

Diseases in the landscape

Landscapers and homeowners alike often overlook the presence of disease in the landscape and focus more on looking for the presence of insects. Diseases in the landscape affects aesthetics just as bad as or even worse than insects. Reason being, most times it is easier to kill the insects than to control diseases in the landscape. Yes, I say control disease and not kill because fungicides do not completely get rid of diseases. Even if the fungicide controls the disease it may reoccur if conditions are favorable. For disease to be present, there must be three factors in place; pathogens, host, and a favorable environment. This is called a disease triangle.

Diseases: There are pathogens such as virus, fungus, and bacteria that cause plant diseases. We will focus on fungus. There are over 8,000 species of fungi that cause plant diseases worldwide. Fungi are microscopic, spore-bearing organisms that are unable to produce their own food. Some fungus feed on dead plant tissue while others live on live plants and cause disease. A few of the common lawn diseases that are caused by fungus are; dollar spot, large spot also referred to as brown patch, and take-all-root rot. During the rainy summer months, residents of Florida are encouraged to be on the lookout for take-all-root rot disease. The take-all-root rot pathogen always presents on the grass root and is activated by a long period of excess moisture in the soil. At first the symptoms appear as a small, circular reddish spot patches after which it developed into a brown or bronze color. The diseases that affect turf are different from those that affect shrubs and trees. People often believe that the more water and fertilizer the plant receives the better the plant will thrive. To maintain a healthy plant, it is important not to over fertilize or over water. Such practices will foster the development of diseases.

If there is the presence of disease in the landscape that you are unable to identify, contact the UF/IFAS Extension. There are wide varieties of fungicide available at your local landscaping supply stores. Most fungicides are only effective for about twenty-one days after application. Therefore, if the disease is not suppressed during that period, a new application must be made. Please note that more of the same fungicide or even fungicide over all is not always the answer. Sometimes the answer could be to break the disease triangle by removing the favorable condition. The favorable condition could be too much water on the leaves or soil saturated with water. Disease thrives very well where there is too much moisture for extended periods. In addition, fungicide rotation could be the answer. Fungicide rotation does not mean changing fungicides based on names only, but changing its mode of action. For example, some fungicides act by inhibiting cell division while others may stop breathing.

Be aware that disease can develop fungicides resistance. Fungicides resistance is the ability for a fungus to adjust to a fungicide, resulting in little or no control. Two of the main reasons fungus develops resistance are: repeated use of the same fungicide and applying fungicide at rate below manufacture's label recommendations.

For more information on plant disease and any other related horticulture topics, contact Grantly Ricketts at UF/IFAS Extension in Osceola County at 321-697-3000 or email at gricketts@ufl.edu.