

Seed Saving Class

For self-pollinating vegetables

Oakridge Public Library



Why a seed library?

- Why save seeds?
 - Maintain locally-adapted seed varieties
 - Maintain biodiversity
 - Support pollinators
 - Increase self-reliance
 - Food supply assurance
 - Save money
- A seed library encourages:
 - Community involvement
 - Knowledge sharing
 - Seed sharing!



What seeds do we want?

- Heirloom seeds
 - Variety grown for many seed generations and reproduces true to its nature
 - Open pollinated (OP)
- Organic seeds
 - Variety grown to organic standards using no artificial fertilizers, pesticides, or herbicides
- Packet print contains both "Heirloom" and "Organic"



What seeds do we NOT want?

- Hybrid seeds
 - Saved seeds:
 - Might be sterile
 - If they sprout, they will be different from the mother plant (not true to their nature)
 - Less vigorous plants
 - Unpredictable results
- We do NOT want to grow and collect hybrid seeds
- Do NOT return seeds to the library from hybrid plants



Why grow Heirloom vegetables?

- Exceptional taste
 - "A lot of the breeding programs for modern hybrids have sacrificed taste and nutrition"¹
- More nutritious than hybrids²
- Less uniform than hybrids, which means they often don't ripen all at once
- Locally adapted varieties may be more resistant to local pests and diseases
- You can save the seeds for growing next season



Footnotes:

 George DeVault, executive director of <u>Seed Savers</u> <u>Exchange</u>
 Mother Earth News

Plant Varieties

- Different types of the same species
- Different characteristics such as:
 - Size
 - Color
 - Yield
 - Climate hardiness (cold, heat, wet, dry)
 - Resistance to pests, disease
 - Time to mature, harvest
- Must decide which variety you want to plant





Organic Bean, Pole Purple Pod



Organic Bean, Pole









Blue Lake

Organic Bean, Pole Italian Snap

Organic Yard Long Pole Bean

Organic Bean, Pole Kentucky Wonder

Organic Bean, Pole, Romano

Organic Bean Rattlesnake

Seed library rules changes

- Last year: we had 140 varieties of vegetables and 15 varieties of herbs
- Now: we have 97 varieties of vegetables and 8 varieties of herbs
- 85 patrons checked out seeds from the library
 - Popular
 - But, we did not receive enough donations of seeds returned
 - We need to be self-sufficient
- So, patrons are allowed only 3 packets of seeds per season



How do we want to grow?

- Organic fertilizers
 - Compost and manures
 - OMRI approved products
- Without using
 - Artificial fertilizers (Miracle Grow)
 - Pesticides or herbicides







Garden records

- When you sow seeds, place a sign with the plant name and variety name
- Make sure the sign is legible and written in indelible ink so it can be read at the end of the season
- Don't try to remember what it was you planted
- When you collect seeds, place them in a **labeled** envelope



Common namo	Lottuco	$\overline{\ }$
Common name	Lettuce	
Variety	New Red Fire	
Harvester	A. Nichols	
Phone number	541-555-0199	
Location	Oakridge	
Date	07/14/16	
Notes Gro	wn organically	

Oakridge Public Library Seed Classifications

Easy

Self pollinating plants - the subject of today's class
Peas, Beans, Lettuce, Tomatoes

Intermediate

- Pollen has to come from another plant of the same species
- Cross pollination problem with other varieties
- Radishes, Cabbage

Difficult

- Life cycle can take two years (overwinter and bloom second year)
- Cross pollination problem with other varieties
- Beets, Broccoli, Carrots, Cauliflower, Celery, Kale, Brussels Sprouts

Self pollinating plants

- These are the easiest plants from which to collect seeds
- They are marked yellow in our seed library catalog
- These plants contain both female (pistils and ovaries) and male organs (stamens and pollen)
- Pollination happens when the flowers are still closed and without help from insects or wind
- In these plants there is little danger of cross pollination (pollen coming from another flower)
- Still, if you plant more than one variety of them they should be spaced at least 20 feet apart
 - Hungry insects could break in to the flowers

How to collect seeds for these?







Peas

- Easy to grow
- Easy to collect seeds
- Healthy, nutritious
- Relatively pest and disease-free
- Cool season crop, sow very early spring
- Growing peas is good for your garden
 - Adds organic matter to your soil
 - Adds nitrogen to your soil, which can be used by other plants in your garden
 - This is called nitrogen-fixing
 - Only occurs if there is enough rhizobial bacteria in the soil
 - Peas and beans accumulate these bacteria in root nodules



Varieties of Peas

- Shelling peas
 - You eat only the seeds inside the pods
 - For soups, fresh, or canned
- Snow peas
 - You eat the pods
- Snap peas
 - You eat the pods and the seeds
 - Sweetest, most productive
- Territorial Seeds has 7 varieties of shelling peas, 7 varieties of snow peas, and 6 varieties of snap peas



Collecting Pea Seeds

- Leave some pods growing
- Let them swell, yellow, and dry
- When they start to rattle
 - Open the pods and collect the seeds into an envelope
 - Label the envelope!
- Store in cool, dry place
- Bring to the library



Variet	Y	
Harves	ter	
Phone a	number	
Locati	on	
Date		
Notes		

Beans

- Easy to grow in warm soil (>65F)
- Easy to collect seeds
- Excellent source of fiber, protein
- Excellent source of antioxidants
- Promotes digestive health
- They also fix nitrogen and enrich your soil



Varieties of Beans

- Bush beans
 - Don't require support
- Pole beans
 - Need support; wood poles or trellis
- Runner beans
 - Need support; wood poles or trellis
- Soybeans
- Dry shelling beans
- Territorial Seeds has 22 varieties of bush beans, 12 varieties of pole beans, 8 varieties of dry shelling beans, and 4 varieties of runner beans





Collecting Bean Seeds

- Leave some pods growing
- Let them mature, dry, turn brown
- When they start to rattle
 - Open the pods and collect the seeds into an envelope
 - Label the envelope!
- Store in cool, dry place
- Bring to the library



Common		
Variety		
Harvest	er	
Phone n	umber	
Locatio	n	
Date		
Notes		

Lettuce

- Easy to grow, short growing cycle
- Easy to collect seeds
- Plant every 2-3 weeks from February—October
- Good source of minerals, fiber, antioxidants
- It likes nitrogen
- Requires fertilizing with compost or manures
- Protect from too much direct sun during the summer months



Varieties of Lettuce

- Butterhead
- Crisphead
- French Crisp/Batavia
- Lettuce Mixes, Mesclun
- Loose-leaf
- Romaine
- Territorial Seeds has 12 varieties of Butterhead lettuce, 4 varieties of Crisphead lettuce, 18 varieties of Loose-leaf lettuce, 14 varieties of Romaine lettuce, and 12 mixes



Collecting Lettuce Seeds

- Let 20% of the plants grow until they bolt
 - Produce a flower stalk and become bitter
 - Not good to eat anymore
- Let them flower, set seeds, and turn dark
- When they are dry
 - Shake the seeds into an envelope
 - Label the envelope!
- Store in cool, dry place
- Bring to the library



Common name	
Variety	
Harvester	
Phone number	
Location	
Date	
Notes	

Tomatoes

- Easy to grow
- Easy to collect seeds
- Sow seeds in trays 6 weeks before setting out (soil >70F)
- High in nutrients and antioxidants
- Require fertilizing with compost or manures
- Determinate tomatoes
 - grow compactly
- Indeterminate tomatoes
 - grow on long vines, need support





Varieties of Tomatoes

- Cherry
- Early
- Heirloom
- Main Season
- Sauce/Paste
- Territorial Seeds has 11 varieties of Cherry tomatoes, 7 varieties of Early tomatoes, 4 varieties of Main Season tomatoes, 17 varieties of Heirloom tomatoes, and 8 varieties of Sauce tomatoes



Collecting Tomato Seeds (1)

- Leave a few fruit on the vines past eating stage
- Squeeze the juice and seeds into a jar
- Add the same amount of water
- Let sit in open air (75F) for 2 to 5 days until bubbles appear (fermentation) and surface is covered in mold

The fermentation removes germination inhibiting substances from the seed coat, controls many seed borne diseases, and aids in sprouting.

Don't ferment longer than 5 days or the seeds may begin sprouting.



Collecting Tomato Seeds (2)

- Skim off the mold, add clean water and stir
- Skim off remaining pulp and floating seeds
- Viable seeds sink to the bottom
- Pour off water and dry the seeds
- When they are dry
 - Put the seeds into an envelope
 - Label the envelope!
- Store in cool, dry place
- Bring to the library

Common name	
Variety	
Harvester	
Phone number	_
Location	_
Date	_
Notes	

