

Groundnut Cultivation Guide

A Quick Reference

I. Introduction

Groundnut (*Arachis hypogaea*), also known as peanut, is an important oilseed crop in India. It is grown mainly during Kharif (rainy) season but also in Rabi and summer in some regions. Groundnut improves soil fertility through nitrogen fixation.

II. Growth Requirements

Requirement	Optimal Range	Notes
Temperature	25°C to 30°C	Sensitive to frost; warm climate preferred
Rainfall	600-1250 mm	Well-distributed rainfall essential during flowering, pegging, and pod formation stages
Soil pH	6.5 to 7.0	Well-drained sandy loam or sandy clay loam soils ideal

III. Recommended NPK Fertilization (kg/ha)

Nutrient	Recommended Dosage	Notes
Nitrogen (N)	20-25 (basal + topdressing)	Usually applied in splits with basal and flowering stage doses
Phosphorus (P)	40-60	Important for root development and early growth
Potassium (K)	60-75	Enhances pod yield and disease resistance
Calcium (gypsum)	250 kg/ha at flowering	Prevents blossom end rot and promotes pod filling

Organic manure (10-12 tons per ha) is beneficial when mixed well before sowing.

IV. Best Cultivation Practices

- **Land Preparation:** Multiple ploughing and harrowing to create a fine seedbed.
- **Sowing:** Sow seeds 5-6 cm deep with 30x10 cm spacing (bunch types) or 30x15 cm (spreading types).
- **Seed Treatment:** Important to treat for fungal and bacterial diseases (e.g., Trichoderma, Pseudomonas).
- **Irrigation:** Critical at flowering, pegging and pod development stages.
- **Weed and Pest Management:** Use recommended herbicides and integrated pest management.
- **Crop Rotation:** Rotate with cereals like maize, sorghum, or millets to improve soil health and reduce pests.

V. Common Diseases and Pest Control

- Groundnut Rosette Virus spread by aphids causes severe yield loss. Control aphids with insecticides and use resistant varieties.
- Leaf spots controlled by fungicides and crop rotation.
- Pod rot and stem wilt managed through resistant varieties and good drainage.
- Pest groups include aphids, thrips, leaf miner, and bollworm; use insecticides and biocontrols.

VI. Types of Groundnut in India

- Kadiri, Kadiri-2, Kadiri-3
- BG-1, BG-2
- GAUG-1, GAUG-10
- PG-1, T-28, T-64
- Chandra, Chitra, Kuber

