



# JUST 4 GROWERS

GLOBAL GARDEN COMMUNITY

INFOSHEET 10901:

## Propagation

Introduction to Perfect Propagation



Introduction



Setting up an indoor propagation area is one of the simplest and most rewarding ways to begin gardening indoors. Cuttings and seedlings are particularly vulnerable to extremes in temperature, so they will really benefit from an environmentally-stable indoor propagation area.



Giving your plants a good start in life is half the battle when it comes to successful growing.

### Moderate Light Levels

A small plant's needs are ... small. Strong, intense light puts way too much stress on those undeveloped root systems.

### High Relative Humidity

A propagator is an absolute must. Select one with a secure-fitting, durable lid with vents. Leave the vents closed to begin with and aim for relative humidity of 85% or more.

### Keep Temperatures Constant and Regulated

73 - 77°F (23 - 25°C) is ideal for seedlings and cuttings of most plant varieties. Use a min / max thermometer with a remote probe and place the probe inside your propagator.

### Take your Time

Don't rush the propagation stage. Allow your seedlings or cuttings to fully explore their rooting media (regular irrigation helps!) before transplanting.

### Avoid Drought Stress

Don't let your propagation media dry out—ever! It can happen very quickly, especially once your seedlings or cuttings develop thirsty roots.

### Keep it Clean

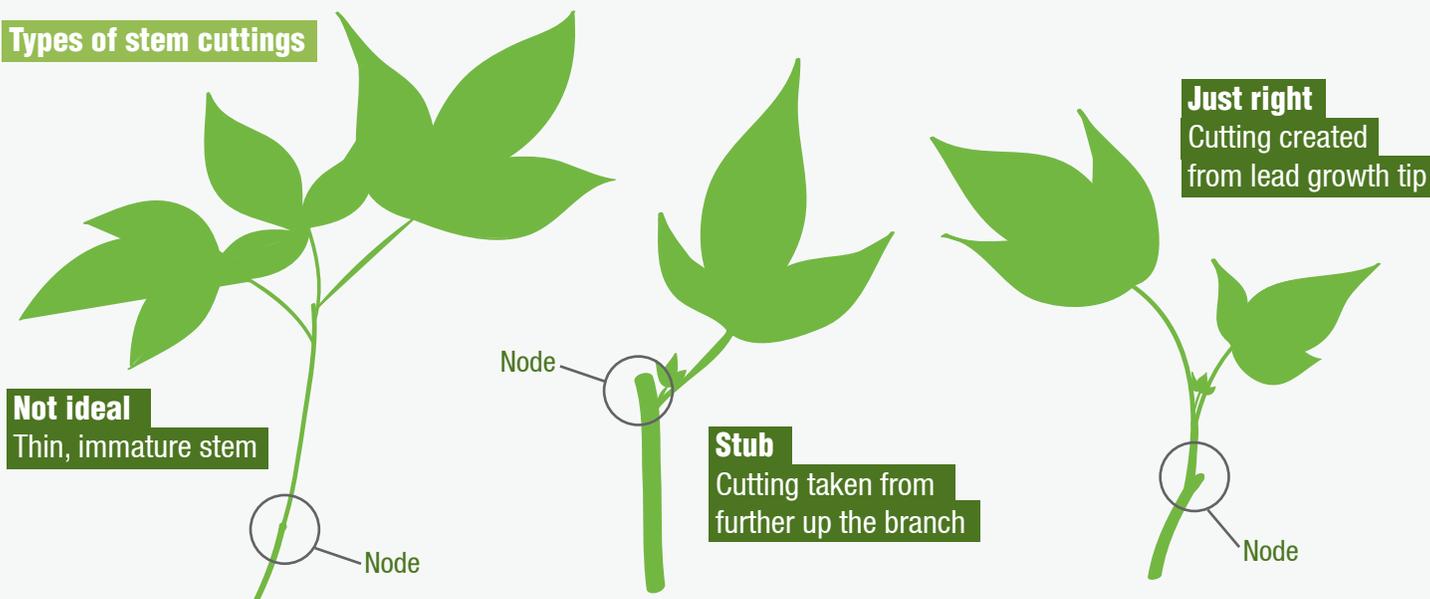
The cleaner your growing environment, the less precious energy your tender young plants need to expend fighting off viruses and diseases. Wipe all surfaces, especially propagators, with a mild bleach solution in between every batch.

### Make Small, Gradual Environmental Changes

Young plants need to be gradually introduced to "life outside the propagator." A sudden drop in relative humidity will put untold strain on an immature root system through excessive transpiration. Once all vents are fully open, try removing the lid completely for a few minutes, gradually lengthening the durations.



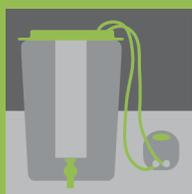
## Types of stem cuttings



## Propagation Pro Tips

**Inoculate your rooting media with mycorrhizae**

Mycorrhizae is a beneficial fungus that forms a special relationship with many plant species. Introduced early into the growth cycle, it can form a vast network that can help translocate moisture and nutrients to plants where roots cannot usually reach.

**Brew your own compost tea**

Active aerated compost tea is the secret weapon of many growers. It contains all the beneficial biology that you would normally find in super-healthy soil. This biology helps plants by converting organic matter into plant accessible nutrients.

**Use breathable pots**

Breathable pots allow more oxygen into the root zone which increases metabolic rates and general health in the rhizosphere. Plants require fewer transplants and do not suffer from root circling. Highly recommended!

**Invest in rooting hormone / accelerator**

The quicker your cuttings form roots, the less prone they will be to harmful pathogens (i.e. damping off)—rooting gel or powder can dramatically increase the rate at which your cuttings form roots of their own.

## Propagation Shopping List



- ▶ T5 Fluorescent Grow Light with 6.5K (daylight-rated) lamps
- ▶ Grow Tent - ask for a model specifically designed for propagation
- ▶ Rooting Media (ask your grow store about 'starter cubes' or 'propagation blocks')
- ▶ Rooting Liquid / Gel / Powder (accelerates the rooting process)
- ▶ Propagator (seals in humidity for a more forgiving environment)
- ▶ Scalpel (for taking clean cuttings)

IN ASSOCIATION WITH:

**DON'T FORGET TO CHECK OUT THESE INFOSHEETS:**

- ▶ **10902** Air Pruning and Other Propagation Tips
- ▶ **10903** Aeroponic Cuttings
- ▶ **10904** Keeping a Healthy Mother / Donor Plant



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