

Other vegetables (Tomato, Cabbage, Cauliflower, Cucumber etc.)

Land Preparation

Vegetable crops can be grown on sandy loam to clay loam soils. But light soils are favourable for maximum vegetables. The field should be deep (20–25 cm) ploughed once with the soil turning plough. Two to three cross harrowing followed by planking is done to make the surface smooth and level. Land is prepared to a fine tilth by thorough ploughing or digging 3-4 times.

Seeds and Sowing

Tomato:

Planting of tomato is done after 3-4 weeks of sowing of seeds. The planting geometry for the tomato depends upon soil fertility, variety and season. Wide spacing is given for the spreading type variety grown on fertile soil during favourable season. The spacing recommended for the autumn – winter crop is 75 cm x 60 cm and for spring-summer crop is 75 cm x 45 cm. However, with drip irrigation the paired row planting (50 cm x 50 cm) is adopted. The transplanting is done in small flat beds or in shallow furrow depending upon the availability of irrigation. In heavy soil it is usually transplanted on ridges and during the rains also it is advantageous to plant the seedlings on ridges. For indeterminate varieties/hybrids, the seedlings have to be staked using bamboo sticks of two meter length or planted in broad ridge of 90 cm width and 15 cm height. The seedlings are planted in the furrows at a spacing of 30 cm and the plant is allowed to spread on the broad ridge.

Cabbage:

Seeds are sown at a spacing of 45-60 x 10 cm² and at a depth of 1-2 cm and covered with a fine layer of soil followed by light watering by water can.

Cauliflower:

A row to row and plant to plant spacing of 45 cm is kept for the early varieties. However, for the late varieties, the row to row spacing is increased to 60 cm. Sowing should be done thinly in lines spaced at 5-7 cm distance. Seeds are sown at a depth of 1-2 cm and covered with a fine layer of soil followed by light watering by water can.

Cucumber:

Pre summer crop: 1.5- 3.0 m X 60-80 cm, Rainy season crop: 2.0 -2.5 m X 80- 90, Pre winter crop: 1.5- 3.0 m X 80-90 cm. Cucumber seeds are sown in hill sowing or furrow sowing method.

Nursery Management

Seeds of vegetable crops should be sown on raised beds of 60-100 cm width and of convenient length to raise seedlings for transplanting in the main field. The soil of the nursery should be mixed with well rotted manure or other organic matter before planting. Plants must be kept well-watered at all times and container-grown plants in particular will require more watering as fruit develops. Water directly to the roots and keep the soil around moist. If possible, keep water off the leaves. Shortly after planting, plants should be given proper support by tying the plant to a stake or by using a cage. Stakes are cheaper and they can be between 4-6 feet tall depending on the type of plant.

Transplanting

Normally the seedlings should be transplanted within 4-6 weeks of sowing. In case of early crop 5- 6 weeks old seedlings have better establishment and less mortality in the field while in mid-season and late varieties 3-4 weeks old seedlings may be transplanted.

Water management

Irrigation is to be given within 2-3 days after planting depending upon the moisture condition of soil. After that irrigation at an interval of 15 days and one month is to be continued before and after starting of monsoon respectively according to need. But irrigation must be given during flowering. Irrigation should be stopped before one month of harvesting.

Weeding

It is better to make the soil loose at 2 weeks after planting to facilitating sprouting. Weeds start germinating with the growth of crops. 2-3 weeding with nirani can be done to make the field weed free according to need.

Harvesting

Tomato:

Depending on the variety, fruits become ready for first picking in about 60-70 days after transplanting. The stage of harvesting depends upon the purpose to which the fruits are to be used. Harvesting should be done by hand picking of fruits.

Cabbage:

The fully developed compact heads are harvested before they start cracking. The outer non-wrapper leaves and stem are removed after harvesting the heads.

Cauliflower:

The harvesting is done as soon as the curd attains right maturity and they are compact, with white colour of the curds is maintained. When harvesting the cauliflower, care should be taken to cut the curd immediately when it reaches its prime condition. If there is any doubt about the maturity, it is better to harvest earlier. For harvesting, the curds are cut off stalk well below the curd with a sharp cutting knife or sickle.

Cucumber:

Harvesting is highly depends on variety and use. Presence of tiny hair is sign of maturity for fresh consumption. After fruiting at 3-4 days interval harvesting is done. Cucumber is harvested with a small portion of stalk end.

Post Harvest Management

After harvesting fresh vegetables should be transport to the market or stored for future in cold storage.