MICROSCOPIC TOMATO PESTS

- Root Knot Nematodes are microscopic, eel-like roundworms that feed on plant roots, leave knots or swellings on the roots. Management is multifaceted: nematode resistant plants, crop rotation, soil solarization, and proper plant cultivation. There are no chemical nematicides or soil fumigants available to home gardeners.

- Russet Mites – cannot be seen without a magnifier. Leaves and stems damaged by mites develop a greasy appearance, then dry out and turn bronze. Damage starts at the base of the plant and moves upward. Both sulfur dust and wettable sulfur are effective for russet mite control.

- Powdery Mildew is a fungal disease that is difficult to control. Prevention is best approach: plant PM resistant plants, keep plants healthy but avoid over fertilizing, make sure there is adequate spacing, air circulation and sun exposure, remove plants that show early signs of the disease.

For Tomato Resources conduct the following searches:

- Introduction/Tomato/Agriculture – UC IPM
- Growing Tomatoes in the Home Garden – ANR Catalog
- Managing Pests in Gardens: Vegetables: Tomatoes
- Vegetable Garden Basics – ANR Catalog
- 2022 Cherry and Paste Tomatoes – UC MASTER GARDENER

Master Gardener Association of San Diego County supports the University of California Cooperative Extension Master Gardeners of San Diego County.

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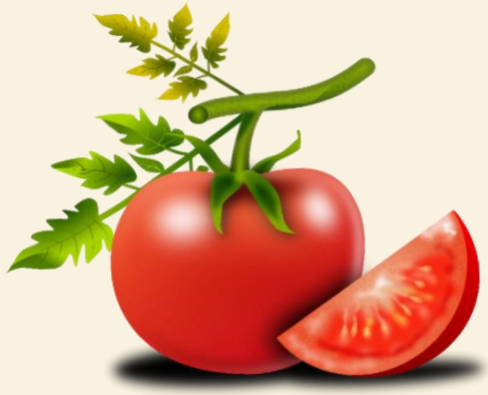
Advice to GROW By

UCCE MASTER GARDENER of San Diego County

TOMATOES



Hotline: 858-822-6910
mastergardenersd.org
help@mastergardenersd.org

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GETTING STARTED

Planning ahead makes for a successful harvest:

- Consult seed catalogues for new varieties.
- Plant disease resistant varieties: Check packaging for information.
- Plant deep: Tomato stems will develop roots when in contact to the ground. Plant up to the first leaves for stronger root development.
- Temperature: Soil temperature must be at least 55°F. Optimal air temperatures will range between 65° and 90°F. Varies by variety.
- Suitable for containers: Look for varieties hybridized for containers or smaller determinate (bush) plants versus indeterminate (tall vine) plants. Container will limit size, aim for at least a 5-gallon pot. Container types are many, from felt bags to wood.
- Support and mulch: Tomatoes should be off the ground to protect fruit and to minimize disease and pests. Indeterminate varieties require support. Difference explained here: https://ucanr.edu/blogs/blogcore/postdetail.cfm?postnum=16937.

OBSERVE YOUR PLANTS

Gardening is a combination of knowledge, observation and problem solving. The most important component is observation:

- Under proper conditions, tomatoes grow and produce rapidly. Observe overall plant health, look for pests, and assure regular and even watering.
- For best flavor, let tomato ripen on vine. Tomatoes are ripe when slightly soft and/or the appropriate color for the variety.
- Irrigate and feed: Tomatoes require even and adequate water to develop fruit. Practice a regular light-fertilizing schedule after the first fruit has set. Too much nitrogen will produce a bushy plant with reduced fruit.
- Special Problems:
    - Blossom end rot and cracking are related to inconsistent moisture conditions.
    - Excessive fertilizer (nitrogen) results in excessive vegetative growth and less fruit.
    - Sunscald is the result of sudden exposure to intense sun and heat.

TOMATO PESTS

- Hornworm- Natural enemies normally keep populations under control. Hand pick or use Bacillus thuringiensis (Bt).

- Practice crop rotation. Do not grow tomatoes in the same soil year after year.
- Tomato Psyllid – have a preference for yellow pear tomatoes. Insects inject toxin into leaves that causes chlorosis, leaf curl and reduced fruit production. Limited management resources.
- Stink Bugs - damage fruit by piercing the skin. Preserve naturally occurring biological control agents, good weed management, and insecticidal soap sprays.
- Tomato Fruit worms – complete their larval development inside the fruit. Management requires careful monitoring for eggs and small larvae. When control is needed, essential to treat before large numbers of larvae enter fruit, where they are protected from sprays. Control resources include beneficial insects and Bacillus thuringiensis (Bt).