PURDUE UNIVERSITY COOPERATIVE EXTENSION SERVICE
Fulton County

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Fungus

There is a Tooth Fairy, Easter Bunny, leprechaun and Santa Claus but none of them can beat Mother Nature when it comes to shear amazement. As I rode my lawnmower past a red oak tree in my yard I marveled at the mottled light green to dark visible raised pattern on very sick looking leaves. The wet spring has allowed a fungus infection called Oak Leaf Blister to occur as buds swell and open. The symptoms, 1/4-1/2-inch circular, light green bulges on the top surface of leaves, usually appear within several weeks following an infection. From the underside, the affected areas are sunken or depressed. These distortions may cause leaf bending or curling of narrow-leaved oak species. As the blisters age they become dry, brown spots; severely diseased leaves may drop early.

Is my beautiful oak tree destined for the fire log pile? Not at all. Although this disease is quite conspicuous, it does not seriously harm healthy trees. That is where the amazement comes in to play. This fungal organism is able to survive from year to year without killing its host. While some other diseases will kill a tree this one allows them to live so the fungus can survive and reinfect next year.

I have always been amazed by those conditions that kill their host. On the farm, intestinal parasitic worms can infect at such great rates they will eventually kill the animal and subsequently themselves. What is the point of denying yourself food?

It is hypothesized that fungi are responsible for 64% of the extinctions of plants. Funguses have a unique way of floating around as spores that may travel up to thousands of miles. When they attach to a host they penetrate and destroy the tissue. Sometimes that destruction is complete where species have been lost to history. Other times it is almost complete, as in the case of the American chestnut.

According to the American Chestnut Association, “The American chestnut tree survived all adversaries for 40 million years, then all but disappeared within 40.” The imported fungus that attacked it would kill all the above ground parts but not the roots, thus allowing it to spout a new tree and allowing this species to survive in a few places in the Northeast United States.

There are a lot of fungus diseases in trees that cause them to have sick looking leaves, but not kill them. Soon we will be seeing big black spots on maple leaves caused by the tar spot fungus. Apple trees leaves will become blackened, then yellow and fall from trees as the fungus for apple scab starts its dirty work. These trees will bounce back next year. The same will hold true for the fungus known as peach leaf curl that causes the growing cells at the leaf margins to grow rapidly

and haphazardly resulting in a puckered, curled, distorted appearance. Often times the color of the leaves vary from shades of green and yellow, to pink, orange, and purple. Just another case of Mother Nature at work.

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