

INSIDE GRUNDY COUNTY
By Bill Arndorfer
Grundy County Extension Education Director
April 28, 2006

I recently came across an article written by Paula Flynn, Extension Plant Pathologist with Iowa State University Extension that discussed ways to prevent plant disease problems. Since we are into another growing season, I thought you might find it helpful to review the points made by Dr. Flynn to reduce disease problems during the growing season.

The first thing is to match the plant to the sight. Ask yourself if the conditions are suitable for the plant. Some of the questions are: Is there adequate space for the plant to grow over time? Is there enough light? Is the soil suitable? Understanding the needs of your plant beforehand will help to avoid health problems later.

Select healthy plants. To determine if a plant is healthy, take a close look at the leaves, stems and roots (if possible). Be wary if you notice wilting, stunting or spots on the leaves and stems or soft, discolored roots. You do need to know what's normal for a particular plant before you can determine its health.

Another way to make sure your yard and garden will not be overrun with diseases is to use a number of different plant species. Many of the problem-causing pathogens attack groups of related plants.

Another option to minimize disease problems would be to look for disease-resistant cultivars. A disease resistant cultivar has the ability to resist certain diseases. If you have had a problem with a particular disease, investigate whether resistant cultivars are available.

Proper spacing for plants is critical to preventing disease problems. Allowing good airflow between plants will help reduce the risk of diseases on leaves. Many of the fungi that cause leaf spot problems on plants thrive on conditions of high humidity and long periods of leaf wetness. The label or seed packet often gives spacing information.

Fungal diseases thrive in moist conditions. To prevent fungi from growing, reduce the amount of time water is on the leaves by watering in the morning. The water will evaporate off the leaves more quickly than if you water late in the day. If possible, water at ground level. As a general rule, deep and infrequent watering is best for established plants.

Removing diseased leaves, stems, branches, roots and fruit is an important way to stop problems from spreading to neighboring plants. Wind and rain can help move diseases around, but pathogens also can be spread as you work in the garden. Keep gardening tools clean. It's also a good idea to remove diseased plant tissue in dry weather only. When cutting out a diseased portion of a plant, cut back into the healthy tissue to make sure you remove the entire problem area.

For more information on preventing plant disease problems, call the Grundy Office of ISU Extension at 319-824-6979.