WATERMELON PRODUCTION GUIDE

Watermelon is a warm season crop popularly known for its fresh consumption and agro processing such as juice making.

It contains about 6% sugar and 92% water by weight. In Kenya, it is done mostly in hot regions like Makueni, Machakos, Kajiado and the coastal regions. Watermelon can be grown in cold regions although the quality of fruits is inferior compared to those grown in hot regions.

Watermelon requires minimal management processes, and the market is readily available.

Ecological requirements of Watermelon

Soil –The crop does well in loamy, well drained soils, rich in nutrients and slightly acidic, within range of 6.0 -6.8

If grown in heavy soils, the crop grows slowly, and fruit size are usually of low quality

Timely addition of organic material, well decomposed, can help in obtaining the right soil structure.

Work the soil deeply to create optimal conditions for root development.

Temperature- Watermelon performs better under warm temperatures and the optimum temperature range for production is 22-28

Altitude-Watermelon can do well at altitudes of up to 1500m above sea level.

However, lowlands are the best growing areas.

Rainfall-The crop flourishes in regions with an optimum rainfall of 600mm per cropping season.

Irrigation is important to ensure consistent availability.

Water deficiency during flowering and fruit development causes serious yield reduction.

However excessive irrigation makes the mature fruits split/crack, tasteless and watery.

LAND PREPARATION AND PLANTING OF WATERMELON

Land preparation should be done early to allow all the weeds to dry and decompose before planting.

The seeds are planted directly on the seed bed however it is possible to first raise them in a nursery bed. Raising them in a nursery bed can cause disturbances to the root system during transplanting. After sowing, the optimal temperature should be at least 25degrees Celsius.

Plough the land and make it level with a fine tilth.

Mix soil well with well decomposed manure.

Make holes and place the seeds at the appropriate spacing at a depth of 2-4 cm.

The plant spacing in the field will vary depending on the location, cultural practices and the method of irrigation to be used.

Fruit setting is improved by using the correct spacing which should be at least 2-3m by 2-3m.

FERTILIZER APPLICATION

In order to achieve maximum yield, timely application of basal fertilizer and appropriate foliar is recommended.

At planting, D.A.P/T.S. P 50 Kgs per acre. D.A.P is preferred because it contains higher levels of phosphorus which helps the crop with root development.

Top dress with C.A.N 3-4 weeks after sowing, 50kg/acre, when vines start to develop.

Second top dressing is done when the plants are about to flower. Apply NPK 50 Kg/acre.

MATURITY AND HARVESTING

This starts about 3-4 months after planting depending on the variety and the ecological factors.

Maturity indices of watermelon

- Tendrils near fruit stem change color from green to brown
- Cracking of the stem near the mature fruit.
- The fruits when thumped with the hand produce muffled dull tone – immature fruits produce metallic ringing tone.
- Mature fruits have sweet flavor, crisps texture and deep red color.
- Break up of green bands at the blossom end.
  Note that watermelons don't ripen after harvesting so harvesting time is important.

Fruits should be cut off the vine using a sharp object rather than pulling or twisting off the vine.

Disclaimer:
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