

ditions, but could backfire under anaerobic conditions.

Isn't it sensible to eliminate the real cause of BLACK LAYER? Excluding SULFUR products is not going to solve the problem, especially if one has an alkaline saline soil. Under this condition — the use of sulfur products is not only essential — but imperative.

Paul Sartoretto, Ph.D.

Verticillium Wilt

by James A. Fizzell

Senior Ext. Adviser, U. of I.

Leaves on a large branch in your favorite maple tree wilt, turn brown & fall in mid-summer. A plant in the barberry hedge dies, followed by death of the plants on either side. Or, a tomato plant yellows and dies just as it starts to produce fruit.

This kind of problem is a common occurrence this year. The cause is often Verticillium Wilt, a soil borne fungus disease. The soil becomes infected with the disease, when diseased plants or contaminated soil is brought in. Susceptible trees, shrubs and also garden plants growing in the soil are invaded through roots.

As well as attacking the above plants, Verticillium Wilt also attacks Ash, Box Elder, Catalpa, Cherry, Dogwood, Elm, Honey Locust, Horse Chestnut, Kentucky Coffee, Lilac, Linden Locust, Magnolia, Oak, Osage Orange, Poplar, Privet, Redbud, Rose, Russian Olive, Sumac, Tulip Tree, Viburnum, and Yellow Wood. Many garden flowers and vegetables are also susceptible.

Infected plants may not show symptoms until they are damaged or stressed in some ways. Floods last fall, and drought last winter damaged plants and hence, those with Verticillium are showing the characteristic symptoms. Susceptible tomato varieties usually succumb from the stress of fruit production. You can tell if your plant has Verticillium Wilt by cutting into affected stems. If the disease is present, vascular tissue or sapwood will be streaked green, purple & brown, depending on the variety of plant. Infected garden plants usually die from the disease, but often a woody plant wilts and recovers, not showing symptoms until stressed again. By keeping the plant healthy and vigorous an affected plant can often live out its normal life span.

A spring application of nitrogen fertilizer to trees and shrubs will promote formation of thick sapwood and may wall off further infection. Remove dead limbs, but postpone pruning any newly wilted branches to see if they will produce new leaves. Water during drought periods.

If your plant dies, be sure to replace it with a resistant variety such as Apple, Beech, Birch, Ginko, Hawthorn, or Oak (White or Burr). Most evergreen trees and shrubs are resistant. Plant only resistant varieties of garden plants.

If you are fortunate enough to have avoided contaminating your soil with Verticillium Wilt, be very selective about any plants you bring in, especially from neighbors. This is one place where it may pay to look a gift horse in the mouth.

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