

# MUNG BEAN FARMING



## SOIL REQUIREMENTS: -

- Soil type: Mung beans grow well in loamy or sandy loam soils with good drainage. The soil should be well aerated and have good water-holding capacity.
- Soil pH: The ideal soil pH range for mung bean farming is between 6.0 to 7.5. Mung beans can tolerate slightly acidic to slightly alkaline soil conditions.
- Soil fertility: Mung beans require a moderate to high level of soil fertility. A soil test can help determine the nutrient status of the soil and guide the application of appropriate fertilizers.
- Organic matter: Incorporating organic matter into the soil can improve soil fertility and structure, as well as enhance water-holding capacity and nutrient availability. Well-decomposed farmyard manure or compost can be added to the soil before planting.
- Soil moisture: Mung beans require a consistent supply of moisture for proper growth and development. Irrigation is usually required in areas with inadequate rainfall. The soil should be moist but not waterlogged.
- Soil drainage: Good soil drainage is essential for mung bean farming, as waterlogged conditions can lead to root rot and other diseases.

## **CLIMATE & TEMPARATURE: -**

**Temperature:** Mung beans require a warm climate for optimal growth and yield. The ideal temperature range for mung bean farming is between 25°C to 35°C (77°F to 95°F). Mung beans are sensitive to frost and low temperatures, which can affect growth and development.

**Sunshine:** Mung beans require plenty of sunshine for proper growth and development. A minimum of 6 hours of sunlight per day is necessary for good yield.

**Rainfall:** Mung beans require adequate rainfall or irrigation for proper growth and development. The crop is sensitive to drought and waterlogging. The ideal rainfall range for mung bean farming is between 600 to 1000 mm per year. However, the crop can tolerate low rainfall conditions with proper irrigation.

**Humidity:** Mung beans grow well in areas with moderate to high humidity. However, high humidity can also increase the risk of fungal diseases.

## **PLANTING SESSION & MATERIAL: -**

To start a mung bean farming session, you will need the following materials:

- Mung bean seeds
- Land or containers for planting
- Compost or fertilizer
- Water source
- Garden tools (hoe, rake, shovel)

## **PLANTING METHOD: -**

a) Prepare the soil: Loosen the soil using a hoe, rake or shovel. Add compost or fertilizer to the soil to improve its fertility.

b) Planting: Mung beans are usually planted during the warm season, in spring or summer. Plant the seeds at a depth of 1-2 inches, spacing them 2-4 inches apart. If you are planting in rows, space the rows 18-24 inches apart.

c) Watering: Mung beans require regular watering to ensure proper growth. Water the plants regularly, keeping the soil moist but not waterlogged.

d) Weeding: Remove any weeds that sprout around the mung bean plants as they compete for nutrients and sunlight.

e) Harvesting: Mung beans are usually ready for harvest after 70-90 days. The pods will turn yellow or brown, and the beans will be fully matured.

## **FERTILIZERS: -**

- Nitrogen (N): Nitrogen is an essential nutrient for mango trees, and it promotes vegetative growth and the development of new leaves. Nitrogen fertilizers can be applied in split doses during the growing season, starting from the onset of the rainy season until the end of the vegetative growth phase.
- Phosphorus (P): Phosphorus is important for root growth and fruit development. Phosphorus fertilizers can be applied at the time of planting and during the early stages of growth.
- Potassium (K): Potassium is necessary for the development of fruits and their size, sweetness, and color. Potassium fertilizers can be applied during the fruit development phase.
- Micronutrients: Mango trees also require micronutrients such as iron, zinc, and manganese, which are essential for proper growth and fruit production. Micronutrient deficiencies can be corrected by applying chelated micronutrient fertilizers or foliar sprays.

## **PESTS AND DISEASES: -**

**Aphids:** These small insects can cause stunted growth and yellowing of the leaves. They can be controlled by spraying the plants with insecticidal soap or neem oil.

**Whiteflies:** These insects feed on the sap of the plant, causing yellowing of the leaves and stunted growth. They can be controlled by spraying the plants with insecticidal soap or neem oil.

**Leafhoppers:** These insects cause yellowing of the leaves and reduced growth. They can be controlled by spraying the plants with insecticidal soap or neem oil.

**Root Rot:** This fungal disease can cause the roots of the plant to rot, leading to wilting and death. It can be prevented by ensuring proper drainage and avoiding overwatering.

**Powdery Mildew:** This fungal disease can cause a white powdery coating on the leaves, reducing photosynthesis and stunting growth. It can be prevented by ensuring proper air circulation and avoiding overcrowding of plants.

**Anthracnose:** This fungal disease can cause brown or black spots on the leaves and pods, leading to reduced yield. It can be prevented by planting disease-resistant varieties and ensuring proper air circulation.

**Bacterial Blight:** This bacterial disease can cause brown spots on the leaves and pods, leading to reduced yield. It can be prevented by planting disease-resistant varieties and avoiding overhead irrigation.

## **HARVESTING OF MOTH BEANS: -**

Mung beans are usually ready for harvesting after 70-90 days from planting, depending on the variety and growing conditions. Here are the steps for harvesting mung beans:

**Check for maturity:** Mung bean pods will turn yellow or brown when they are mature and ready for harvest. The pods should be dry and crispy to the touch.

**Harvest the pods:** Pull the pods off the plant gently by hand or cut them off using garden shears. Be careful not to damage the plants.

**Remove the beans from the pods:** Once the pods are harvested, remove the beans by gently squeezing the pods or by shaking them in a container. Discard any damaged or discoloured beans.

**Dry the beans:** Spread the beans out in a dry, well-ventilated area, away from direct sunlight. Allow them to dry completely before storing them.

**Store the beans:** Once the beans are dry, store them in an airtight container in a cool, dry place. They can be stored for up to a year.