Type Problem: Plant Disorder

[Plant pathologists usually group causes of plant health problems or diseases into two categories. Some diseases in plants are caused by non-living factors including environmental stress or improper cultural practices. This category of diseases is referred to by a variety of names. The term 'Plant Disorder' is utilized herein. Other equivalent terms and references include 'abiotic diseases', 'physiological disorders', 'non-parasitic diseases', 'non-infectious diseases', and 'non-pathogenic diseases'.

Other plant diseases are caused by a living pathogen (or more than one pathogen including fungi, bacteria, viruses, and nematodes. This category of diseases is referred to by a variety of names including 'biotic diseases', 'parasitic diseases', 'pathogenic diseases', and 'infectious diseases'.]

Period of Primary Occurrence: mid spring to early June

- Especially when heavy rainfall occurs after an extended period of dry weather conditions
- Can also occur in fall grown tomatoes

Description / Symptoms

- Cracks appear in the stem end of tomatoes
- Two types of cracks appear in our area
  - Radial cracks (spread outward from the stem scar) - occur when temperatures are greater than 90° Fahrenheit and humidity is high (Fig. 1)
  - Concentric cracks (circular cracks around the stem) occur from rapid fruit growth stimulated by abundant wet weather or irrigation after a dry/drought period (Fig. 4)
- Black moldy growth can develop along cracks
- Cracks can easily be invaded by organisms that promote fruit rot
- Variations in soil moisture and temperature can cause cracking
- High nitrogen level combined with low potassium can also cause cracking
Best Management Practices (BMP)

- Maintain regular irrigation and mulch to keep soil temperature and an adequate, consistent soil moisture level
- Maintain proper plant nutrition
- Plant resistant varieties
- Remove ripe fruit immediately after a rain to reduce cracking
- Plant at proper planting times for best temperatures

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Use pesticides only according to the directions on the label. Individuals who use chemicals are responsible for ensuring that the intended use complies with current regulations and conforms to the product label. If the information does not agree with current labeling, follow the label instructions. The label is the law.

Always remember to read and heed six of the most important words on the label: “KEEP OUT OF REACH OF CHILDREN”