

Package of Practice for Hybrid Watermelon cultivation

Hybrid watermelon thrives best in warm and dry climates. Germination is adversely affected when temperatures drop below 20°C. Frost and cold conditions can severely hinder plant growth. A combination of high temperatures, low humidity, and abundant sunshine contributes to sweeter and more flavorful fruits.

Sowing Period

In plain regions, sowing can be done from October to the first week of March. However, **mid-February** is considered the ideal time for optimal yield.

Seed Rate

1.0 to 1.25 kg per hectare

Spacing

Row to Row: 250 cm

Plant to Plant: 60 cm

Recommended Fertilizer Application

During land preparation, apply **30-40 cartloads per hectare of well-decomposed FYM (Farm Yard Manure)**. Use the following NPK schedule (in kg/ha):

Stage	N (kg)	P (kg)	K (kg)
At transplanting	80	100	100
3-leaf stage	40	0	0
Pre-flowering stage	40	0	0
Total	160	100	100

Note:

40 kg Nitrogen = 87 kg Urea

100 kg Phosphorus = 217 kg DAP

100 kg Potash = 166 kg MOP

Pest Management

Aphids and Jassids

Spray any one of the following per liter of water:

Imidacloprid (Confidor): 0.6 ml

Thiamethoxam (Actara): 0.3 gm

Metasystox: 2 ml

Monocrotophos: 1.5 ml

Dimethoate (Rogor): 2.5 ml

Leaf Caterpillars and Loopers

Use any one of the following per liter:

Malathion: 2 ml

Quinalphos (Ekalux): 2 ml

Metasystox: 2 ml

Carbaryl (Sevin): 3 gm

Fruit Fly Control

Deep ploughing after harvest to expose pupae

Collect and destroy infested fruits and dry leaves

Avoid over-ripening of fruits on plants

Spray Malathion (2 ml), Carbaryl/ Lebaycid (1.25 ml), or Ekalux (2 ml) per liter of water

Disease Management

Powdery Mildew

Spray:

Dinocap (Karathane): 0.5–1 ml/liter

Triadimefon (Calixin): 3 gm/liter

Downy Mildew

Spray:

Metalaxyl + Mancozeb (Ridomil): 1.5 ml/liter

Fusarium Wilt

Practice crop rotation (4–5 years)

Seed treatment with Carbendazim (Bavistin) at recommended dosage

Anthracnose

Follow proper crop rotation

Spray Mancozeb (Dithane M-45): 2 gm/liter

Or Carbendazim (Bavistin) at recommended dose

Mosaic Virus

Control vectors like aphids and leafhoppers through regular pest monitoring and management

Additional Tips for Better Yield

Ideal Seed Germination Temperature: 20–25°C

Optimal Growth & Yield Temperature: 25–30°C (daytime)

At temperatures above 40°C, male flowers increase and fruits become more rounded

Soil: Light, fertile, well-drained soil with a pH of 5.0–5.7 is best

When 2–4 leaves appear, spray a mixture of **3 gm/liter of boron, calcium, and molybdenum**

Maintain an ideal planting density of **4,166 plants per acre**, with **60 cm** spacing between plants and **160 cm** between rows

Ensure adequate soil moisture is maintained throughout the growing season for proper fruit development

Disclaimer

The crop recommendations mentioned are based on **field research conducted at company research stations**. However, actual performance may vary depending on **soil type, weather conditions, pest infestations, and crop management practices**. Farmers are advised to follow region-specific agricultural guidelines and consult local **agricultural officers or universities** for best results.

Note: The farmer holds complete responsibility for crop performance. Use quality seeds, sow at the right time, and follow integrated crop management practices for **maximum yield and quality production**.