

PART THREE: BASICS

SOIL mixes largely determine the health and staying power of starts. A mediocre planting mix creates struggle in your life - slower, smaller plants more susceptible to disease & predators, less able to 'hold' in pots, more susceptible to stress, requiring far more in the way of hand-holding such as additional feeding. A bad soil mix will stop you in your tracks, it is not unheard of for nursery people faced with evidence of a 'bum batch' of soil to throw all the plants out & begin again, many weeks into a seeding program.



Linear Herb (Pilea, Phytogrammice, 1996)

Some gardening texts, such as the influential 'New Seed Starters Handbook' by Nancy

Bubel, recommend germinating seedlings in sterile mediums such as perlite, vermiculite, sphagnum moss, or combinations thereof, which are devoid of nutrients necessary to support growth once the small seedling stage is passed. Instead, the plants are fed with liquid fertilizers (essentially hydroponically) until they are transplanted to other, richer mediums. Most gardeners

avoid this approach and seed directly into a soil mix which contains nutrients sufficient to sustain growth without additional feeding.

Recipes for making soil mixes that happily support a wide variety of plants are plentiful, but do require a modicum of experience to fine-tune, not so much in terms of ensuring the right balance of nutrients is present (follow a formula) but in terms of ensuring that the mixes are neither too light, nor too heavy - a critical factor in managing watering, particularly in the early weeks of the seeding season.

While storebought mixes provide a good basis for starting seedlings, they tend toward the nutrient light and lack the 'body' to carry plants robustly past their initial phase. By all means use them, but consider adding amendments.

Read labels carefully on potting soils. Many of them were not designed for starting seed.

Most storebought mixes make a habit of proudly claiming that they are sterilized (to reduce the likelihood of disease). How surreal. Organic gardeners planting in sterilized soils?

Adding healthy compost to your mix makes it more active, giving it and your plants greater life. Yes, your plants will require more management, initially - the potential for unwanted 'germs' comes in with the wanted ones, but, all told you will raise plants that are healthier and happier.

A BULLET-PROOF MIX

The Food For Lane County Youth Farm/School Garden Project soil mix is as fine a mix for seedstarting & potting up, as it gets. It demonstrates exceptional holding power - the ability to sustain robust, husky, healthy plants, in pots, over time, without additional feeding. Most ingredients are available at Down To Earth.

- ▶ 2 bales Coco Peat, soaked overnight, then sifted.
- ▶ 1½-2 full wheelbarrows of sifted compost or Rexius Steer Plus (½ for deluxe compost)
- ▶ 1 large bag of vermiculite
- ▶ 5-6 bags of Down To Earth OG potting mix
- ▶ 1½ gallons of Dolomite or Ag. Lime
- ▶ 1 gallon of soft rock phosphorus
- ▶ 1 gallon kelp meal
- ▶ 1½ gallons Fish meal
- ▶ 1 quart azomite
- ▶ 2 gallons (builder's) sharp sand

Wormcastings are a highly concentrated form of goodness. Add them if you can. Fishmeal for nitrogen helps. Down To Earth has a variety of excellent amendments and supporting literature to help you make sense of your options. Whatever amendments you add, do be sure to readjust the tilth of your mix by, for example, adding vermiculite and/or perlite to account for the increase in density. Too dense mixes, watered, will suffocate your plants.

If you are using heat mats to germinate and grow up your seedlings, consider a sterile/sterilized medium until the seedlings are established and you can pot them up to an active mix. In non-sterile mixes, the additional heat can encourage damping off.



Comubine, Der Carr.

Matz, Peter Schiffer, 1485

WATERING: Perhaps the steepest and fastest learning curve in raising plants from seed relates to watering practices - especially so in early Spring when one heavy-handed or ill-timed watering can create knock-on affects that kill many plants. Whenever possible, have an experienced nursery person demonstrate their watering style for you. Have them critique your efforts.

Some experts water their plants from underneath, by placing flats in water-filled trays or troughs. If you have the set up and patience for this approach, great. Most go with top-watering with a wand.

Use a watering wand with a light spray. Most watering wands put out too heavy a shower - they are better suited to watering perennials in gallon pots. The Gortena watering wand is a favorite among experienced hands. Keep your watering wand off the ground as soil-borne nasties can be picked up & spread.

SOME SIMPLE HINTS

The weather conditions of Spring - with its warm days and cold nights and lots in the way of daily fluctuations - demand a flexible approach to watering. Nursery people watch the skies as well as the plants.

A simple rule is: don't have the plants damp going into an evening. Often this means watering no later than late morning or early afternoon. It is not difficult to overwater and hence waterlog plants. Once soils are waterlogged, ushering them back into balance can prove more troublesome than you might think. Be modest with your watering. But if, during a hot day in Feb/Mar, you anticipate a good 4 hour stretch of sunshine heat, you can be more generous, 'topping up' with the confidence that evaporation will compensate for the additional dousing.

Sometimes, the soil layer in your flats may become top-heavy with water, and dryer toward its base. Lift the flats and spray them lightly from underneath. Whatever the time of year, lifting the edge of a flat will alert you to how much water is held in the soil (a watered flat is a great deal heavier than a dry one). Sticking your finger tip in the soil is a good test, too.

Nursery people who watch their greenhouses like hawks will tend to watch the surface of the soil in their flats dry down before stepping in immediately and watering - this appears, among other things, to reduce the likelihood of surface algae/mold forming on active soil mixes. Where algae/mold does form, it seems not to hurt the plants directly, but does form a surface barrier preventing the free flow of air & moisture into and out of the soil. Simply rough up the soil surface with your finger tip, and adjust your watering style.