

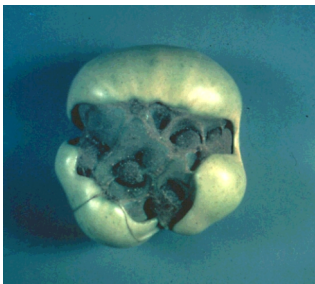
Tomato Disorders

Blossom-end rot

Blossom end rot is a physiological disorder of tomato that can appear on fruits at any time in their development, but most commonly appears when fruits are one-third to one-half grown. The initial symptoms are water-soaked spots on the blossom end of the fruit. These spots later enlarge and become black. Secondary infection by other decay causing organisms usually follows. The cause of this disorder is considered to be calcium deficiency in the developing fruit. Extreme fluctuations in moisture, root pruning and excessive nitrogen fertilization can also result in blossom end rot.

Control: Avoid excessive application of Nitrogen particularly in ammonium form. Application of lime or calcium based fertilizers (eg. Calcium Ammonium Nitrate) as basal dose is commonly used to control this physiological disorder. Foliar spray of Calcium chloride (3 g/litre of water) also controls this disorder.

Catface



Catface is a condition involving malformation and scarring of fruits, particularly at blossom ends. Affected fruits are puckered with swollen protuberances and can have cavities extending deep into the flesh.

Generally, any disturbance to flowers can lead to abnormally shaped fruits. Extreme heat, drought, low temperature, and contact with hormone-type herbicide sprays may cause flower injury.

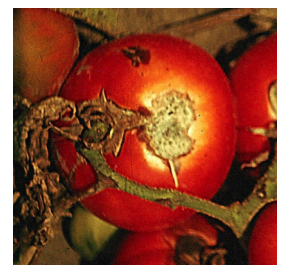
Control: Other than keeping herbicides away from flowers, the only control for catface is planting less susceptible tomato varieties.

Puffiness

As the name implies, fruit suffering from puffiness appear somewhat bloated and angular. When cut, cavities may be present that lack the normal "gel" and the fruit as a whole isn't as dense. Puffiness results from incomplete pollination, fertilization, or seed development often as a result of cool temperatures that negatively impact fertilization. Similar to growth cracking, high nitrogen and low potassium can also lead to puffiness. Some tomato cultivars are more susceptible to this disorder than others.

Sunscald

Tomato fruits nearing maturity when exposed to the sun are prone to scald. The tissue has blistered water-soaked appearance. Rapid desiccation leads to sunken area which usually has white or grey colour in green fruit or yellowish in red fruits. Any factor causing a loss of leaves, such as disease, will expose fruits to sunlight and increase chances for sunscald.



Control: Maintaining a continuous disease control program will lessen chances of foliage loss. Covering exposed fruits with straw, if plants are not staked reduce the incidence of sunscald.

Cracking



Cracks results from extremely rapid fruit growth brought on by periods of abundant rain and high temperatures, especially when these conditions

take place following periods of stress. Cracks of varying depth radiate from the stem end of the fruit, blemishing the fruit and providing an entrance for

decay-causing organisms. It is common during rainy season when temperature is high, especially when rain follows long dry spell.

Radial cracking is more likely to develop in full ripe fruit than in mature green. Fruits exposed to sun develop more concentric cracking than those, which are covered with foliage.