UNIVERSITY OF MARYLAND EXTENSION

Greenhouse TPM/IPM Report

Central Maryland Research and Education Center
Ellicott City, Maryland

April 13, 2022

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Chili Pepper Mild Mottle Virus

By: Karen Rane, UMD

A new virus has been reported in calibrachoa this year. The virus is called Chili Pepper Mild Mottle Virus (CPMMoV), and belongs to the same group of viruses (called tobamoviruses) as Tobacco Mosaic Virus (TMV). Potentially infected plants were inadvertently distributed by one supplier and customers who may have purchased infected plants have been notified. The symptoms include faint to strong leaf mottling (Fig. 1), necrotic spots on leaves, and flower breaking (unusual color patterns such as white streaking or spotting of petals). Like TMV, CPMMoV can be easily transmitted plant to plant on tools and on hands of workers, and is likely to be as stable as TMV on surfaces. The host range for CPMMoV is not yet known, but to be cautious, growers should be alert to symptoms other plants, particularly solanaceous plants like tomato, pepper, nicotiana, and petunia. The TMV Immunostrip produced by Agdia, Inc. will detect CPMMoV as well.

Fig. 1 – Chili Pepper Mild Mottle Virus (CPMMoV) symptoms on calibrachoa.
Photo: Sandra Jensen, Cornell University, Bugwood.org

For more information and symptom photos, refer to the recent article posted on e-Gro by Nora Catlin and Margery Daughtrey of Cornell University: http://e-gro.org/pdf/2022-11-20.pdf

Aphids Active in Greenhouses and Overwintering Houses

By: Stanton Gill

We have been out visiting greenhouses and found melon aphids damaging salvia and aphid populations on pansy and Lenten rose. As the temperatures continue to climb the week of April 11 – 15, expect the aphid populations to take off. Female melon and green peach aphids can crank out 6 – 8 immature aphids per day with a resulting rapid build-up.

Growers have several good products, including Endeavor, Altus, and Aza-Direct, on the market for aphid control. The key is to catch a population before it builds and starts to produce winged alate stages which spread the population though your crop.

Aphid feeding causing distorted growth on salvia

An aphid found feeding on hellebores

Wedding Flowers

By: Stanton Gill

NPR did a radio segment recently on weddings and wedding flowers. They mentioned that weddings have increased 25% in 2022, and there are shortages of many things used in wedding ceremonies, including cut flowers. The supply chain problem is keeping many of the shipped in flowers out of the market, creating great markets for local flowers. It looks like if you are going after the wedding market for flowers sales, then 2022 is your YEAR.

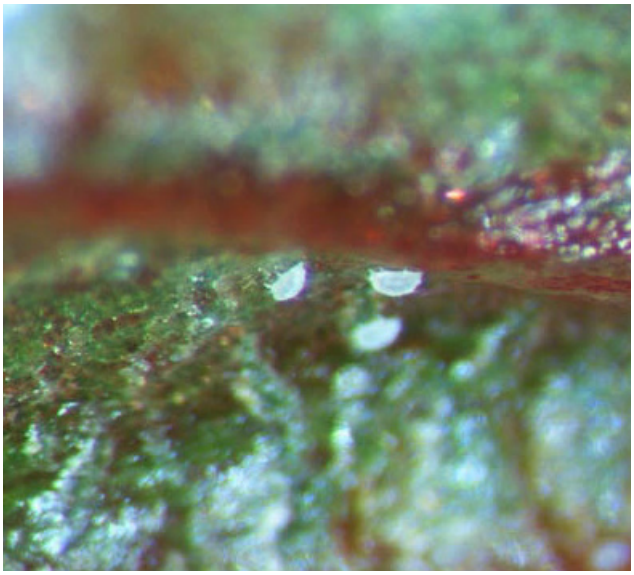
New Guinea Impatiens and Broad Mites

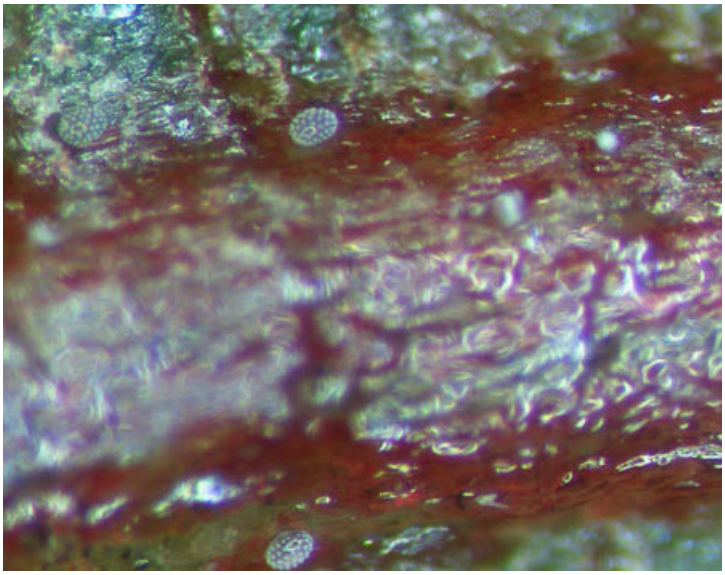
By: Stanton Gill

A central Maryland greenhouse grower called with a rapidly spreading problem on New Guinea impatiens. It started with a couple of plants and within a short time, the problem had spread to several adjacent plants. (see pictures of greenhouse bench). Samples were sent to Karen Rane at the Plant Diagnostic lab and to us at CMREC. Karen and I found the same culprit – Tarsonemid mites, commonly called broad mites.

Plants infested with tarsonemid mites have distorted new growth with leaves having a strap-like appearance. New growth on the plants is twisted, with a downward curling or cupping of the leaf edge. Often a russeting can also be observed on foliage, stems, or buds. As infestations progress, terminal buds can be killed, flowers can be distorted, and plants will be stunted. Heavily infested plants should be discarded and get them away from healthy plants as rapidly as possible.

Some materials labeled for broad mite management include abamectin (e.g., Avid), chlorfenapyr (Pylon), fenpyroximate (Akari), and pyridaben (Sanmite). Spiromesifen is an option for other crops, but is not recommended for New Guinea impatiens.





Broad mites (left) and eggs (right). Eggs are clear, elliptical, and covered with opaque white dots. Photos: Karen Rane, UME