

CUCUMBER

(*Cucumis sativus* L.)

Cucumber is a common cucurbitaceous summer vegetable. Cucumber plant, as a creeper, has a climbing or trailing habit. The tender fruits are eaten raw or with salt in salad. They are also used as cooked vegetables. Fruits are good for people suffering from constipation, jaundice and indigestion.

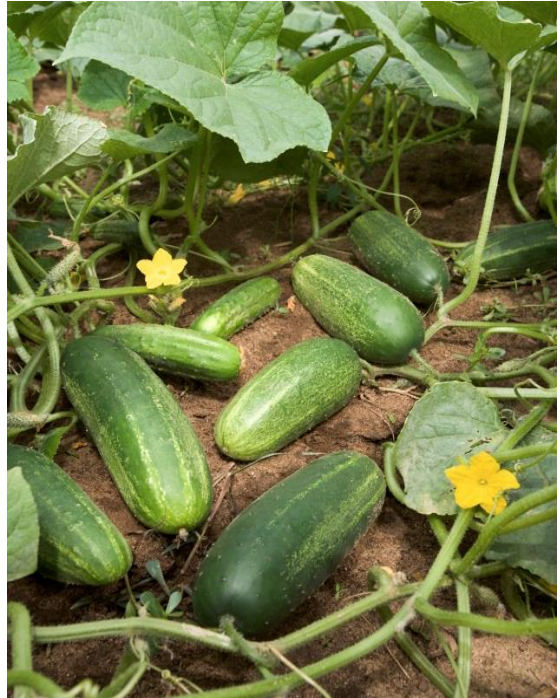
Cultivars

Meghalaya Local, Japanese Long Green, Straight Eight, Pusa Sanyog.

Climate and Soil

Cucumber is a warm season crop and grows best at a temperature of 18-24 °C. It does not withstand frost.

Cucumber can be grown in all types of soil from sandy to heavy soil. Loam, silt loam and clay loam soils are best for getting higher yield.



Field Preparation

Soil should be ploughed thoroughly 3-4 times through digging with spade. Well rotten compost or FYM is mixed at the time of ploughing. Apply BHC @ 15-20kg/ ha to control termites and cutworms in the soil at the time of land preparation.

Seed Rate

2.5 to 3.5 kg/ha

Time of Sowing

Cucumber is cultivated both as summer and rainy season crop.

Summer crop: January to February

Rainy season crop: June to July

In hills of Meghalaya the seeds are sown in April.

Spacing

1.5 to 2.5m (row to row) x 60 to 90cm (plant to plant)

Manure and Fertilizer

Well rotten FYM @ 10-15 t/ha should be applied at the time of land preparation. NPK @ 100:60:60 kg/ha should be applied at the time of planting.

Intercultural Operation

Weeding: During early stage, the crop should be kept weed free by giving shallow cultivation.

Staking: The plants should be provided a suitable support made of bamboo sticks particularly in rainy season to check against rotting of fruits.

Irrigation

The summer crops require frequent irrigation at an interval of 4-5 days. No irrigation is given in rainy season crops.

Plant Protection

Red pumpkin beetle (*Aulacophora foevicollis*) -The larvae and the adult of this pest cause damage by eating away young leaves and flowers at the seedling and flowering stage. The grub bores into the roots and fruits lie on the ground and pupate in the soil. Hand picking and dusting kerosinised ash controls this pest. Spraying the crop with Malathion 50EC @ 2ml/ 1of water is also recommended.

Epilachna beetle (*Epilachna sp.*) -The adult and grub feed voraciously on the leaves and tender part of the plant leaving skeletonized patches and lace like appearance on leaves which later dry away. Spraying the crop with Endosulphan @ 2ml/1 of water is recommended to manage this pest.

Powdery mildew- This disease is caused by fungus *Erysiphe cichoracearum*, symptom first appears as white circular patches on the under surface of the leaves. In severe cases, the patches coalesce and cover both the surface of the leaves and defoliation occurs. Fruits of the affected plant remain small and do not develop fully. This disease can be controlled by dusting sulphur or spraying Karathane @ 2ml/1 of water.

Downy mildew -This disease is caused by fungus *Pseudoperonospora cubensis*. It is prevalent in areas of high humidity especially when summer rains occur regularly. The disease is characterized by formation of yellow, angular spots on upper surface of leaves. The disease spreads rapidly killing the plant quickly through rapid defoliation. Application of fungicidal spray such as Dithane M-45 once a week is effective in controlling this pest.

Cucumber mosaic virus- This disease is transmitted by aphids. Mottled leaf with roughened surface occurs. In severe cases, the plants are yellow and dwarfed and bear little or no fruit. Crop rotation with non-cucurbitaceous crops preferably cole crops and spraying the crop with Rogor @ 1 ml / 1 of water (con trolling the insect vector) are the recommended control measures of this disease.

Harvesting and Yield

The full grown fruit should be harvested when they are still green. Delay in harvesting causes the fruit to become unfit for marketing.

The average yield is 80-120q/ha.