

2024 PDDC Plant Disease Talks

Confessions of a Black Thumb: Plants That I Have Killed (Or at Least Seriously Maimed)

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Confessions of a Black Thumb Drought Stress

- **Victims**
 - Hostas
 - Many a potted plant
- **Causes of the problem**
 - Unwillingness to water
 - Cluelessness that plants really DO need water

Confessions of a Black Thumb Drought Stress



Confessions of a Black Thumb Drought Stress

- **Lessons learned**
 - **Water adequately**
 - ~1 inch of water per week for established plants
 - ~1.5 to 2 inches of water per week for new transplants
 - **Mulch properly**
 - ~1 to 2 inches for heavier (clay) soils
 - ~3 to 4 inches for lighter (sandy) soils

Confessions of a Black Thumb Drought Stress

- **Other considerations**
 - **Water correctly**
 - Use a drip or soaker hose
 - DO NOT use a sprinkler
 - **Water at the correct time**
 - Water when it is cool (late evening/early morning)
 - DO NOT water when it is hot (mid-day)

Confessions of a Black Thumb Overwatering

- **Victim: Dappled willow**
- **Causes of the problem**
 - Pure unadulterated stupidity
 - Inability to admit I can't remember everything
 - Inability to set a timer

Confessions of a Black Thumb Overwatering



Confessions of a Black Thumb Overwatering

- **Lessons learned**
 - Buy AND USE a timer!
 - DO NOT overwater
 - ~1 inch of water per week for established plants
 - ~1.5 to 2 inches of water per week for new transplants
 - How and when you water can be immaterial
 - How much you mulch can be immaterial
- **Other considerations: None**

Confessions of a Black Thumb Walnut Toxicity

- **Victim: Fothergilla**
- **Cause of the problem**
 - Planting plants susceptible to juglones
 - Not removing walnuts planted by neighborhood squirrels

Confessions of a Black Thumb Walnut Toxicity



Confessions of a Black Thumb Walnut Toxicity

- **Lessons learned**
 - Walnut trees really CAN kill other plants
 - Be careful what you plant near established walnuts
 - Remove volunteer walnut trees promptly

Confessions of a Black Thumb Walnut Toxicity

- **Other considerations**
 - Vegetables can have problems with juglones
 - Sensitive: pepper, eggplant, potato, TOMATO
 - Tolerant: beans, beet, carrot, corn, melon, onion, parsnip, squash
 - Making raised beds may help prevent issues
 - DO not use or compost walnut leaves or fruits
 - Cutting down a walnut will not immediately solve your problems

Confessions of a Black Thumb Verticillium Wilt

- **Victim: Redbud**
- **Causes of the problem**
 - Planting a susceptible host
 - Bad luck

Confessions of a Black Thumb Verticillium Wilt



Confessions of a Black Thumb Verticillium Wilt

- **Lessons learned**
 - You can inherit plant disease problems
 - Sometimes the stars are against you
 - Sometimes diseases can serve as biocontrol

Confessions of a Black Thumb Verticillium Wilt

- **Other considerations**
 - Resistant/immune plants can be your friends
 - Pines, spruces, firs, junipers
 - Beech, birch, ginkgo, hackberry, hawthorn, hickory, honey locust, mountain ash, white oak, bur oak, poplar, serviceberry, sycamore, willow
 - Clean up leaf litter
 - Avoid municipal mulches
 - Fungicides will not likely help

Confessions of a Black Thumb Phomopsis Tip Blight

- **Victim(s): 'Moonglow' juniper (15)**
- **Causes of the problem**
 - Really, REALLY poor variety selection
 - Crowding shrubs
 - Planting in an overly shaded area
 - Lack of proper watering

Confessions of a Black Thumb Phomopsis Tip Blight



Confessions of a Black Thumb Phomopsis Tip Blight

- **Lessons learned**
 - Use appropriate resistant cultivars/varieties
 - “Juniper Diseases”
(Available upon request)
 - “Disease and Insect Resistant Ornamental Plants: Juniperus (Junipers)”
(<https://ecommons.cornell.edu/handle/1813/56372.2>)
 - **DO NOT** crowd plants when planting
 - Use the right plant in the right location
 - Water when needed

Confessions of a Black Thumb Phomopsis Tip Blight

- **Other considerations**
 - Avoid over-fertilization (nitrogen)
 - Prune diseased branches, but avoid excessive pruning
 - Decontaminate pruning tools
(70% alcohol, disinfectants, bleach)
 - Destroy infected materials
(burn where allowed, bury)

Confessions of a Black Thumb Phomopsis Tip Blight

- **Other considerations**
 - Consider fungicides where appropriate
 - Is this how you want to spend your time?
 - Apply from bud break through period of rapid growth
 - Apply every 7-21 days
 - Mancozeb, copper, thiophanate-methyl
 - Alternate active ingredients (FRAC Codes)

Confessions of a Black Thumb Winter Injury

- **Victim:** Japanese maple
- **Cause of the problem**
 - Wanting to grow non-hardy plants

Confessions of a Black Thumb Winter Injury



Confessions of a Black Thumb Winter Injury

- **Lessons learned**
 - Just because you love it, doesn't mean you should plant it
 - Use appropriate cold hardy plants
 - Pray for
 - Lots of snow
 - A slow, gradual winter cool down
 - Limited temperature fluctuations
 - A slow spring warm up

Confessions of a Black Thumb Winter Injury

- Other considerations
 - Plant trees and shrubs
 - Properly
 - In protected locations (sensitive plants)
 - Water trees and shrubs properly
 - Protect sensitive plants

Confessions of a Black Thumb Rhizosphaera Needle Cast

- Victim: 'Fat Albert' blue spruce
- Cause of the problem
 - Planting a blue spruce
 - Not taking into account environmental changes in my landscape
 - Overcrowding
 - Lack of proper watering
 - Planting a blue spruce, planting a blue spruce, planting a blue spruce!!!!!!!!!!!!!!

Confessions of a Black Thumb Rhizosphaera Needle Cast



Confessions of a Black Thumb Rhizosphaera Needle Cast

- Lessons learned
 - DO NOT plant blue spruce, DO NOT plant blue spruce, DO NOT PLANT BLUE SPRUCE!!!!!!!!!!!!
 - DO NOT crowd plants
 - Landscape environmental conditions change
 - Plants survive better when cared for properly
 - Plants have a finite life span (some more than others)
 - Sometimes it's better to cut and run

Confessions of a Black Thumb Rhizosphaera Needle Cast

- Other considerations
 - Plant dwarf blue spruce varieties
 - Thin healthy branches to increase airflow
 - Prune diseased branches
 - Consider fungicides where appropriate
 - Is this how you want to spend your time?
 - Copper, chlorothalonil
 - Ever 3-4 weeks starting at bud break while favorable environmental conditions occur

Confessions of a Black Thumb Tar Spot

- Victim: Norway maple
- Causes of the problem
 - Lack of time due to work obligations
 - Laziness

Confessions of a Black Thumb Tar Spot



Confessions of a Black Thumb Tar Spot

- **Lessons learned**
 - Make time for gardening
 - DO NOT be lazy
 - Do proper leaf clean up
 - Fall or early spring
 - Burn where allowed, bury, hot compost

Confessions of a Black Thumb Tar Spot

- **Other considerations**
 - Consider fungicides where appropriate
 - Most often never
 - Young or focal point trees
 - Copper applied at bud break, 1/2 and full leaf expansion

Confessions of a Black Thumb Hosta Virus X

- **Victim: Hosta**
- **Cause of the problem**
 - Buying infected plants
 - Not removing infected plants promptly
 - Moving the virus while gardening

Confessions of a Black Thumb Hosta Virus X



Confessions of a Black Thumb Hosta Virus X

- **Lessons learned**
 - You can bring diseases home from the store
 - ‘Gold Edger’
 - ‘Golden Tiara’
 - ‘Sum and Substance’
 - ‘Gold Standard’
 - ‘Striptease’
 - You may not know that the plant is diseased
 - You can easily move this virus
 - Shovels
 - Lawnmowers
 - Knives
 - String Edgers

Confessions of a Black Thumb Hosta Virus X

- **Other considerations**
 - Infected plants should be removed (burn where allowed, bury, hot compost)
 - Be sure to decontaminate
 - 1% Sodium dodecyl sulfate (sodium lauryl sulfate) + 1% Alconox® (2½ Tbsp + 2¾ Tbsp/gal)
 - Trisodium phosphate (14 dry oz/gal)
 - Alcohol dip followed by flaming

Confessions of a Black Thumb Tobacco Rattle

- **Victims**
 - Bleeding heart
 - Goldenrod
 - Likely many others
- **Causes of the problem**
 - Buying infected plants
 - Not removing infected plants

Confessions of a Black Thumb Tobacco Rattle



Confessions of a Black Thumb Tobacco Rattle

- **Lessons learned**
 - You can bring diseases home from the store
 - You may not know that the plant is diseased
 - Diseased plants can survive for a long time
 - Disease symptoms can look quite beautiful
 - Diseased plants can be useful (at least to me)

Confessions of a Black Thumb Tobacco Rattle

- **Other considerations**
 - This virus is easily moved from plant to plant (mechanically, via nematodes)
 - This virus is a HUGE deal in potato production
 - Infected plants should be removed (burn where allowed, bury, hot compost)
 - Immune plants are limited
 - Annual phlox, carnation, *Datura*, sweet William, zinnia

Confessions of a Black Thumb Tobacco Rattle

- **Other considerations**
 - You need to decontaminate
 - 1% Sodium dodecyl sulfate (sodium lauryl sulfate) + 1% Alconox® (2½ Tbsp + 2¾ Tbsp/gal)
 - Trisodium phosphate (14 dry oz/gal)
 - Alcohol dip followed by flaming

Confessions of a Black Thumb
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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