

Priority plants	Crops	Species	Family	Life Cycle	Primary Pollination Method	Recommended Isolation Distance for Seed Saving	Population Size (Number of Plants)		
							Viable Seeds	Variety Maintenance	Genetic Preservation
	amaranth	<i>Amaranthus</i> spp.	Amaranthaceae	annual	wind	650–1,300 feet	1	5–25	50+
x	arugula (rocket)	<i>Eruca sativa</i>	Brassicaceae	annual	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	asparagus	<i>Asparagus officinalis</i>	Asparagaceae	perennial	wind	800 feet–1/2 mile (244–805 m)	2 (1 male, 1 female)	20–50	80+
x	basil	<i>Ocimum basilicum</i>	Lamiaceae	annual	insect	150 ft		15	
	bean (common bean), tepary or soybean (edamame)	<i>Phaseolus vulgaris, acutifolius</i> or <i>Glycine max</i>	Fabaceae	annual	self or insect	10–20 feet (3–6 m)	1	5–10	20+
	bean- lima, runner, fava	<i>Phaseolus lunatus, coccineus</i> or <i>Vicia faba</i>	Fabaceae	annual	self or insect	160–500 feet (49–152 m)	1	10–25	50+
x	beet	<i>Beta vulgaris</i>	Amaranthaceae	biennial	wind	800 feet–1 mile (244 m–1.6 km)	5	20–50	80+
x	broccoli	<i>Brassica oleracea, rapa</i>	Brassicaceae	biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	broccoli raab	<i>Brassica rapa</i>	Brassicaceae	annual/biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	Brussels sprouts	<i>Brassica oleracea</i>	Brassicaceae	biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	cabbage	<i>Brassica oleracea</i>	Brassicaceae	biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
x	catenula	<i>Calendula officinalis</i>	Asteraceae	annual	insect	700 feet		10	
x	carrot	<i>Daucus carota</i>	Apiaceae	biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	cauliflower	<i>Brassica oleracea</i>	Brassicaceae	biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	celeriac	<i>Apium graveolens</i>	Apiaceae	biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	celery	<i>Apium graveolens</i>	Apiaceae	biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	chickpea (garbanzo bean)	<i>Cicer arietinum</i>	Fabaceae	annual	self	10–20 feet (3–6 m)	1	5–10	20+
	Chinese cabbage	<i>Brassica rapa</i>	Brassicaceae	annual/biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	chives (common chives)	<i>Allium schoenoprasum</i>	Amaryllidaceae	perennial	insect	800 feet–1/2 mile	5	20–50	80+
x	cilantro (coriander)	<i>Coriandrum sativum</i>	Apiaceae	annual	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	collards	<i>Brassica oleracea</i>	Brassicaceae	biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	corn (maize)	<i>Zea mays</i>	Poaceae	annual	wind	800 feet–1/2 mile (244–805 m)	10	50–120	200+
x	cucumber	<i>Cucumis sativus</i> or <i>melo</i>	Cucurbitaceae	annual	insect	800 feet–1/2 mile (244–805 m)	1	5–10	25+
x	dill	<i>Anethum graveolens</i>	Apiaceae	annual	insect	800 feet–1/2 mile	5	20–50	80+
x	eggplant	<i>Solanum melongena</i>	Solanaceae	annual	self or insect	300–1,600 feet (91–488 m)	1	5–20	50+
	endive	<i>Cichorium endivia</i>	Asteraceae	annual	self	10–20 feet (3–6 m)	1	5–10	20+
	escarole	<i>Cichorium endivia</i>	Asteraceae	annual	self	10–20 feet (3–6 m)	1	5–10	20+
	fennel	<i>Foeniculum vulgare</i>	Apiaceae	perennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	frisee	<i>Cichorium endivia</i>	Asteraceae	annual	self	10–20 feet (3–6 m)	1	5–10	20+
	gourd	<i>Cucurbita</i> spp., <i>Lagenaria siceraria</i>	Cucurbitaceae	annual	insect	800 feet–1/2 mile (244–805 m)	1	5–10	25+
x	ground cherry	<i>Physalis grisea</i>	Solanaceae	annual	self or insect	300–1,600 feet (91–488 m)	1	5–20	25+
	Japanese greens	<i>Brassica rapa</i>	Brassicaceae	annual/biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
x	kale	<i>Brassica oleracea</i>	Brassicaceae	biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
x	kale- Siberian	<i>Brassica napus</i>	Brassicaceae	biennial	insect	800 feet–1/2 mile (244–805 m)	1	5–25	50+
	kohlrabi	<i>Brassica oleracea</i>	Brassicaceae	annual/biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	leek	<i>Allium ampeloprasum</i>	Amaryllidaceae	biennial	insect	800 feet–1/2 mile	5	20–50	80+
	lentil	<i>Lens culinaris</i>	Fabaceae	annual	self	10–20 feet (3–6 m)	1	5–10	20+
x	lettuce	<i>Lactuca sativa</i>	Asteraceae	annual	self	10–20 feet (3–6 m)	1	5–10	20+
x	marigold	<i>Tagetes officinalis</i>	Asteraceae	annual	self or insect	1/4 mile		10	
	melon	<i>Cucumis melo</i> or <i>Citrullus lanatus</i>	Cucurbitaceae	annual	insect	800 feet–1/2 mile (244–805 m)	1	5–10	25+
	mustard greens	<i>Brassica juncea</i>	Brassicaceae	annual/biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
x	nasturtiums	<i>Tropaeolum majus</i>	Tropaeolaceae	annual					
	okra	<i>Abelmoschus esculentus</i>	Malvaceae	annual	self or insect	500–1,600 feet	1	5–10	25+
	onion (common onion, multiplier onion)	<i>Allium cepa</i>	Amaryllidaceae	biennial	insect	800 feet–1/2 mile	5	20–50	80+
	orach (mountain spinach)	<i>Atriplex hortensis</i>	Amaranthaceae	annual	wind	800 feet–1 mile (244 m–1.6 km)	1	5–25	50+
x	parsley	<i>Petroselinum crispum</i>	Apiaceae	biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	parsnip	<i>Pastinaca sativa</i>	Apiaceae	biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
x	pea	<i>Pisum sativum</i>	Fabaceae	annual	self	10–20 feet (3–6 m)	1	5–10	20+
x	pepper	<i>Capsicum</i> spp.	Solanaceae	annual	self or insect	300–1,600 feet (91–488 m)	1	5–20	50+
x	pumpkin	<i>Cucurbita</i> spp.	Cucurbitaceae	annual	insect	800 feet–1/2 mile (244–805 m)	1	5–10	25+
	radichio	<i>Cichorium intybus</i>	Asteraceae	biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
x	radish	<i>Raphanus sativus</i>	Brassicaceae	annual	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	rutabaga	<i>Brassica napus</i>	Brassicaceae	biennial	insect	800 feet–1/2 mile (244–805 m)	1	5–25	50+
	shallot	<i>Allium cepa</i>	Amaryllidaceae	biennial	insect	800 feet–1/2 mile	5	20–50	80+
x	spinach	<i>Spinacia oleracea</i>	Amaranthaceae	annual	wind	800 feet–1 mile (244 m–1.6 km)	10	20–50	80+
	squash (summer squash, winter squash)	<i>Cucurbita</i> spp.	Cucurbitaceae	annual	insect	800 feet–1/2 mile (244–805 m)	1	5–10	25+
x	sunflower	<i>Helianthus annuus</i>	Asteraceae	annual	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
x	Swiss chard	<i>Beta vulgaris</i>	Amaranthaceae	biennial	wind	800 feet–1 mile (244 m–1.6 km)	5	20–50	80+
x	tomatillo (husk tomato)	<i>Physalis philadelphica</i>	Solanaceae	annual	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
x	tomato	<i>Solanum lycopersicum</i>	Solanaceae	annual	self or insect	10–50 feet (3–15 m)	1	5–10	20+
	turnip	<i>Brassica rapa</i>	Brassicaceae	biennial	insect	800 feet–1/2 mile (244–805 m)	5	20–50	80+
	watermelon	<i>Citrullus lanatus</i>	Cucurbitaceae	annual	insect	800 feet–1/2 mile (244–805 m)	1	5–10	25+

Color Key: Easy Advanced

Priority plants are the types most frequently requested by LSL community members

Info source: Seed Savers Exchange

Crops:

The chart is organized alphabetically by crop type, all the way from amaranth to wild arugula.

Species:

The species column shows the scientific name for each crop type. This is important because varieties of the same species can cross-pollinate, even if they are different crops! For example, both broccoli and cabbage belong to the species *Brassica oleracea*. When different varieties cross with each other, the seeds that they produce will lose their uniformity and distinct characteristics.

Family:

The family column shows which plant family each crop belongs to. While knowing the family is not essential for seed saving, often times, crops in the same family can be treated similarly by seed savers. For example, carrots and celery belong to different species but are both members of the *Apiaceae* family: both crops are insect pollinated biennials that benefit from relatively larger population sizes (keep reading to learn more about population sizes).

Life Cycle:

The life cycle of a variety tells you how many seasons it will take for that crop to flower and how long the plant will live. Annual plants complete their entire reproductive life cycle - from germination, through seed production and then on to death - in one season. Biennial crops require a period of cold weather in order to flower and therefore need the better part of two growing seasons to produce seeds. Perennials live longer than two seasons and many will not flower in their first year. In general, annual crops are easiest to save seed from because gardeners do not need to know how to overwinter plants.

Primary Pollination Method:

There are three ways flowers are pollinated: by insects, by the wind, and all by themselves without the aid of either insects or wind (e.g. self-pollinating). How a plant is pollinated informs how far different varieties of the same species must be separated from one another in order to prevent unwanted crossing. In general, self-pollinating crops are easier for beginning seed savers to work with because each flower typically pollinates itself without help.

Recommended Isolation Distance for Seed Saving:

Unless gardeners take action to distract or exclude pollinators from carrying pollen into their garden. They must rely on isolation by distance to prevent unwanted crossing between different varieties of the same species. For example, gardeners may need anywhere from 800 feet to 1/2 mile of distance between their watermelon patch and their neighbor's in order to prevent bees from spreading pollen between the two patches. In general, plants that are self-pollinated require the shortest isolation distances and wind-pollinated crops require the greatest isolation distances. There are ways for seed savers to get around these large distances when space is limited.

Population Size:

Viable Seeds:

This column shows the number of plants that are needed for a crop to produce viable seeds. In many cases, such as with lettuce and tomatoes, seed can be successfully obtained from a single plant. However, seed savers who are interested in maintaining varieties for more than one generation, or those who are concerned about maintaining a genetically diverse population should produce seeds from larger populations.

Variety Maintenance:

The population size for maintaining a variety is a recommended range that seed savers should use when routinely growing a crop to save seeds. Larger populations will increase the chance that a variety will maintain a higher level of genetic diversity, which is more important for long term seed saving and/or when growers regenerate their seeds often (say every 1-3 years). Gardeners who are less concerned about losing genetic diversity, who can obtain new seed stocks if needed, and/or who store their seeds for long periods of time between regenerations may be okay using smaller populations.

Genetic Preservation:

For seed savers who are engaged in long-term preservation projects, seed banking, and/or conservation efforts, the population sizes in this column indicate the minimum number of plants that should be grown to ensure that seeds retain a high level of their existing genetic diversity.