# **How to Grow**

# Amaranthus

# Introduction

## In this chapter...

| Overview         | page 6  |
|------------------|---------|
| Prerequisites    | page 6  |
| Steps            | page 6  |
| Maintenance      | page 7  |
| Companion Plants | page 8  |
| Plant Protection | page 8  |
| Harvesting       | page 10 |

### Overview

Amaranthus, that is grown as a grain crop. It's not a kind of grass as most grains are, but amaranth is grouped together with the other grains anyway. Amaranth seeds are very high in protein, and its a very high-quality protein closer to what you find in soybeans.

The amaranthus family includes flowers, herbs, and weeds. Some varieties are grown and harvested for food.

This document focuses on growing Amaranthus.

 Table 1
 Planting Guide



| Depth<br>to plant      | Spacing<br>between<br>seeds   | Spacing<br>between<br>seedlings   | Days to<br>germinate<br>(Sprout) | Planting<br>season | Plant<br>height    | Soil<br>requirements                                   |
|------------------------|---|---|----------------------------------|--------------------|--------------------|--|
| 0.25<br>inches<br>deep | Space<br>seeds<br>about 7" to<br>10" apart<br>(tolerates<br>crowding) | Space<br>seedlings<br>about 10"<br>to 12"<br>apart<br>(tolerates<br>crowding) | 4 - 8 days                       | Annual             | Appx. 5 ft<br>tall | Prefers soil<br>rich in<br>nitrogen and<br>phosphorous |

### Prerequisites

- Light: Full sun
- Water: When it comes to watering amaranthus in container gardens, water only when dry.

#### Steps

The following steps define the process from seed to harvest.

1. You must directly sow the heirloom seeds of amaranthus from *My Green Vault* into containers. For more information on sowing tips, refer to \*\*\*.



2. A week after the seeds germinate, you can move you container to direct sunlight.



**Note:** Wet conditions do not promote seed germination in case of this plant and even if the seedlings emerge, most probably they will decay.

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.



#### Maintenance

Amaranthus require evenly moist soil to ensure the best and fast growth. Do not over water or allow the soil to dry out.



1. Amaranthus are non-fussy greens. Ensuring adequate sun, along with

intermittent Compost Tea (CT) foliar spray does wonders.



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

2. Once the soil has warmed, mulch around to retain soil moisture and an even growing temperature.

#### **Companion Plants**

• Bush beans and other nitrogen-fixing crops.

#### **Plant Protection**

#### Pests

Amaranthus can be attacked by the following:

- Ants
- Leaf eating caterpillar

#### Diseases

- Leaf spot
- Root decay

#### **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. Ants
  - Lemon juice or chilli garlic spray.



**Note:** For more information on preparation and application of lemon juice and chilli garlic spray, refer to \*\*\*.

b. Leaf eating caterpillar

- Hand pick off the plants
- Dislodge with jet water spray
- c. Leaf spot
  - Remove the affected plants in the early stages to control the vector
- d. Root decay
  - If the soil is too damp and soggy, you will have to stop watering for a couple of days and replace the top soil. Ensure that the container has ample holes for proper water drainage. Also, moving the container to bright sunlight helps.

#### Harvesting

Your organic colorful amaranthus greens are ready for harvest before they start flowering.





**Note:** You can also cut your amaranthus when it is between one and two feet tall. You must cut the whole stem, maybe six to ten inches above the ground. The stem will re-shoot and can be harvested again.

The time from planting to harvest is 20 to 30 days from seed. Finally, the hard work pays off and you have the most colorful and sweet smelling greens!

