

Rubber Cultivation Guide

Introduction

Rubber (*Hevea brasiliensis*) is a tropical tree species cultivated for its latex, which is used in manufacturing various rubber products. It thrives in warm, humid climates with well-distributed rainfall. Rubber plantations are a long-term investment, requiring proper care and management for optimal latex yield.

Steps of Cultivation

1. Variety Selection

- Choose high-yielding and disease-resistant varieties.
- Popular varieties include RRIM 600, PB 235, PB 260, and GT1.

2. Soil Preparation

- Prefers deep, well-drained loamy or lateritic soil with a pH of 4.5–6.5.
- Land should be cleared of weeds and plowed to a fine tilth.
- Organic manure or compost should be added to enhance soil fertility.

3. Planting and Spacing

- Rubber is propagated through bud-grafted seedlings.
- Ideal planting distance: 5–6 meters between trees.
- Planting is best done during the rainy season to ensure proper establishment.

4. Irrigation and Water Management

- Requires regular moisture, especially in dry periods.
- Drip irrigation is recommended for efficient water use.
- Avoid waterlogging, as it affects root development.

5. Fertilization and Nutrient Management

- Apply nitrogen, phosphorus, and potassium fertilizers based on soil test results.
- Organic fertilizers and mulching improve soil health and moisture retention.
- Micronutrients like magnesium and zinc are essential for healthy tree growth.

6. Weeding and Pest Control

- Regular weeding prevents competition for nutrients.
- **Common pests:** Termites, mealybugs, and rodents. Neem oil and biological control methods help manage infestations.
- **Common diseases:** Powdery mildew, leaf fall disease, and root rot. Fungicides and good plantation hygiene reduce disease incidence.

7. Tapping and Latex Harvesting

- Rubber trees are ready for tapping 5–7 years after planting.
- Tapping is done early in the morning by making a controlled incision on the bark to collect latex.
- Proper tapping techniques ensure high latex yield without harming the tree.
- Average latex yield: 1,500–2,500 kg per hectare annually.

Conclusion

Rubber cultivation is a profitable long-term investment when managed efficiently. Proper plantation care, irrigation, fertilization, and pest control enhance latex yield and tree health. Sustainable farming practices help maintain soil fertility and ensure long-term productivity.

