

TOMATOES

Varieties

Bush type: Early – Sunchief.

Bush type: Mid-season/Late – Mountain Crest, Florida 47, QualiT23, Sun Brite, Mountain Fresh, Acclaim.

Staking – Ultra Boy, Early Girl, Fantastic.

Cherry type – Super Sweet 100, Sun Sugar, Sweet Million

Grape Type – Smarty, Cupid.

Seed Treatment

Use only hot-water treated seed from a reliable seed source. Use seed treated with **Thiram** seed protectant.

See your seed dealer for the most recent variety recommendations.

Greenhouse Temperature

The tomato is a warm-temperature vegetable and requires a long growing season. Transplants which are grown under glass should be kept close to the following temperatures:

- 18 to 21°C during the day.
- 13 to 16°C at night until the seedlings are pricked out.

Planting

Use 70 g/ha (28 g/acre) of seed, depending on the variety and required plant population. Sow them in the greenhouse 6 to 8 weeks before field transplanting. Tomatoes are generally grown in plug trays to minimize root damage at transplanting. Large cell sizes such as 38s or 72s result in sturdy, early-producing plants, but because of higher costs are generally only used for early plantings. Cell sizes of 200 or more are often used for later plantings. Smaller cells are more cost-effective, but require a high level of management to obtain quality plants. Provide adequate ventilation during the heat of the day, particularly after watering, which should be completed before 1 p.m. Water plants before

signs of wilting appear. Harden transplants for about a week before transplanting to the field by slightly reducing the moisture and maintaining approximate outdoor temperatures.

Growing tomatoes using plasticulture provides many benefits. See “Plasticulture”, Chapter 5.

See control of Mosaic and Streak in “Disease Control” (this section).

Spacing

Rows 120 cm apart and plants 30 to 45 cm apart in the row, depending on variety recommendations.

Fertilizer

A soil test is necessary to determine phosphate and potash requirements. See Chapter 3 for recommendations based on soil test results. Broadcast and disc in the following:

90 kg/ha (36 kg/acre) nitrogen and the required phosphate and potash.

Side-dress with 22 kg/ha (9 kg/acre) of nitrogen when first fruits appear. Acid producing fertilizers are recommended for most areas.

Where mulching and trickle irrigation are practised, additional nitrogen can be fed through the trickle irrigation system at 17 kg/ha (6.8 kg/acre) when the first fruit begins to set and an additional 17 kg/ha (6.8 kg/acre) four weeks after. To prevent clogging or plugging from occurring use soluble forms of nitrogen (Urea or Ammonium nitrate) and chlorinate the system once a month with a 10 to 50 ppm. chlorine solution. Chlorinate more frequently if the flow rate decreases.

Weed Control

A black or wavelength-selective plastic mulch provides excellent weed control and other benefits. See “Plastic Mulches”, Chapter 5. For herbicide recommendations, see Table 7.58. See also the fold-out chart inside the back cover.

Note: Best control is achieved when a combination of the chemical methods is used.