

SEED SAVING 101

A STEP-BY-STEP ON HOW TO SAVE SEEDS



WHAT ARE SEEDS?

Plants produce seeds in order to reproduce. 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(easy to save)**—the male and female parts are contained within a single flower that fertilizes itself.

Other plants, called **cross-pollinators(hard to save)**, 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.



HOW HARD IS IT TO SAVE SEEDS?

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-hard to save”** because it takes effort to keep them from crossing with each other.

TYPES OF SEEDS WE WANT

Open-pollinated or **heirloom** seeds will be “true to type” if saved. In simple terms, you will reap what you sow.



PLANT FAMILIES

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

Families: Plants from the same family will have the same reproductive structure.

Species: Plants within one species will easily cross with each other. Be aware!

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.

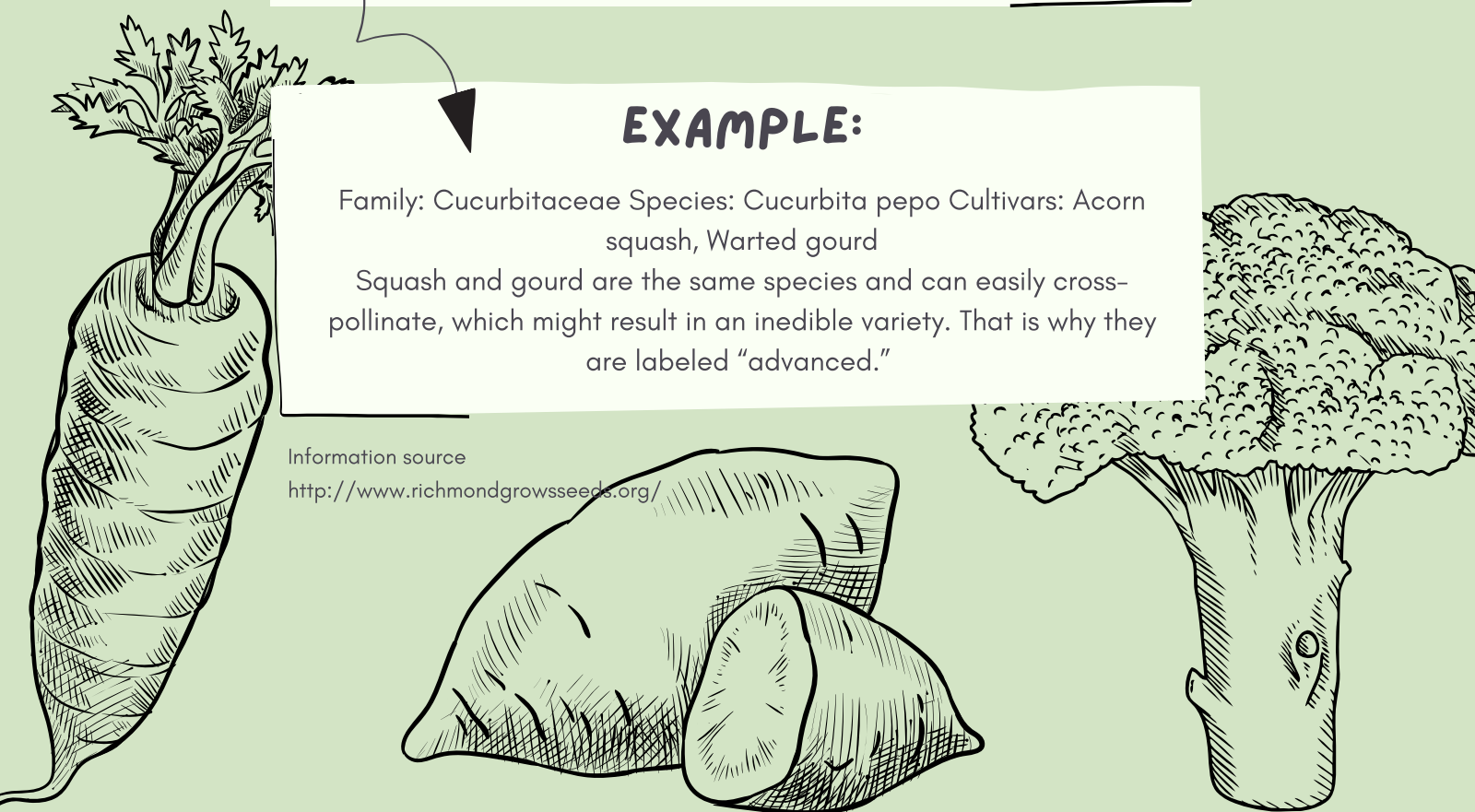


EXAMPLE:

Family: Cucurbitaceae 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.”

Information source
<http://www.richmondgrowsseeds.org/>



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EASIEST-TO-SAVE SEEDS

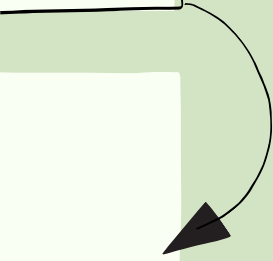
The plants in these families are mostly self-pollinating. The flowers have male and female parts, so pollination occurs within the individual plant, not as a cross between plants. Seeds are reliably the same as the parent plant.



ASTERACEAE OR COMPOSITAE ASTER, DAISY, OR SUNFLOWER FAMILY

artichoke, endive, Jerusalem artichoke, lettuce, sunflower.

For Jerusalem artichokes, the tuber is planted.
For others in this family, allow the plants to flower, collect dry seeds.



FABACEAE OR LEGUMINOSAE PEA, BEAN, LEGUME OR PULSE FAMILY

bean, lentil, pea, peanut, soybean.

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

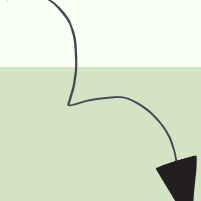


SOLANACEAE NIGHTSHADE FAMILY



eggplant, ground cherry, pepper, potato, 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. Potatoes are grown from tubers not seeds.



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SORT OF 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



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. With bulbing varieties, replant bulb when it sprouts.

CHENOPODIACEAE OR AMARANTHACEAE GOOSEFOOT OR AMARANTH FAMILY

beet, chard, 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, cilantro (coriander), dill, fennel, parsley, parsnip.

Many of this family are biennials, so flowering may not occur until the second year. Let the seeds dry on the plant. Collect.

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ADVANCED HARD TO SAVE 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: Plant uncommon cucurbits like gourds, mixta squash, luffa. Hand pollinate to ensure purity with this family.

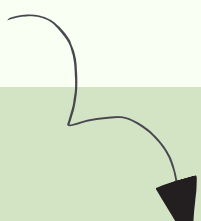


POACEAE GRASS FAMILY

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.



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