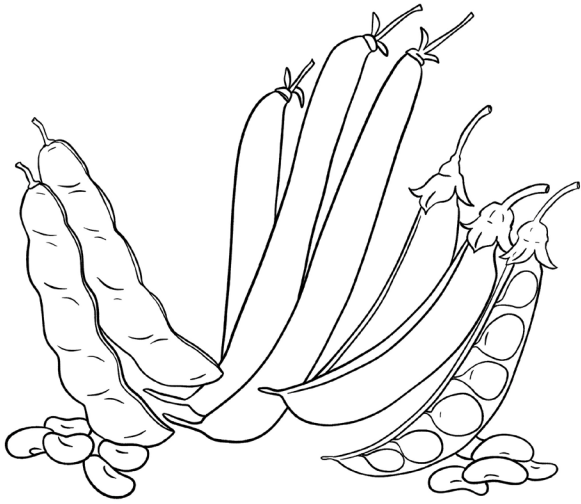


LOCAL GROWING & SEED SAVING ADVICE

Legumes



This guide provides growing and seed saving instructions specifically for gardeners of the Fox Valley in Wisconsin.

Seed from “open pollinated” or “heirloom” varieties can be saved and replanted to produce offspring like the parents, as long as they have not crossed with plants of a different variety. Seed from hybrid varieties is not usually worth saving, since the offspring will differ noticeably from the parents. Hybrid seed packets are usually labeled “hybrid” or “F1.” Some species require isolation and/or hand pollination to prevent crossing with another variety.

Overview of saving legume seeds

Legumes (beans and peas) are among the easiest seeds to grow and save. The legumes most often grown in gardens of the Fox Valley are common beans (often grown as “green beans”), which are usually members of the species *Phaseolus vulgaris*. Though there are many varieties in this well known species, several other species also grow well in our area.

- Pollinators can cross-pollinate legume varieties within the same species but not between varieties of different species.

If you are planning on saving seeds, you should either plant different varieties at recommended isolation distances or plant only one variety of each species in any given year. Either way, saving legume seeds is as simple as leaving fruits on the vines until they are dry.

Plan ahead for seed saving

Since isolation distances for members of the same species may be greater than what is possible in an suburban/urban setting, most city gardeners planning to harvest true-to-type seed will plant just one variety per species in a single season. Be sure to consider proximity to your neighbors’ gardens, since they may also be growing legumes.

ISOLATION DISTANCES REQUIRED TO GET TRUE-TO-TYPE SEEDS IF PLANTING MORE THAN ONE VARIETY WITHIN THE SAME SPECIES

| | | |
|-----------------|------------------------------|-------|
| Adzuki Bean | <i>Vigna angularis</i> | 50 ft |
| Common Bean | <i>Phaseolus vulgaris</i> | 20 ft |
| Cowpea/Longbean | <i>Vigna unguiculata</i> | 50 ft |
| Fava Bean | <i>Vicia faba</i> | 50 ft |
| Lima Bean | <i>Phaseolus lunatus</i> | 50 ft |
| Pea | <i>Pisum sativum</i> | 20 ft |
| Runner Bean | <i>Phaseolus coccineus</i> | 50 ft |
| Soybean/Edamame | <i>Glycine max</i> | 20 ft |
| Tepary Bean | <i>Phaseolus acutifolius</i> | 20 ft |

TIMING

As early as possible – March or April

| | |
|-----------|----------------------|
| Fava Bean | <i>Vicia faba</i> |
| Pea | <i>Pisum sativum</i> |

Last week in May

| | |
|-------------|------------------------------|
| Common Bean | <i>Phaseolus vulgaris</i> |
| Lima Bean | <i>Phaseolus lunatus</i> |
| Runner Bean | <i>Phaseolus coccineus</i> |
| Tepary Bean | <i>Phaseolus acutifolius</i> |

First week in June

| | |
|-----------------|--------------------|
| Soybean/Edamame | <i>Glycine max</i> |
|-----------------|--------------------|

Second week in June

| | |
|-----------------|--------------------------|
| Cowpea/Longbean | <i>Vigna unguiculata</i> |
| Adzuki Bean | <i>Vigna angularis</i> |

Planting legume seeds

Legumes can grow in poor soils because, unlike nearly all other plants, legumes form mutually beneficial relationships with nitrogen-fixing bacteria. If you are planning to grow legumes for the first time in your garden, consider inoculating with the bacteria appropriate for the legume species (this information will be on

packaging). If you have an established garden where legumes have been cultivated, the bacteria are likely already abundant in the soil.

All legume species can be directly sown in our gardens, but planting times vary by species. If using powdered inoculant, coat seeds prior to planting.

► As a general rule, plant a little deeper as the seed is long.

At the time of planting, fencing out rabbits will be necessary. Chicken wire/poultry netting that is three feet tall with one-inch holes or smaller is generally adequate. Many products marketed as “rabbit” fencing have holes large enough for bunnies to get through. If you already have a fence, check for holes and mend as needed. Be sure it is dug into the ground a bit to prevent rabbits coming in underneath.

Also consider whether a trellis will be needed for the species and variety you are cultivating. Runner beans, tepary, longbeans, and some varieties of common and lima require extensive light duty trellis space, since they will produce very long vines. Many peas, fava and cowpeas benefit from a light duty line or trellis at least three feet tall. Some varieties of common and lima beans, along with tepary, soybean, and adzuki, are bushy plants requiring no support.

Watch for pests and disease

If it is wet early in the growing season, remove mulch temporarily from the legume planting area to reduce habitat for slugs, since they will devour seedlings. Copper collars made from lightweight sheet copper can be placed around clusters of seedlings to guard against slugs, who will not cross copper. Slug traps can be made using saucers of beer or yeasty slurry made with baker’s yeast, sugar, and water.

Disease is not usually a problem for legumes in our area unless we have a particularly wet fall, when mildew or mold can ruin a dry bean harvest. To mitigate damage by fungus, space plants several inches apart and trellis to allow for air flow. If you are approaching harvest time for dry beans and there is rain in the forecast, pull the almost-dry pods off the vines and spread them out in a dry place such as a garage or shed, ideally with a fan blowing on them.

Harvest for eating

Many legumes can be harvested at various stages for eating.

GREEN, SNAP, AND WAX BEANS

Tender young pods without developed seeds are desirable.

SHELLIES

Varieties grown for green beans and dry beans can also be harvested as “shellies” (fresh shelled beans) if allowed to develop seeds. For shellies, harvest pods when still green but bulging with immature seeds, remove those fresh seeds, compost the pods, and boil the seeds until tender (probably just a few minutes).

DRY BEANS

For shelf-stable dry beans that will require longer cooking, leave pods on the vines until dry and brown before shelling them. At that dry stage, they will keep indefinitely.

Harvest for seed

The seed harvest stage for all legumes is the same. Pods should be dry and contain fully developed, dry seeds.

► To maximize genetic diversity in your saved population of seed, be sure to collect seed from as many plants as possible.

If you do not have at least twenty plants of the same variety, consider coordinating with other gardeners growing the same variety. Mix the saved seeds from the same variety before storing/resharing.

Spread out harvested legume pods in a dry, protected location and allow them to dry for at least one month.

Store and share seeds

When completely dry, label seeds and store in a cool dry place out of direct sunlight. At room temperature, they should remain viable for several years. For longer term storage, freeze in air tight containers or bags.

If you are a Seed Saver growing a variety from the OSS Collection to share with the organizers, please label fully dried seeds with your name, the variety name, harvest date, how many plants contributed seed, and location where the fruits were grown.



Local Growing & Seed Saving Advice: Legumes was written by Jason Mills and Julia Chybowsky, designed by Lynn Stuart, and illustrated by Cassie Edwards.