# **In-Depth Guide on Fenugreek Cultivation**

# 1. Introduction

Fenugreek (Trigonella foenum-graecum) is a spice and leafy vegetable crop grown for its seeds and leaves. It is a popular Rabi crop in Rajasthan, Gujarat, and Uttar Pradesh.

#### 2. Climate and Soil Requirements

- Temperature: Ideal range is 10–25°C.
- Rainfall: Requires 30–40 cm during growth.
- Soil:
- Well-drained loamy soils.
- Soil pH: 6.0–7.5.

# 3. Seed Selection and Preparation

- Varieties:
- Pusa Early Bunching: High-yielding.
- RMt-1: Suitable for seed production.
- Seed Rate: 20–25 kg per hectare.
- Seed Treatment: Treat seeds with Thiram (2 g/kg) to prevent fungal diseases.

#### **4. Sowing Techniques**

- Time of Sowing: October to mid-November.
- Method: Line sowing for seed production; broadcasting for leafy greens.
- Depth and Spacing:
  - Sow seeds 1–2 cm deep.
  - Maintain 25 cm row spacing.

#### 5. Fertilizer Management

- Base Fertilizers:
  - Nitrogen (N): 20 kg/ha.
  - Phosphorus (P): 30 kg/ha.
- Application: Apply all fertilizers at sowing.

#### **6. Irrigation Management**

• Irrigate at 15-day intervals during the growth period.

# 7. Pest and Disease Management

- Pests:
- Aphids: Spray Neem oil or Dimethoate (0.03%).
- Diseases:
- Powdery Mildew: Use Sulphur dust or systemic fungicides.

# 8. Weed Control

• Perform light weeding 20–30 days after sowing.

# 9. Harvesting and Post-Harvest Management

- Harvesting:
  - For seeds: Harvest when pods dry and turn brown.
  - For leaves: Pluck 25–30 days after sowing.
- Threshing: Use mechanical or manual methods for seed extraction.
- Storage: Store seeds in moisture-free, airtight containers.

# 10. Yield and Economics

- Yield:
- Seeds: 1–1.2 tons per hectare.
- Leaves: 2–3 tons per hectare.
- Cost of Cultivation: ₹10,000–₹15,000 per hectare.
- Market Price: ₹6,000–₹8,000 per quintal.