Seed Saving 101

Collect seed from the best, healthiest plants
- Do not save seed from diseased plants
- To produce offspring similar to the parent plant the parent needs to be pollinated by the same variety
- Plants that are self-pollinated are more likely to breed ‘true’
- Plants that are wind or insect pollinated are easily cross-pollinated
  - Cross-pollination between different varieties needs to be prevented to get seed that will produce plants similar to parent plant
  - Avoid cross pollination by separating varieties by distance, pollination time, or exclusion with row cover

Pollination Methods

**Self-pollinated**
Seed reliably produces plants similar to the parent plant
- Beans, peas, tomatoes, lettuce, chicory, endive

**Wind-pollinated**
Need 1 mile distance in between varieties to completely avoid cross-pollination
- Or need to stagger pollen shed time or use row cover
- Beets, Swiss chard, corn, spinach

**Insect-pollinated**
Need ¼ mile distance between varieties to avoid cross-pollination
- Or need to stagger pollen shed time or use row cover
- Broccoli, cauliflower, cabbage, Brussels sprouts, kale, collards/mustard greens are all different cultivars of the same species
  - They will readily cross-pollinate each other so treat these as different varieties of same crop
  - Squashes will also cross-pollinate each other
- Asparagus, kohlrabi, broccoli, melons, Brussels sprouts, mustard, cabbage, onions, carrots, parsley, cauliflower, parsnips, celeriac, peppers, celery, pumpkin, Chinese cabbage, squash, collards, radishes, cucumber, rutabaga, eggplant, turnips, kale
**The Wet Method**

Plants with fleshy fruits
- Tomatoes, cucumbers, summer squashes, eggplant, winter squashes, melons
- Tomatoes: best when allowed to ferment for 3-5 days
  - Scoop seeds and pulp into water, let sit for 3-5 days in a warm place
  - Pulp and non-viable seeds rise to the top, good seeds sink to the bottom
  - Pour off pulp and bad seeds to collect the good seeds at the bottom
  - Dip in 20% bleach solution (kills some diseases) and rinse in clean water and let dry
- Other fleshy fruits: wash off pulp and allow to dry
  - You may let the seed sit in the water for a few hours to allow non-viable seed to rise to top of water, dip in 20% bleach, rinse & dry
- Leave cucumbers and summer squash on the vine until after frost, like winter squashes
- Wait until eggplant is brown-ish and shriveled

**The Dry Method**

Plants with dry seeds
- Peas, beans, peppers, greens, mustards, carrots, root vegetables, most herbs
- Allow the seed to fully reach maturity and dry on the plant but collect before the seed falls
- Peas and beans should be left on the plant until the pod dries
- Peppers: wait until the pepper has reached its mature color (red / yellow / orange) and has some wrinkles

**Storage**
- Make sure seeds are dried before storing
- Store in paper envelope, fabric bag - not plastic
- Store in cool, dark, dry place, like refrigerator

**Potential Pitfalls**

**Hybrids**
- Cross between 2 inbred lines
- Do not save seed from hybrids
- The offspring from hybrids will have large differences in characteristics
- Look for F1 hybrid on seed package

**Biennial Plants**
- Common biennials: carrots, beets, Swiss chard, parsley, kohlrabi, kale, turnips, onions, cabbage
- Will not produce seed at the end of the season
  - Need to overwinter in field or be dug up and stored at 32 - 45 degrees Fahrenheit through winter
- Try overwintering these crops by mulching thickly with straw and row cover

Scan QR Code or visit https://extension.colostate.edu/topic-areas/yard-garden/saving-seed-7-602/ to learn more about seed saving