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Early Spring in 2023?

Karen Rane, UMD, pointed out the National Phenology Network website to us this week. She noted that there are interesting “maps of how early spring is this year throughout the country”. This site reports the Chesapeake Bay area is 3 - 4 weeks ahead of a “normal spring”.

<https://www.usanpn.org/usa-national-phenology-network>

Early Spring Weather Means Early White Mold

By: Karen Rane, UMD

We commonly see *Sclerotinia* blight, also called white mold, in March and April on greenhouse bedding and pot plants, particularly on the Eastern Shore and southern Maryland. This year, we received our first case of white mold in early February, on cut flowers grown in a high tunnel. The fungus, *Sclerotinia sclerotiorum*, can infect a wide variety of herbaceous ornamentals, vegetables, soybeans and weeds. Even some woody ornamentals, like forsythia, are susceptible. Symptoms of the disease include crown rot, stem rot, and flower blight. The pathogen produces hard, black structures called sclerotia that are irregular in shape and about 1/8 to 1/4 inch in size. Under cool, moist conditions, sclerotia produce cup-like spore structures that release airborne spores that cause infections. Humid conditions encourage fluffy white fungal growth to develop on infected plant parts as well. Sclerotia are very resistant to environmental extremes, and can survive in soil and plant debris for several years. Management of *Sclerotinia* involves excellent sanitation – discard symptomatic plants, but do not compost



Bleached, rotted crowns of iris with *Sclerotinia* blight, also called white mold.

Photo: Karen Rane, UMD

them (many composts do not reach the uniformly high temperatures needed to kill thick-walled sclerotia). For commercial greenhouse ornamental growers, soil drench application of fungicides such as Terraclor or thiophanate-methyl can help protect uninfected plants from Sclerotinia blight. Some growers report successful management of white mold with a biological control product called Contans WG. This product contains a fungus (*Coniothyrium minitans*) which breaks down sclerotia when applied to soil in and around high tunnels pre-plant or post-harvest.

For more information and photos of white mold-infected plants, check out this recent article from e-Gro: <https://www.e-gro.org/pdf/2023-12-4.pdf>



Rotted base of iris leaf, showing white fungal growth and black sclerotium (circled) of Sclerotinia.
Photo: Karen Rane, UMD

Warm Weather and Tick Activity

By: Stanton Gill

The warm weather last week and this week has been great for a winter reprieve for February weather. We are getting reports of daffodils blooming in Westminster, crocus popping up in Takoma Park and even forsythia is in bloom in several locations in central Maryland and on the Eastern Shore of Maryland. People were out hiking on trails with the warm weather over the weekend. We found black legged ticks active in Westminster and Brookeville last Saturday. Since the black legged tick is a potential vector of Lyme disease, be sure to check yourself thoroughly after hiking on trails and hanging out at the edge of wooded areas. Maryland is a bit of a hotspot for deer tick activity, especially around counties surrounding the Chesapeake Bay. I use pants and shirts treated with permethrin when walking in my woods, and it has worked well for the last 8 years. You can purchase permethrin treated clothing from sports stores or online.

While giving a presentation in Grantsville, PA for the Pennsylvania Nursery Association, I saw an interesting printed booklet entitled “Lyme Disease and Associated Diseases”. It is described as a plain language introduction to tick borne diseases. It is published by the Lyme Disease Association of Southeastern Pennsylvania, Inc. You can obtain a copy by visiting their web site at www.LymePA.org.

The University of Wisconsin has come up with a novel method of teaching entomology students and the general public how to search for deer ticks on a body. They are using Vanessa and Valerie, tick mannequins to help people locate ticks. At Extension and educational outreach events in Wisconsin, Vanessa and Valerie allow people to train their eye and to practice how and where they would check for ticks on themselves and others. Dead ticks are glued to commonly reported attachment areas: the hairline, back of the knees, and under waistbands, to name a few. People can readily see what it looks like to have a tick tucked away in an armpit and how they’re easier to spot on light-colored clothes compared to darker colors. Maybe we can rent them out for Extension education events in Maryland. Stay tuned. Read more on this technique at <https://entomologytoday.org/2023/02/10/americas-next-top-entomology-outreach-model-tick-check-mannequin/>

Cut Woody Stems

By: Stanton Gill

The warm February weather is forcing out many of the cut woody plants much earlier this season. Hopefully, most of you harvested your woody pussy willow stems back in December and January. The warm weather of February is forcing the pussy willow blooms out rapidly this week.

**Pussy willows starting to bloom this week.
Photo: Stanton Gill, UME**



Several growers have been cutting stems of contorted hazelnut. The catkins are visible this week. Most of the contorted hazelnut cultivars in the marketplace are highly susceptible to filbert blight disease. Rutgers University breeding program released a cultivar 'Red Dragon' that is resistant to this devastating disease. I have been growing it for the last 8 years with excellent success.

**'Red Dragon' contorted hazelnut catkins are forming.
Photo: Stanton Gill, UME**



Many of you are growing *Ilex verticillata* hybrids and most people harvested the stems back in December. I left some stems outdoors on 'Maryland Beauty', and the interesting thing is the berries still look good. It just has not been cold enough in Central Maryland to trash out the berries as it would normally be in mid-February.

One evergreen holly that cut woody plant growers should consider is *Ilex x koehneana* (see photo on next page). Bill Kuhl of McLean Nursery introduced me to this hybrid 19 years ago. The foliage is large and beautiful and the berries set on the older wood. The berries look great at this time of year. I have cut the stems and held them in water for up to 2 weeks with good holding capacity of the leaves and the berries. It may be past the season for marketing cut holly branches, but these plants looked great before the holidays and continue to look good into February. Other good cultivars include 'Martha Berry'. You do need a male pollinator for the females to set fruit. I use 'Ajax' and 'Apollo' as male pollinators.



***Ilex verticillata* 'Maryland Beauty' still have berries that look because it hasn't been that cold this winter.**

Photo: Stanton Gill, UME



Ilex x koehneana is an evergreen holly to consider growing as a woody cut stem.
Photo: Stanton Gill, UME

Greenhouse Pest Activity

By: Stanton Gill

The warm and sunny weather is creating perfect conditions for aphid populations to explode on pansy, salvia, and Lenten rose. Check these plants carefully this week for aphid populations. The females live birth and can build up an epicenter in your greenhouse or unheated high tunnel rapidly. Endeavor insecticide is a stylet blocker that is very effective on aphids.

We have a number of greenhouse growers growing and selling lemon and oranges plants. I am seeing a lot of activity from *Phyllocoptruta oleivora*, citrus rust mite this week on this crop. A large infestation can cause damage to young plant parts, with leaf stippling and mutilated fruit. Their feeding causes a loss of the gloss of the citrus foliage. The mites come in a range of colors from yellow to orange to brown. Check the tip growth and undersides of the foliage for this mite. A 0.5 - 1.0% horticulture oil application works well on this mite, but you need to direct a mist spray to the undersides of the foliage.



Hellebore aphid on hellebore (Lenten rose)
Photo: Suzanne Klick, UME

Work on Chocolate Plants with USDA

Nothing says Valentine's Day in the United States like chocolate. According to the [National Confectioners Association](#), 92% of Americans celebrated Valentine's Day with chocolate and candy. Making all that chocolate takes a lot of cocoa. The USDA [Economic Research Service](#) notes that imports of chocolate and edible cocoa products to the United States reached almost \$2.8 billion per year between 2017–21. One challenge facing cacao producers all over the world is cadmium in soils where cacao trees are grown. As recently reported by [Consumer Reports](#), [Seattle Times](#), [Reuters](#), and others, chocolate can contain trace amounts of cadmium - a heavy metal that can cause health problems when consumed at certain levels, confirming U.S. [Food and Drug Administration](#) (FDA) research findings from 2018. The cadmium is taken up by cacao trees from the soil where they grow. Changing the soil can be difficult, so scientists are turning to biotechnology to help solve the problem.

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