

Castor Seed Cultivation Guide

Introduction

Castor (*Ricinus communis*) is an important oilseed crop known for its industrial applications, primarily in the production of castor oil. It is a hardy crop that thrives in tropical and subtropical climates with minimal water requirements. Castor plants are grown for their high oil content and medicinal properties.

Steps of Cultivation

1. Variety Selection

- Choose high-yielding and disease-resistant varieties suited to the local climate.
- Popular varieties include GCH-4, GCH-5, TMV-5, and DCH-177.

2. Soil Preparation

- Prefers well-drained sandy loam or clay loam soil with a pH of 6.0–7.5.
- Deep plowing followed by harrowing ensures proper aeration and root growth.
- Organic manure or compost should be added to improve soil fertility.

3. Sowing and Spacing

- Sowing is done during monsoon or early winter for better establishment.
- Maintain a spacing of 90 cm × 60 cm for proper plant growth and aeration.
- Seeds should be treated with fungicides to prevent seed-borne diseases.

4. Irrigation and Water Management

- Requires minimal irrigation, especially in rainfed conditions.
- Irrigate at critical growth stages such as flowering and seed development.
- Avoid waterlogging as it can cause root rot.

5. Fertilization and Nutrient Management

- Apply balanced fertilizers rich in nitrogen, phosphorus, and potassium.
- Organic manure such as farmyard manure or green manure improves soil structure.
- Micronutrients like zinc and boron enhance seed development.

6. Weeding and Pest Control

- Regular weeding is necessary to prevent competition for nutrients.
- Common pests: Castor semi-looper, whiteflies, and aphids. Use neem-based pesticides and biological control methods.
- Common diseases: Wilt, root rot, and powdery mildew. Apply fungicides and practice crop rotation.

7. Harvesting

- Castor plants are ready for harvest 140–180 days after sowing.
- Harvest when the capsules turn brown and begin to split open.
- Dry the harvested seeds properly to reduce moisture content before storage.

Conclusion

Castor seed cultivation is a profitable and low-maintenance farming venture with high industrial demand. By selecting appropriate varieties, managing soil fertility, and controlling pests effectively, farmers can achieve good yields. Proper harvesting and post-harvest management ensure high-quality castor seeds for oil extraction and other applications.

