

MUSKMELEON



1. Climatic Conditions:

Muskmelon is a hot and dry season crop. The seed germinates best at the temperature of 28°C - 30 °C and grows well at 25°C - 35°C. It requires also plenty of sunshine. Continuous rain or high humidity will increase disease problem and reduce flowering and fruit setting. The growth will be slow when the weather is cold.

2. Soil Requirement:

Muskmelon thrives best on sandy or sandy loam soil with pH 6 to pH 6.8, good fertility and drainage. The location should be free from nematode and disease. Continuous cropping should be avoided. It is best to wait for three years before plant muskmelon again on the same ground to prevent fusarium wilt and other soil born diseases.

3. Seedling Care:

Usually 180-200 Gms of seeds are enough for planting one acre of field. It is necessary to treat seeds with Captan (WP) at the rate of 3 gm per 1kg of seeds. Put seeds on wet cloth or towel in the dark and warm place. After 24 hours, the seeds will sprout. Then they can be direct

seeded to the field or sown into the plastic bag or seedling pot, which contain 1 part of dry manure and 2 part of loose soil. Sow the seed when the sprout is 0.5cm long.

4. Spacing and Transplanting:

Spacing is 2X8ft.

Transplant the seedlings at 3-4 true leaves stage.

5. Fertilizer:

Basal Dose: Basal Dose is very important and is basically compulsory to apply before sowing and transplanting (Soil Application).

- FYM Compost- 5 to 6 tons/ acre.
- Neem Cake- 200kg/acre.

After Transplanting

Sr. No.	Stages	Days	Fertilizers	Qty/Alternative Day/Acre	Total/Acre
1	5-6 Leaf stage	17-32	19:19:19 + Urea	2kgs+ Half Kg	25Kgs+10Kgs
2	From Flowering to Fruiting Stage	35-55	12:26:10	2kgs	25Kgs
3	From Fruit Development Stage	56-65	13:0:45	4kgs	15kgs
4	Maturity Stage for increasing sugar content and shining of fruits.	66-75	SOP	5kgs	10 Kgs

Further application of additional fertilizer should be determined according to the vigor of plants. For maintaining vigor and increase the yield spray 0.25% Urea solution on the leaves 1-2 times every 7 days.

6. Fruit pruning:

A. Set fruit on primary branch: This method is good for close spacing especially in the green house planting.

- a) Pick off the growing point of the main stem at 20-25 node stage. Cut off all the primary branches within the 13 th node of the main stem.
- b) Save only fruit on the primary branches from 14 th node. Save only one good fruit on each branch and a total of 2 fruits for each plant. Cut the other branches off as soon as possible when the fruits are growing to maintain the quality of the fruit.
- c) Cut off the end of the primary branch but save the first leaf after the fruit.

B. Set fruit on secondary branches:

- a) Pick off the growing point of the main stem at 4 th true leaf stage.
- b) Select 3 good primary branches then cut off the others.

- c) Pick off the growing point of the primary braches at 13 leaves stage.
- d) Cut off the secondary branches within the 4 th node of primary branches, and save fruit from 5 th node on.
- e) For large fruited variety, it is recommended to save 3 fruits (one on each primary branch). For medium sized variety, 2 fruit on each primary branch. For small sized variety, 3 fruits on each primary branch.

7. Management:



Irrigation must be applied frequently and evenly at the early stage to maintain a steady growth. This is also required during the fruit developing period to improve the quality of the fruits. Watering should be reduced when the plants are flowering, to ensure a good fruit – set, and when the fruits are ripening, to prevent fruit cracking. It is better to use furrow irrigation and try not to wet the foliage, as this would increase leaf diseases.

It is necessary to remove the diseased, malformed and cracked fruits as soon as possible. Straw mulching should be used to prevent soil erosion, to keep the soil moisture and to control the weeds. Train the veins to the right direction after mulching.

8. Harvest:

The best time to harvest quality muskmelon for fresh market is before the fruit reaches full maturity, that is about 80% ripen. They taste best in 2-3 days after harvest.





9. Plant Protection:

Days after sowing

10 Days	Chlorothalanil (2gm/lit)+Carbaryl (3ml/lit)
20 Days	Mancozeb (2gm/lit)+Acetamaprid (0.25ml/lit)
30 Days	Chlorothalonil (2gm/lit)+Fipronil (1gm/lit)
40 Days	COC (3gm/lit)+Abamactin (3ml/lit)
50 Days	Carbaryl (3gm/lit)
60 Days	Ridomil (2 gm/ lit)

Note: The above information is provided based on research and field observation. Variations in local condition may affect the information and suggestions contained above and for which the company should not be held liable. In case of doubt, it is recommended to carry out ordinary trial production in order to test local growing condition in different seasons and area.

