

Disease Profile

Common name	Cypress Canker	Class	Coelomycetes
Genus/species	<i>Seiridium species, S. cardinale, S. unicorne or</i>	Pest/disease type	Parasitic fungi that affects introduced cypress pines.
Host	<i>Cypress and Pinus</i> species are mostly affected. <i>Cupressocyparis leylandii, cupressus macrocarpa, cupressus sempervirens and cupressus torulosa</i> are particularly vulnerable		
Symptoms	Foliage will begin to yellow as the infection spreads and blocks the vascular system. Branches may die rapidly, usually starting with tip dieback.		
Identifying features	<p>Bark/Trunk: Cankers or fungal legions develop. The number of legions on a branch may increase as the fungus moves through the vascular or new spores germinate. Resin usually oozes from these cankers. Cankers are normally long, skinny and sunken with a red tinge to the outer bark around the legion. Tissue beneath the bark is often discoloured. Tiny black circular (small dots) fruiting bodies will appear around the wound.</p> <p>Branches: Tip and whole branch die back will occur as the vascular system is blocked. The tree becomes dehydrated.</p>		
Life cycle-	This pathogen is an obligate ; it can only survive on a living host. The fruiting bodies that are produced may appear at different stages of the year, depending on time and length of infection.		
Disease spread	The pathogen is spread via spores carried either by water, wind, insects and birds or by pruning tools. The disease is often spread on the same tree after spores are carried to other branches by wind, rain or by overhead irrigation. It may also be spread when infected tools are used to prune multiple trees without sterilising them between cuts.		

Control options

Environmental controls	Choosing more resistant species is the easiest control. Ensuring that excessive wounding does not occur when pruning by making smaller cuts rather than large cuts and limiting topping will reduce instances. Ensuring mechanical damage does not occur to the trunk. Sterilising tools with either bleach or methylated spirits will help ensure that the disease is not spread when pruning. Removing infected branches back as far from the infected wound as practical and destroying the branch may remove the infection. If a tree becomes infected subsequent irrigation should be applied to assist in hydration as the hyphae from the fungi will block xylem vessels.
Chemical control	<p>There are a number of fungicides that have been used effectively to control this pathogen. copper silicate can be used as a preventative fungicide. It is non-systemic and is used amongst some of the nursery trade as a foliar and stem spray to limit spore germination. Copper silicate can be found in most snail deterrent products.</p> <p>When branch dieback has occurred chemical treatment is required immediately. Phosphorus acid or copper oxychloride can be used as a foliar spray to combat the pathogen. For larger trees and more direct treatment Phosphorus acid can be injected into the stem. It is recommended that these chemicals are injected or sprayed on twice, once in late winter and then again six weeks later during early-mid spring.</p> <p>As with all systemic treatments, soil moisture levels should be adequate during and leading up to the application to ensure movement of the fungicide through the vascular system. Phosphorus acid can be purchased as Phosic 600, Phosphite or Phosphonate. A foliar spray version of phosphorus acid is available as Fos-ject 200.</p>



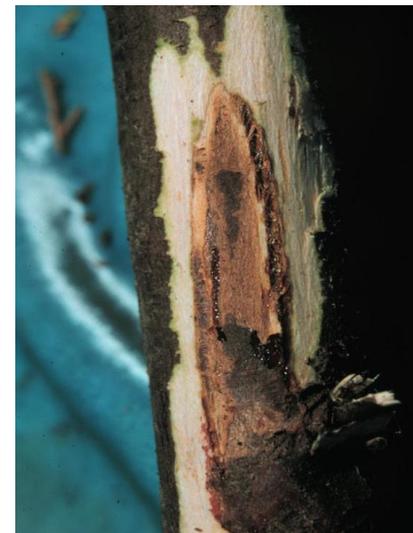
www.bspp.org.uk
Dieback caused by canker in cypress sp.



www.oregonstate.edu
X *Cupressocyparis leylandii*, dieback



www.oregonstate.edu
. Sunken canker stained red



www.ces.ncsu.edu
canker wound

References:

http://www.agric.wa.gov.au/objtwr/imported_assets/content/fcp/sc/tree/gn2004_013.pdf,
http://www.rbgsyd.nsw.gov.au/plant_info/pests_diseases/fact_sheets/cypress_canker

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