

# Tomato

## Intercultural Operations

### Weed Control

The field should be kept weed-free, especially in the initial stage of plant growth, as weeds compete with the crop and reduce the yield drastically. Frequent shallow cultivation should be done at regular interval so as to keep the field free from weeds and to facilitate soil aeration and proper root development. Deep cultivation is injurious because of the damage of roots and exposure of moist soil to the surface. Two-three hoeing and the earthing up are required to keep the crop free of weeds. Pre-emergence application of Basalin (1kg a.i./ha) or Pendimethalin (1kg a.i./ha), coupled with one hand weeding 45 days after transplanting is effective for control of weeds.

Plastic mulching (black or transparent) can be used to control the weeds. Weeds can be controlled successfully by mulching plus use of herbicides such as Pendimethalin (0.75 kg a.i./ha) or Oxyfluorfen (0.12 kg a.i./ha).

### Crop Rotation

Tomato should not be grown successively on the same field and a break of at least one year is required between planting of tomatoes or other Solanaceous crops (eg. Chillies, Brinjals, Capsicum, Potato, Tobacco, etc.), cucurbits and many other vegetables. The crops, which can be grown after tomatoes, are as follows-

Cereals (eg. Rice, Corn Sorghum, Wheat, Millets, etc.) or

Cruciferous crops (eg. Cabbage, Cauliflower, Kohlrabi etc) or

Radish, Watermelon, Onion, Garlic, Groundnut, Cotton, Safflower, Sunflower, Sesame, Sugar beet and Marigold.

### Intercropping

Tomato is well fitted in different cropping systems of cereals, grains, pulses and oilseeds. Cropping systems rice-tomato, rice-maize, okra-potato-tomato, tomato-onion are popular in various parts of India. Spinach or radish can also be grown as inter-crop in tomato successfully.

### Staking

Due to the tall habit and heaving bearing nature of the hybrids staking is essential. Staking facilitates intercultural operations and helps in maintaining the quality of the fruits. It is done 2-3 weeks after transplanting. Staking can be done either by wooden stakes or laying overhead wires to which individual plant is tied. In case of indeterminate types, two or three wires are stretched parallel to each other along the row and plants are tied to these wires.