

# **How to Grow Bottle Gourd**

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## Overview

Bottle gourd (*Lagenaria siceraria*) is an annual, vigorous, climbing vine with large leaves and white flowers. Bottle gourds come in various shapes and sizes.

- Round (called calabash)
- High round
- Cylindrical
- Bottle
- Long

The plant grows quite quickly and vigorously, spreading over large areas.

This document focuses on growing **Bottle Gourds**.

*Table 1 Planting Guide*



Shop for Bottle Gourd Seeds

Depth to plant	Spacing between plants	Spacing between rows	Days to germinate (Sprout)	Planting season	Plant height	No. of plants per sq. ft.	Soil requirements
1/2 inch deep	Space plants about 5" apart	Space rows about 3" apart	7 - 12 days	Summer Spring	Grows as a vine	1 plant per sq. ft.	Prefers soil with pH levels of 5.5 - 6.8.

## Prerequisites

- **Plant Type:** Perennial grown as an annual plant.
- **Light:** Full sun
- **Water:** When it comes to watering bottle gourds in container gardens, keep the potting soil constantly moist.

## Steps

The following steps define the process from seed to harvest.

1. You must sow the heirloom seeds of bottle gourds from *My Green Vault* in pro trays and then transplant. For more information on sowing seeds and germination tips, refer to \*\*\*.

2. Prepare your bottle gourds for transplanting once the plants have reached at least 1/2-foot in height.



3. Prepare a good growing medium. A good, simple option is a mix of two parts potting soil, one part Coco Peat (CP) and one part Vermi Compost (VC). The soil and VC provides your plant with the nutrients it needs, while the CP mix retains the moisture.



4. Place your pot in a sunny location and ensure to provide adequate support system





**Note:** Without any support, your bottle gourds will have very little upward growth and, as a result, they may not yield.

## Maintenance

Bottle gourds require evenly moist soil to ensure the best and fast growth. Do not over water or allow the soil to dry out. Pollination in bottle gourds or for that matter, any type of gourds, can be quite tricky!

So, a brief description on the flowers and pollination is provided.

- [Bottle gourd flowers](#)
  - [Bottle gourd pollination](#)
1. Bottle gourds are heavy feeders. When your bottle gourds bloom, to help promote greater plant productivity, add adequate amount of VC or Compost Tea (CT).



**Note:** For more information on CT preparation and application, refer to \*\*\*. 2.

Make sure your bottle gourds receive at least 1“-1 1/2” of water a week.

3. Once the soil has warmed, ensure to retain soil moisture and an even growing temperature around the plant.

## Bottle gourd flowers

Bottle gourds produces both male and female flowers. The white flowers mainly bloom at night and they droop off after pollination. The female flower develop into bottle gourd, and this sets them apart from their male counterparts.

## Bottle gourd pollination

Sometimes, none of the female flowers produce fruits, but drop off without growing into a bottle gourd. This is mainly due to the failure of pollination. Even though nature does its magic everyday, its absolutely normal to go ahead and hand pollinate the bottle gourd.

*How?* Very simple!

When the flowers open, rub a soft brush, first in the male flower and then in the female flower.

**Tip:** I have also succeeded by rubbing softly the inside of both the flowers together.

## Companion Plants

- Sponge gourd, bitter gourd, cucumber.

## Plant Protection

### Pests

Bottle gourds can be attacked by the following:

- [Fruit fly](#)
- [Shoot and fruit borer](#)
- [Spider mites and Aphids](#)
- [Beetles and caterpillars](#)

### Diseases

- [Damping off and Nematode](#)
- [Leaf spot](#)
- [Powdery mildew](#)
- [Downey mildew](#)

### Organic control

Once you have identified the troublemakers, you can control them with an assortment of organic pest-control methods. The following list contains few methods:

#### a. Shoot and fruit borer

- Remove the affected terminal shoot showing boreholes
- Remove the affected fruits and destroy
- Spray Neem oil

**Note:** For more information on neem oil dilution and application, refer to \*\*\*.

#### b. Beetles and caterpillars

- Hand pick off the plants
- Dislodge with jet water spray

#### c. Damping off and Nematode

- Treat the seeds with *Trichoderma viride* or *Pseudomonas fluorescens* 24 hours before sowing
- Apply *Pseudomonas fluorescens* as soil application

- Avoid water stagnation

**d. Spider mites and Aphids**

- Spray home made garlic and insecticidal soap solution



**Note:** For more information on preparation and application of garlic and insecticidal soap spray, refer to \*\*\*.

**e. Leaf spot**

- Remove the affected plants in the early stages to control the vector

**f. Fruit fly**

- Set up pheromone trap at 12 numbers per hectare.
- Remove the affected fruits and destroy

**g. Downey mildew**

- Prune or stake plants to improve air circulation
- Water only in the morning so plants have a chance to dry during the day

**h. Powdery mildew**

- Mix 1 part milk with 9 parts water and spray the stems and tops of leaves with the solution. Reapply after rain.
- Spraying leaves with baking soda (1 teaspoon in 1 quart water) raises the pH, creating an inhospitable environment for powdery mildew.

## Harvesting

Your organic bottle gourds are ready for harvest just by looking at the stem right next to the gourd. If it has started to shrivel, turn brown and dry, then, the gourd is done growing and can be harvested. The body of the gourd may still be green, but the dried stem means that the gourd is not receiving any more nutrients from the vine.



The time from planting to harvest is 60 to 120 days from transplants. Finally, with those cute little bottles, oops, bottle gourds in hand, I can echo your feelings. It does not matter if you do not have land space to grow. It is just the determination and willpower that matters!





