

Moong (Green Gram) Cultivation Guide

Introduction

Moong (*Vigna radiata*), also known as green gram, is a highly nutritious pulse crop rich in protein, fiber, and essential vitamins. It is widely cultivated in tropical and subtropical regions and is valued for its short growing period and nitrogen-fixing ability, which improves soil fertility.

Steps of Cultivation

1. Variety Selection

- Choose high-yielding and disease-resistant varieties.
- Popular varieties include Pusa Vishal, PDM-139, SML-668, and HUM-16.

2. Soil Preparation

- Prefers well-drained sandy loam or loamy soil with a pH of 6.2–7.2.
- Land should be plowed 2–3 times to achieve a fine tilth.
- Application of organic manure or compost enhances soil fertility.

3. Sowing and Spacing

- Sowing is done in Kharif (June–July) and Rabi (October–November) seasons.
- Seed rate: 15–20 kg per hectare.
- Spacing: 30–40 cm between rows and 10–15 cm between plants.

4. Irrigation and Water Management

- Requires minimal irrigation; rainfed conditions are suitable.
- Key irrigation stages include flowering and pod development.
- Avoid excessive irrigation to prevent root rot and fungal diseases.

5. Fertilization and Nutrient Management

- Apply phosphorus and potassium based on soil test recommendations.
- Use organic fertilizers like farmyard manure to improve soil structure.
- Seed inoculation with *Rhizobium* bacteria enhances nitrogen fixation.

6. Weeding and Pest Control

- Regular weeding is necessary to reduce competition.
- **Common pests:** Aphids, whiteflies, and pod borers. Neem-based pesticides and biological control methods are effective.
- **Common diseases:** Yellow mosaic virus, powdery mildew, and anthracnose. Crop rotation and resistant varieties help in disease management.

7. Harvesting and Yield

- Moong is ready for harvest 60–75 days after sowing.
- Harvest when pods turn yellow and dry.
- The average yield is 10–15 quintals per hectare under good management practices.

Conclusion

Moong is an excellent choice for farmers due to its short growing cycle, nutritional value, and ability to improve soil fertility. Proper crop management, including timely irrigation, fertilization, and pest control, ensures high yields and profitability.

