

10 Common Diseases that Make Your Plants Sick!

You know the dread you feel when you step outside and see one of your beloved plants looking under the weather? The term “under the weather” is appropriate since many Florida garden problems are due to excessive rainfall and heat. Here we’ll explore 10 common Florida garden diseases.

First, you should know about the disease triangle – the three things needed for disease development: a vulnerable plant, a strong pathogen (disease), and a favorable environment. Controlling garden disease hinges on your ability to eliminate at least one part of the disease triangle. Often that can mean simply altering care practices like reducing water or proper pruning. Next, you should know that most plant diseases are caused by fungi (most common), bacteria, or viruses. Let’s explore 10 garden offenders:



Spots caused by anthracnose on *Crinum* spp.

Anthracnose (*Colletotrichum* leaf spot) is one of the most common plant diseases and may be found year round. The first signs usually appear at leaf edges, with tissue yellowing and then dying. Beige to reddish-brown spots develop along leaf veins and older leaves may show cupping, distortion, dead tissue, and sometimes leaf drop. Anthracnose is spread by spores in splashing water. Good sanitation like removing fallen leaves, pruning out infected branches, and reducing leaf wetness will reduce disease spread. In severe cases, fungicides are available, often containing the active ingredient chlorothalonil.



Spots on lettuce leaf caused by bacterial infection.

Bacterial spot is common in tomatoes and peppers. The bacterium that causes this leaf spot infects leaves and fruit with dark brown spots. Spread by wind, rain, and even you, these bacteria can be seed-borne, which means saving seeds from a diseased plant can further spread disease. Wet, windy, warm weather favors this disease so it’s often found in late summer and early fall. Like all bacterial disease it’s hard to control, so prevention is key. Always start with disease-free seeds and plants. Avoid overhead watering and planting in the hot, rainy season. Bactericides containing copper can be helpful if applied early.



Black spot of rose, notice the feathery borders of the spots.

Black spot of roses is a serious rose disease in Florida. The fungal pathogen *Marssonina rosae* is specific to roses and modern roses, especially the hybrid teas, are particularly vulnerable. Symptoms include black spots mainly on the leaves, although they can be on other plant parts. These spots may have irregular “spiky” or “feathery” borders. Eventually the leaves yellow around the spots and fall off, reduc-

ing plant vigor. Removing fallen leaves can reduce disease spread and there are many fungicides available for black spot control. Best tip: plant resistant cultivars as fungicide applications will be ongoing.



Citrus greening infected leaves showing characteristic blotchy mottling.

Citrus greening is a fatal disease devastating to citrus production thought to be caused by a bacterium spread by the invasive exotic Asian citrus psyllid. Early symptoms include a mottled yellowing on leaves. It looks similar to some nutrient deficiencies, but is not uniform on the leaf. Eventually root/shoot growth declines, twig dieback occurs, and fruit production and flavor deteriorates. No control or prevention is available to the home gardener; once detected the plant should be removed.



Ganoderma conk (mushroom) on palm trunk.

Ganoderma butt rot is a common palm disease caused by the fungus *Ganoderma zonatum*. All palms are vulnerable. There are several *Ganoderma* in Florida but only this one affects palms. Simply put, if you find a conk (shelf-like mushroom) on a palm trunk you can safely assume that it’s

Ganoderma zonatum. Once *Ganoderma* is found you must remove the diseased palm to reduce spread of the spores. There is no control or cure. No palms can be planted there again.



Characteristic mosaic mottling on leaves, caused by a virus.

Mosaic virus is a family of viral infections that can affect tomatoes, peppers, cucumbers, St. Augustinegrass, and others. Tobacco mosaic virus is one of the most common plant viruses, and although not usually fatal, it reduces flower/fruit production and overall plant health. Mosaic viruses cause leaf distortion, curl, and leaf mottle with white, yellow, and green patches. Viral infections have no control or cure; infected plants must be removed to prevent disease spread.



Honey-colored *Armillaria* mushroom cluster.

Mushroom root rot (*Armillaria*) decays the root systems of trees and shrubs and is usually lethal. Early symptoms include wilting, dead branches, and dieback throughout the plant. The most obvious signs are patches of honey-colored mushrooms in the root zone in fall, winter, or late spring. Unfortunately the symptoms usually show up one to three years after infection and there is no way to control the disease then. Soil fungicide treatment may be necessary before replanting the area and then choose resistant species. Disinfect pruning tools between each plant to reduce the spread of *Armillaria* and other diseases.



Oak leaf blister symptoms.

Oak leaf blister (*Taphrina caerulescens*) is a common fungal disease on oaks, most prevalent on laurel oak (*Quercus laurifolia*). Favored by cool, wet weather, the spores infect newer leaves and cause swollen blister tissue, leaf distortion, and curl. In most cases it’s cosmetic and rarely does significant damage, attacking only the leaves. In extreme cases a young tree may experience heavy leaf loss. Dispose of the fallen infected leaves to prevent spreading fungal spores, no other treatment is necessary.



Powdery mildew symptoms on tomato leaves.

Powdery mildew is common in spring and fall. Starting as white powdery patches on leaves, it spreads until it covers the plant with a powdery coating. This fungus likes moisture, so shady, crowded plantings are often affected. Infected plants will eventually be stunted and lose leaves, possibly dying if left untreated. Reducing leaf wetness (apply water to roots, not leaves) and thinning may improve plant health. There are fungicides labeled for powdery mildew, but fungicides work best preventively so treat early or in advance in known problem areas. Neem oil and other horticultural oils can be effective on more severe infestations.



Rust pustules on plumeria (*frangipani*) leaf.

Rust is a common fungus for many plants. Rust starts as small yellow spots on leaves where eventually yellow-orange (rust-colored) pustules form. As rust progresses the spots grow together turning brown or black and cause leaf loss. In the case of Plumeria the disease commonly hits before seasonal leaf drop, so disposing of fallen leaves reduces future infection and no other control is recommended. In other plants there are fungicides labeled for rust, simply check to be sure your plant is on the label. ✨

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Left: Redbay with laurel wilt symptoms, maroon-brown wilted leaves remaining on the tree. Right: Symptoms of TPPD on Sabal palmetto: dead lower leaves and spear leaf (top, center).

New Diseases

Laurel wilt is fatal to redbay (*Persea borbonia*) and avocado. The redbay ambrosia beetle bores into healthy trees and cultivates a fungus in the vascular system. This causes wilting where leaves turn purple-brown, and hang for up to a year. Dead plants should be removed and chipped, burned, or buried.

Texas Phoenix Palm Decline (TPPD) is spread by plant-feeding insects. First flowers/fruit drop, lower fronds discolor (reddish-brown to gray), and the spear leaf dies, briefly leaving a ring of green around the dead center. Palms with TPPD should be removed. Known susceptible palm species: *Phoenix* spp. and *Sabal palmetto* (cabbage palm).