

**LOU ANN GOOD**  
Lancaster Farming Staff  
**LEBANON (Lebanon Co.)** — While no amount of wishing will bring spring quickly, planning for it makes these long winter months a bit more bearable. Recently Deb Hartman taught a class at the Lebanon County

Extension office on "Starting Seeds Successfully Indoors." For those who want to make sure their seedlings survive outdoors, Hartman provided a whole list of factors that must be considered before planting seeds. One of the most important factors to consider is the planting soil.

Using garden soil for indoor planting is taboo because it will crust and dormant weeds, fungi, and disease may choke new seedlings. Soil that allows good drainage but will hold some moisture is necessary. Hartman shared several soil mixes that she prepares. Formulas for these mixes are included at the end of this article. Planting soils are also available for purchase from gardening centers.

It is important to know the soil pH, and to adjust soil additives to accommodate the plant's preference. Most vegetable plants need a medium to high pH soil. Seedlings need a lot of fertilizer so if you are purchasing fertilizer, all three numbers should be equal for the nitrogen, phosphorus, and potassium.

The soil can be perfect, but the plants will fail if they are planted

too early before outdoor transplanting. Ideally, seeds should be planted four to 12 weeks, depending on the plant, before the last frost. If seeds are planted too early, they will become "leggy" or "spindly" and more prone to disease.

In this area, May 11 is considered the last frost date for the area. That doesn't mean that frost is never reported after that date, but generally the weather is safe after that date. Low areas may experience frost when higher elevations do not.

Planting valuable or very large plantings of frost-sensitive crops should be delayed to be on the safe side. On the other hand, it may be worth gambling on an early last frost with limited plantings of certain crops to get a jump on the season.

To determine when seeds

should be planted, count backward from the May 11 date to the approximate time to seed before the last spring frost.

Begonia, browalia, geranium, larkspur, pansy, and vinca should be seeded 12 weeks before frost. Dianthus, impatiens, petunia, portulaca, snapdragon, stock and verbenas should be planted 10 weeks before frost.

Ageratum, alyssum, broccoli, cabbage, cauliflower, celosia, coleus, dahlia, eggplant, head lettuce, nicotiana, pepper, and phlox should be planted eight weeks before frost.

Aster, balsam, centurea, marigold, tomato, and zinnia should be planted six weeks before frost.

Cucumber, cosmos, muskmelon, squash, and watermelon should be seeded indoors four weeks or less before the May 11 date.

#### Steps to follow for planting seeds:

- Wash containers in hot soapy water with nine parts water to one part bleach.
- fill container with soil
- press down with finger to work out air space.
- water
- plant seeds 2-3 seeds spread in each container
- tamping-press down to contact soil.
- sprinkle a little soil on top
- thin by cutting rather than pulling out to prevent disturbing root system.
- tamp down gently
- mist top of soil

Some seeds need light and others germinate in dark. Check seed packets for instructions. If light is needed, never cover the seeds with soil.

- The seed trays should be placed at a window or under florescent lights.
- Cool 40 watt florescent lights work as well as grow lights and are more economical.
- Keep lights on until plant germinates, then turn off for 6-8 hours every 24 hour period.
- Mist throughout the day or top water with small spout.

After germination, lots of light is needed. Temperatures should be kept at 65-70 degrees during the day and 55 to 60 degrees at night. Seedlings need 16 hours of light daily.

- Lights should be placed 4-6-inches above plants.
- Keep growth constant. If growth stops, the plant will suffer a setback.
- When the plant has three leaves, they are ready to be transplanted. Use a screwdriver to ease out plant if soil is moderately dry. Plant seedling the same way as the seed had been planted but do not water until seedling is transplanted. Use soil line in transplanting.
- Two to four weeks before the plant will be transplanted into the garden, toughen up the plant by exposing plant to outdoor sun, starting with one hour a day and increasing the amount each day.

Here are the formulas for soil mixes, which Hartman recommends:

#### CORNELL MIX

for seedlings and houseplants

- 4 quarts horticultural grade vermiculite
- 4 quarts shredded peat moss
- 1 tablespoon superphosphate
- 2 tablespoons ground limestone
- 4 tablespoons cow manure or bonemeal

#### SOIL BASE MIX

for outdoor containers

- 1 cubic foot topsoil
- 1 cup foot vermiculite
- 1 cup foot peat moss
- 1 quart dried cow manure
- ½ cup ground limestone
- 1 cup dried blood
- 1 cup bonemeal

#### SOILESS MIX

for outdoor containers

- 5 cubic feet ground bark
- 5 cubic feet sand
- 5 cubic feet peat moss
- 1 pound, 10 ounces 5-10-10
- 2 pounds ground limestone
- ½ pound iron sulfate

## Grafting Workshop

**HONESDALE (Wayne Co.)**—A Make-A-Tree Grafting Workshop will be held Thursday evening, March 28 from 7:00 p.m. until 9:00 p.m. at the Central Methodist Church Social Room, Eleventh and Church Street, Honesdale. Registration fee \$5.

The workshop will include a discussion on basic fruit tree grafting techniques followed with a hands-on grafting session. All materials will be provided. Grafting rootstock will be available at

\$5 each to make your own tree. The instructor will be Charles Bertram, a local fruit producer.

The instruction will be designed for small scale fruit producers and home gardeners. All interested persons are welcome. Call to register by March 26.

For more information and to register for the workshop, call the Wayne County Cooperative Extension at (717) 253-5970, ext. 239, or Bertram's Orchard at (717) 253-4105.

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