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Conifer Disease Quick Reference

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Root and Crown Rots

Hosts: All conifers

Pathogens: Assorted root rot fungi/water molds **Signs/Symptoms:** Poor growth, branch dieback,

discolored and deteriorated roots

For more information see: UW Plant Disease Facts D0094



Rhizosphaera Needle Cast

Hosts: Colorado blue spruce, other spruces

Pathogen: Rhizosphaera kalkhoffii

Signs/Symptoms: Browning/purpling of interior needles

of lower branches, followed by needle drop

For more information see: UW Plant Disease Facts D0093



Cytospora Canker

Hosts: Colorado blue spruce, other spruces

Pathogen: Cytospora kunzei

Signs/Symptoms: Branch dieback with milky-white

patches of dried sap on affected branches

For more information see: UW Plant Disease Facts D0037



Spruce Needle Drop

Hosts: Spruces

Pathogen: Unknown (possibly *Setomelannoma holmii*) **Signs/Symptoms:** Needle loss and dieback at or near

branch tips



Gymnosporangium Rusts

Hosts: Juniper, apple, crabapple, hawthorn, quince

Pathogen: Gymnosporangium spp.

Signs/Symptoms: Brown blobs with orange gelatinous masses (juniper); yellow/orange leaf spots (other hosts)

For more information see: UW Plant Disease Facts D0058



Phomopsis Tip Blight

Hosts: Junipers

Pathogen: Phomopsis juniperovora

Signs/Symptoms: Browning and dieback of branch tips in spring and early summer as new growth emerges

For more information see: UW Plant Disease Facts D0077



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Diplodia Shoot Blight and Canker

Hosts: Austrian pine, other pines

Pathogen: Diplodia spp.

Signs/Symptoms: Dieback of branch tips with dead

needles showing uneven lengths

For more information see: UW Plant Disease Facts D0042



Dothistroma Needle Blight

Hosts: Austrian pine, other pines Pathogen: *Dothistroma pini*

Signs/Symptoms: Needle tip browning and death with

a distinct break between live and dead tissue

For more information see: UW Plant Disease Facts D0043



Drought Stress

Hosts: All conifers

Cause: Insufficient water

Signs/Symptoms: Purpling/browning of needles near branch tips or higher up in plants during the summer



Winter Injury/Winter Burn

Hosts: All conifers, particularly yew and juniper

Cause: Insufficient water

Signs/Symptoms: Needle browning/bleaching over winter or in spring as plants come out of dormancy **For more information see:** UW Plant Disease Facts D0127



Herbicide Damage

Hosts: All conifers

Cause: Exposure to herbicides

Signs/Symptoms: Twisted or otherwise distorted growth, needle yellowing or browning, plant death **For more information see:** UW Plant Disease Facts D0060

For more information on conifer diseases: See https://pddc.wisc.edu/ or contact the University of Wisconsin Plant Disease Diagnostics Clinic (PDDC) at (608) 262-2863 or pddc@wisc.edu.

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