

Disease Prevention and Garden Maintenance in the Fall

We are now in one of the most important times of the year in a disease management program. Fall cleanup and maintenance goes a long way toward preventing many plant diseases, or at least lessening their severity. In general, cleaning up of plant debris and checking over your plants for problems should be done in the fall for a whole host of reasons, including aesthetics, insect management, plant disease management, and to comply with local regulations, in a few cases. This discussion will center on fall plant maintenance and the role it plays in helping control plant diseases.

It is very important to clean up ALL above-ground plant debris from plants that were infected with plant diseases that caused lesions on the leaves, stem, fruit, or other visible tissues. This particularly includes the following diseases: Downy and powdery mildews; Leaf spots; Black Rot; Black Spot, Botrytis (gray mold); white mold; and other stem/spur diseases of herbaceous perennials. The most important class is probably the leaf spot diseases, especially Septoria Leaf Spot of tomatoes and potatoes, Apple/Pear/Crabapple Scab, and the Anthracnose diseases.

How do you go about this process, and what should you do with the plant materials you are cleaning up? The key words are thoroughness and removal. Your level of disease prevention is directly related to how thorough you are in removing plant debris. If you half-heartedly remove the plant stems and the big materials and that is all, you haven't helped much. However, if you pull out the plants, rake up ALL the leaves and petioles, and fallen stems, etc..., then you have removed nearly all of the disease inoculum and have hopefully short-circuited the disease cycle so that it can't get started next year.

Of course, this does not work with all diseases, so you should know what disease you are dealing with, so that you can do the right type of maintenance. Root rots, wilt diseases, and seedling blights are diseases that survive in soil-borne organic matter, not above-ground matter, so cleanup practices don't help much to fight these diseases.

Then, there are specific diseases that need to have more done than just cleaning up of leaves. These are diseases that affect perennials, especially woody perennials. The first step is to thoroughly analyze your plants and either pull out or prune out infected areas. In particular, you need to do this to counteract fruit and stem diseases of woody perennials, such as black knot and black rot of plums, cherries, etc.; Fire blight of pears & apples; Cane & spur blight of raspberries, and other diseases such as cankers. If you suspect viral diseases, you should pull out the entire plant to prevent insects spreading that disease to other plants that are not affected.

This is a short discussion of this topic, if you have a specific disease in mind that we didn't mention here, call me at 715-732-7510 and we can talk about how to manage them. In general, if you have a foliar disease, it is a good practice to remove the leaves or needles and send them to a municipal compost heap instead of leaving them on your property. You can burn some debris, but this is somewhat dangerous with most of the fungal diseases, because the spores can actually be spread further this way. Thus, I recommend long-distance removal of diseases tissues.