



Identifying and Combating Plant Diseases

Plant diseases can be a problem no matter where you garden or how experienced a gardener you may be. But, in particular, if you are growing in a new-to-you community garden bed this year, you might not know much about the habits of the gardener who took care of the plot before you. As such, it can be a good idea to take a few extra precautions in the disease prevention department.

Disease Prevention Best Practices

Crop Rotation—Whenever possible, rotate crops, so that you aren't growing members of the same plant family in the same location year after year. Of course, this may be easier said than done, if you have a really small plot or you don't know exactly what was growing where in your plot last year.

Disease-Resistant Varieties—Choose plant varieties that are resistant to the various diseases which most often strike them. (This doesn't mean you have to limit yourself to hybrids. There are various heirloom varieties which are naturally resistant to some of the most common plant diseases.)

Room to Grow—Without good air circulation, plants become more susceptible to disease, so, if you can, resist the temptation to fill your plot with as many plants as it will hold. (After all, it's better to grow a few really healthy plants than several sickly ones!)

Careful Watering—When watering, direct water to your plants' roots (at soil level), trying to keep the leaves of your plants as dry as possible. Wet leaves can become a vector for plant disease—especially in the absence of good air circulation.









Sanitizing Tools—Before and after you use them, you may want to sanitize garden tools, plant stakes, and tomato cages by dipping them in a mild bleach solution. (One-half cup of bleach to about five cups of water is a good ratio.) Also, be sure to dry everything well with a clean rag to prevent rusting.

Weeds and Waste—Remove any diseased leaves or fruits you see in your plot. Do not compost these, as doing so can spread disease to other plots. Instead, bag up diseased plant debris and throw it away.

Common Diseases in the Garden

Spring	Summer	Fall
Early Blight	Early Blight	Late Blight
Damping-off Disease		Damping-off Disease
Powdery Mildew	Powdery Mildew	
Verticillium Wilt	Verticillium Wilt	
	Fusarium Wilt	Fusarium Wilt
	Downy Mildew	Downy Mildew
	Anthracnose	

Common Diseases in the Garden (continued)

Disease	Crops most likely affected	What it looks like	Prevention	Treatment
Anthracnose	Beans, cucumbers, and melons		Opt for disease-resistant varieties, afford individual plants plenty of space for optimal air circulation, keep water off of leaves and vines when possible.	Avoid contact with diseased leaves, vines, or fruits while plants or soil are wet. Remove affected plants or portions of plants and discard. (Do not compost—bag up plant debris and throw away.) Improve air circulation around remaining plants. <i>Apply an approved fungicide as needed.</i>
Damping-off Disease	All kinds of germinating seeds and young seedlings		Make sure seedlings have good drainage, avoid overwatering, plant when soil is warm.	Remove affected seedlings. Replant new seeds in sterile growing medium and transplant when soil is warm.
Downy Mildew	Carrots, lettuce, peas, spinach		Space plants for ideal air circulation, keep tools clean and sanitized, keep water off of plant leaves whenever possible, watering directly at the soil line instead.	Avoid contact with diseased leaves, vines, or fruits while plants or soil are wet. Remove affected plants or portions of plants and discard. (Do not compost—bag up plant debris and throw away.) Improve air circulation around remaining plants.
Early Blight	Tomatoes*, potatoes, and peppers		Space plants for ideal air circulation, keep tools clean and sanitized, keep water off of plant leaves whenever possible, watering directly at the soil line instead.	Cut out and remove diseased portions of plants. Do not compost—bag up plant debris and throw away. <i>Apply an approved fungicide as needed.</i>
Fusarium Wilt	Wide range of plants		Choose disease-resistant varieties, avoid planting the same crop type in the same place year after year.	If caught early, you may be able to cut out and remove diseased portions of plants. Do not compost—bag up plant debris and throw away. Plan to rotate crops in affected soil areas next season. <i>Apply an approved fungicide as needed.</i>
Late Blight	Tomatoes*, potatoes, and peppers		Space plants for ideal air circulation, keep tools clean and sanitized, keep water off of plant leaves whenever possible, watering directly at the soil line instead.	Cut out and remove diseased portions of plants. Do not compost—bag up plant debris and throw away. <i>Apply an approved fungicide or product containing copper as needed.</i>
Powdery Mildew	Cucumbers, melons, squash, bee balm, and many other plants		Choose disease-resistant varieties, space well for optimal air circulation.	Cut out and remove diseased portions of plants. (Do not compost—bag up plant debris and throw away.) Prune and/or stake to improve air circulation. <i>Apply sulfur as needed.</i>
Verticillium Wilt	Wide range of plants		Choose disease-resistant varieties, avoid planting the same crop type in the same place year after year.	If caught early, you may be able to cut out and remove damaged portions of plants. Do not compost—bag up plant debris and throw away.

*For more detail on tomato blight, see “Growing Healthier Tomato Plants” info sheet.

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Contact the Community Garden Supervisor at communitygardens@bloomington.in.gov.**