of pest outbreaks.

Be sure to respect insects and the important roles they play in maintaining healthy ecosystems and preventing pest outbreaks and damage. When making plant and pest management decisions try to reduce detrimental impacts on these beneficial insects and conserve the “benefits” they provide.

Nutsedge Control Update
By: Stanton Gill
Steve Black, Raemelton Farms, alerted me to an article published in 1991 in the Journal of Weed Science by Howard Harrison and Joseph Peterson entitled “Evidence That Sweet Potato (Ipomoea batata) is Allelopathic to Yellow Nutsedge”. The researchers found that in greenhouse trials where they interplanted sweet potato vines...
Weed of the Week
By: Chuck Schuster

It’s looking a lot like snow again today, but it is also time to be considering tackling the turf and landscape for weed control. Spring germinating weeds including crabgrass need control plans that usually look to having product on the ground as early in the spring as possible. A review of research does indicate we have a window of opportunity. Our target soil temperature, taken at one inch of depth, is between 57 to 64 °F for crabgrass, one of our earlier emerging weeds. One needs to have pre-emergent products on the ground and activated prior to seedling emergence. That activation is usually .25 to .5 inches of moisture, either rainfall or irrigation. Some products do have early post emergent properties. Dithiopyr (Dimension) used for crabgrass does have the ability to control up to the first tiller. For other spring germinating grasses this product must be placed and activated prior to germination. Some turf managers will use a split application of dithiopyr to help prevent a lapse in coverage due to the fact that some crabgrass will not germinate until soil temperatures get to 73 °F or above at a one-inch depth. This temperature may occur after the first material applied has already broken down. Since soil temperatures are not often readily available, growing degree days (GDD), using air temperature can be used. Utilizing 50 °F as the baseline, crabgrass will not germinate until 200 gdd are achieved.

Working in landscapes to prevent the germination of Japanese stiltgrass and other spring emerging grassy weeds, one also needs to pay attention to timing. Applying product and having it activated prior to seed germination is critical. When provided the opportunity, look to the southern exposed slopes to apply product to first, and work towards the more northern exposed slopes last. For many turf and landscape managers, this approach may be a way of planning which properties to route to first.

Use care when applying a spring germinating grassy weed product with an added post emergent broadleaf killer. Not that anything bad will happen, but that the weed is actively growing to allow the broadleaf products to enter the plant and do its job.
**Plant of the Week, Ginny Rosenkranz, UME**

*Galanthus nivalis*, common snowdrop, is a bulb that thrives in the northern and western parts of Maryland and survives in Southern Maryland and on the Eastern Shore in USDA zone 3-7. As its names states, these tiny plants often pierce the snow if necessary to bloom from January to April. Flowers are borne on short green arching stems and have three large outer and three short inner pure white petals. Two strap-like leaves hug the short flower stem. Snowdrops grow best in well drained soils in full sun to part shade. Bulb rot occurs if planted in heavy clay or poorly drained souls.

**Degree Days (As of March 19)**

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To check degree day (DD) accumulations in your local area go to: [http://www.yourweekendview.com/outlook/agriculture/growing-degree-days/](http://www.yourweekendview.com/outlook/agriculture/growing-degree-days/). Note: degree days reported in this newsletter use a base temperature of 50 °F, a start date of January 1st, and the date of monitoring as the end date.

**Operator Certification (FTC) for Writing Nursery Nutrient Management Plans**

April 7th, 2015  
9 to 3:30 PM  

Central Maryland Research and Education Center  
11975-A Homewood Road, Ellicott City, MD 21042

Nursery Operator Certification (FTC) for writing nursery nutrient management plans will be offered to growers who are interested in attaining Farmer Training Certification for writing nutrient management plans. This training program will assist you in writing a nutrient management plan for your nursery or greenhouse operation. You must write a nursery nutrient management plan if you use fertilizers and you gross $2500 or more per year in sales. With this certification, you will be able to sign off and submit your own plan and annual implementation reports.

Each program consists of a Training Day and an Exam/Signoff Day. The Training Day will consist of learning the plan-writing process. After the Training Day you will have about 5 weeks, during which time you will study the Nursery Nutrient Management Training Manual and develop your plan. The Exam/Signoff Day will be for taking the exam and going over your newly developed plan (or renewing your old plan).

The process is relatively simple for small (or low-risk) operations, so if your operation size is less than 5 acres, we would strongly encourage you to think about becoming a certified operator. If your operation is larger than 5 acres, we would still encourage you to become a certified operator, even though the nutrient management process may be a little more complicated.
Upcoming Conferences:

**2015 Interstate Ornamental Plant Management Conference**
April 6, 2015
Location: Maritime Institute, Linthicum Heights, MD
Contact: Avis Koeiman, 301-405-3913

Recertification credits have been approved by the following states:
Delaware - Cat 03; District of Columbia - 3A, 3B, 3C, 5, 6, 7F; Maryland - Cat 3A, 3B, 3C, 6, 10; Virginia - Cat 3A, 3B, 10, 60; West Virginia - Cat 4A-13, 4B-13, 7-3; Pennsylvania - Please call

**MAA Pest Walk**
May 20, 2015
Location: Irvine Nature Center, Owings Mills, MD

**MNLGA Nursery Field Day**
June 17, 2015
Location: Clear Ridge Nursery, Union Bridge, MD

**Greenhouse Tour and MNLGA Picnic**
June 25, 2015
Location: Greenstreet Growers, Lothian, MD

**Alternative Crops for Greenhouse Production: Conference and Tour**
August 5 and 6, 2015
Location: Brookside Gardens, Wheaton, MD on August 5th (conference day)

**LCA Hands-on Training Seminar**
September 16, 2015
Location: Johns Hopkins University, Montgomery County Campus

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CONTRIBUTORS:

Stanton Gill
Extension Specialist
gill@umd.edu
410-868-9400 (cell)

Paula Shrewsbury
Extension Specialist
pshrewsb@umd.edu

Karen Rane
Plant Pathologist
rane@umd.edu

Chuck Schuster
Extension Educator
cfs@umd.edu

David Clement
Plant Pathologist
clement@umd.edu

Andrew Ristvey
Extension Specialist
aristvey@umd.edu

Ginny Rosenkranz
Extension Educator
rosnkrnz@umd.edu

Nancy Harding
Faculty Research Assistant

Thank you to the Maryland Arborist Association, the Landscape Contractors Association of MD, D.C. and VA, the Maryland Nursery and Landscape Association, Professional Grounds Management Society, and FALCAN for your financial support in making these weekly reports possible.

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