# OKRA (Abelmoschus esculentus L.)

Okra is one of the most favourite vegetables for growing in kitchen gardens. It is rich in vitamins and minerals. It also has medicinal value.

### **Suitable Varieties/Hybrids**

Pusa Makhmali, Pusa Sawani, Selecion-2, Red Bhindi, Panjab Padrnini, Vaishali Vadhu, Varsh Uphar, Parbhani Kranti, Arka Anamika



Okra can be grown in all types of soils but it should be friable. However, it grows best in light soils ranging from sandy loam to loam. It can tolerate slightly acidic soil. It is a crop of tropical and sub tropical climates requiring a long warm and humid growing season. It is susceptible to frost and cannot thrive well in cold. Seeds fail to germinate below 20°C. Optimum temperature for seed germination is 29 "C.

### **Field Preparation**

Soil and climate

The land should be well prepared and proper drainage should be provided during rainy season.

#### Seed Rate

For spring-summer and winter season crop 15-20 kg and for rainy season crop 8-10 kg seeds are required for one hectare of land.

### Sowing time

Summer season crop: Mid February to Mid March Rainy season crop: Mid May to Mid June In hills: March to May

# Method of planting

Okra is sown in rows by dibbling method, sowing is also done by dropping the seeds behind the plough furrow. During rainy season it should be sown on ridges. For spring summer crop the distance should be  $30 \times 45$ cm and for rainy season  $45 \times 60$ cm.

#### **Manures and fertilizers**

10-15 t/ha of FYM should be mixed with the soil 15-12 days before sowing. 50: 50: 50 kg: P: K is required for a hectare of land. One-third dose of N along with full P & K are applied at the time of final land preparation. Remaining N should be applied at 30 and 60 days after sowing.

### Irrigation

First irrigation is given just after sowing. Subsequent irrigations should be given at 5-8 days interval for spring-summer crop and 10-12 days interval for winter season crop. No irrigation is required for rainy season crop.

## **Plant protection measures**

**Fusarium wilt**: The fungus is soil and seed borne. Affected plants show yellowing and stunting followed by wilting and rolling of the leaves and dieing of plants. Crop rotation should be followed. All affected plants should be removed. Deep summer ploughing should be done. Seeds should be treated with Ziram 0.3% at 45 QC for 30 minutes.

**Yellow vein mosaic**: It is a viral disease transmitted by white fly. On the attacked leaves, vein clearing and patches of light and dark green are seen. In case of severe infection, young leaves and even fruits turn yellow become reduced in size and plants become stunted. Spraying Dimethoate 0.03 % at 15 and 30 days after germination may control the vector. All affected plants should be uprooted and destroyed. Tolerant varieties like Parbhani Kranti and Punjab-7 should be grown. The weed hosts should be destroyed.

**Jassids:** They suck sap from the lower surface of the leaves and the leaves become curled upwards and plant growth is stunted. Spraying of Malathion 0.05% 15 days after germination followed by 0.03% Dimethoate 25 and 30 days after germination can effectively control Jassids.

**Shoot and fruit borer**: The larvae bore into the shoot, flower buds and fruits. The affected fruits that are unfit for consumption should be collected and destructed. Application of Endosulfan 0.06% followed by Neem seed kernel extract 5% + % dose of Endosulfan at 0.045% should be done.

#### Harvesting and yield

Fruits are harvested by bending the pedicel with a jerk. An average yield of 8 t/ha during spring-summer and 12.5 t/ ha during rainy season are obtained. In general, harvesting every alternate day is advisable.