Seeds, Soils, Supplies

**SEEDS**

Most vegetable seeds can be easily started indoors. Some that require a long growing season or cool weather have to be started inside because they will not ripen or mature well if they are not.

You can make a mini-greenhouse (see Vegetable Seeds project) to help your seeds get a good start. Or, you can use some of the other supplies suggested in this HELP sheet.

Seeds that should be started indoors for best results:
- tomatoes
- peppers
- cabbage
- kale
- herbs
- eggplant
- celery
- head lettuce
- Brussels sprouts
- broccoli

Others that may be started indoors or out:
- sunflowers
- melons
- cucumbers
- squash
- leaf lettuce
- squash
- beans
- carrots
- radishes
- peas
- corn (not good for containers)
- onion (sets)
- potatoes (seed pieces with "eyes")

**SOILS...**

Seed started indoors need a light soil mix which does not get waterlogged, since too much water can cause disease. A good seed-starting mix is:

1 part peat moss
1 part perlite

Mix these together and moisten with a little bit of water at a time. The soil mix should be just damp all the way through, but not wet, before planting. This mix may be used in peat pots, flats, paper cups, mini-greenhouse or other container. See "Supplies" for more instructions.

Vegetables grown in containers need a heavier soil mix because containers can be tipped over by the wind. One suggested container soil mix is as follows. Mix thoroughly and moisten as above.

1 part topsoil or heavy potting soil
1 part peat moss or compost (organic matter)
1 part coarse sand
coarse sand - can be obtained free or at a low price from cement or stone companies; also known as builder's sand. Sand for sandboxes may be purchased in bags. Beach sand is too fine and may cause caking of the soil mix. Sand increases air spaces and adds weight to soil mixes.

horticultural grade milled sphagnum moss - sometimes called "No Damp-off;" can be used alone or with other soil mixes for starting seeds. Expensive for large numbers of seedlings, but can be sprinkled on the surface of seed-starting mixes after planting to prevent "damping-off," a common fungus disease of seedlings; it contains a natural fungicide. Lighter in color than sphagnum peat moss.

jiffy-mix (pro-mix, etc.) - these are pre-mixed soil mixes for starting seeds and plants. They are fairly expensive and are best used for small numbers of seedlings. Most contain enough fertilizer for plants to reach transplanting stage.

peat moss or sphagnum peat moss - a product of bogs (swampy areas) which is the remains of sphagnum moss that is partly decayed. When mixed with other products such as perlite, it is excellent for starting seeds or container mixes. Peat moss is difficult to moisten. Add water till the peat is moistened thoroughly, and let drain. This is true for all soil mixes containing peat moss.

perlite - a lightweight, sterile soil additive that is often used in container mixes and for starting seeds. Perlite increases the amount of air that can get to plant roots, and is often combined with soil or peat moss, which can become too moist. Its greatest disadvantage is that it tends to float away during watering.

potting soil - usually a sterilized mixture of soil and other additives such as vermiculite, perlite or coarse sand. Some potting soils are very light; others are heavier and are mostly topsoil.

vermiculite - another lightweight, sterile product made from expanded volcanic rock (mica). Vermiculite holds moisture and nutrients well. It tends to break down after awhile and can become soggy, but is excellent for lightening soils.

SUPPLIES

Fertl-cubes (Kys-cubes, etc.)

These are 1" to 1½" cubes of compressed mosses and vermiculite or other material that have holes in the top for planting seeds. Some contain plant food. Seeds are placed in the depression in the top and covered with soil mix, then watered. Since the cubes are small, they should be transplanted into larger containers such as peat pots or other small pots for growing to the size needed for planting outdoors.
Peat Pots, Jiffy Strips

Peat pots are made of wood fiber and sphagnum peat moss, which are molded into the form of a pot. Some also contain fertilizer. They are usually 2"-3½" in diameter and either round or square. Jiffy strips are strips of small peat pots molded together, similar to the bottom of an egg carton.

To plant, fill pots 2/3 full with fine, moist seed-starting mix (see page 1). Plant one to several seeds (depending on the size of the seed) and cover with more soil mix to the depth suggested on the seed packet.

Water by placing a tray of peat pots into a larger tray or sink with several inches of water in it, allowing the pots to soak until thoroughly moistened; or, sprinkle very carefully from the top.

Peat pots may become too moist and fungi will develop on their walls. This is normal, but you can keep it from getting worse by reducing the amount of water or allowing more air circulation between pots.

Plant roots will grow right through the walls of peat pots, and you can put the whole plant and pot into the soil when you are transplanting (see "Transplanting" HELP sheet). It helps to remove the top rim of peat pots when transplanting, but do not disturb the parts where roots are growing through. Jiffy strips should be carefully cut or torn apart before planting.

Jiffy-7's or Peat Pellets

Jiffy-7's are neat little packages of potting soil with a net-like material around the soil to hold it in. You buy them as pellets about the size of a thick silver dollar. When moistened, Jiffy-7's expand like bread rising. Soak for about 20 minutes.

To plant, make a hole in the soil in the top, put the seed(s) in, and cover them with more soil. Usually only one or two seeds are planted in each pellet unless they are very small.

Put the Jiffy-7's in a tray with drainage holes (aluminum or plastic trays are good, or use a mini-greenhouse) and keep them moist, but not soaking wet, until the seeds germinate. After the plants are growing well, their roots will grow outside the "pot" and the whole package can be transplanted. Peat pellets are an inexpensive way to start a small number of plants indoors. Since these are made of peat moss, they dry out slowly, especially when plants are small. Be careful not to overwater.
Several of the projects have variety trials listed as an extra project. A variety trial is a test to compare how different varieties of the same vegetable or fruit grow for you. For example, some tomatoes grow well in containers, some do not; some lettuce will grow well in heat, some will not; some varieties taste better or freeze better than others. Your aim is to try several and see which you like the best.

A few rules for a good variety trial:

1. Conditions should be as close as possible for all plants grown in a trial of a particular vegetable or fruit. Use the same soil mix, water and fertilize the same way, plant and transplant at the same time, give them the same amount of sun, etc. If conditions are not as similar as possible, it is hard to know whether the differences are caused by the variety or not.

2. Label all varieties well. Use a permanent marking pen so that the names don't wash off.

3. Keep very careful records. If one variety is more susceptible (that is, more likely to be troubled by) insects, disease, drought, or other conditions, make note of it and explain as well as you can what you have noticed.

4. Taste the produce of each variety one right after the other if possible. This will help you decide which ones you like best. It's hard to remember a taste for a long time.

5. If you or someone helping you is canning or freezing your produce, keep records on how it tastes after it is canned or frozen, how well it keeps its color, etc.