



Watch out for Potato Blight

Potato blight (*Phytophthora infestans*) is likely to strike outdoor tomatoes and potato crops. If you see characteristic greyish-brown blotches on the leaves and stems, or sections of leaves with brown patches and a sort of yellowish border spreading from the brown patch, you need to act promptly. Once infested the stems of potatoes can flop quite rapidly and can wipe out the plants almost overnight and in a severe attack you may find all the potato foliage a rotting mass.

Tubers affected by potato blight can be told by dark patches on the skin. Cutting the potato in half will reveal brownish rot spreading down from the skin. In a sack it will travel from potato to potato ruining the lot.



What Causes Potato Blight?

Potato Blight is caused by a fungus (*Phytophthora infestans*) which can also infect other members of the potato family, such as tomatoes. It spreads through the air and develops when the weather conditions are warm and humid so any period of warm, humid weather increases blight risk.

Treatment of Potato Blight

If you notice a small number of affected leaves with patches, cut them back to soil level and bin or burn them and then harvest the tubers. They may not be full size yet, but if lifted know, they are unlikely to be infected with the fungal spores. Removing the foliage prevents the disease getting into the tubers, as long as they are well covered with earth. Leave the crop alone for at least two weeks to let the blight spores on the surface die and the potatoes develop a thicker skin. After harvest, check regularly for signs of blight and remove any suspect tubers at once from your store.

Prevention of Potato Blight

Potato blight fungus is generally killed by cold weather, although there are some rare resistant crossbred strains that over winter. Otherwise, the disease reservoir is infected tubers in the ground or your sack.

Wherever it comes from, it can travel miles on the wind and there is little you can do if the weather is right (above 10deg C and 75% humidity) and there has been recent rain leaving wet foliage.



There are a range of chemical treatments available to farmers but gardeners are more limited. The traditional spray was Bordeaux mixture. This isn't such a good idea as it contains copper and not good for your diet although it is organically approved. Inorganic **Dithane 945** is good as long as it is applied before blight has hold. Perhaps the best method of control is to try and avoid an infection of Potato Blight in the first place and grow a resistant variety that is less affected by the blight.

Other actions to help prevent potato blight

Risk of Potato blight can be reduced by using disease-free seed potatoes and good garden hygiene to help to prevent blight, but the spores of the disease are carried on the breeze, so few gardens will escape.

1. Problems with blight are normally far worse during the high humidity of late summer and early autumn. Blight can be reduced and even avoided by encouraging the tubers to crop earlier. Try using second early varieties and gather them up in August, also start chitting the seed at the earliest possible time.
2. Any plant material or debris that is believed to have been infected by blight should be binned or if possible burned to prevent the risk of further infection.
3. Ensure potatoes are well earthed up to protect tubers even if you get it in the foliage. Although spores can survive in the soil for several weeks, they cannot penetrate deeply into it. You could also try and secure polythene sheeting under the plants to act as an effected barrier against the spores from entering the soil.
4. Water from the base rather than spraying potatoes when blight is actively sporing on the foliage as this can provide ideal conditions for these new spores to leech through the soil and infect the tubers.
5. Try to get **all** the potatoes out from the ground when you harvest and so you won't leave a reservoir on your plot. These are infected tubers which remain as weeds from previous crops. Either remove and burn them or change your next crop.
6. If you have the space increase the distance between tubers at planting time. This will allow a better circulation of air and will reduce the conditions of high relative humidity necessary for the effective formation of viable blight spores.
7. Avoid storing potatoes anywhere that may be damp. Although your crop may not be infected, you may be providing ideal conditions for an infection to take hold that can blow in from infected neighbouring potatoes.
8. Never lift your crop when there is evidence of blight on the foliage. Remove and burn infected foliage first to reduce the infection from being transfer to the tubers as they are lifted from the soil.



9. If you believe that the use of traditional copper fungicides is within the bounds of organic gardening then you can use them to control the disease should a serious outbreak occur. However you must be aware that even though many chemicals have been developed that can effectively control potato blight there are as yet no methods that can actually kill it.

Blight Resistant Varieties

For blight resistance some of the best are Sante, and Valor

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| First earlies | - Arran Pilot, Epicure, Pentland Javelin, Rocket, and Swift. |
| Second earlies | - Kestrel Maris Peer, Nadine, and Romano |
| Main crops | - Cara Desiree Golden Wonder, and Sarpo Mira |