Saving Seeds

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Collecting Seed:

- Who collects?
- Ways to collect seed?
- When to collect?
- Where do you collect?
- Why collect?







Who might collect seed?

- Gardeners wishing to save money
- Gardeners who enjoy the challenge of new things
- Gardeners wanting to fill a meadow easily and quickly
- Overzealous gardeners
- Others/anyone



Ways to collect seed

From garden or purchased produce

From mature flower blooms in the garden

From wild plants/fields

From neighbors' plants(with permission)

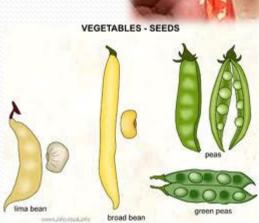
From roadsides

From other sources















Pulpy Seed Collection:







Collecting seed from produce

- Choose mature items
- Cut open to reveal seeds



Scoop out seeds



Select cleaning method:

Soak to clean:

Scoop out pulp and seeds





How to Soak/Clean:

- Put seeds into a container with water
- Leave for several days
- Soak until a foam formes
- Stir occasionally
- When foamy, wash away trash and rinse well
- Dry well then label& store.

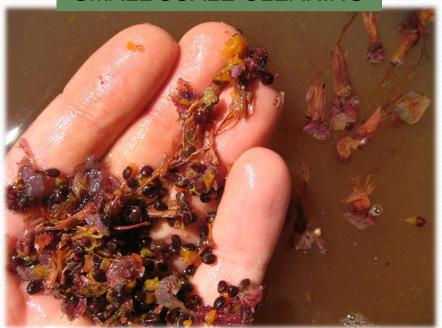




OR:

Scrub to clean:

SMALL SCALE CLEANING





LARGE SCALE CLEANING



Moderate scale cleaning

How to Scrub/Clean:

- Clean seeds under running water
- Wash very well
- Drain & pour onto rough cloth surface (terry does a good job) or onto screen
- Scrub well to remove pulp
- Allow to dry, then label

& store.













Collecting Dry Seeds







Dry seed heads from the field



Strip off seed heads and place in paper bag



High Tech Seeding Unit



Close bag and shake.

Seeds and small litter sink to bottom of bag



Remove large debris and sort seed

Clean seed: Ready to label and store



Collect seeds from mature flower blooms:

Select Blooms that have matured, dropped petals and dried

These examples are Marigold and Gaillardia allowed to dry on the plant.

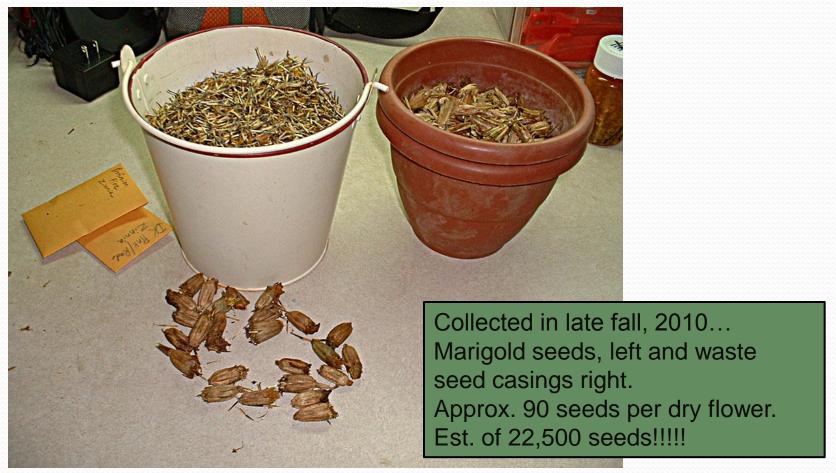




Gaillardia seed head with partial seed separation



Marigold seeds aplenty!



When to collect?

- The easiest collection from flowers is when the blooms (or pods) have withered and seeds are dry. This occurs throughout the season but most heavily at the end of the season.
- Select thoroughly dry flowers for seed collection.





- **■** For produce, select mature items and process as shown in the previous slides: 5,6 and 7.
- Remember the limitations of open pollinated seed.





Where do you collect?













TIPS FOR SEED SAVING:

- When saving seeds of vegetables or flowers, make sure your varieties are labeled "open pollinated" or "heirloom"; hybrid (sometimes labeled "F1") seeds will not produce offspring identical to their parents. You want to select the most attractive and healthiest specimens from which to collect seeds.
- Save seeds from more than one plant to maintain genetic diversity.

ABOUT POLLINATION:

Some plants are self pollinating; pollen will transfer from the male to the female part of the flower without help from insects or wind (beans, eggplant, lettuce, peas, peppers,





 Other plants require insects to pollinate the flowers (broccoli, cukes, melons, spinach, squash, sunflowers). Insects can cause plants to cross-pollinate with different varieties, or with certain weeds, resulting in seeds that will not produce fruits or flowers identical to the original.

 It's important to isolate the crops you want to save seeds from so that you will be sure to get seeds that will grow out to be just like their parents. Insect Barriers: To prevent insects from cross-pollinating your crops, you may need to cover plants with cages made from row cover material or fine mesh screen.







Another technique is to place a small bag made of row cover material or fabric over the flower cluster before it opens.









Once fruit has begun to form, remove the bag, mark those specific fruits along the stem with colored string and save seeds from only those fruits or flowers when mature.

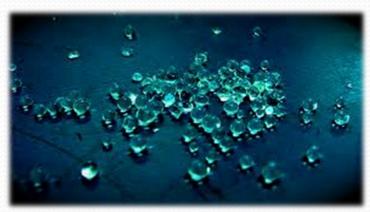


DRYING AND STORING SEED:

MAKE SURE THEY ARE <u>VERY DRY</u>. Seeds must be well dried before storing. Dry seeds in a dark and warm (not hot) location with good air circulation for a few weeks. You may also use silica gel to absorb seed moisture:







Put seeds in a paper or cloth bag and weigh them; put package of seeds and an equal weight of silica gel in a glass jar with a tight fitting lid and leave for 7-8 days. Test seeds for dryness before storing; they should be very brittle.





STORAGE:

Store dry seeds in an air-tight container and place in a cool, dark, dry place.



Seeds may be stored in a refrigerator or freezer, or an unheated basement. Seeds will remain viable longer if they are not exposed to fluctuating temperatures, humidity or light.



If storing seeds in the freezer or refrigerator, allow the jar to come to room temperature before opening, so that moisture will not condense on your dry seeds.





LABELING:

Make sure you label saved seeds with the variety name, year seed was saved, seed source, and any other notes about your experience (disease resistance, yield, taste, days to maturity, etc.).



Realistic home seed systems













Huge scale seed storage







Scientific seed collections





Cold storage

Millinnium Seed Bank Project



Royal Botanic Gardens, Kew

Global Seed Vaulk: Svalbard, Norway





Baker Creek Seed
Bank: Petuluma, CA
in old Sonoma County
National Bank



Established 1929:
Pavlovsk Research Station:
Repository for species security