

FENNEL



GENERAL INFORMATION

Fennel also known as Saunf in Hindi is belongs to Apiaceae family. This annual herb is native of Europe. Its seeds after drying are mostly used for spice purpose. Fennel is good source of fibre, vitamin C, potassium. It is used for flavouring meat dishes, soups etc. Its leaves are used for garnishing dishes also in salads. Fennel also has medicinal properties like it is used for digestion, also to treat constipation, diarrhea, throat pain, headache etc. It is cultivated as Rabi crop. India is top producer of fennel and Rajasthan, Andhra Pradesh, Punjab, Uttar Pradesh, Gujarat, Madhya Pradesh, Karnataka and Haryana are major fennel growing states.

CLIMATE

Temperature

15-25°C

Rainfall

50-75mm

Sowing Temperature

15-25°C

Harvesting Temperature

18-25°C

SOIL

All soils rich in organic matter are suitable for fennel cultivation. It gives best result when grown on well drained sandy loam to loamy soils. Avoid shallow soils for fennel cultivation. PH of soil should be in range of 6.5 to 8.

POPULAR VARIETIES WITH THEIR YIELD

Local: This variety grows upto height of 150 cm. Ready to harvest in 185-190 days after sowing. Its fruits are oblong and greenish gray in color with prominent ridges.

Other States Varieties:

RF 101: Ready to harvest in 155-160 days. Gives average yield of 6.5qtl/acre.

Gujrat Fennel 1: Ready to harvest in 255 days. It can survive in drought conditions. Gives average yield of 6.6Qtl/acre.

RF 35: Tall variety, ready to harvest in 225 days. Resistant to leaf spot and sugary disease. Gives average yield of 5.2qtl/acre.

CO 1: Medium tall variety, ready to harvest in 220 days. It can be cultivated in saline, water logged areas. Gives average yield of 3qtl/acre.

LAND PREPARATION

To prepared fine seed bed, give two to three ploughings in medium soil. For heavy soils, take ploughing for three to four times. Carry out planking after each ploughing to obtained uniform bed.

SOWING

Time of sowing

As it is long duration crop, complete sowing in second fortnight of October. To obtain good yield avoid delay in sowing.

Spacing

Under rainfed condition, use spacing of 45 cm between two rows and 10 cm between two crops.

Sowing Depth

Sow seeds at depth of 3-4 cm.

Method of sowing

Fennel can be directly sown where as in some areas it first raised in nursery then transplanted to main field.

SEED

Seed Rate:

For sowing use seed rate of 4 kg per acre.

FERTILIZER

Fertilizer Requirement (kg/acre)

UREA	SSP	MURIATE OF POTASH
45	Apply if deficiency observed	Apply if deficiency observed

Nutrient Requirement (kg/acre)

NITROGEN	PHOSPHORUS	POTASH
20	-	-

Apply well decomposed cowdung@4-6 qtl/acre in soil at time of land preparation. Apply Nitrogen@20kg/acre in form of Urea@45kg/acre in two to three equal splits. First nitrogen application is as basal dose, apply remaining dose of Nitrogen 30 and 60 days after sowing. Use of phosphorus fertilizer is based upon soil test result; apply it if its deficiency is observed.

WEED CONTROL

Depending upon weed intensity, carry out, one or two hoeing operation. To control weed chemical, apply Pendimethalin@1ltr/acre.

IRRIGATION

For better germination of seeds, apply pre-sowing irrigation. First irrigation is given 10-15 days after sowing. Depending upon soil type and climate, apply remaining irrigation at interval of 15-25 days. Avoid water stress at flowering and seed formation stage.

PLANT PROTECTION



- **Pest and Their control:**

Aphid: If infestation of Aphid is observed, to controlled take spray of Dimethoate 30EC@2ml per litter of water or Methyl demeton 25EC@2ml per liter of water.



- **Disease and Their control:**

Powdery Mildew: If infestation is observed, take spray of wettable Sulphur@2gm/ltr of water.

HARVESTING

Depending upon variety used, crop is ready to harvest in 180 days, i.e. end of April or end of May. Start harvesting when umbels change its color from green to light yellow. Harvesting is done by plucking umbels. After then umbels are dried in sun for 1-2 days and about 8-10 days in shades.

POST-HARVEST

After proper drying, cleaning of fennel seed is carried out. Then depending upon quality, grading of fennel seed is done. After then seeds are packed in Jute bag.

REFERENCES

1. Punjab Agricultural University Ludhiana

