



# Package of Practices of Cumin

## INTRODUCTION

- ❖ Cumin (*Cuminum cyminum*) popularly known as Jeera belongs to the family Umbelliferae is an important annual spice crop in India.
- ❖ Cumin seed is basically native to the Egypt and now it grows in countries like India, north Africa, China.
- ❖ In India it is mainly grown in Gujarat , Rajasthan, Uttar Pradesh and about 70 % of world production of cumin is from India
- ❖ It is an important spice mainly used in Nepali and Indian Kitchen regularly for flavoring various foods.
- ❖ Cumin seeds are also used in various Ayurvedic herbal medicines especially for stomach problems



## SOIL AND CLIMATE

- ❖ Cumin cultivation requires loamy soil with good drainage supplemented with organic matter.
- ❖ For commercial cultivation of cumin the land should be selected where cumin farming has not been taken up at least 3-4 years.
- ❖ It is cultivated in mild climatic condition
- ❖ Cumin crop does not grow well in humid and heavy rainfall condition
- ❖ Dry and cool climate is very much suitable for this crop
- ❖ High humidity during flowering and fruiting period leads to high risk of disease and pest.



## **VARIETIES:**

- ❖ **RSK-1 ( north India)**
- ❖ **Toplka (Resistance to Pseudomonas cumin)**
- ❖ **NO 1 (Early variety from Bulgaria)**
- ❖ **GC 1 (Gujurat Cumin 1)- Yields 775 kg/ha**
- ❖ **MC 43 & Vijapur 5 (Promising high yielding varieties from Gujarat)**
- ❖ **MC 43 (Resistance to wilt and blight, yield 580 kg/ha, maturity 115 days)**
- ❖ **RZ 19 (Rjasthan Jeera 19)- Duration 120-130 days, tolerant to wilt and blight, yield 900 kg seeds /ha**
- ❖ **RZ 209 (resistant to wilt and blight)**



# Land Preparation

- ❖ Soil should be finely tilled through one deep ploughing followed by 2-3 light ploughing.
- ❖ Pre sowing irrigation should be given



## Manures and Fertilizers

- ❖ FYM @ 10-15 t/ha may be applied during land preparation
- ❖ Fertilizer dose: 15-20-15 kg NPK/ha should be applied at the time of sowing and rest 15 kg N should be top dressed at 30 days after sowing.

## **Sowing time and seed rate:**

- ❖ Cumin is sown during mid November- mid December
- ❖ Seed rate for sowing is 12-15 kg/ha

## **Sowing method:**

- ❖ Seeds may be sown either by broadcasting or in line sowing
- ❖ The seeds are sown with spacing of 22.5 to 25 cm from row to row
- ❖ Seed should not be sown more than 1 cm depth



## Irrigation:

- ❖ First: Light irrigation immediately after sowing
- ❖ Second: 8-10 days after sowing
- ❖ Third: 15-20 days after sowing,  
depending on moisture condition of soil
- ❖ Irrigation should be avoided at the  
time of grain filling stage



## Weed Management:

- ❖ To facilitate proper growth of crop, first weeding and hoeing should be done 25-30 days after sowing when the plant attain a height of 4-5 cm
- ❖ Pre-emergence application of Pendimethalin @ 1 kg/ha followed by one hand weeding at 45 days after sowing

## Insect Pests & Diseases:

❖ **Wilt:** This is a fungal disease due to which the bark becomes rough and peeling of bark becomes difficult. This becomes difficult to harvest and also the quality decreases.



❖ **Leaf Blight:** This disease is severe during rainy season. Mostly causes economic damage during nursery and sapling stage after establishment in field



❖ **Powdery mildew :**



❖ **Damping off :**

❖ **Aphid :**



❖ **Thrips:**



# Harvesting and yield

- ❖ Crop matures in 80-120 days after sowing depending upon variety and agro-climatic conditions
- ❖ Crop is harvested when the stem becomes yellow, leaves fall and seeds turn light grayish to brown
- ❖ It is harvested by cutting the plant with sickle
- ❖ After a sun dry seeds can be separated by beating with a stick.
- ❖ Average yield can be obtained 6-8 q/ha depending upon variety





THANK YOU