

Coconut Cultivation Guide

A Quick Reference

I. Introduction

Coconut (*Cocos nucifera*) is a major plantation crop grown predominantly in coastal and tropical regions of India including Kerala, Tamil Nadu, Karnataka, Andhra Pradesh, and the Konkan region. It thrives under warm, humid climates and well-drained soil.

II. Growth Requirements

Requirement	Optimal Range	Notes
Rainfall	1300 to 2300 mm annually	Well-distributed rainfall or irrigation
Soil	Well-drained sandy loam, laterite	Avoid waterlogged or heavy clayey soils
Soil pH	5.2 to 8.6	Soil depth >1.2 m preferred
Temperature	27°C to 32°C	Favours frost free, warm climate

III. Recommended NPK Fertilization (per palm per year)

Nutrient	Recommended Dose	Notes
Nitrogen (N)	1.0 kg	Applied in 3 splits (June, October, February)
Phosphorus (P)	0.5 kg	Full dose applied in June
Potassium (K)	1.0 kg	Applied in 3 splits like nitrogen
Micronutrients	Boron, Zinc, Mn, Fe, Cu, Mo	Supplemented as required, generally in organic form

Additionally, organic manures such as well-rotted farmyard manure or coir pith are applied annually (about 25 kg/palm).

IV. Best Cultivation Practices

- Land preparation involves pit digging (size varies by soil type) and filling with organic compost.
- Plant spacing usually 7.5 m between palms in triangular or square layouts.
- Seedlings are planted with care to avoid root damage and provided with shade initially.
- Mulching, green manuring, and cover crops help conserve moisture and improve soil fertility.
- Irrigation is critical especially in the first few years and during drought conditions.
- Integrated pest and disease management includes monitoring and control of mites, beetles, bud rot, and leaf blight.

V. Coconut Varieties in India

- Tall varieties: West Coast tall, East Coast tall, Tiptur tall, etc.
- Dwarf varieties: Malayan dwarf, Chavakadan dwarf, Kerasree dwarf.
- Hybrids: Popular for early bearing and higher yields.

