

Transplant Training

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Potting Medium

Soil-less

Potting Soil

Make your own

Soil-Less

- ▶ Best for containers
- ▶ Ideal for seed starting
- ▶ Allow for water and air movement; retention and drainage. Good drainage important for healthy root growth
- ▶ Sterile so free of weed seed and pathogens.



Gardening Know How: Soilless Potting Mix - What Is A Soilless Mixture And Making Homemade Soilless Mix <https://www.gardeningknowhow.com/garden-how-to/soil-fertilizers/soilless-growing-mediums.htm>

Components of soil-less mix

Perlite:

- form of expanded volcanic rock and is usually white in color.
- provides good drainage, is lightweight, and holds air.
- Perlite should also be mixed with other mediums like peat moss since it does not retain water and will float to the top when plants are watered.

Vermiculite:

is often used with or instead of perlite.

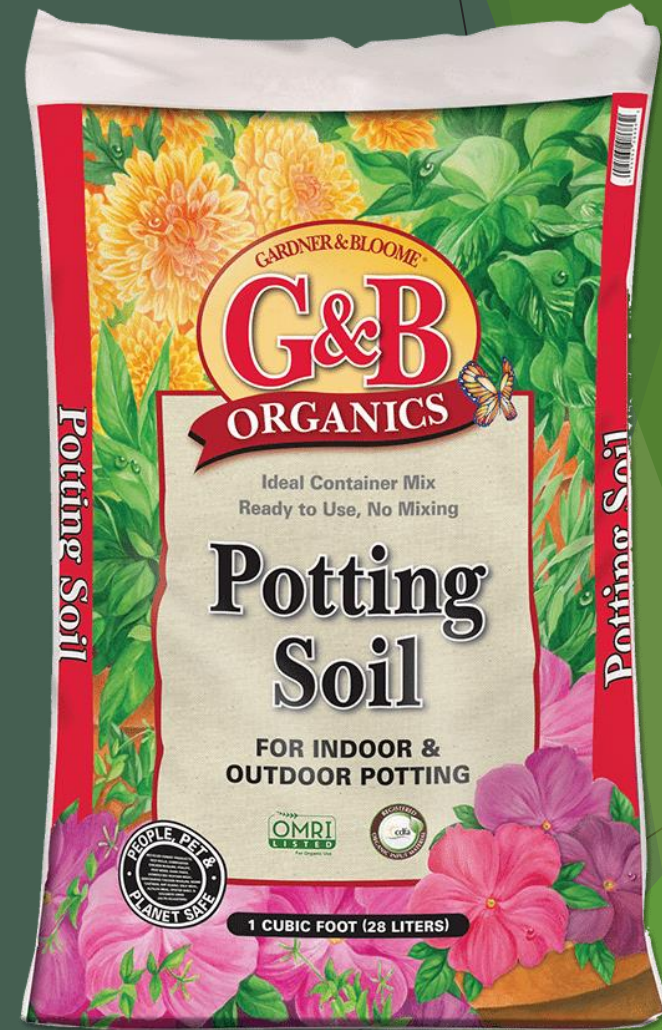
- It is a form of mica and it does well at helping to retain water.
- But doesn't provide as good aeration as does the perlite.

▶ Coarse sand:

- Sand improves drainage and aeration but doesn't retain water.

Potting Soil

- ▶ Similar to soil-less potting mix but may (or may not) contain soil.
- ▶ Not sterile
- ▶ Can contain nutrients
- ▶ Can mix “garden soil” with potting soil, but not alone as too dense for a container



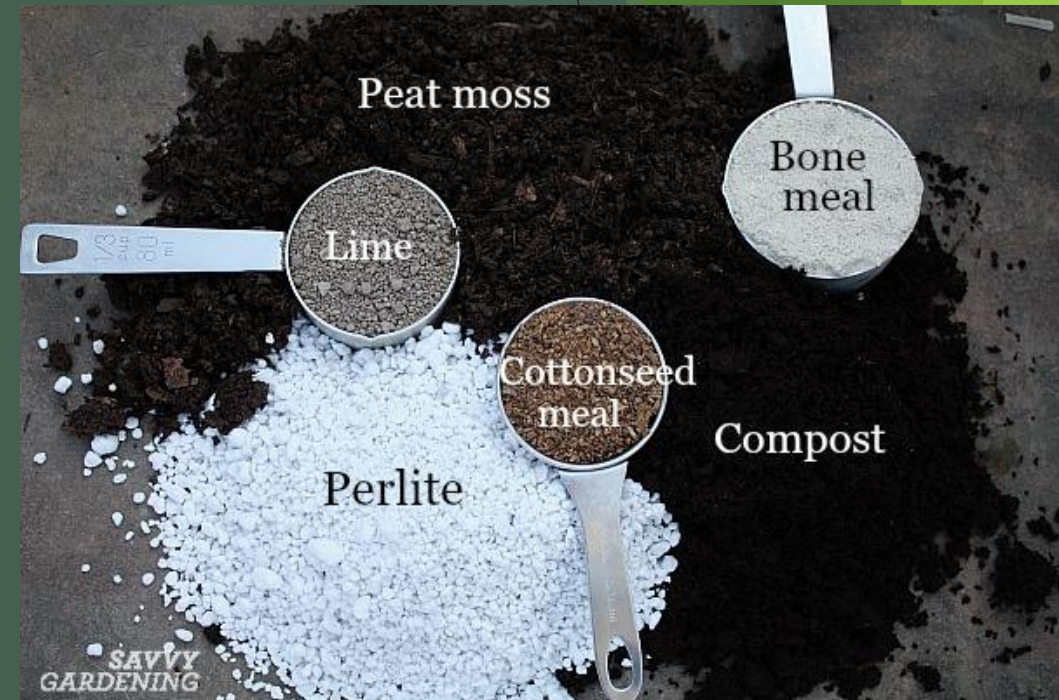
Make your own

Soil-less mix

- ▶ A.
 - ▶ 3 parts Sphagnum peat moss, Limestone to counter peat moss acidity, 1 part compost, 1 part perlite
- ▶ B.
 - ▶ 2 parts compost; 2 parts peat moss; 1 part vermiculite (pre-wet), or perlite

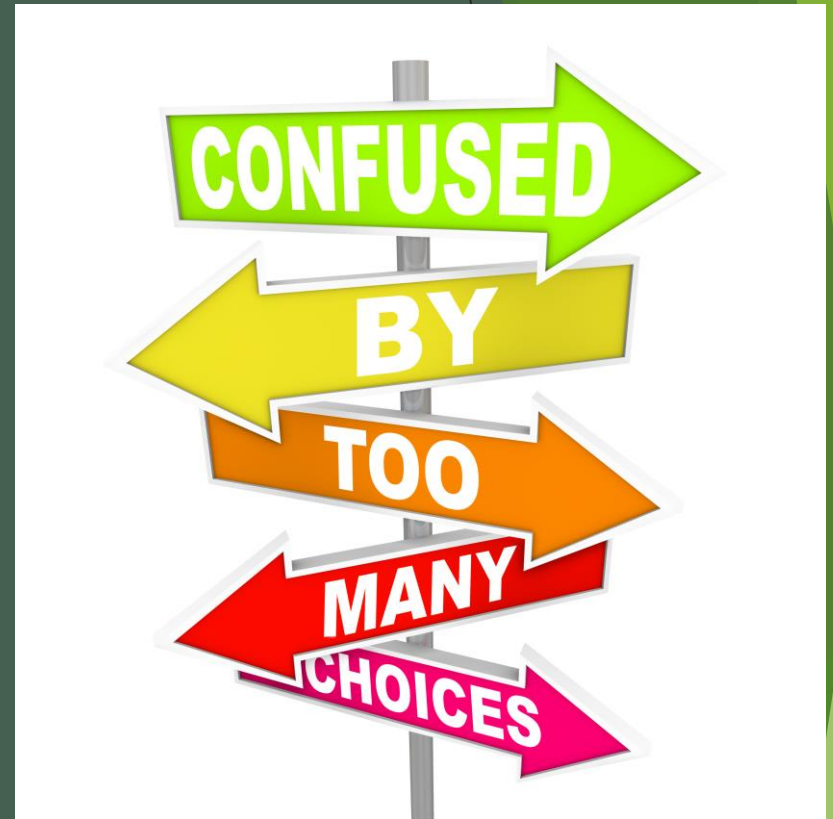
Soil-Based Mix

- ▶ 1/3 compost; 1/3 topsoil; 1/3 sand
- ▶ This mix is heavier than peat-based mixes, but it has good drainage. Vermiculite or perlite can be used for sand.



Transplant Trays:

What size cell seed
Trays should I use?



Considerations

- ▶ Are you growing a large number of one variety of plants?
- ▶ Are you planting smaller numbers of a wide variety of plants?
- ▶ Will you be planting your crops all at once, or will you be using the succession planting method?
- ▶ What type of seeds will you be planting and what size are they?
- ▶ How long will your seedlings need to stay in the cell trays?
- ▶ Will you be potting up your plant starts or planting out directly from the plug trays?

32 Cell tray

- Common among mixed vegetable farmers
- Cells are 2" square x 2" deep
- big enough to accommodate until planting



50 Cell Tray

- 50 cell
- Can accommodate big seed like tomatoes, melons, squash
- 1 7/8 x 2.5"
- Also big enough to not require transplanting



72 cell size

- Good for seedling starts
- Bottom watering
- 1.5" square x 2.25" deep
- Most likely need to move transplants to bigger cells before planting out



Small size for germination

98 cell

1.25" square x 2" deep



288 cell

0.81 " square x 1.06" deep



Bottom watering a 72 cell tray

Watering

Prevents overwatering

Promotes uniform
watering

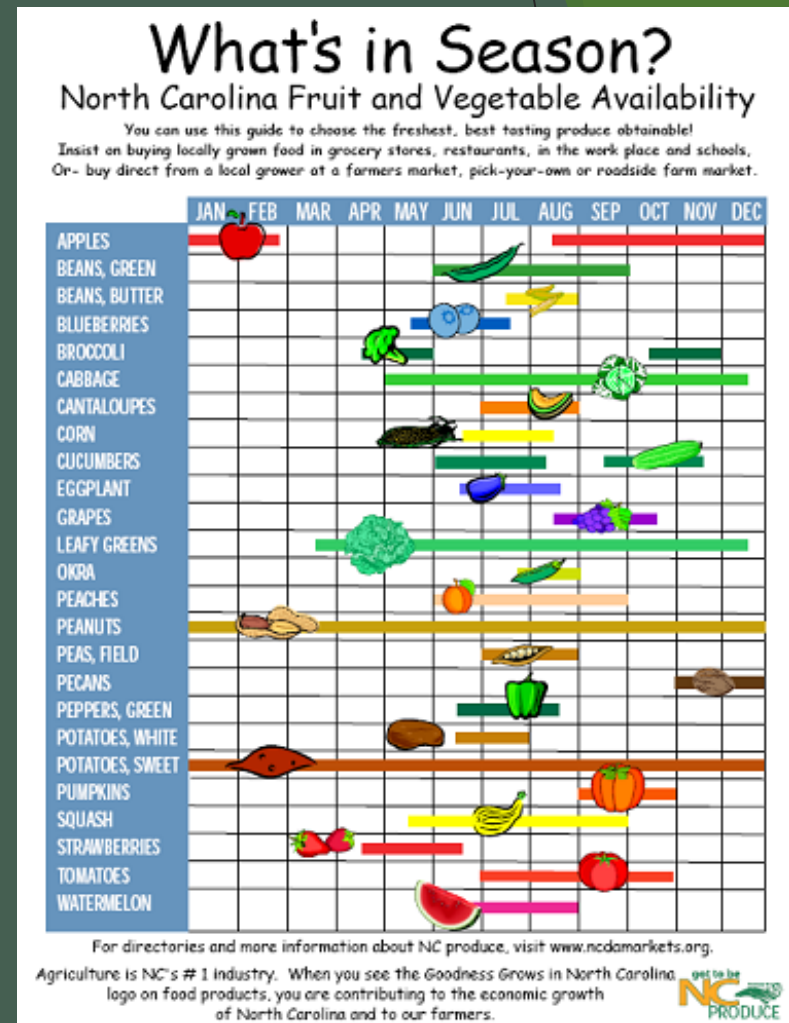
Strengthens root growth

Better nutrient absorption



Planting Dates

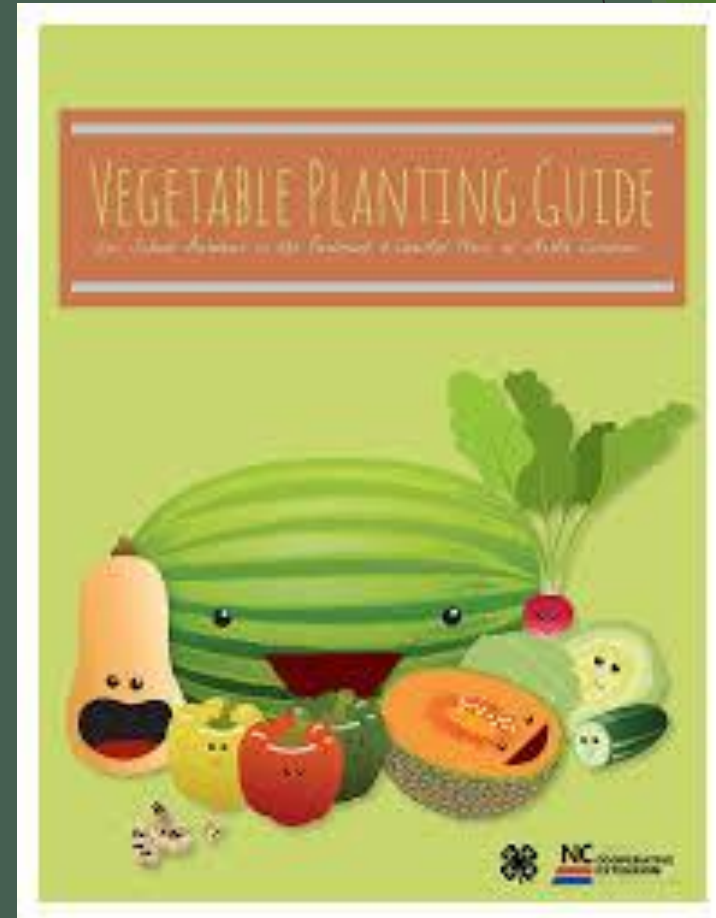
- ▶ Target planting date and count back 5-8 weeks to allow for adequate seedling growth
- ▶ In NC spring and fall crop choices are often the same.



NC Vegetable Planting Guide

PLANNING!!!

- ▶ Vegetable Planting Guide-
- ▶ 5-7 weeks:
- ▶ Broccoli
- ▶ Cabbage:
- ▶ Cauliflower
- ▶ Tomato
- ▶ Kale
- ▶ 3-4 weeks:
- ▶ Cucumber, Melon
- ▶ 6-8 weeks:
- ▶ Eggplant



Demonstration: preparing transplant trays, planting seeds, watering trays

Pre-moisten your planting mix

Filling the tray and packing the cells

Planting the seeds and covering

Top watering and bottom watering

Harden-off transplants prior to field planting