## **Bottle Gourd Cultivation Guide**

**Introduction** Bottle gourd (Lagenaria siceraria) is a widely cultivated vegetable known for its high water content, nutritional benefits, and medicinal properties. It is commonly used in various culinary dishes and traditional remedies. Bottle gourd thrives in warm climates and well-drained soil, requiring proper care throughout its growing season to ensure a good yield.

## **Steps to Harvest/Cultivate**

- 1. **Selection of Variety:** Choose a suitable variety based on climate and soil conditions. Common varieties include Pusa Summer Prolific Long, Pusa Summer Prolific Round, and Arka Bahar.
- 2. **Soil Preparation:** Bottle gourd grows best in well-drained sandy loam soil with a pH of 6.0 to 7.5. The soil should be enriched with organic compost or well-rotted manure for better fertility.

## 3. **Planting:**

- Sow seeds directly into the field or start them in nursery trays and transplant later
- o Plant seeds ½ to 1 inch deep, spaced 12-18 inches apart, with 4-5 feet between rows to allow for vine growth.
- 4. **Watering:** Provide regular watering to maintain soil moisture, especially during flowering and fruit development. Avoid waterlogging to prevent root diseases.
- 5. **Fertilization:** Apply a balanced fertilizer (NPK 10-10-10) at the early growth stage and supplement with organic fertilizers like compost or farmyard manure.
- 6. **Trellising:** Bottle gourd is a climbing vine and benefits from trellising, which improves air circulation, reduces pest infestation, and enhances fruit quality.
- 7. **Pest and Disease Control:** Monitor for pests such as fruit flies, aphids, and whiteflies. Use neem oil or organic pesticides to control infestations. Prevent fungal diseases by ensuring good air circulation and practicing crop rotation.
- 8. **Weed Management:** Use mulching or manual weeding to keep the field weed-free and reduce competition for nutrients.

## 9. Harvesting:

- o Bottle gourd is ready for harvest 55-70 days after sowing.
- o Harvest when fruits are tender and green before they become overripe.
- o Use sharp tools to cut the fruit, leaving a small portion of the stem attached.

**Conclusion** Bottle gourd cultivation requires proper soil preparation, adequate watering, and pest control to ensure healthy growth and high yields. By following best agricultural practices, farmers can produce high-quality bottle gourds suitable for consumption and commercial sale. This crop is highly valued for its nutritional benefits and market demand, making it a profitable choice for cultivation.

