

January 12, 2022

From: Stanton Gill, Extension Specialist – IPM for Greenhouse and Nurseries, Central Maryland Research and Education Center, University of Maryland Extension
Karen Rane, Plant Pathologist, Director of the Plant Diagnostic Clinic, University of Maryland Extension
Andrew Ristvey, Extension Specialist, Wye Research and Education Center, University of Maryland Extension
Suzanne Klick, Technician, CMREC, University of Maryland Extension

Wintertime Insects

By: Stanton Gill

We had an interesting insect show up at the CMREC labs this winter from a greenhouse operation. The grower had started ‘Purple Flash’ ornamental pepper plants to serve as banker plants for *Franklinothrips vespiformis* and *Orius insidiosus* (minute pirate bugs).

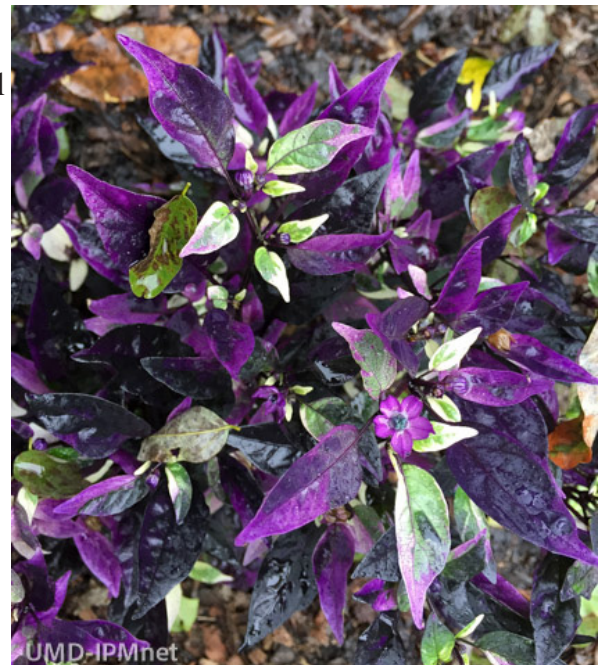
Before we get into the insect we found, let’s discuss why you would start banker plants in your greenhouse in winter.

The pepper plant flowers with a huge number of blooms from March through the fall. The flowers serve as pollen sources for these two beneficial insects. Both of these beneficial insects feed on the pollen, then lay their eggs into the pepper foliage. The nymphs hatch out and feed on the pollen. When they reach the adult stage, they fly out across the greenhouse to feed on thrips that attack your vegetable and flower transplants in the greenhouse. It is a way to increase your populations of beneficial insects in the greenhouse and keep plant-feeding thrips in check.

The beneficial thrips species, *Franklinothrips*, are from tropical and subtropical countries. You can purchase them from biological control suppliers such as BioBee, Koppert, and BioBest. Adults and larvae are predatory on the larvae of other thrips species.

The *Orius insidiosus* (commonly called the minute pirate bug) is an excellent predator of thrips species that damage vegetable and flower plants transplants that are growing in the greenhouse in the winter months. ‘Purple Flash’ pepper plants are started in winter so they are in bloom by mid-March when you move vegetable and ornamental plants into the greenhouse. You want the beneficial bugs to build up on the banker ornamental pepper plants and migrate off the plant in search of thrips throughout your greenhouse.

The arthropod that was found in the soil or the banker plant was a collembola. These are primitive arthropods that evolved before insects and with their six legs look like a creature from the Insecta phylum. Collembola, also called spring tails, are common



Start Pepper ‘Purple Flash’ as early as November, but no later than late January when using as a banker plant

in soil that is held wet for extended periods of time. The collembola themselves are harmless to plants but are a good indicator that the soil is being too wet.



**Collembola found in the substrate of a banker plant
Photo: Heather Zindash, The Soulful Gardener**

Plants for the Chinese New Year

By: Stanton Gill

The Chinese New Year starts February 1, 2022 and continues for 15 days. In 2022, it is the year of the tiger. Growers and sellers of plants are always on the look-out for new markets. There may be one with the upcoming Chinese New Year. The plant of interest is oranges. They are a symbol of hopeful prosperity in the upcoming year. If you have orange trees with fruit on them, it is worth marketing to the Chinese community. In 2014, I visited Las Vegas during Chinese New Year's. In the Balellagio hotel in Las Vegas, they lined a 100 ft long water feature with orange trees in 20 gallon pots, Each of the orange trees had a full crop of Satsuma oranges on them. It was visited by a large number of Chinese clients. I was informed that giving an orange for the New Years was a southern Chinese tradition. If you were well off, you gave a whole, potted orange tree. There might be a potential market here.



**Citrance oranges in January
Photo: Stanton Gill**

I have been growing orange trees and various other citrus for the last 14 years. We start them in 10-gallon pots and move them up to 40-gallon pots for 6 – 7 ft trees. One that might be of interest to growers is one called a citrance orange. The citrance orange is a result from a hybrid between *Poncirus trifoliata* and a Washington navel orange. It has wicked thorns (gift of the part of the mix), but also has a very good, fairly large orange on it. I must tell you it is not as sweet as some would like but, it is not half bad. I have found that it is hardy down to 1 °F. I planted one outdoors in August of 2021 and am observing it to see if it survives our winter of 2022. There is also a cultivar called 'Rusk' which resulted from a cross between a Ruby orange and a trifoliolate orange. This one is also very cold tolerant. I have been growing Satsuma 'Frost Line' orange in 40-gallons pots, and it is hardy down to 12 °F. The fruit on this orange is sweet and tastes a lot like a clementine orange.

Here is another angle to investigate

The color red is considered lucky. In Chinese culture, the day before Chinese New Year, the house is cleaned thoroughly to start the New Year. Young people dress up on New Year's morning. When they greet their parents and grandparents, they bow in respect. In return, the elders give the respectful younger family member a red envelope with money in it. Many paper lantern ornaments are displayed with red color, which, again is 'lucky.' In talking with Will Healy of Ball Horticulture, he told me several years ago that poinsettias were introduced into the Chinese market as the 'lucky plant'. Poinsettias with red bracts were "lucky plants". You might look around and see what red flowering plants might work for sales into the Chinese New Year market.

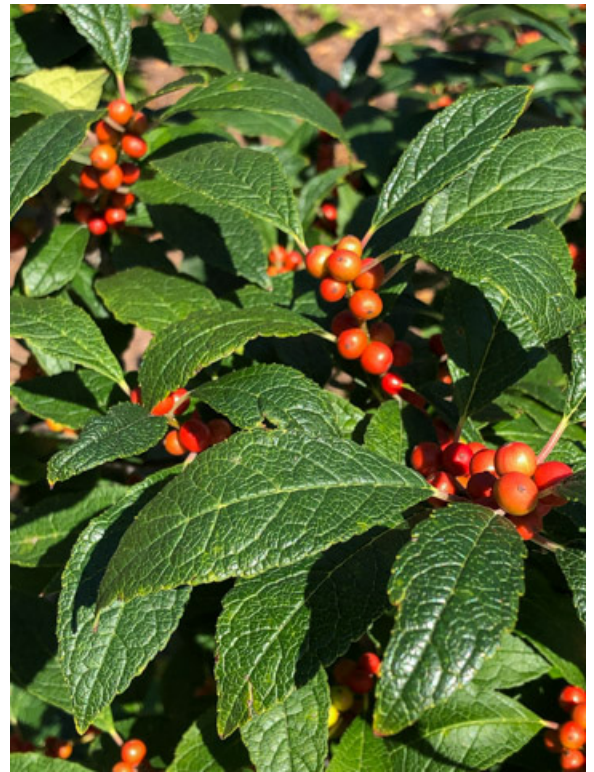
Ilex Verticillata – Poor Berry Set?

By: Stanton Gill

I have had inquiries from some cut woody stem growers that are saying they had a poor fruit set on their winterberry plants, *Ilex verticillata*. I visited with Bill Kuhl of McLean Holly Nursery to discuss a solution. Bill told me that many people use 'Jim Dandy' as their male pollinator, which works for some but not all female winterberry females. Bill suggested that the male 'Appollo' had a long bloom time that started as early as 'Jim Dandy' but lasted longer into the season with pollen sources fertilizing mid season blooming winterberry.

Jim Dandy is great, but it is a slow-growing, early-flowering dwarf male clone. This cultivar is useful as a pollinator for early-flowering female clones such as 'Afterglow', 'Aurantiaca', and 'Red Sprite'. It grows to about 5' tall.

For late flowering female winterberries, he suggested using 'Southern Gentleman'. This plant is a late-blooming male pollinator for 'Winter Red', 'Winter Gold', 'Capapon', 'Shaver', 'Sparkleberry' and other later blooming female clones. If you are not getting the fruit set you desire, then look into adding another male cultivars into your planting.



Ilex verticillata 'Winter Red'
Photo: Ginny Rosenkranz, UME

FYI - Selling Annuals at Farm Markets

We received a question about selling plants at farm markets.

MDA responded with the following information: "A nursery/plant dealer license is NOT required if the salable plants are considered an annual here in Maryland and the sales are local sales within Maryland."

Anyone needing more information can contact MDA 410-841-5920.

Conferences

February 17 and 18, 2022

[Chesapeake Green Horticulture Symposium](#)

Location: Maritime Institute, Linthicum Heights, MD

Registration will be available by January 21st

March 15, 16, and 17, 2022

Cut Flower Course

Locations: Howard County and Montgomery County sites

Details will be posted when available

April 5 – 8, 2022

IPM Scouts' Session

Details will be posted when available

Cut Flower Short Course Topics for March 15, 16, and 17, 2022

This program will be held at various locations for lectures and there will be site visits to different cut flower operations. Details will be posted at a later date.

Day 1: High tunnel production: lectures and visiting locations with high tunnels.

Day 2: Crops to produce in high tunnels, Managing soil in high tunnels, Big bucks in spring cut flowers, Marketing cut flowers via local markets, Raised bed demonstration, Soil fertility, Using and calibrating fertilizer injectors

Day 3: Marketing - tricks of the trade, unusual woody cut stems, Walk-in coolers, Setting up a trickle irrigation system, Small equipment to make cut flower production easier

Additional topics to be added.

The information given herein is supplied with the understanding that no discrimination is intended and no endorsement by University of Maryland Extension is implied.

Read labels carefully before applying any pesticides.

Photographs are by Suzanne Klick and Stanton Gill unless stated otherwise.

The University of Maryland Extension programs are open to any person and will not discriminate against anyone because of race, age, sex, color, sexual orientation, physical or mental disability, religion, ancestry, national origin, marital status, genetic information, political affiliation, and gender identity or expression.