

Collecting & Cleaning Seeds

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Why Collect Your Own Seeds?

Fun Hobby (potentially addicting)
Trading with other gardeners
Inexpensive way to get more plants
Preserve diversity: make stronger plants
Inexpensive way to get more plants
Separating seed from chaff reduces disease
Connect with history and other cultures

A Word About Hybrid Plants

Edible seed packs will be clearly marked: F1 hybrid for edibles
They do not reproduce the same fruit

The same is not always true for flowers: Seed packs do not always have F1
Hybrid appear with variety names in single quotes

For seed collecting choose: Open-Pollinated; Heritage or Heirloom ; Native/ Straight Species; Nativars

The Importance of Pollinators

Pollination is vitally important to veg production
BUT.... Without pollination, we would not have flowers out in nature (and our gardens)
Pollinator health depends on the quantity and quality of the plants provided
Plan for a healthy % of native plants in your garden/ Encourage native bees with nest boxes
Use no pesticides in your garden

The Easy List : Look for the easy species at first

Almost all Natives: Agastache/ Allium/ Amsonia/ Asclepias/ Asters/ Baptisia/ Echinacea/ Eryngium/ Eupatorium
Geranium, wild/ Liatris/ Penstemon/ Ratibita/ Rudbeckia/ Ruellia/ Silphium/ Solidago/ Verbena/ Vernonia

Five Steps to Saving Seeds:

Observation; Harvesting; Drying; Cleaning; Storing

Observation: What To Know About How Plants Flower

Plant species generally bloom the same time every year.
Perennials bloom for shorter periods than annuals.
Species bloom at different times of the season.

Makes for a good garden

Flowers on the same plant will bloom sequentially. Usually depends on the flower position on the stem.

Plants bloom either top to bottom or bottom to top.

Find stems with the biggest, healthiest flowers.

Mark them with string. Do not deadhead these blooms. Let the seeds ripen on the stem.

OR Use a sleeve to protect the seed pod.

Aster family flowers, Ready when the seed head begins to shatter :(zinnia, coneflower) Watch for finch activity

Seed pod/ capsule (peas, milkweed, columbine): Pods are ready when they become dry/ brittle

Seed pods are near ready when you can hear seeds rattling (Baptisia, columbine, poppy)

Seed pod splits open a little when you squeeze it gently (milkweed)

Opens completely on its own (verbena)

Clusters of seeds are visible on the seed head (allium)

Tufts of seeds are browned on the outside seeds are ripe (asters, liatris)

Which Seed Head Will You Collect?

Find stems with the biggest, healthiest flowers

Mark them with string

Let the seeds ripen on the stem

Use a sleeve to protect the seed pod

Knowing When Seeds Are Ready

Seeds need to be collected at the right time for maximum viability

Learning the cues takes practice

Seeds are ripe when they turn brown from green/white (for most species)

Your plant will tell you when seeds are ready

It is best to leave seed pods on the plants until they are almost about to burst.

Use a sleeve to protect the seed pod

Harvesting/ Collecting

Be prepared when you go out into the garden: Paper bags/ Pruners/ Markers/ Gloves

The Importance of Paper Bags:

Allows air circulation/ Don't fill to the top with fleshy seed pods / i.e. milkweed

All plants have a lifespan: Plants need to renew themselves.

Taking all the seeds in any one area damages this renewal process.

Animals and insects need seeds for food in winter: Collect less than 20%

Cutting Seed Heads

See if your seeds are ready: Look closely before you cut/ Seeds should be ripe/ Split open a seed pod to check/

Typically, the first ripe seed heads will be on the oldest stems or lowest position/ Cut rather than tear the seed head

Let Your Seed Heads Dry

Before you clean your seeds. . .

Stems should be upside down in a paper bag or bowl:

2-4 weeks is enough drying time

Allow to dry a couple of weeks to a few months.

Drying can also be done in bowls or on trays: I find paper bags easiest

Why Clean Seeds?

When you clean seeds you are actually separating the seed from the chaff.

Chaff is plant material that protects the seed.

Weather wears down this material over the winter out in the garden.

Separate so you are planting the seed and not the chaff.

When sharing seeds, cleaning is proper etiquette.

This is the most satisfying and rewarding part of the seed to garden to seed cycle.

Most Seeds Can be Shaken Loose

After two weeks shake the seeds out of the seed heads.

Simply hold the paper bag closed and shake.

Periodically open the bag and check some of the stems

Check for seeds in the bottom of the bag

Empty into a bowl

Shake until no more seeds fall into the bottom of the bag

Special Cleaning Needs

You will need gloves to collect and clean:

Eryngium yuccifolium rattlesnake master

Echinacea purpureum purple coneflower

Echinops ritro globe thistle

Tithonia rotundifolia Mexican sunflower

Separate Seeds from Chaff:

Squeeze out of the chaff: Echinops ritro

Crush with a board: Rudbeckia and Ratibida

Crush seed heads with mortar and pestle: Penstemon

Separating Seeds with a Sieve/ Screening

Separating Seeds from Chaff: Use graduated sieves or Winnow your seeds

Determining Seed Viability

Look for firm, plump seeds that seem more “full” than others

Flat, flimsy, bendable, off color seeds are usually not viable

Collecting/ Cleaning Vegetable Seeds

Growing Veg For Seed Collection

Choose open pollinated varieties and/ or Grow Heirloom varieties

Avoid unwanted cross pollination: Grow only one type of cucumber; Grow only one type of squash

Most other vegetables won't cross pollinate

Collecting Vegetable Seeds

Two types: Dry Seed collecting;

Wet Seed collecting

When choosing a fruit to collect seeds from; Choose one the best from the plant;

Let them ripen completely on the plant

Tie ribbon or string around the stem so you know which one to keep

Dry Seed Collecting:

For most vegetables, allow the fruit to dry on the plant

Collect seeds when the season is almost done, allow to dry from 2 weeks to months then strip from pod

Beans; Peas; Pepper; Melon/ Squash; Eggplant; Okra

Wet Seed Collecting:

These seeds are surrounded by a gel that prevents germination: tomatoes, cucumbers

Seed from these plants need to ferment to get them ready for storage

Steps for Seed Fermentation:

Collect tomatoes and cucumbers fully ripe from the garden

Scoop out seeds and gel;

Place in a clear glass or jar;

Fill with 2-3” of water;

Leave top off, place out of direct sunlight;

Swish twice a day;

After 3 days scoop out the mold on top and any floating seeds;
Rinse seed clean/ Dry on a coffee filter for one week;
store in plastic or glass jar

Veg Plants that Flower/ Seed in the Second year
Cabbage, Swiss Chard, Kale, Celery, Carrots, Beets

Storing Seeds

A cool dark spot is best to store plastic containers of seeds or plastic containers of seed envelopes:
Seeds should never be placed in the freezer

Sharing Seeds

Use #1 coin envelopes, mini wax paper bags or homemade envelopes

What Can You Do With All These Seeds?

Make Seed Bombs: Sow outdoors: Winter Sow:
Share with friends or Go to a seed exchange

Seed starting: Four Methods

Direct sow in the garden in fall

Start seeds indoors (lots of equipment required)

Use small greenhouse

Winter Sow

Cold Stratification:

Giving seeds a period of cold to mimic vernalization and stimulate germination

Don't Want to Start Seeds Indoors?

Consider Winter Seed Sowing:

Plant List from This Presentation:

Slide 6: Echinops ritro, globe thistle

Slide 9: Aquilegia canadensis, wild columbine

Slide 10: Cosmos sulphureus, orange cosmos

Slide 11: Echinacea purpurea, purple coneflower

Slide 12: Centrantherum intermedium, Brazilian bachelor button

Slide 13: Echinops ritro, globe thistle

Slide 14: Liatris spicata, marsh blazing star

Slide 15: Zinnia 'Oriole'

Slide 19: Asclepias syriaca, common milkweed

Slide 21: Asclepias tuberosa, butterfly weed

Slide 22: Asclepias curassavica, tropical milkweed

Slide 23: Alcea rosea, hollyhock

Slide 24: Allium cernuum, nodding wild onion

Slide 25: Antirrhinum, snapdragon

Slide 26: Baptisia australis, false blue indigo

Slide 27: Aquilegia vulgaris, Granny's Bonnet columbine

Slide 28: Echinacea purpurea, purple coneflower

Slide 29: Echinops ritro, globe thistle

Slide 30: Eutrochium maculatum (Eupatorium maculatum), Joe Pye weed

Slide 31: Dolichos lablab, hyacinth bean vine

Slide 32: Hibiscus moscheutos, hardy hibiscus

Slide 33: Helianthus annuus: sunflower

Slide 34: Vernonia fasciculata, tall ironweed

Slide 35: Papaver orientale, poppy

Slide 36: Ruellia hummulis, wild petunia

Slide 37: Symphotrichon nova-angliaea (Aster nova-angliaea), New England aster

Slide 38: Tithonia rotundifolia, Mexican sunflower

Slide 39: Verbena hastata, blue vervain

Slide 57: Penstemon digitalis, foxglove beard tongue