UF IFAS Extension UNIVERSITY of FLORIDA

HS506

Seeding The Garden[1]

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Starting Your Garden with Seeds

For each vegetable you plan to grow in your garden, you will have to decide whether to start it from seed, from plants, or from plant parts.

The main advantage in starting directly from seeds is that you have a wider selection of varieties and sources from which to choose. Furthermore, not all vegetables do well when transplanted and must be grown from seed sown directly in the garden row where they are to be grown. Most vegetables may be seeded directly in the garden row. Some exceptions are sweet potatoes, strawberries and Irish potatoes.

Start with Good Seed

Good seed may mean the difference between success and failure in your garden. Buy good seed from a reliable dealer. For some crops, seed may be gathered from one's own garden, but for many other vegetables, threshing seed is impractical. Do not thresh seeds from hybrids as the seed will not 'come-true'.

Seeds gathered from Florida gardens quite often are infected with disease. Mainly for this reason commercial seedstocks are grown out of state.

Plant Tested Varieties

Plant varieties of vegetables which have been tested and found to be adapted to your area. Vegetables resistant to pests and tolerant of adverse weather conditions are much easier to grow successfully than those that are not. Table 3 in the *Florida Vegetable Gardening Guide* lists those varieties which are best suited to Florida conditions.

Of course, it is a privilege enjoyed by gardeners to try varieties which have proven themselves elsewhere and which may do well in their gardens. However, many gardeners are cheating themselves of the best possible results by continuing to grow inferior varieties without ever testing the suggested varieties.

Note of Caution—Most seeds are treated with chemicals to reduce injury and decay caused by insects and diseases. These chemicals are poisonous and should be handled with care. Such treated seeds are not to be eaten under any circumstances. Keep them out of the reach of children.

Planting the Seed

When vegetable seeds are placed in the soil, they can sprout, grow and make plants. The soil contains water and plant food for the small plants to use and grow larger.

But seeds can be planted so deep the young plants can not reach the top of the ground. Or they can be planted too shallow and may be washed away with the first rain, or exposed for birds and rodents.

When sowing small seed cut or tear off a corner of the packet and scatter seed in furrow while tapping gently with index finger.

1. This document is HS506, one of a series of the Horticultural Sciences Department, UF/IFAS Extension. Original publication date October 1998. Revised March 2014. Visit the EDIS website at http://edis.ifas.ufl.edu.

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Small seeds like carrots are planted shallow and fairly close together. They help each other break through the soil. But later seedlings must be thinned to prevent crowding.

Sow small seeds ¼ inch deep. Medium seeds, such as cucumber, about 3/4 inch deep.

For small seeds make a planting furrow with finger or handle of hoe or rake drawn along the cord. Or, you may broadcast the seeds over the soil surface and cover by sprinkling soil. Some gardeners use a cloth cover, such as burlap.

Plant in straight rows. The garden will look better and be easier to hoe or cultivate. Rows should be marked off. Use a string or a cord stretched between two stakes.

For square foot or wide-row gardening, broadcast seeds in a broader pattern, usually cross-wise on a prepared raised bed.

For larger seed open a deeper planting furrow with hoe. Beans and corn can be planted 1 to 2 inches deep.

Since larger seed make stronger young plants, they can be planted deeper than the small seed. The young plants from larger seed can grow farther to reach the soil surface.

Larger seed like corn are also planted farther apart. The young sprouting plants are larger and stronger. They do not need to help each other break through the soil surface. Space larger seed evenly and drop by hand, then thin to the proper stand.

After the seed is dropped or placed in the furrow, use the hoe or the rake or your hands to cover the seed. Fill the seed furrow with soil. Leave the ground level or slightly mounded above the seed.

Why Seeds Fail to Grow

1. Seeds may be weak. Germination means the ability to sprout; however, vigor is also important. It refers to the strength of that sprouting and the ability of the seedling to grow stronger.

2. Conditions for sprouting may not be ideal. Seeds need aeration, moisture, and the right temperature. With a few exceptions, such as lettuce, vegetable seeds do not require light to germinate. However, do not plant too deeply.

3. Rots, decays, insects, birds and animals sometimes destroy seeds. Do not put seeds directly in the fertilizer band, as "burning" injury will occur.

4. Some seeds have hard seed coats, or have other physiological needs, such as dormancy breakage.

5. Allelopathy—hormones in the roots of some plants may cause seeds of other plants not to sprout. Lettuce seeds are affected this way by celery roots. (see *Allelopathy: How Plants Suppress Other Plants*).

Storing Leftover Seeds

Store in original packets; place in cool, dry place. A tightly sealed jar placed in the refrigerator at 50°F works well.

Most garden vegetable seeds may be stored in the freezer, but storage is generally no better than in the refrigerator. But be careful. Seeds must be very dry (5-10% internal moisture) before freezing, or the seeds can be killed. See Table 1 for storage life of several vegetable seeds.

Table 1. Seed Storage Life

Short-lived	Medium-lived	Long-lived
Onion	Beans	Cucumber
Corn	Carrot	Radish
Okra	Peas	Eggplant
Parsnip	Tomato	Squash