

## Package of Practice for Mustard Cultivation

### Introduction

Mustard (*Brassica* spp.) is an important oilseed crop that is widely grown in India. Its oil is beneficial, and it plays a crucial role in Indian agriculture.

### Climate and Soil

**Climate:** Mustard thrives in cool and dry weather. Its optimal growth occurs at temperatures between 10°C and 25°C.

**Soil:** Well-drained sandy soil is the best, but it can also grow in clayey and loamy soils. Soil pH should be between 6.0 and 7.0.

### Land Preparation

**Tillage:** Prepare the field by tilling thoroughly to soften the soil. Apply manure or compost.

**Leveling:** Level the field to prevent waterlogging.

### Seed Selection and Treatment

**Variety:** Choose good varieties according to the local climate.

**Seed Treatment:** Treat the seeds with fungicides like thiram or carbendazim to protect against fungi and diseases.

### Sowing

**Timing:** Sow in North India from October to November and in South India in September.

**Method:** Seeds can be sown using a seed drill or manually. Maintain a distance of 30-45 cm between rows and use 4-5 kg of seeds per hectare.

**Depth:** Sow seeds at a depth of 2-3 cm.

### Fertilization

**Soil Testing:** Conduct soil tests to determine necessary fertilizers.

**Application:** Apply 20-25 kg of nitrogen (N), 50-60 kg of phosphorus (P<sub>2</sub>O<sub>5</sub>), and 20-25 kg of potassium (K<sub>2</sub>O) per hectare. Half of the nitrogen and all phosphorus and potassium should be applied before sowing, while the remaining nitrogen should be applied at flowering time.

## **Irrigation**

**Water Requirements:** Mustard requires irrigation 3-4 times. Irrigate after sowing and again during flowering and pod formation.

**Drainage:** Ensure proper drainage to avoid waterlogging.

## **Weed Control**

**Weeds:** Control weeds by manual removal or using herbicides if necessary. Removing weeds during early growth is crucial.

## **Pest and Disease Management**

**Pests:** Common pests include aphids, mustard flies, and cabbage caterpillars, which can be managed with appropriate pesticides.

**Diseases:** Major diseases include powdery mildew, which can be controlled using resistant varieties and fungicides.

## **Harvesting**

**Maturity:** Harvest when the pods turn brown and dry. Shake the pods to check if they rattle.

**Method:** Cut the crops with a sickle and leave them in the field to dry. Thresh the dried crops to extract seeds.

## **Post-Harvest Management**

**Cleaning:** Clean the seeds thoroughly.

**Storage:** Store seeds in a cool, dry, and airtight place to protect them from moisture and pests.

## **Crop Rotation and Sustainability**

**Rotation:** Practice crop rotation to maintain soil fertility and control pests and diseases.

**Sustainability:** Use organic farming and integrated pest management (IPM) for sustainability.

## **Note:**

These recommendations are based on research center findings. Yield may vary due to soil, weather, pest/disease attacks, and crop management.

Farmers are responsible for their crop outcomes. Local agricultural department guidelines may also be followed.

