

## What are Seeds?

A plant produces seeds in order to reproduce itself. Just like an egg has to be fertilized to become a new animal, a seed must be pollinated to produce a new plant. Understanding pollination is key to getting seeds to produce the plants you want. Some plants are **self-pollinating**—the male and female parts are contained within a single flower that fertilizes itself. Other plants, called **cross-pollinators**, have separate male and female flowers and their pollen has to get from one flower to another in order for the flowers to be fertilized.

The seeds from families of plants that are self-pollinating are labeled “**easy**” to save. The most widely crossing of the cross-pollinators are labeled “**advanced**” because it takes effort to keep them from crossing with each other.

## Types of Seeds

**Open-pollinated** or **heirloom** varieties have been grown for so many generations that their physical and genetic qualities are relatively stable. This seed will be “true to type” if saved. In simple terms, you will reap what you sow.

**Hybrid seeds.** If a packet has *hybrid*, *F1*, or *VF* written on it, seeds from those plants will not produce plants like the parent plant. **\*The Seed Library does not accept seeds collected from hybrid plants.**

## Plant Families

If you learn the family, genus and species of vegetables, you will also learn their basic seed saving needs and risks.

**Families** define the basic form of the flower parts of plants. All plants with the same flower (and reproductive) structure are in the same family.

**Genera** (singular: Genus) define more closely related plants. Crosses between genera are rare but can occur.

**Species** define specific botanically recognized plants with similar fruit, flowers, and leaves. Plants within one species will readily cross with each other.

**Cultivars** are cultivated varieties that can cross with each other but will not cross with varieties of other species. When we save seeds we usually want to maintain a cultivar or breed a new one.

*Example:*

**Family:** Cucurbitaceae **Genus:** *Cucurbita*

**Species:** *Cucurbita pepo* **Cultivars:** Acorn squash, Warty gourd

Squash and gourd are the same species and can easily cross-pollinate, which might result in an inedible variety. That is why they are labeled “advanced.”

## Contact the Library

For more information contact the library at  
519-376-6623 ext. 5207  
www.osngupl.ca  
cmarun@library.osngupl.ca

## How to Save Seeds



### OUR MISSION:

**The Seed Lending Library is dedicated to providing a free source of open pollinated vegetable and flower seeds to the community, supporting an active understanding of our food system through education and a culture of sharing.**

Owen Sound & North Grey  
Union Public Library  
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Owen Sound, ON N4K 4K4  
[www.osngupl.ca](http://www.osngupl.ca)

Monday 1pm-8pm  
Tuesday - Thursday 10am -8pm,  
Friday & Saturday 10am-5pm



Owen Sound & North Grey  
Union Public Library

## Easiest-to-Save Seeds



The plants in these families are mostly self-pollinating. The flowers have male and female parts, so

pollination occurs within the individual plant, not as a cross between plants. Seeds are reliably the same as the parent plant.

**Asteraceae or Compositae Aster, Daisy, or Sunflower Family:** *cardoon, endive, Jerusalem artichoke, lettuce, salsify, shungiku, sunflower.* Allow the plants to flower, collect dry seeds.

**Fabaceae or Leguminosae Pea, Bean, Legume or Pulse Family:** *bean, lentil, pea, soybean.*

Allow beans and peas to dry in their pods on plants before collecting and storing.

**Solanaceae Nightshade Family:** *eggplant, ground cherry, pepper, tomatillo, tomato.* Allow fruits to fully ripen. Seed must be separated from flesh. Letting tomato pulp ferment in water for a few days is helpful. Seed should be rinsed and dried thoroughly before being stored.

**Poaceae Grass Family:** *barley, corn, kamut, millet, oats, sorghum, wheat.*

Corn readily crosses with different, unseen varieties. It is unlikely that saved seeds will be like their parents.

**Exceptions that are easy:** Sorghum is easy to save because it does not cross. All other crops

in this family are so uncommon in backyards that they are easy to save.



## Easy-to-Save Seeds

These plants are self-sterile, cross-pollinating, or **outbreeding**. They will cross with other plants of their species. To save seeds from these plants you must

- allow only one variety in each species to flower at a time
- let multiple plants of one variety flower to ensure pollination

In our dense urban environments, some crossing can occur with our neighbors' plants, but these plants will not cross over great distances. Many are rarely allowed to flower anyway.

**Amaryllidaceae or Alliaceae Lily or Onion Family:** *chives, garlic, leeks, onions.*

They are biennial, which means they won't flower until the second year, after winter. Let the seeds dry on the plant. Collect.

**Chenopodiaceae or Amaranthaceae Goosefoot or Amaranth Family:** *amaranth, beet, chard, lamb's quarters, orach, quinoa, spinach.*

**Beet** and **Chard** are the same species, so only let one variety flower at the same time.

**Spinach** is **dioecious** meaning each plant is either male or female, so let many plants

flower at once for pollination. Let the seeds dry on the plant. Collect.

**Umbelliferae or Apiaceae Parsley Family:** *carrot, celery, caraway, chervil, cilantro (coriander), dill, fennel, parsley, parsnip.*

**Carrot** unfortunately will cross with Queen Anne's Lace, so don't save carrot seeds if Queen Anne's Lace grows nearby. Many of this family are biennials, so flowering may not occur until the second year. Let the seeds dry on the plant. Collect.

## Advanced Seeds



Most of these vegetables are outbreeding and pollinated by wind or insects. They are commonly found flowering in local

neighborhoods, making isolation very difficult. Seeds that require hand pollination, tenting, and other methods to ensure varietal purity are labeled "advanced." **These families will readily cross with unseen nearby plants and may create odd and possibly inedible varieties in one generation.**

**Brassicaceae Mustard Family:** *Asian greens, broccoli, Brussels sprouts, cabbage, cauliflower, collards, kale, kohlrabi, mustard, turnip.*

**Exceptions that are easy:** Arugula, rutabaga

**Cucurbitaceae Gourd Family:** *cucumbers, gourds, luffa, melons, pumpkin, summer squash (ex. zucchini), winter squash (ex. acorn)*

**Exceptions that are easy:**

