

## Field Tomato

*Greg Owens, Senior Extension Officer, DPIFM Darwin*



**Ground Preparation:** A pre-plant soil test will indicate the required pH adjustment to about 6.5 with Ag-lime and the amount of basal fertiliser needed. Extra calcium as gypsum should be added at 100-200 g/m<sup>2</sup>.

It is preferable to grow the crop on raised beds or ridges. A green manure crop or additional organic matter is highly recommended for field tomatoes.

Using plastic mulch and T-tape is beneficial for plant growth, weed control and fertiliser injection.

**Varieties:** Most seed companies have a very large range of tomato varieties and there are new varieties every year. These are some that have been grown successfully in the past:

- **Round types:** Summer Taste, Scorpio, Tracer, Grosse Lisse.
- **Roma types:** Futura.
- **Cherry types:** any of the cherry types should be suitable.

**Sowing Season:** Field tomatoes are best grown in the dry season, with plantings from late April to July. Harvesting is from May to October. Seeds can be direct sown but the use of seedlings is recommended.

**Trellising and Plant Spacing:** Field tomatoes are grown on a vertical trellis about 1.8 m high. Horizontal wires on each side of the plants are used to support the plants. Under local conditions plants spaced at 60 cm apart provides good light penetration for fruit colour and an extended fruiting period. Seedlings should be planted carefully in the evening into moist soil to prevent sunburn.

**Nutrition:** Tomatoes should be grown with a two-phase fertiliser program. The first phase is to encourage strong early growth and the second phase for fruit development:

- **Phase 1** (25 kg N, 5 kg P, 18 kg K) per ha per week for early growth.
- **Phase 2** (1 2kg N, 5 kg P, 18 kg K, 10 kg Ca) per ha per week from fruit set onwards.

An adequate supply of calcium is essential to prevent blossom end rot. Fertiliser can be applied as solids but fertiliser injection produces higher yields.

**Irrigation:** Drippers or sprayers on individual plants, or T-tape under plastic mulch, up to 4-6 L/plant/day.

**Pests and Diseases:** Pests include caterpillars, aphids, whiteflies, mites and thrips.

Bacterial wilt and nematodes in the soil and yellow leaf roll virus in the growing tips are the main diseases (go to [www.horticulture.nt.gov.au](http://www.horticulture.nt.gov.au) under Vegetables for the relevant Agnotes). Bacterial wilt and the virus are less of a problem in cooler months. Cherry tomatoes are more tolerant of wilt and it is also possible to graft all varieties onto wilt resistant rootstock. See IS28 on how to graft tomatoes.

**DEPARTMENT OF PRIMARY INDUSTRY, FISHERIES AND MINES**

Crops, Forestry and Horticulture Division  
GPO Box 3000  
Darwin NT 0801  
Tel: 08 8999 2357  
Fax: 08 8999 2049  
Email: [horticulture@nt.gov.au](mailto:horticulture@nt.gov.au)  
Web: [www.horticulture.nt.gov.au](http://www.horticulture.nt.gov.au)

**Disclaimer:**

While all reasonable efforts have been made to ensure that the information contained in this publication is correct, the information covered is subject to change. The Northern Territory Government does not assume and hereby disclaims any express or implied liability whatsoever to any party for any loss or damage caused by errors or omissions, whether these errors or omissions result from negligence, accident or any other cause.

**Pollination and Yield:** Tomato flowers in Australia are mostly pollinated by wind or other vibrations that spread pollen. Plants produce their first harvest at about eight weeks.

**Maturity and Harvest:** Fruit should be firm, have colour and be free of visual defects.

**Post-harvest:** Optimal storage temperature for fruit is 7–15°C with 85–95% relative humidity.

**References:** <http://www.dpi.qld.gov.au/thematiclists/7393.html>