

Seed Saving Chart

The isolation distances and plant populations listed below are the optimal numbers for garden-scale seed saving. That said, the best way to build solid seed skills is a combination of researching the ideal methods and experimenting with your own approach. The only real mistake you can make is to not try. Have fun.

	FAMILY, GENUS, SPECIES	POLLINATION	ISOLATION DISTANCE	# OF PLANTS	SEED LIFE	MISCELLANEOUS INFORMATION
Annual Vegetables						
Arugula	Brassicaceae (<i>Eruca sativa</i>)	Insect	1/2 mi.	40	5 yrs.	Easy outcrosser for beginners
Bean	Fabaceae (<i>Phaseolus vulgaris</i>)	Self	20 ft.	10	4 yrs.	Good for beginners
Bean, Fava	Fabaceae (<i>Vicia faba</i>)	Self	50 ft.	20	4 yrs.	Primarily selfers, but insects do pollinate
Corn	Poaceae (<i>Zea mays</i>)	Wind	1–2 mi.	100	6 yrs.	Seed matures 6–8 weeks after eating stage
Cucumber	Cucurbitaceae (<i>Cucumis sativus</i>)	Insect	1/2 mi.	10	8 yrs.	Male and female flowers
Eggplant	Solanaceae (<i>Solanum melongena</i>)	Self	50 ft.	10	6 yrs.	Harvest seed from overripe fruit
Lettuce	Asteraceae (<i>Latuca sativa</i>)	Self	20 ft.	10	3 yrs.	Good for beginners
Melon	Cucurbitaceae (<i>Cucumis melo</i>)	Insect	1/2 mi.	10	7 yrs.	Does not cross with watermelon
Mustard	Brassicaceae (<i>Brassica juncea</i>)	Insect	1/2 mi.	40	5 yrs.	Will cross with wild species
Pea	Fabaceae (<i>Pisum sativum</i>)	Self	20 ft.	25	5 yrs.	Good for beginners
Pepper	Solanaceae (<i>Capsicum spp</i>)	Self	100 ft.	10	4 yrs.	Primarily selfers, but insects do pollinate
Pumpkin	Cucurbitaceae (<i>Cucurbita pepo</i>)	Insect	1/2 mi.	10	7 yrs.	Male and female flowers
Radish	Brassicaceae (<i>Rapnanus sativas</i>)	Insect	1/2 mi.	50	5 yrs.	Can cross with wild radishes
Spinach	Amaranthaceae (<i>Spinacia oleracea</i>)	Wind	2 mi.	50	4 yrs.	Male and female plants
Squash	Cucurbitaceae (<i>Cucubita spp</i>)	Insect	1/2 mi.	10	7 yrs.	Cross only within species
Tomato	Solanaceae (<i>Lycopersicon spp</i>)	Self	10 ft.	10	5 yrs.	Good for beginners
Watermelon	Cucurbitaceae (<i>Citrullus lanatus</i>)	Insect	1/2 mi.	10	6 yrs.	Does not cross with other melon types
Biennial Vegetables						
Beet	Amaranthaceae (<i>Beta vulgaris</i>)	Wind	1 mi.	30	6 yrs.	Crosses with chard
Broccoli	Brassicaceae (<i>Brassica oleracea</i>)	Insect	1/2 mi.	40	5 yrs.	Crosses with all oleraceae
Brussels Sprout	Brassicaceae (<i>Brassica oleracea</i>)	Insect	1/2 mi.	40	5 yrs.	Crosses with all oleraceae
Cabbage	Brassicaceae (<i>Brassica oleracea</i>)	Insect	1/2 mi.	40	5 yrs.	Crosses with all oleraceae
Cauliflower	Brassicaceae (<i>Brassica oleracea</i>)	Insect	1/2 mi.	40	5 yrs.	Crosses with all oleraceae
Carrot	Apiaceae (<i>Daucus carota</i>)	Insect	1 mi.	60	3 yrs.	Crosses with Queen Anne's Lace
Celery, Celeriac	Apiaceae (<i>Apium graveolens</i>)	Insect	1/2 mi.	30	5 yrs.	Difficult to overwinter
Kale	Brassicaceae (<i>Brassica napus</i>)	Insect	1/2 mi.	40	5 yrs.	Russian and Siberian varieties
Kale	Brassicaceae (<i>Brassica oleracea</i>)	Insect	1/2 mi.	40	5 yrs.	Scotch and Tuscan varieties
Kohlrabi	Brassicaceae (<i>Brassica oleracea</i>)	Insect	1/2 mi.	40	5 yrs.	Crosses with all oleraceae
Leek	Amaryllidaceae (<i>Allium ampeloprasum</i>)	Insect	1 mi.	20	2 yrs.	Seed tightly encased in seed head
Onion	Amaryllidaceae (<i>Allium cepa</i>)	Insect	1 mi.	50	2 yrs.	Very short seed life
Parsley	Apiaceae (<i>Petroselinum crispum</i>)	Insect	1 mi.	30	5 yrs.	Seed heads shatter easily
Parsnip	Apiaceae (<i>Pastinaca sativa</i>)	Insect	1 mi.	20	1 yr.	Extremely short seed life
Rutabaga	Brassicaceae (<i>Brassica napus</i>)	Insect	1/2 mi.	40	5 yrs.	Crosses with some Russian kales
Swiss Chard	Amaranthaceae (<i>Beta vulgaris</i>)	Wind	1 mi.	30	6 yrs.	Crosses with beets
Turnip	Brassicaceae (<i>Brassica rapa</i>)	Insect	1/2 mi.	40	5 yrs.	Crosses with broccoli raab

Isolation distance: Varieties of the same species can cross-pollinate, producing offspring with new characteristics. To keep seed varieties “pure,” seed savers create “isolation”—planting related varieties at appropriate distances to minimize the chance of crossing.

Number of plants: To maintain genetic integrity, it's important to save seed from a diverse population of individual plants. The optimum population size differs depending on whether a variety is wind or insect pollinated, or self-pollinated.



For more seed saving resources, check out our Community Seed Toolkits at www.seedmatters.org