

KALRO/NAVCDP/Tomato Leaflet No. 122/2024

TOMATO BLOSSOM END ROT

Blossom end rot is a common challenge in both green and ripe tomato fruits. It is caused by a localized calcium deficiency in the distal end of the fruit and starts as a light tan, water-soaked lesion that grows in size, turns black, and becomes leathery.



Light tan and black leathery water-soaked lesions at the distal ends of young tomato fruits. (Source:Wasilwa L.)

- Because calcium is not a highly mobile element, a deficiency can occur with a change in water supply, even for a short time. As a result, moisture extremes increase the likelihood of disorder.
- Although blossom end rot causes only external damage, pathogenic organisms frequently infiltrate the lesion and trigger fungal or bacterial fruit rots.
- It commonly occurs in rapidly developing fruit during

periods of hot, dry weather, and it affects the earliest maturing fruit the most.

- Other factors that reduce plant calcium uptake, such as high salts, ammonium nitrogen use, and high relative humidity, can exacerbate the problem.
- Plants that grow quickly are more susceptible to the disease.



Blossom End Rot on young tomato fruits triggers ethylene-induced premature ripening. (Source:Wasilwa L)

Management

- Proper fertility and water management,
- Do soil and plant tissue testing/analysis to determine and correct calcium deficiency.

- Lime your soil with high-calcium limestone 2-4 months before planting.
- If you have a calcium deficiency, a foliar spray of anhydrous calcium chloride can help

Legend

Major tomato producing Counties: Kajiado, Kirinyaga, Machakos, Taita Taveta, Narok, Makueni, Bomet, Muranga, Bungoma, Homabay, Laikipia, Nakuru, Lamu, Kitui, Kiambu and Trans Nzoia (AFA-Horticulture Crops Directorate; 2021 Report)

Emerging tomato growing counties: Siaya, Meru, Migori, Kericho and Kisumu (AFA-Horticulture Crops Directorate; 2021 Report)



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