Which are the most common fungal diseases on plants and how to fight them?

Having healthy plants that have high yield is the dream for most farmers and gardeners. This dream is always interrupted by the fear that something might happen to your precious harvest.

There are three types of diseases each having different signs of symptoms. They are bacterial, fungal, and viruses which usually happen when the weather conditions or the soil are not in their best shape. We have compiled a list with the most common fungal diseases and how to avoid them below.

**Anthracnose**

Most affected: *cucumbers, beans, eggplants, peppers, tomatoes.*

The damage appears when the fruit ripens, forming dark lesions on the surface which cause the premature rot of the fruit and harm the leaves. This happens frequently to varieties planted in areas with high humidity.

Be careful when watering the plants. Overhead irrigation is a no-go because the anthracnose spores live in the soil and need just a little splash of water to spread over and infect the plant. You can also try to prevent fruits from touching the soil during ripening and harvest them as soon as they mature. What is more, you should clear away the fruits that fell on the ground and rot there to ensure the disease has nothing to feed on.
Powdery mildew

Affected plants: beans, cucumbers, squashes, and pumpkins.

It sounds somewhat magical, but the magic it does is not very helpful. Powdery mildew is the white powdery coating that emerges on the surface of the leaves and the fruit plant. This fungal disease strikes the leaves that are closest to the ground. We can say it’s the most common pest of all.

Powdery mildew particularly thrives in shady areas no matter if it's hot or humid. It can outlive the winter in spores and in buds of the fallen leaves. You can spot the occurrence of powdery mildew when very thin white frost like powdered sugar (called mycelium) covers the older leaves. Sounds beautiful, but it actually blocks out the essential sunlight and cripples the plant’s ability to breathe. The powdery mildew spreads easily through the air and can sometimes travel through windows and even affect indoor plants.
How do you fight these fungi?

You may be surprised, but the most effective “medicines” for prevention and treatment are milk and whey. Spraying both of them over the diseased plant could eradicate up to 90% of the infection! It’s better to use this “potion” as a prevention tool rather than as a medicine. Then, carefully trim the infected leaves and avoid spreading fungi on the rest of the plant or yourself! Put the extracted leaves in a plastic bag, seal it and put it away.

**Gray Mold**

Most affected vegetables: *eggplants, potatoes, peppers, tomatoes, strawberries*

Gray mold is the brown or gray circular spot that shows up on leaves, fruits, flowers or the stems of the plant. The mold affects the plant and causes premature falling of the fruit. Right after the buds develop, they get the brown spots which grow to become a fuzzy mold. The disease may also occur when you have harvested your fruits and cause them to rot.

To protect your crop from the gray mold you should cut the diseased parts of the plant and put them away and generally leave space between your plants for air circulation. Also, keep the soil under the plant clean and add some organic compost or mulch under the plants. This will prevent the spread of fungi on the other parts of the plant.

**Fusarium wilt**

These disease symptoms are very upsetting. It’s a well-known fact that there is no cure for it. If you want to grow plants, you should choose the varieties that have resistance from it. As its name says, these fungi affect the plant from the root traveling through the capillary vessels all along the stem damaging the plant’s ability to drink water. Soon the plant starts to wilt, the leaves turn yellow starting from the older ones and transferring to the newer ones as they grow.
This disease is so persistent, that after infection you should avoid planting anything in that area, sometimes for years.

The best you can do to help the soil recover is to try solarizing it by covering the diseased area with a clear plastic tarp for 4 to 6 weeks during the hottest time of the year. Trapped heat kills disease-causing pathogens in the top 12 to 18 inches of soil.

Most fungal based diseases in your garden could be prevented by taking good care of your plants. Choose seeds with a good resistance package and rootstock to ensure your crops have the best possible start. Take good care of your garden tool trays, pots and anything that comes in contact with your plants and soil. Disinfect your greenhouse at the beginning of the growing season to ensure no problems of the previous year persist. Allow good air circulation for your plants and don't overwater them!

Disclaimer* This article contains only general information and can't be used as a disease treatment prescription. If your crops are suffering any disease, please consult with a specialist before taking further action.