

Extension Tip of the Week

The tomato is the most popular vegetable in the home garden. As popular as they are, the tomato can present the home gardener with more challenges than they bargain for. Environmental issues may be the leading cause of tomato crop problems. Generally, too little rain, too much rain, not enough air movement or fluctuating temperature ranges may be the cause of much of the problems with producing a picture perfect tomato crop.

Here is a summary of tomato diseases and disorders caused by the environment:

Blossom Drop

Plants fail to set fruit due to extremes in temperature and dry conditions which result in poor pollination and cause the flowers to drop from the plant without setting fruit. Control: Water plants deeply once a week during dry weather.

Blossom –End Rot

Brown or black spots develop on the blossom end of the fruit. Caused by a lack of calcium in the developing fruit and wide fluctuations in soil moisture impairs calcium uptake by the root. Excessive nitrogen fertilizations may contribute to blossom –end rot. Control: mulch, and water plants regularly during dry weather to maintain uniform moisture levels in soil. Avoid over-fertilization.

Sunscald

Tomatoes start to show shiny white or yellow areas on the side of the fruit exposed to the sun and then tomatoes dry out, collapse forming sunken, wrinkled areas. This occurs when the fruit is exposed to the sun during long periods of extreme heat. Control: Grow tomatoes in wire cages so foliage protects fruit and control foliar diseases in tomatoes which defoliate the plants allowing the tomato to be more exposed to direct sunlight.

Fruit Cracks

Radial and concentric cracks at the stem end of the fruit and often caused by a long dry period and then a heavy rainfall or irrigation. This promotes rapid growth during the ripening period resulting in cracking. This is most common on large fruited varieties such as ‘Beefsteak’. Control: Supply the plant with a uniform supply of moisture. Mulch and water the plants during dry weather.

Catfacing

The blossom end of the fruit is puckered and scarred cause by cloudy and cool weather at blooming time and the blossom actually sticks to the developing fruit. Occurs more often on large-fruited varieties. Chemical damage from herbicide, 2,4-D may produce similar symptoms. Control: There are no effective controls.

One of the first steps to producing a healthy tomato crop is planting tomato plants far enough apart that allows for ample air movement between plants and they don’t have to fight for available moisture. Secondly, be sure and cage those healthy tomato plants so they remain upright. Thirdly, mulch the soil so it retains the available moisture. Lastly, if there is not sufficient rainfall it is profitable to water tomato plants deeply so they have adequate and regular moisture levels to avoid the issues listed above.

Stay tuned: Next week, the TOW will review tomato problems that are systemic in nature vs. environmental.

