

Watermelon Cultivation Guide

Introduction

Watermelon (*Citrullus lanatus*) is a popular summer fruit known for its high water content, refreshing taste, and nutritional benefits. It is grown in tropical and subtropical regions, requiring warm temperatures and well-drained soil. Watermelon is consumed fresh or processed into juices and desserts.

Steps of Cultivation

1. Variety Selection

- Choose high-yielding and disease-resistant varieties.
- Popular varieties include Sugar Baby, Crimson Sweet, Charleston Gray, and Black Diamond.

2. Soil Preparation

- Prefers sandy loam soil with good drainage and a pH of 6.0–7.5.
- Deep plowing and harrowing are recommended for proper aeration.
- Organic manure or compost should be applied before planting to improve soil fertility.

3. Planting and Spacing

- The best time for sowing is during the warm season (February–April for summer crops, November–January for winter crops in warmer regions).
- Seeds are sown directly in the field at a depth of 2–3 cm.
- Spacing: 1–1.5 meters between rows and 60–90 cm between plants.

4. Irrigation and Water Management

- Requires consistent moisture during early growth and fruit development.
- Drip irrigation is recommended for efficient water use and to prevent waterlogging.
- Reduce irrigation during fruit ripening to enhance sweetness.

5. Fertilization and Nutrient Management

- Apply nitrogen, phosphorus, and potassium fertilizers based on soil test recommendations.
- Organic fertilizers such as farmyard manure and compost improve fruit quality.
- Calcium and boron supplements enhance fruit firmness and reduce blossom-end rot.

6. Weeding and Pest Control

- Regular weeding helps prevent competition for nutrients.
- **Common pests:** Aphids, fruit flies, and spider mites. Use neem-based pesticides and biological controls.

- **Common diseases:** Powdery mildew, anthracnose, and fusarium wilt. Apply fungicides and practice crop rotation.

7. Harvesting and Yield

- Watermelons are ready for harvest 80–100 days after sowing.
- Signs of maturity include a dull skin surface, dried tendrils near the fruit stem, and a hollow sound when tapped.
- Average yield ranges from 30–50 tons per hectare, depending on variety and management.

Conclusion

Watermelon cultivation is a profitable and refreshing fruit farming practice. Proper soil preparation, irrigation, fertilization, and pest management ensure high yields and quality fruits. Sustainable farming techniques enhance production and market value.

