# Common Problems: Pests/Diseases/Environmental Disorders of Tomatoes

### General Control Practices for Common Problems

- Practice Crop Rotation Do not plant in same spot in the garden; rotate every three years. For pots, clean thoroughly before use and use all new potting soil every year.
- Plant Disease-Resistant Varieties Look for disease resistance indication on seed packets or nursery labels; if the information not on the tag, ask the nursery person. The initials stand for disease/pest resistance against: V=verticillium wilt, F=fusarium wilt, N=nematodes, T=tobacco mosaic virus.
- Space Appropriately Good air circulation will inhibit disease. Follow spacing on seed packet or nursery label, generally 1½ to 3 feet apart.
- Water Consistently Keep evenly moist fruit cracking, leaf roll and blossom end rot are result of uneven watering.
- Do Not Water Overhead Use soaker hoses or hand water at the base of the plant. Wet foliage encourages disease.
- Mulch Help the soil stay evenly moist, moderate soil temperature and control weeds.
- Encourage Beneficial Insects They act as natural pest control; avoid pesticides.
- Practice Integrated Pest Management (IPM) Squish, Squirt, Stomp. Use the least toxic approach to control pests and diseases.

#### Common Pests

- Tomato Hornworm large green caterpillar with distinctive horn on rear. Symptoms leaves and small stems completely eaten. http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/PESTS/hornworm.html
- Cutworms smooth-skinned brown caterpillars that curl into C-shape when disturbed; active at night. Symptoms young plants cut off at ground level. http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/PESTS/cutworm.html
- Tomato fruitworm (Corn earworm) caterpillars of various colors; stripes on sides and many short whisker-like hairs on body surface. Symptoms eat fruit and leave deep watery cavities.
  - http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/PESTS/cornearworm.html
- Stink bugs shield-shaped bugs with large triangle on their back. Can be brown or green with red/yellow/pink markings. Symptoms attack fruit leaving blemishes that become white and pithy.
  - http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/PESTS/stinkbug.html
- Tomato pinworm tiny mottled caterpillars grey to yellowish with red or purple around each segment. Can also be quite dark. Symptoms –leaf mines and folded leaves. Bore into fruit where joins the stem.
- http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/PESTS/tompinworm.html
- Nematodes microscopic, eel-like roundworms. The most troublesome species in the garden are those that live and feed within plant roots most of their lives and those that live freely in the soil and feed on plant roots. Symptoms wilting, loss of vigor, yellowing; similar to lack of water. http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7489.html

#### Common Diseases

- Alternaria (Black Mold) fungus. Symptoms black lesions on ripe fruit. http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/DISEASES/tomblkmold.html
- Fusarium wilt fungus. Symptoms leaves on one side of plant turn yellow, spreads to entire plant, which then dies.
  - http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/DISEASES/fusarwilt.html
- Verticillium wilt fungus. Symptoms yellowing in veins of leaves, spreads throughout plant, which then dies.
  - http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/DISEASES/tomvertwilt.html
- Tobacco Mosaic Virus virus. Symptoms light green, yellow, or white mottling on leaves; stringy distorted leaves.
  - http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/DISEASES/tobaccomosvir.html
- Yellow Leaf Curl virus. Symptoms stunted plants; small leaves curl upward; yellowing between veins and on leaf margins; no fruit development. http://www.ipm.ucdavis.edu/PMG/r783103311.html

#### Common Environmental Disorders

- Blossom end rot dark soft spot on bottom of fruit caused by inconsistent watering http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/ENVIRON/blossomendrot.html
- Fruit cracking skin splits open caused by inconsistent watering or overexposure to sun http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/ENVIRON/tomcracking.html
- Leaf roll leaves roll upward when weather is cool; no action required http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/ENVIRON/tomlfroll.html
- Blossoms fall off caused by too cool nights or too hot days or not enough sunlight http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/ENVIRON/blossomdropvg.html
- Sunscald fruit turns leathery and brown cause: overexposure to sun (need more leaves) http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/ENVIRON/tomsunscald.html
- Catfacing fruit disfigured with cavities cause: too cool and cloudy http://www.ipm.ucdavis.edu/PMG/GARDEN/VEGES/ENVIRON/catfacing.html

## **UCCE Orange County Master Gardeners**

http://mgorange.ucanr.edu http://mgorange.ucanr.edu/Gardening Hotline/

It is the policy of the University of California (UC) and the UC Division of Agriculture & Natural Resources not to engage in discrimination against or harassment of any person in any of its programs or activities (Complete nondiscrimination policy statement can be found at <a href="http://ucanr.edu/sites/anrstaff/files/215244.pdf">http://ucanr.edu/sites/anrstaff/files/215244.pdf</a>) Inquiries regarding ANR's nondiscrimination policies may be directed to John I. Sims, Affirmative Action Compliance Officer/Title IX Officer, University of California, Agriculture and Natural Resources, 2801 Second Street, Davis, CA 95618, (530) 750-1397.