



Terrariums are a fun way for gardeners to bring in a small piece of nature into the home. However, there are a few simple rules and many helpful tricks that make a gardener successful with terrariums. So, let's start with the basics, there are two types of terrariums– open and closed.

### **Terrarium Vessels: Open vs. Closed**

Open terrariums must have tall sides; an open vessel that has short walls is considered a bowl or dish and will not produce the appropriate environment for terrarium plants. The important difference between these two categories is the amount of humidity that can be maintained inside the vessel. Open terrariums are typically easier to create and maintain. Although open terrariums require more frequent watering than closed ones they are less likely to succumb to the danger of disease via overwatering and too high of moisture.

Closed terrariums are both beautiful and impressive. They do require more thought into planning and building as well as experimentation into creating a balanced environment. This learning opportunity will teach gardeners to understand the wet-dry cycle of plants and equilibrium of humidity in a terrarium. Eventually, a terrarium can become self-sustaining and require little maintenance.

### **Selecting the Glassware: Making the Right Choice**

Shopping or repurposing glassware can be one of the most fun processes in making a terrarium. However, the vessel's size and transparency need to be priority in the selecting process.

Let's talk size– the larger the glassware the easier the terrarium and the smaller the harder. Size affects not only the construction and planting process but also ease of environmental control. We recommend avoiding the tiny mason jar terrariums for beginners.

Clarity of the glass is very important because most terrarium plants thrive in strong indirect light; this means avoiding colored glass and texture glass.

### **Plant Selection: Naturally Small**

Plants that are suited best for terrariums are ones that are naturally small and slow growing. Faster and larger growing plants can be used but we caution that the maintenance will be much higher.

### **Placement for Light: Bright Indirect**

Depending on the selection available most terrarium plants prefer bright indirect light. Some terrarium plants are best suited for low light. However, a terrarium should never be placed in direct sun.

### **Water Requirements: Each Plant Varies**

When selecting several plants to be in a terrarium choose plants that have similar moisture needs.

### **Personalizing the Terrarium**

Terrariums can be more than some soil materials and plants– moss, twigs, seed pods, rocks, crystals, bark

### **The Essentials: Materials and Tools**

- Glass Container
- Pebbles
- Charcoal
- Sheet Moss
- Coffee Filter
- Cactus Potting Mix
- Long Tongs or Chopsticks
- Long bamboo stick with a cork on the end
- Long bamboo stick with a spoon attached.
- Turkey Baster
- Long-bladed Scissors
- Plants
- Accessories: Rocks, Twigs, Shells, etc.

# Indoor Gardening: Terrarium Care & Planting Guide

## Directions: Step by Step

- **Clean** the glassware of dust and particles using a glass cleaner and a paper towel. The layers of a terrarium are very important but the depth of each layer can vary based on the size, style and design needs of the creator. It is however, important for the gardener to make sure each layer is thick enough to cover the entire surface of the base and previous layer.
- **Reservoir**– this is a layer of pebbles that creates an airspace to collect extra water at the bottom of the terrarium. We recommend using cleaned or prewashed pebbles to keep the inside glass tidy. This layer is typically 1"-1.5" thick.
- **Purification**– This is a layer of activated charcoal that purifies the water. It is crucial to have this layer thick enough to purify water as it passes through. We suggest that you prewash your charcoal before working with it because it is very dusty. This layer is typically 1" thick.
- **Filter**– This layer can consist of either sheet moss or a coffee filter. This layer again must cover the entire surface. The filter will prevent the next layer (cactus soil) from washing down and clogging the entire stratification system. Lightly wet down the coffee filter to keep it in place when adding the next layer. When working with sheet moss, presoak it on a cookie sheet so that it is pliable.
- **Growing Media**– In this layer the gardener will use *cactus soil*. Cactus soil provides excellent draining and good air movement, especially in this high humidity environment. This layer is minimally 2" thick.
- **Planting**– In this step, select plants that are similar with each other in both water and light requirements. Experiment with placement of the plants in the terrarium before planting them. Make sure that none of the plants' foliage will touch the wall of the glass. Once satisfied with placement pull the plants out of the terrarium. Dig small holes into the soil using your fingers or a spoon-bamboo tool (you can carefully dig down to the coffee filter/ moss layer without puncturing it). Remove the plant from its pot and gently remove any extra soil and loosen the roots. Use a paper funnel slide the plant into its hole. Firm the soil around the planting by tamping the soil with the corked-bamboo tool or your fingers. *Clean the glass walls with a rag as you work.*
- **Accessories**– Add extra rock, moss, twigs, shells, etc. around the plantings to add interest. Ensure that the plants' crowns and stems are not buried in extra materials. *Clean the glass walls with a rag as you work.*
- **Water & Maintenance**– Water in your new planting with a turkey baster by dribbling water around the base of the plantings.

Remember to rotate your terrarium regularly to keep even healthy growth.

Because the container is confining for the plants, fertilizing should be kept to a minimum. However, some plants require fertilizer while in flower. In addition, as a terrarium ages fertilizing will be more necessary to sustain a balance of food.

Occasionally, clean out dead leaves, trim straggling plants, and clean the glass with water and a paper towel.

If you are working with a closed terrarium it is recommended to open the terrarium occasionally. We recommend opening a terrarium for about a half day or when the walls become too foggy to see inside. Don't forget that plants require carbon dioxide to live so airing out the oxygen and letting some gas exchange to occur will be helpful for growth.

