

Keep Tomato Plants Healthy to Prolong Harvest

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June 12, 2003

If you're a serious tomato gardener, you probably set your plants out in March or April and they are now flowering and setting fruit. Good cultural practices provided from now through early summer can increase fruit production and extend the harvest season. You will need to pay special attention to irrigation, pest control, and fertilization.

Watering to grow young tomato plants to the flowering stage and watering enough to maintain both the plant and developing fruit is not the same. Once plants load up with fruit, the demand for water greatly increases.

The goal should be to avoid extreme fluctuations in soil moisture which lead to reduced fruit set and blossom end rot. Daily irrigation is often required if plants are bearing heavily. Many commercial growers who use trickle irrigation are known to water moderately twice a day. This is done during mid-morning and mid-afternoon to help ensure that uniform soil moisture is maintained.

Avoid wetting the foliage, stems, or fruit when irrigating tomatoes. In small plantings, this can be done by carefully watering the soil with a hose. Growers who maintain many plants should consider low pressure, slow delivery irrigation techniques, including drip or trickle irrigation.

Mulch helps to conserve soil moisture by reducing the amount of water that is lost to evaporation. Use a thick layer of leaves, coarse bark, pine needles or straw beneath plants.

Diseases can take their toll on even healthy plants and most diseases are best controlled by using preventative measures. Leaf blights and fruit rots can be controlled by spacing plants at least 3 feet apart to allow for good air circulation, staking plants to keep leaves and fruit from touching the ground, avoiding the wetting of above-ground plant parts when watering, and through timely applications of approved fungicides.

Only a few fungicides are recommended for tomato disease control in home gardens. These are maneb and mancozeb for the control of diseases caused by fungi and basic copper sulfate to aid in controlling bacterial spot. Read and follow label directions carefully. These products work best when applications are begun early. They generally won't cure heavily infected plants where diseases have a head start.

Most damaging insects can be controlled by inspecting plants twice weekly and applying control measures as needed. Be alert for two caterpillar species – tomato fruit worm and tomato hornworm. These can be controlled with insecticides containing *Bacillus thuringiensis*, such as Dipel, Biotrol or Thuricide. Carbaryl (Sevin) will also control caterpillars. Aphids and spider mites can be controlled with insecticidal soap, malathion, or diazinon. Read labels and make note of the required waiting periods between spraying and picking.

Bearing tomato plants should not be fertilized heavily. For several weeks following establishment, young plants are in the vegetative or growth stage. During this time they can be fertilized to develop plants that are large and vigorous enough to bear heavily. Once they reach the reproductive stage however, plants change physiologically and fertilizer rates should be reduced. Excessive amounts of fertilizer applied during the fruiting stage can result in reduced production.

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