Conifer die-back seems to be running rampant again!

Also known as Cypress canker, it is caused by a Seiridium fungus (usually *S. cardinale*), and is often a swift and deadly disease to a range of Conifers, Junipers and Pencil pines.

The disease affects the vessels that carry liquids from the roots up to the canopy, causing a severe restriction or cessation of sap-flow. So affected branches literally die of both thirst and starvation, and this can occur very rapidly (a dollar for every time I've heard "it seemed to die overnight").

Some dot points:

- Usually most death or damage is seen in summer (when there is maximum heat and moisture stress), but this season I've witnessed a lot of damage in late spring and early summer (2011/12).

- Following on from the last point, please know that a larger number of smaller dead patches in a canopy may actually be caused by mites, so make sure the diagnosis is done properly before commencing any type of treatment.

- Only infected trees need to be treated, and possibly their immediate neighbours if trees are planted in groups or rows, though it is sensible to cover-spray other trees (especially young trees) once in the spring with either phosphoric acid or a suitable copper compound.

- You may read or be told there is no chemical treatment registered for the specific treatment of Seiridium. While true in a pedantic way, phosphoric acid and many copper compounds have a generic registration for use on ornaments, and aren't conifers ornamentals?

- You may read or be told that continual drilling holes for injection weakens trees and they can snap and fall down. What rubbish. There may have been a very slight chance back with the dinosaurs when we used to drill a number of 12-16mm wide holes and use a funnel to poor in insecticides to treat borers. We now use special injectors that only need a few 4mm holes.

- You may read or be told that you have to treat the trees once or twice per year forever. Totally wrong. A few treatments over a couple of years seems to overcome the disease as long as the trees are not badly stressed from other causes. Then it's a matter of keeping a close eye on the situation and do further treatments when necessary.

In Europe and parts of the U.S., it's believed that most infection is spread by water-splash, especially during spring snowmelts. While water-splash can be responsible here, most infections seem to be caused by borers, though during the nineties (and probably since) some retail nursery stock was observed as being infected. As with many diseases, stressed trees are more likely to succumb (and are also more attractive to pests such as borers).

It really saddens me that many people are told there is nothing you can do about it, when exactly the opposite is true. Treatment with phosphoric acid is cheap, safe and usually very effective if less then one-third of the canopy has been affected.

This once would have been a glorious hedge lining the driveway into a semi-rural property in the Swan Valley. Simple, safe and relatively cheap treatments could have saved these trees.

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Conifer die-back (cont’d)

I believe conifers are an integral part of many urban landscapes, adding a deeper green, more formal and attractive form of evergreen trees. You could say they are one of the very few northern hemisphere group of trees giving us that ‘little taste of Europe’ that many people seem to want in most southern states of Australia, not the least on the gutless sandy soils of Perth and the southwest coastal plain.

Most species tolerate exceptionally harsh climatic conditions from scorching dry winds through to frosts and even snow, and once established need little or no supplementary waterings.

So it’s a great pity to see them disappear from our treescapes. There are varying estimates, but in Perth alone possibly 60% of susceptible species have died.

So what can we do about it? The answer is some simple treatments can have at least a 90% success rate if less than one-third of a particular specimen’s canopy has died from Seiridium infection.

So don’t listen to the many ‘experts’ out there that tell you that it’s a waste of time – they either haven’t treated trees properly, or some haven’t even been out in the field and actually done it, and some simply wouldn’t have a clue.

I’ve treated or advised on treatments on hundreds of specimens with a success rate of around 85%, including those specimens with much greater than 30% canopy death. Here’s a summary of one of the best success stories I’ve been involved in:

This residential property had a walkway on one boundary and less than ideal neighbours on the adjoining boundary. They had planted Conifers and Junipers on these fence lines that eventually became beautiful borders/barriers.

Unfortunately, Seiridium took hold and some of the trees began to die back and they were told there was nothing they could do. They contacted me so I visited them and instigated a treatment program.

As I normally suggest to save costs for the clients, I show them how to do the treatments themselves. Because these specimens were, quote ‘invaluable’, the clients did even more than is normal. One of the specimens had a 60% canopy mortality, but they persevered (see next photo).

This specimen was treated a number of times in the first 3-4 years. Only one preventative injection has been done since. This is living proof that treatment can be very successful.

So how much do you value your trees? Think about how much it would cost to replace them with trees of the same size, or how long it would take to get alternative replacement species to the same size and form. For the cost of a visit from me you could save a huge amount.

Very susceptible species include:
(Most of what we call ‘Conifers’ are Cupressus spp or Chamaecyparis spp or their hybrids, Cupressocyparis spp). Common names include:

- Monterey cypress
- Swanes Golden (and other selections/cultivars)
- Castlewellian Gold
- Naylors Blue
- Lawsonia selections/cultivars

Other susceptible species include:

- Pencil pine (Thuja occidentalis)
- Western red cedar (Thuja plicata)
- Juniper virginiana
- Other Cupressus species: C.arazonica, C.glabra, C.lusitanica, and C.torlosa

A great fact-sheet on injecting trees can be found at http://www.dwg.org.au/files/Phosphite%20Injectio n%20using%20Chemjet%20Syringes1.pdf

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