

Saving Seeds in the Southeast

1. Will it go to seed in Florida?

Not everything produces seeds here. Many biennial plants including brassicas and root crops require cold winters to produce seed. So don't waste your time thinking about saving these seeds!

2. Is it hybrid or open-pollinated?

Don't save seeds from (F1) hybrids. Seed saved from hybrids will not be "true to type". Hybrids are great for growing, but not for seed-saving. If the plant is open-pollinated, as long as you don't let it cross-pollinate in the garden, you can save seeds "true to type"!

3. Watch for cross-pollination!

To keep a variety pure, you must plant it in isolation from other crops it can cross-pollinate with. Knowing the scientific name will help you know what it will cross with, because only crops that are the same species will cross-pollinate. For example, *Cucurbita moschata* includes both Seminole pumpkin and Butternut squash. That means they are likely to cross with one another if flowering at the same time within proximity to one another.

4. Do you have space for that many plants?

Some crops require many flowering plants at the same time in order to have good genetics. Good genetics= good plants. If you are growing too few, over time the quality of the crop will decline. Also, crops going to seed may take more room in the garden, as they can get very tall and heavy.

5. Save from the best!

Always save from plants that show favorable characteristics including vigor, health, productivity, taste, and conformity with what the variety is supposed to look like. Pass on desirable traits to the next generation, not bad ones.

6. Save information, not just seeds!

It's really important to keep good notes including planting and harvesting dates, disease and pest issues, overall growth patterns, and use in the kitchen. These are helpful to you later, and also make it nicer when sharing seeds with others, who do not have this information. Take lots of photos!

7. Make those seeds last!

The average garden seed can last in decent storage for 2-10 years. Each year they lose some viability especially if storage conditions are poor. Three words to remember: COOL. DARK. DRY. These can be hard in Florida, but try your best. Dry your seeds as much as possible before storage. Keep them in paper bags or envelopes and inside a sealed container, or directly into a glass jar. Find a dark, restful and cool location to keep them. A refrigerator works ok, but put them in the back, not the door. Never store in warm places or in expose them to light. We don't recommend drying your seeds in a dehydrator, as temperatures above 90F can kill a seed embryo.

Resources:

1. The Seed Garden: The Art and Practice of Seed Saving by *Seed Savers Exchange*.
2. Seed to Seed by *Suzanne Ashworth*.
3. Breeding Your Own Vegetable Varieties by *Carol Deppe*.
4. The Organic Seed Grower by *John Navazio*.
5. Southern Exposure Seed Exchange has many resources available online.
6. Organic Seed Alliance has numerous growing, breeding, and trialing publications available online.

**The Southern Heritage Seed Collective
is a program of Working Food.**



Useful Charts for Seed Saving

Table 1: Common garden crop families.

Family	Crops
Amaranthaceae	Amaranth, orach, beets/swiss chard, quinoa, spinach
Amaryllidaceae	Leeks, onions, garlic, chives
Apiaceae	Dill, celery, cilantro, carrot, fennel, parsley
Asteraceae	Endive, chicory, dandelion, radicchio, artichoke, sunflower, lettuce
Brassicaceae	Mustards, rutabaga, broccoli, Brussels sprouts, cabbage, cauliflower, collards, kale, kohlrabi, broccoli raab, Chinese cabbage, Japanese greens, turnip, arugula, radish
Chenopodiaceae	Beets, Swiss chard, lamb's quarters, quinoa, spinach
Compositae	Endive, escarole, chicory, cardoon, artichoke, sunflower, Jerusalem artichoke, lettuce
Cucurbitaceae	Citron melon, watermelon, Armenian cucumber, luffah, chayote, melon, cucumber, gourds, pumpkin, winter squash, summer squash
Fabaceae	Peanut, pigeon pea, beans, chickpeas, soybean, lentils, cowpeas, tepary bean, scarlet runner bean, fava bean, yardlong beans
Malvaceae	Okra, Hibiscus
Poaceae	Barely, rice, rye, sorghum, wheat, corn
Solanaceae	Peppers, tomatoes, tomatillo, gooseberry, ground cherry, eggplant, potato

Table 3: Crop specific seed saving for Florida. SI= Strongly Inbreeding, MI=Mostly Inbreeding, BIO=Both Inbreeding and Outbreeding, MO=Mostly Outbreeding, SO=Strongly Outbreeding. For population size, three numbers are offered: viable seed (not ideal), variety maintenance (better) and genetic preservation (best).

Species	Crop Common Name	Pollination Method	Breeding	Isolation Distance	Population Size		
					Viable Seed	Genetic Preservation	
<i>Abelmoschus esculentum</i>	Okra	Self, insects	BIO	500-1600ft	1	5-10	25+
<i>Amaranthus</i> sp.	Amaranth, Callaloo	Wind	BIO	650-1,300ft	1	5-25	50
<i>Anethum graveolens</i>	Dill	Insects	SO	800ft-1/2mile	5	20-50	80+
<i>Brassica juncea</i>	Mustard Greens	Insects	SO	800ft-1/2mile	5	20-50	80+
<i>Brassica oleracea</i>	Broccoli, Collards, Cauliflower, Kale, Brussels sprouts	Insects	SO	800ft-1/2mile	5	20-50	80+
<i>Brassica rapa</i>	Broccoli Raab, Chinese cabbage, Japanese greens, turnip	Insects	SO	800ft-1/2mile	5	20-50	80+
<i>Capsicum</i> spp.	Peppers	Self, insects	MI	300-1,600ft	1	5-20	50+
<i>Citrullus lanatus</i>	Watermelon	Insects	MO	800ft-1/2 mile	1	5-10	25+
<i>Coriandrum sativum</i>	Cilantro	Insects	SO	800ft-1/2mile	5	20-50	80+
<i>Cucumis melo</i>	Melon	Insects	SO				
<i>Cucumis sativus</i>	Cucumber	Insects	SO	800ft-1/2mile	1	5-10	25+
<i>Cucurbita argyrosperma</i>	Squash and gourds	Insects	BIO	800ft-1/2mile	1	5-10	25+
<i>Cucurbita maxima</i>	Squash: Winter and Pumpkin i.e. <i>Turban, Banana, Kuri, Kabocha, Hubbard</i>	Insects	MO	800ft-1/2mile	1	5-10	25+
<i>Cucurbita moschata</i>	Squash: Winter and Pumpkin i.e. <i>Butternut, Calabaza, Seminole, Cheese</i>	Insects	MO	800ft-1/2mile	1	5-10	25+
<i>Cucurbita pepo</i>	Squash: Summer, Winter, Pumpkin and Gourd i.e. <i>zucchini, crookneck, pattypan, acorn, spaghetti, delicate, cocozelle, some pumpkins</i>	Insects	MO	800ft-1/2mile	1	5-10	25+
<i>Eruca sativa</i>	Arugula	Insect	SO	800ft-1/2mile	5	20-50	80+
<i>Fagopyrum esculentum</i>	Buckwheat	Insects	BIO	800ft-1/2mile	5	20-50	80+
<i>Foeniculum vulgare</i>	Fennel	Insects	BIO	800ft-1/2mile	5	20-50	80+
<i>Helianthus annuus</i>	Sunflower	Insects	BIO	800ft-1/2mile	5	20-50	80+
<i>Lactuca sativa</i>	Lettuce	Self	MI	10-20ft	1	5-10	20+
<i>Lagenaria siceraria</i>	Gourd	Insects	BIO	800ft-1/2mile	1	5-10	25+
<i>Ocimum basilicum</i>	Basil	insect	SO	800ft-1/2mile	5	20-50	80+
<i>Petroselinium crispum</i>	Parsley	Insects	SO	800ft-1/2mile	5	20-50	80+
<i>Phaseolus lunatus</i>	Bean, lima	Self, insects	MI	160-500ft	1	10-25	50+
<i>Phaseolus lunatus</i>	Bean, runner	Self, insects	BIO	160-500ft	1	10-25	50+
<i>Phaseolus vulgaris</i>	Bean, common	Self	MI	10-20ft	1	5-10	20+
<i>Physalis grisea</i>	Ground Cherry	Self, insects	BIO	300-1,600ft	1	5-20	25+
<i>Physalis philadelphica</i>	Tomatillo	Insects	BIO	800ft-1/2mile	5	20-50	80+
<i>Pisum sativum</i>	English Garden Peas	Self	MI	10-20ft	1	5-10	20+
<i>Raphanus sativus</i>	Radish	Insects	SO	800ft-1/2mile	5	20-50	80+
<i>Solanum lycopersicum</i>	Tomatoes	Self, insects	BIO	10-50ft	1	5-10	20+
<i>Solanum melongena</i>	Eggplant	Insects	SO	300-1,600ft	1	5-20	50+
<i>Spinacea oleracea</i>	Spinach	Wind	SO	800ft-1mile	10	20-50	80+
<i>Vicia faga</i>	Bean, fava	Self, insects	BIO	160-500ft	1	10-25	50+
<i>Vigna unguiculata</i>	Bean, cowpea	Self, insects	BIO	10-20ft	1	10-25	50+
<i>Zea mays</i>	Corn	Wind	SO	800ft-1/2mile	10	50-120	200+