


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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TOMATO YELLOW SHOULDER



Introduction

Tomato is one of the most popular protective foodstuffs because of its high lycopene content and widely grown vegetables in the world, ranking second in importance to potato in many countries. However delicate nature of tomato fruit skin from initiation to harvesting makes it susceptible to many physiological disorders. A physiological disorder is the abnormal growth pattern or abnormal external or internal conditions of a crop due to adverse environmental conditions such as deviation from normal state of temperature, light, moisture, nutrient, harmful gases and inadequate supply of growth regulators. Environmental stresses produce several common physiological disorders of tomatoes key among them being Tomato Yellow Shoulder also known as yellow top or persistent green shoulder. As the fruit ripens, the chlorophyll in this region takes an abnormally long time to degrade, resulting in a patch that is either green or becomes yellow but not red. The condition may affect the whole shoulder or only a tiny area of it and the afflicted area's outer pericarp is firm and whitish.

Causes

- Exposure to high temperature
- Genetic deformity of the particular tomato variety.

Symptoms

- The stalk end portion of the fruits turns yellowish-green.



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Impact on Yield Quality

- This physiological disorder lowers the market quality of tomato fruits, causing them to lack appeal for consumers.
- This disorder leads to reduced shelf life for the affected tomato fruits.

Management

- Foliar disease management is crucial.
- Planting cultivars with very dense foliage that does not split open and expose the fruit is an effective preventive measure.
- Additionally, reducing the greenhouse temperature can contribute to better management practices.
- Green shoulder can be minimized by applying a nutrient solution containing potassium.