

Blight in Potatoes and Tomatoes and how to prevent and treat biodynamically

This seems a challenging year for blight. Even though you might have done everything possible to avoid it, it seems still a big issue in many areas. To be honest, I have very little blight in my tomatoes this year even though they were planted in pots and had no attention whatsoever this summer (see photo).

For those who are new to gardening, what is blight?

Potato and tomato blight (late blight in UK and early blight in USA) is a disease caused by a fungus-like organism that spreads rapidly in the foliage and tubers or fruit of potatoes and tomatoes in wet weather, causing collapse and decay. If the fungal community in the soil is disturbed blight will be passed on from year to year through spores surviving in the soil.

How can you recognize blight?

Potatoes

The initial symptom of blight on potatoes is a rapidly spreading, watery rot of leaves which soon collapse, shrivel and turning first yellow and then brown. During humid conditions, a fine white fungal growth may be seen around the edge of the lesions on the underside of the leaves.

Brown areas may develop on the stems. If allowed to spread unchecked, the disease will reach the tubers. Affected tubers have a reddish-brown decay below the skin, firm at first but soon developing into a soft rot as the tissues are invaded by bacteria. Early attacks of blight may not be visible on tubers, but any infected tubers will rot in store.

Tomatoes

The symptoms on tomato leaves and stems are similar to those on potatoes. Usually yellow and then brown patches may appear on the leaves and then affect even the green fruit, while more mature fruits will decay rapidly.

Outdoor tomatoes are at higher risk of infection if the weather is wet and warm. The disease is less of a problem under glass as the spores have to find their way into the glasshouse through doors and vents. If, however, blight establishes in a glasshouse the high humidity inside usually leads to very rapid development of symptoms.

Prevention of blight:

Earthing up potatoes provides some protection to tubers.

- **Early-harvested** potatoes are more likely to escape infection.
- Picking off leaves or leaflets when just a few are affected may slow down the progress of the disease very slightly, but will not eradicate the problem.
- When infection levels reach about 25 percent of leaves affected or marks appear on stems cut off the foliage (haulm), severing the stalks near soil level and raking up debris. When the skin on tubers has hardened, after about two weeks, the tubers can be dug up.
- Operate a **rotation** to reduce the risk of infection, ideally of at least four years.
- Grow your own seed potatoes or get them from Scotland or the West Coast of British Isles.
- Lime the soil well before planting potatoes particularly clay soils (400grams/10m²).

Biodynamic measures for treating Potatoes & Tomatoes:

- Change the bio-terrain of the soil and the leaves, by applying a dusting of basalt, soot or ash on soil and leaves. Fungal communities develop within a certain range of pH.
- Apply the Horn Silica Preparation (501) and Horsetail decoction (508) every month before full moon.
Spray above infection on tomato plants in a warmth or light/air constellation.
Cultivate, water and pick diseased leaves off tomato plants, when the moon is in a warmth constellation (Archer/Sagittarius; Ram/Aries; Lion/Leo) and remove them.
Burning is best to remove the risk of spores staying in the soil of your garden.
- Cultivate, water and spray above infection on potatoes in a light/air constellation (Scales/Libra; Water-carrier/Aquarius; Twins/Gemini) or/and with moon in Apogee.
- Pick the flowers off the Potato plants for more life forces being available to grow bigger and healthier tubers.

I remember one year when I lived in Wales I had tomato plants in a tunnel structure, which had four trusses of tomatoes fully laden with fruit and the plants totally diseased, not just with blight, but also with the tomato virus, I pampered them with above means, then they grew healthily out of the diseased plants giving me healthy tomatoes from September to Christmas. Anything is possible, if you care enough.

Good luck with the challenging summer this year with so much rain, moist, cold and variable weather.

Happy gardening

Hans-Günther

Tomato with early blight



Diseased tomatoes with blight



Potato with late blight



Potato blight dead leaves



Blight in potatoes

