

# Native Farm to School

A Project of First Nations Development Institute



## SEED SAVING & CROP PROFILES

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## VARIETIES

Popcorn  
Flint  
Dent  
Flour  
Sweet

## CORN



**Scientific Name:**  
Zea mays

**Will cross breed**  
**Wind pollinated**

## PLANTING:

- Corn that is "true-to-type," meaning uniform, you will need to isolate your corn as pollen has been known to travel up to 5 miles.
- An alternative is to plant staggered timeframes at least two weeks off-set from each other. Though this also depends on the corn's growing season, there will most likely be some crossing.
- Plant 3 to 4 seeds 1 inch deep spaced by at 4 to 5 feet from each plant.
- Plant no later than May at above 6,500 ft. altitude.
- In early July, thin out plants to leave 2-3 plants if too thick.

Beans are called "perfect flowers," meaning there are male and female reproductive parts in a single flower. This makes seed saving easier and less likely to cross. However, pollinator insects still find their way in the flowers and cause crossing if they are the same variety. It is essential to know the different varieties because the same types will cross.

## BEANS



**Self-pollinated**

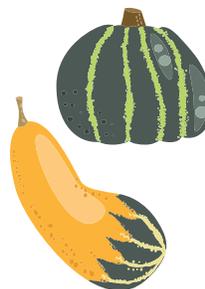
## VARIETIES:

- **COMMON BEANS**  
Also: Phaseolus vulgaris  
Classified by growth habitat such as bush, half runner or pole. Dry beans which include Pinto, turtle, cranberry, Anasazi, Jacobs Cattle. Snap beans include green beans, wax, and French varieties.
- **LIMA BEANS**  
Also: Phaseolus lunatus  
Broad and Flat

Can be eaten immature as shelled beans or mature as dry bean

Squash has separate male and female flowers that need bees and other pollinators to fertilize and produce fruit. These will cross with different varieties, and you will need to know the genus and specific epithet to tell if your squash will cross-pollinate. Ex. Cucurbita Maxima will not cross with a Cucurbita Pepo or Cucurbita Moschata; only if they share the same genus (e.g., Cucurbita) AND specific epithet (e.g., Maxima) can they cross. You will notice a bulb at the base of the female flowers; this is the ovary and will produce a squash baby if fertilized.

## SQUASH



**Insect pollinated**

## VARIETIES:

- **GROUP A CUCURBITA PEPO:**  
Summer squash, Yellow crookneck or straightneck, Zucchini, Scallop/patty pan, Winter Squash, Acorn, Spaghetti, Gourds and many Pumpkins including Cinderella, Big Tom, Jack O'Lantern, Jackpot, and Connecticut Field.
- **GROUP B CUCURBITA MOSCHATA:**  
Winter Squash, Butternut squash, Pumpkins, Cheese, Golden, Cushaw and Kentucky Field

- Early to mid-September, the tassels, the male part, will start producing pollen that will fall with help from the wind to the corn silks, the female part of the corn. This is a great time to collect pollen if needed for ceremonial use.
- Pollen is best gathered in the early morning by large plastic bags over the tassels and shaken.
- Each strand of corn silk on the ears is a potential kernel of corn that needs to get fertilized with pollen to produce the seed.
- If you end up with “naked” cobs, meaning no kernels, the silks were not pollinated.

## HARVEST:

Late September to Early October, you can harvest the green corn while it is in its “milky” stage.

You can test by peeling back the husk and if you see developed kernels press and if they pop with milky fluid. You can either boil or roast if you choose.

You cannot save seed from green corn, and any corn harvested will need to be cooked.

The corn stalks will fully dry around late October to Early November.

## SEED SAVING:

Only harvest for seed or dry corn when husks are fully dry.

Peel husks, decob, and wind winnow the organic material using two containers during a gusty day or with a fan.

Pour seed in containers back and forth to separate.

Save seed from at least 50 individual plants for best genetics and seed stock.

- **RUNNER BEANS**  
Also: Phaseolus coccineus  
Grown for fresh beans or eaten whole like green beans as well as dry beans. Often categorized by their flower color
- **TEPARY BEAN**  
Also: Phaselus acutifolius  
Eaten for dry beans
- **FAVA BEAN**  
Also: Vicia faba  
Origins in Syria 12,000 years ago
- **ADZUKI BEAN**  
Also: Vigna angularis  
7,500 year ago in Peru, Argentina, and Bolivia

## PLANTING:

Plant 3 to 4 seeds 1 inch deep spaced by at least 1 ft apart.

Plant in May or early June.

Beans are also nitrogen fixers and will help build your soil and are great if your lands have been fallow.

You can also plant in-between your corn as nitrogen is one of the primary nutrients corn needs; if this method is used, plant your corn at least 6 ft apart with beans in the middle and alternate in rows. This will allow the beans room to get sunlight and not compete with your corn.

You might notice if your beans vine out that they will climb the corn; this is part of their mutualistic relationship.

## HARVEST:

Harvest and seed save roughly around late October to Mid November when pods are dry and ready to shatter.

Large quantities of beans can be processed by stomping bean pods in a folded tarp and using wind winnow to separate seed from the chaff.

- **GROUP C CUCURBITA MAXIMA:**  
Winter squash, Hubbard, Pumpkins, Big Max, King of the Mammoths, Mammoth Chile, Mammoth Prize, Atlantic Giant, Ornamental squash, Alladin and Turk’s Turban
- **GROUP D CUCURBITA MIXTA:**  
Pumpkins, Green-Striped Cushaw, Japanese Pie, Tennessee Sweet Potato, White Cushaw and Mixta Gold

## PLANTING:

Plant 2-3 seeds at ½ -1 in. deep and space at 5-6 feet apart.

These plants will vine out very wide. With their large and broad leaves, they serve as great natural canopies to retain the moisture.

Planting in between rows of corn is a common practice in Indigenous communities. Plant no later than early June.

To bring in pollinators, plant flowers around your garden. A favorite of Ancestral Lands are sunflowers, which grow tall and can be easily planted around the plants’ perimeter.

## HARVEST:

Harvest when mature, which the dry stem and vines will indicate at the top of the crop.

Save seed after harvest but cutting open the crop is very difficult because of the tough rind; a serrated knife or a hand saw is recommended. Collect seed and separate it from organic material.

Set on a non-stick pan, plate, or parchment paper and let dry for at least two weeks.

You will notice they will start to dry when the thin translucent skin of the seed chaffs off.

Don’t risk putting seed in storage until dry, or you may end up with moldy unusable seed.



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