

Timing is Every Thing

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Just as with many things in life, timing is everything when it comes to control of plant diseases and insects.

When pesticides are used, it is important to keep in mind they work best when applied at a specific time in a disease or insects life cycle. If applied at the wrong time, control will not be achieved and the unnecessary use of a pesticide can lead to pest resistance.

During spring, at bud break and shortly after, is when fungicides are best applied for many of our common foliar tree diseases. Waiting until we see symptoms on leaves or needles is often too late for fungicides to control a disease.

If a tree had a disease last summer that caused unacceptable damage, this spring is the time to apply fungicides to protect this year's growth. Fungicides work better at preventing infections than curing them. To avoid pest resistance, pesticides should not be applied unless a plant has a history of infection.

Also, many foliar diseases of shade trees are minor issues for otherwise healthy plants and pesticide control may not be needed. Unless a disease caused a tree to lose 50 percent or more of its leaves by late August last year, it is more of an aesthetic issue than harmful to tree health.

Pesticide control is often justified for evergreen diseases due to their inability to recover. If the needles on a branch are killed back to where there are no green needles on that branch, it will die and not recover.

Sphereopsis tip blight is a fungal disease of older pines causing new growth to be stunted and turn brown, black specks to develop on the bottoms of pine cones, and entire branches to die with needles turning light brown and hanging straight down so they appear wilted.

If an Austrian or Ponderosa pine had these symptoms last year, the time to apply fungicides such as thiophanate-methyl, propiconazole or Bordeaux mixture is approaching. Spray branch tips thoroughly when new growth starts around the third week of April, just before needles emerge from sheaths in about mid-May and again 7 to 14 days later according to the label.

Dothistroma needle blight is a pine disease that causes needles to turn reddish brown. On close inspection, reddish-purple bands that encircle needles will be found with needles often dying from the tip back to the lesions. For control, spray trees with copper salts of fatty and rosin acids or Bordeaux mixture as needles are emerging around mid-May and again after new growth has fully expanded in June.

Rhizosphaera needle cast infects spruce trees causing older needles and those in shade to turn reddish brown, usually on the trees lower half. Individual needles develop rows of tiny black dots that are seen under magnification to help identify the disease. Apply chlorothalonil or Bordeaux mixture when new shoots are one-half to 2 inches long in May and repeat every 3 to 4 weeks if frequent rains occur.

Sirococcus shoot blight kills young shoots of spruce so the tips of branches turn brown and needles drop off. In some cases, young shoots droop and appear wilted. If control is desired, apply chlorothalonil when new shoots are one-half to 2 inches long in May and every 3 to 4 weeks if frequent rains occur.

As with all plant problems, it is important to positively identify what is causing the issue before applying pesticides. Once the cause is known, and pesticide use is justified, determine when these products need to be applied to be effective and to reduce the risk of pest resistance.