

BOTANY

- Botanical Name** : *Cucumis sativus* L.
- Family** : Cucurbitaceae
- Chromosome No.** : $2n = 2x = 14$
- Mode of Pollination** : Cross pollinated
- Pollination Source** : Entomophilus
- Flowering Habit** : Monoecious

IMPORTANCE

- **Low in Saturated Fat and very low in Cholesterol and Sodium**
- **Good source of Vitamin A, Pantothenic Acid, Magnesium, Phosphorus and Manganese**
- **Very good source of Vitamin C, Vitamin K and Potassium**
- **A large portion of the calories come from carbohydrates**

SOIL REQUIREMENTS

- **Cucumbers like**
- warm,
- humid weather;
- loose, organic soil
- plenty of sunlight
- Ph :6-7

FERTILIZER

- **NPK (35:30:25)**
- 10-12 bags of FYM one month before sowing
- 4 bags of SSP, 1 bag of NH_4NO_3 & K_2SO_4 at time of sowing
- $\frac{1}{2}$ bag of urea at the time of flowering
- After 2-3 pickings $\frac{1}{2}$ bag of urea

FERTIGATION

WEEK	DAYS	N (PPM)	P (PPM)	K (PPM)
1	7	72	235	300
2	7	132	35	175
3	7	165	35	133
4	7	170	35	251
5	7	176	35	270
6	7	183	35	289
7	7	189	35	308
11	28	195	35	270
17	42	221	35	251
22	35	214	35	233
23	30	208	35	233
27	7	208	35	233

TIME OF SOWING

- Mid February and July (Open field)
- **Nov (Parthenocarpic)**

TIME OF Harvesting

- ◆ April to June (15-18)
- ◆ September to November (15-20)
- ◆

➤ **Warm season crop grow well in temperature ranging from 25-30 °C**

➤ **Temperature below 18 °C and above**

35 °C cause reduction in growth

Modes of Pollination

- Honey bees are the main pollinators of Cucumber and other insects also contribute.
- Cucumbers can also be produced without pollination by a process called **Parthenocarpy**

HOW TO AVIOD BITTERNESS

- Keeping the soil moist at all times will ensure they are not bitter
- It is recommended that you side-dress the plants with **nitrogen fertilizer** as they begin to vine.
- Cucumber vines may be trained to climb **trellis netting** or a fence; hanging cucumbers will develop straighter fruits and will be more uniformly colored.

MAJOR DISEASES

- **Downy Mildew**
- **Powdery Mildew**
- **Mosaic**
- **Nematodes**

MAJOR INSECT PESTS

- **Leaf Miner**
- **Jassid**
- **Aphid**
- **White fly**
- **Red Pumpkin beetle**
- **Mites**