



BEST FARMER PRACTICES

TOMATO/ NYANYA



05 TOMATOES



STEPS FOR GROWING

REQUIREMENTS

well drained sandy loams or clay loam soils. The rain should be well distributed throughout the growing seasons.

1. RAISING SEEDLINGS

Tomato seeds should first be planted in a well set up nursery bed. Farmers can either raise the seedlings themselves or acquire them from **certified nursery operators**

When raising seedlings, farmers should consider the following;

The nursery should be large enough to meet the farmers' requirements for planting materials

*The bed should be 1 metre wide with a spacing of **20-30cm** between rows*

*Nursery trays can be utilised
After sowing, watering should be done regularly though caution should be taken to avoid over watering.*

*The seedlings should be hardened about **1-2 weeks** before transplanting by gradually exposing them to direct sunlight*

*Insects like whiteflies, aphids can be controlled by use of biopesticides like **nimbecidine, mycotal and bio catch***

2. LAND PREPARATION

The seedbed should be prepared prior to transplanting. Hardpans or compacted soil should be thoroughly loosened by deep ploughing to enable the root system to spread to a depth of **40 - 60cm**.

3. TRANSPLANTING SEEDS

Seedlings are transplanted after **30-45 days** after sowing.

Transplanting should be done either in the morning or in the evening
Spacing depends on the variety and it can range from **75 - 100cm** between rows and **40-60 cm** within rows.

Manure can be placed in the soil before transplanting.

DAP can also be applied at a rate of 80kg per acre. A farmer can use one bottle hole per hole.

Management Practices
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4. WEED MANAGEMENT

The field should be kept free of weeds since they can compete with the seedlings for nutrients and water. It should be done every **2 weeks**. Weeding should be done when the soils are dry because doing it when wet can increase the spread of some bacterial and fungal disease.

5. FERTILISER APPLICATION

Topdress with a nitrogen containing fertiliser like **CAN** in 2 splits at a rate of 40kg per acre.

It is also crucial to ensure that boron and potassium are supplied during the top dressing processing.

7. PRUNING

It enables the achievement of optimum balance between vegetative growth and fruit development.

Pruning blades need to be sterilised for example by using **JK** as they can spread diseases like bacterial wilt, tomato mosaic virus.

6. STAKING

Staking improves fruit quality by keeping the fruit off the ground and increasing air flow through the plant

It is usually done after **2-3 weeks** of transplanting or when the plants attain a height of 30cm

PEST
AFRICAN BOLLWORM



Caterpillars of the African bollworm feeds on leaves, flowers and the tomato fruit, the damage on the leaves reduces leaf area which impact plant growth and productivity

MANAGEMENT

- ▶ Avoid planting of the tomatoes near maize and cotton since they can be a source of the pest.
- ▶ Ensure proper weed management since the weeds can act as temporary hiding places for the pests.
- ▶ Synthetic pesticides like Striker can be used to spray.
- ▶ Use biopesticides like nimbecidine

PEST
RED SPIDER MITES



The mite and the webbing can be seen clearly on the underside of the leaves.

MANAGEMENT

- ▶ Regular scouting to establish the pest levels is encouraged.
- ▶ Plant resistant cultivars.
- ▶ Interplanting tomatoes with garlic or onions as trap crops helps to reduce the pest incidences.

DISEASES

DISEASE EARLY BLIGHT



Leaf spotting first appears early in the season on the oldest leaves and progresses upward on the plant. Spots on the stem resemble those on leaves but tend to be more elongated and the circular or ring-like pattern is more pronounced.

MANAGEMENT

- Practice crop rotation with non-Solanaceae plants to break the pest cycle for at least one and half years
- Use resistant varieties
- Clean seed and healthy transplants will help control the disease
- Deep-plough to bury tomato debris, or dead plants should be removed from the garden and destroyed
- Avoid planting adjacent to earlier planted or old crops of brinjals (eggplants), pepper, potatoes or older tomato crops as they could be a source of disease

DISEASE LATE BLIGHT



Irregular, greenish-black, water-soaked patches on the leaves

- The spots soon turn brown and many of the infected leaves wither, yet frequently remain attached to the stem.
- Under moist conditions white fungal growth may be seen on the underside of leaf spots.
- In damp weather the disease spreads so rapidly, that almost all the foliage is affected, and the plants look as though scorched.

MANAGEMENT

- Avoid planting tomatoes after potatoes or other Solanaceae plants.
- Use clean planting material.
- Use tomato transplants from a disease-free nursery.

Disease Management
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MANAGEMENT

- ▶ Scout fields regularly to look for late blight.
- ▶ Remove volunteers from the garden prior to planting and space plants far enough apart to allow for plenty of air circulation.
- ▶ Use of compatible chemicals.

DISEASE
TOMATO
COMMON
MOSAIC


- Affected plants exhibit a mottling with raised dark green areas and distortion of the youngest leaves.
- Under conditions of high temperature and high light intensity, the mottling is frequently severe.
- Under conditions of low temperature and low light intensity, the mottling is not noticeable, stunting and leaf distortion are severe.

MANAGEMENT

- Use resistant varieties and certified disease-free seeds.
- Remove crop debris and roots from the field.
- Field hygiene should be well practiced.
- Wash hands with soap and water before handling plants.
- Disinfect equipment.
- Do not plant in a field with infected debris.
- Use clean soil each year in seedbeds, or sterilize old soil.

- Harvesting

The plants are ready for harvesting after about 120 days.

- Post harvest handling

- The fruits can be transported from the field directly to the field or can be first stored but caution should be taken when either transporting to the market or storing since they are perishable crops that can easily be damaged.

