

Preventing Blossom End Rot on Nightshade Fruit

Long Range Weather

This weekend will see largely dry and settled weather, though with three very cold nights from Friday through Sunday, as high pressure once again brings Polar air into our region.

From Tuesday, the weather will turn more unsettled during the week and through to the end of the month, as low pressure becomes more dominant.

This will bring showers or longer spells of rain, perhaps heavy, to most, if not all, areas of the British Isles, with thunderstorms in the south. At times, there will still be some sunny interludes. It may also be windy at times. Temperatures are likely to be near average, though variable, with some short-lived warm and humid spells possible, especially in the south.

What Is Blossom End Rot on Nightshade Fruit?

This is a physiological problem and does not spread in the way that diseases do.

Although it is caused by calcium deficiency, which might be widespread in the growing medium, it is easily prevented or alleviated if detected early.

The calcium deficiency causes the collapse of the cell walls at the blossom end of the fruit.

Although the damage is irreversible once detected in individual fruits, we can take measures to prevent newly forming fruit from being subjected to the same deficiency and therefore developing the same symptoms.

Prevention Is Better Than Cure

There are several ways to prevent this symptom from occurring.

The first consideration is to use well-composted organic materials. This means staying away from fast-return composting methods for use with nightshades, as these materials can still contain a lot of ammonium, which drives this symptom.

If you use animal manures, use manure from cows rather than horses, goats or sheep, which are also prone to developing more ammonium.

Lime the soil where you plant tomatoes, peppers and aubergines properly, with **150g–300g per 10m² every three years and before planting.**

Another problem occurs through irregular watering, which prevents plants from taking up nutrients. Therefore, water more frequently and, if possible, use drip or exudation irrigation systems.

Mulch exposed soil to prevent excess heating, and water in the morning when the soil is cool and before the plants are exposed to too much stress during hot days.

Early Detection of Symptoms and Intervention

The first signs of the symptom are watery tissue at the blossom end, followed by the development of leathery or dark-coloured skin.

Once detected, pick damaged fruit so that the other fruits will receive more nutrients, such as calcium.

If you notice that your tomatoes have splitting skin, then you have a sure sign that they are not being watered regularly enough.

Also, if the skin becomes really tough, that is another sign of an insufficient water supply.

Calcium's Essential Role in Growing Healthy

When the fruit is forming during the first **21–30 days**, it needs enough calcium to develop a healthy cell wall structure. If calcium is deficient or there is a lack of water, you will notice symptoms of blossom end rot.

Primary Reasons for Poor Calcium Transport

If watering is irregular and plant roots become too dry, or too wet from overwatering, then calcium becomes unavailable.

Cultivation that disturbs the soil around the feeder roots may also cause excessive drying and a lack of calcium uptake.

If the pH is below **6.5** or above **7.4**, calcium uptake is also impaired.

Soils that are too rich in potassium or magnesium could inhibit calcium uptake.

How to Ameliorate the Situation

Add a handful of wood ash around every plant.

Use **1–2 cups of gypsum** around each plant.

Alternatively, use seaweed extract rich in calcium and other essential minerals.

Top-dress every plant with one spadeful of mature compost rich in Salpeter.

Water more frequently and less heavily.

Add more mulch to keep the soil from overheating.

I trust these suggestions will help you to avoid the worst in your nightshades and help you grow nutritious and high-yielding crops.

Wishing you a joyful time in the garden,

Hans-Günther

