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

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

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

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)

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

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Walnut Toxicity

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

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Walnut Toxicity

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

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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
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Verticillium Wilt

• Victim: Redbud
• Causes of the problem
  – Planting a susceptible host
  – Bad luck

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Verticillium Wilt

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

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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

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Phomopsis Tip Blight

• 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
Lessons learned

- Use appropriate resistant cultivars/varieties
  - "Juniper Diseases" ([https://store.extension.iastate.edu/Product/Juniper-Diseases](https://store.extension.iastate.edu/Product/Juniper-Diseases))
  - "Disease and Insect Resistant Ornamental Plants: Juniperus (Junipers)" ([https://ecommons.cornell.edu/handle/1813/56372.2](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

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)

Victim: Japanese maple

Cause of the problem

- Wanting to grow non-hardy plants

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
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Winter Injury

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

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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!!!!!!!!!!!!!

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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

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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

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Tar Spot

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

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

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Hosta Virus X

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

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Hosta Virus X

• Lessons learned
  – You can bring diseases home from the store
    • ‘Gold Edger’      • ‘Gold Standard’
    • ‘Golden Tiara’    • ‘Striptease’
    • ‘Sum and Substance’
  – You may not know that the plant is diseased
  – You can easily move this virus
    • Shovels         • Knives
    • Lawnmowers      • String Edgers
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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 + 2½ 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

- 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)

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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 + 2½ Tbsp/gal)
    - Trisodium phosphate (14 dry oz/gal)
    - Alcohol dip followed by flaming
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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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