

BACKGROUND

Origin

Muskmelon is native to tropical Africa, particularly the eastern region south of the Sahara desert. The crop is now popular and it is grown commercially and in home gardens worldwide. Varieties that are grown frequently in South Africa are Imperial 45, Honeydew, Hale's Best cantaloupe, and Edisto cantaloupe.

Climatic and soil requirements

It is a warm-season crop that grows best in a hot, dry climate, with optimum temperatures of 27 to 30 °C. Muskmelon does not tolerate frost or low temperatures and seed should not be planted until the soil temperatures reach 18 °C because germination does not occur at temperatures below this. High temperatures, low humidity and sunshine are needed for proper ripening and a high sugar content. Muskmelon can be grown on different types of soils, from sandy and sandy loam to silt and clay loam but sandy loam is considered ideal. The ideal soil pH range is 6 to 6,7.

Uses

Muskmelons are marketed locally and in foreign countries as fresh fruit.

CULTURAL PRACTICES

Planting

The establishment of seedlings can take different forms, some of which include transplanting or direct planting of

seeds on level ground. Planting can be done by hand or mechanically. The muskmelon seeds or seedlings are planted at the spacing of 1,5 to 2,0 m between the rows and 300 mm within the rows.

Fertilisation

Fertilisers can be applied by means of broadcasting or band placement on level ground. The crops require about 500 kg of 3:2:4 (33) at planting time and after about 2 weeks should receive 100 kg 1:0:1 (36) and after a further 2 to 3 weeks, they should receive another 100 kg of 1:0:1

(36). This rate applies more to the short-growth season cultivars. Microelements are also very important in the production of muskmelons and these include iron, molybdenum, boron, copper, zinc and manganese.

Irrigation

The plants should be irrigated immediately after sowing. The drip irrigation system is the most suitable for production of muskmelons. Irrigation should be given at 5 to 7-day intervals until fruit setting. Irrigation frequency may be reduced during the fruit ripening stage. The field



should not be flooded (to avoid infection of leaves and stems).

Weed control

The most critical period of weed competition is 4 to 6 weeks after crop emergence. The practice of utilising plastic mulching for producing muskmelon has several advantages, one of which is weed suppression. However, if this method is not adapted, registered herbicides can be utilised.

Pest and disease control

Major pests that affect muskmelons include aphids, cucumber beetles and leaf hoppers. Downey mildew, powdery mildew, leaf blight, scab and root rot are some of the major diseases. An integrated pest management programme can be followed to control pests: it can also lead to reduced disease infections. Registered chemicals can also be used to control diseases and pests.

CONTACT DETAILS

Directorate Plant Production

Division: Vegetables

Tel: 012 319 6072

Fax: 012 319 6372

E-mail: DPP@nda.agric.za

Directorate Plant Production

• MUSK MELON •



2008 Department of Agriculture
Private Bag X250, Pretoria 0001

Design and layout by
Directorate Agricultural Information Services



agriculture

Department:
Agriculture
REPUBLIC OF SOUTH AFRICA