

Wisconsin Hosta Society

Hosta Diseases

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Hosta Diseases Southern Blight

- **Pathogen:** *Sclerotium rolfsii*
- **Hosts**
 - Hosta
 - Bedding plants
 - Many other herbaceous annuals and perennials
 - Some woody ornamentals



Hosta Diseases Southern Blight

- **Control**
 - DO NOT buy infected/infested plants
 - Avoid cocoa mulch (????)
 - Remove infected plants, mulch and soil
 - Double bag
 - Landfill
 - Disinfest contaminated materials
 - 10% bleach
 - 70% alcohol
 - Commercial disinfectants

Hosta Diseases Southern Blight

- **Control**
 - Use fungicides for control
 - Triadimefon
 - 14 – 28 day intervals
 - Pray for a cold winter

Hosta Diseases Hosta Virus X

- **Cause:** Hosta virus X virus (HVX)
- **Host:** Hosta
 - 'Gold Edger', 'Gold Standard', 'Golden Tiara', 'Striptease', 'Sum and Substance'
- **Transmission: Mechanical**
 - Tools
 - Shovels
 - String edgers
 - Touch



hostalibrary.org/firstlook/HVX.htm

Hosta Diseases Hosta Virus X

- **Control**
 - Buy hostas from reputable sources
 - Inspect hostas prior to purchase for symptoms of HVX
 - Request that hostas be tested for HVX prior to purchase
 - Keep new hostas isolated from established hostas

Hosta Diseases Hosta Virus X

- **Control**
 - Remove and destroy infected plants and infested plant debris
 - Disinfest contaminated materials
 - Sodium dodecyl sulfate (sodium lauryl sulfate) + Alconox® (1% + 1%)
 - Trisodium phosphate
 - Alcohol dip followed by flaming

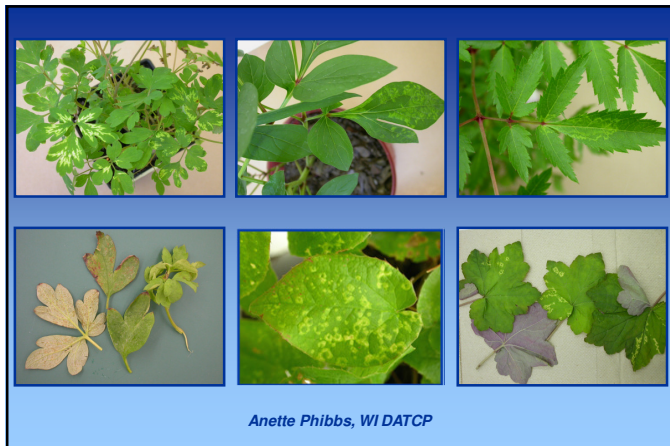
Hosta Diseases Tobacco Rattle

- **Cause: Tobacco Rattle Virus**
- **Hosts**
 - **Herbaceous ornamentals**
 - Hosta
 - Astilbe, bleeding heart, columbine, coral bells, daffodils, epimedium, gladiolus, hyacinth, marigold, peony, tulip, vinca
 - **Vegetables**
 - Beans, beet, pepper, potato, spinach

Hosta Diseases Tobacco Rattle

- **Transmission**
 - Stubby-root nematodes
 - *Trichodorus* spp.
 - *Paratrichodorus* spp.
 - Mechanical inoculation
 - Grafting
 - Seed





Hosta Diseases Tobacco Rattle

- **Control**
 - **DO NOT** buy symptomatic plants
 - **Grow non-susceptible plants**
 - Annual phlox, carnation, devil's trumpet (downy thorn-apple), sweet William, zinnia, zombie cucumber
 - **Remove and destroy infected plants**

Hosta Diseases Tobacco Rattle

- **Control**
 - **Disinfest contaminated materials**
 - Sodium dodecyl sulfate (sodium lauryl sulfate) + Alconox® (1% + 1%)
 - Trisodium phosphate
 - Alcohol dip followed by flaming
 - **DO NOT attempt to control stubby-root nematodes**

Hosta Diseases Foliar Nematode

- **Cause:** Aphelenchoides spp.
- **Hosts**
 - **Many types of herbaceous plants**
 - **Houseplants**
 - African violets, ferns, chrysanthemum
 - **Landscape plants**
 - Hosta, coral bells, miterwort, begonia



Hosta Diseases Foliar Nematode

- **Control**
 - **Inspect plants prior to purchase for symptoms**
 - **Avoid overhead irrigation**
 - **Remove symptomatic plants and infested plant debris**
 - Burn (where allowed)
 - Deep bury (landfill)
 - Hot compost

Hosta Diseases Foliar Nematode

- **Control**
 - Disinfest contaminated materials
 - 10% bleach
 - 70% alcohol
 - Commercial disinfectants
 - Hot water treatments (10 minutes at 125°F)

Hosta Diseases Root/Crown Rots

- **Pathogens**
 - Pythium spp.
 - Phytophthora spp.
 - Rhizoctonia solani
 - Fusarium spp.
 - Cylindrocarpon spp.
- **Hosts:** Anything and everything



Hosta Diseases Root/Crown Rots

- **Control**
 - Moderate soil moisture
 - Grow ornamentals in well-drained sites
 - Use a potting soil with adequate drainage
 - Improve drainage in poorly drained yard soils
 - Add organic matter to improve drainage
 - Use raised beds
 - DO NOT overwater
 - DO NOT overmulch

Hosta Diseases Root/Crown Rots

- **Control:**
 - Pretest soils/mulches/composts for the presence of root rot fungi
 - Use a soil-less potting mix or pasteurized potting mixes for containerized plants

Hosta Diseases Root/Crown Rots

- **Control**
 - DO NOT move contaminated soil or plants to non-infested areas
 - Disinfest contaminated materials
 - 10% bleach
 - 70% alcohol
 - Commercial disinfectants

Hosta Diseases Root/Crown Rots

- **Control:**
 - Use fungicides to prevent infections
 - Etridiazole, metalaxyl, mefenoxam, fosetyl-AI, PCNB, thiophanate-methyl, fludioxonil
 - Alternate active ingredients (FRAC codes)
 - Use granular formulations if possible
 - Use during periods of wet weather
 - Use biopesticides to prevent infections
 - Trichoderma, Gliocladium
 - Use in pot production

Hosta Diseases Sun Scald

- **Causes**
 - Excessive light
 - Excessive heat
 - Insufficient rain
- **Hosts**
 - Hosta
 - Other shade-loving plants



Hosta Diseases Sun Scald

- **Management**
 - Site plants appropriately
 - Provide adequate shade
 - Water adequately
 - Mulch appropriately

Hosta 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@plantpath.wisc.edu
<http://pddc.wisc.edu>
Follow the clinic on Twitter @UWPDDC***