

NEWS RELEASE  
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COMMON SENSE CULTURAL PRACTICES CAN HELP  
TO PREVENT GARDEN DISEASES

BACKYARD HORTICULTURE  
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As you plan and plant your summer vegetable garden, keep in mind that you can use certain cultural practices to make conditions in your garden less suitable for some common diseases. In many cases cultural practices can help you limit the amount of pesticide applications needed.

Often the best way to avoid plant diseases is to plant resistant varieties of vegetables. Such varieties either cannot be infected by diseases or nematodes, or, if infected, the plant withstands the infection without severe injury. Varieties resistant to a number of diseases are available at local nurseries. In many cases, you can find varieties that are resistant to nematodes, powdery mildew, certain viruses, and vascular diseases such as Verticillium wilt and Fusarium wilt. Check with your nursery to find out which ones are available for local conditions. A gardener may choose to plant a more disease susceptible variety because of more desirable horticultural characteristics. For instance, you may prefer to grow an old favorite variety of tomato, even though the variety may be very susceptible to nematode injury. If this is the case, you should be aware that you might need to use pest management more often, and be prepared to accept more loss from diseases.

In the interest of avoiding disease problems, always select the highest quality of seed and planting stock that is available. Examine the planting stock for any obvious signs of diseases. Do not accept plants for your garden that have been dug out of another garden, unless you are sure the soil and plants are free of diseases and nematodes. The best way to prevent diseases is to keep them out of your garden from the start.

Another way to help prevent disease problems is to plant your garden in a suitable location. Most vegetable plants prefer full sun, but some may tolerate shady areas. Diseases like powdery mildew, white mold and gray mold are more serious in shady areas.

Avoid planting in soil that drains poorly, since root diseases are likely to be a problem in such soil. Improve soil drainage before planting, because it's nearly impossible to do once your garden is already in. Do not overcrowd plants; crowded conditions favor damping-off and gray mold of vegetables. Arrange your garden according to the watering needs of the various plants. Do not plant deep-rooted plants that need infrequent irrigation next to shallow-rooted crops that need more frequent light waterings.

Proper irrigation is the most important cultural practice when it comes to managing diseases. Maintain an even water supply for your garden without over watering. Too much water favors root diseases; overhead (sprinkler) watering favors several leaf diseases and fruit diseases. If you use sprinklers, water early in the day so that leaves and fruit have a chance to dry out quickly.

Remove diseased plants from your garden as soon as you see them. The quicker you remove them, the less likely the disease will spread to other plants. Also keep your garden tools clean to avoid spreading contaminated soil. This is especially true if you are working in soil that you know is infested with nematodes or certain diseases. If you smoke, wash your hands before handling potato or tomato plants; tobacco mosaic virus, a serious disease, may be spread through contact with tobacco. For a free leaflet on damping-off diseases, call the UCCE office in Mariposa and ask for leaflet #8041.

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