Plant Health Insights

Aster Yellows and Virus Diseases

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Aster Yellows and Virus Diseases Aster Yellows

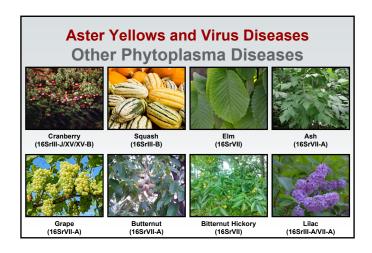
- · Pathogen: Aster yellows phytoplasma
- Hosts
 - Many plants in the Asteraceae (aster family)
 - Many other plants in many other plant families
 - Vegetable crops
- Favorable environment: None
- · Vector: Aster leafhopper





Aster Yellows and Virus Diseases Aster Yellows

- Control
 - Remove diseased plants
 - · Hot compost
 - Bury
 - Burn (where allowed)
 - Control leafhopper vector (?)



Aster Yellows and Virus Diseases

Virus Diseases

- Pathogens
 - Many and varied
 - Tobacco mosaic virus (TMV)
 - Cucumber mosaic virus (CMV)
 - Impatiens necrotic spot virus (INSV)
 - Tobacco rattle virus (TRV)
 - Hosta virus X (HVX)
- Hosts: Many ornamentals and vegetables

Aster Yellows and Virus Diseases

Virus Diseases

- · Favorable environment: None
- Transmission
 - Touch (TMV)
 - Mechanical injury (HVX)
 - Insects (CMV, INSV)
 - Nematodes (TRV)
 - Grafting
 - Seed





Aster Yellows and Virus Diseases

Virus Diseases

- Control
 - Buy plants from a reputable source
 - · Inspect plants for viral symptoms
 - Test plants for viruses
 - (Agdia, Inc.: https://www.agdia.com/)
 - DO NOT buy symptomatic plants
 - Use resistant/tolerant varieties
 - Keep weeds under control

Aster Yellows and Virus Diseases

Virus Diseases

- Control
 - Control insects (e.g., aphids, thrips)
 - DO NOT smoke around your plants
 - Remove and destroy infected plants
 - Burn (where allowed)
 - · Deep bury/landfill
 - Hot compost
 - · Technique depends on the virus
 - Wash hands routinely with soap and water

Aster Yellows and Virus Diseases Virus Diseases

Control

- Disinfest contaminated materials
 - 1% sodium dodecyl sulfate (sodium lauryl sulfate) + 1% Alconox® (2½ Tbsp + 2¾ Tbsp/gal)
 - Trisodium phosphate (14 dry oz/gal)
 - · Alcohol dip following by flaming
- DO NOT use chemical controls on plants

Aster Yellows and Virus Diseases Where to Go for Help

Plant Disease Diagnostics Clinic Department of Plant Pathology University of Wisconsin-Madison 1630 Linden Drive Madison, WI 53706-1598 (608) 262-2863 pddc@wisc.edu https://pddc.wisc.edu

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