

The background of the slide is a dense, close-up photograph of various vegetable seeds, likely from the Cucurbitaceae family, showing different shapes and shades of brown and tan. The seeds are scattered across the entire frame, creating a textured, organic pattern.

# **Vegetable Seed Saving**

**BY  
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# Why Save Seeds



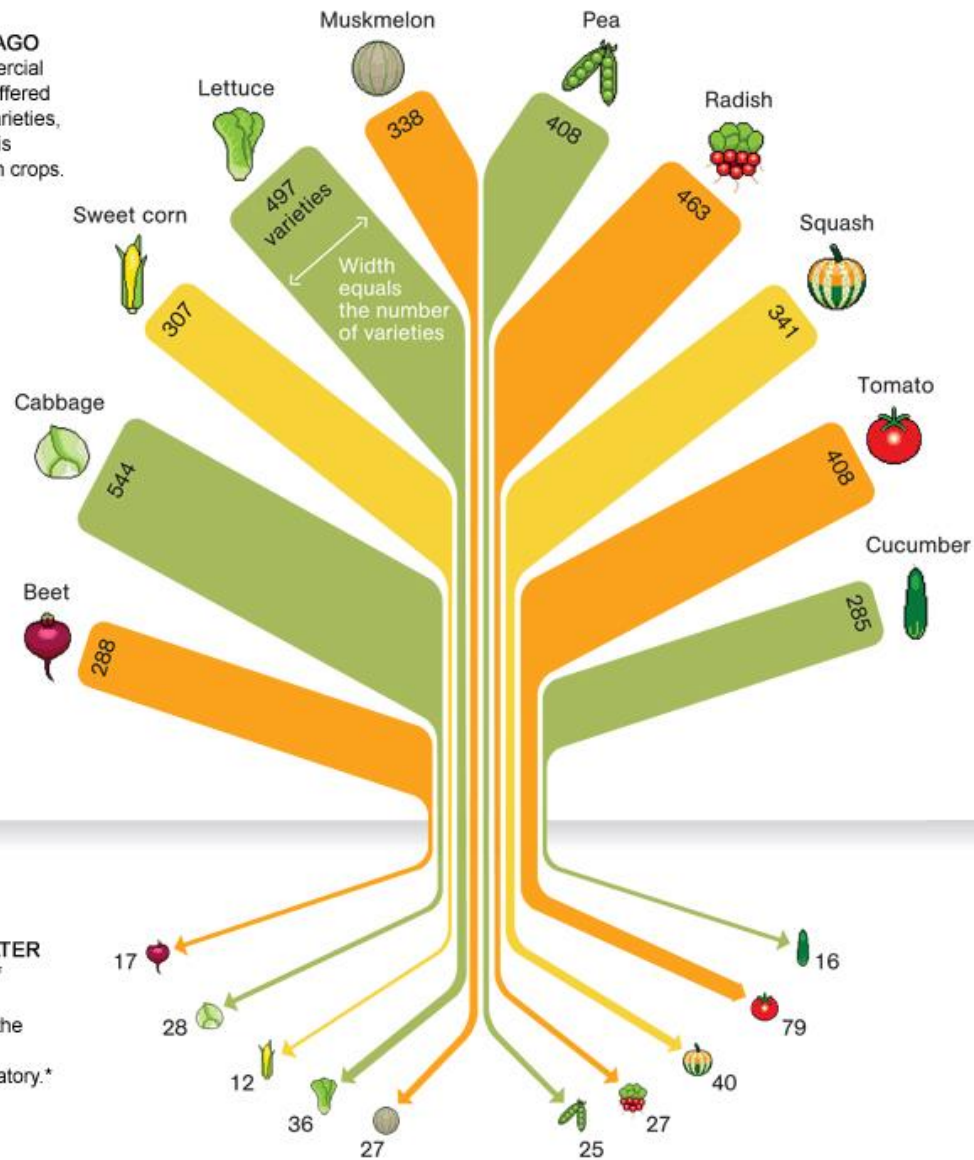
- Save money
- Help preserve heirloom seeds genetic diversity
- Your own breeding goals vs. commercial breeding goals
- No GMO's and loss of food plant adaptability
- Seed saving is satisfying and fun
- Over time, the seeds you save from your own garden grow plants that are uniquely adapted to the conditions in your garden.

# Seed Diversity



- There is a real threat to plant diversity
- The Food and Agriculture Organization of the United Nations estimates that about 75 per cent of the genetic diversity of agricultural crops has been lost in the last 100 years.
- In the early 1900's there were about 1500 different plants providing our food.
- By 1970 30 plants provided 90% of our food supply.
- The increasingly small genetic base is not only limiting the diversity of food we get on our plate, it makes the agriculture industry more vulnerable to pests and diseases.

**A CENTURY AGO**  
 In 1903 commercial seed houses offered hundreds of varieties, as shown in this sampling of ten crops.



**80 YEARS LATER**  
 By 1983 few of those varieties were found in the National Seed Storage Laboratory.\*

\* CHANGED ITS NAME IN 2001 TO THE NATIONAL CENTER FOR GENETIC RESOURCES PRESERVATION

JOHN TOMANIO, NGM STAFF. FOOD ICONS: QUICKHONEY  
 SOURCE: RURAL ADVANCEMENT FOUNDATION INTERNATIONAL

# Open Pollinated & Heirloom



- You want to save seeds from open pollinated types. Meaning the plant is pollinated by nature, such as from the wind, insects, or birds.
- Heirloom seeds are the seeds that have been passed from one generation to the next.
- They have been selected for their production, flavor and dependability not their ability to stay fresh on a truck and in stores for days.

# What Seeds To Save



- You can select for the qualities you want to bring out.
- The health of your seeds begins with the plants that produce them.
- Strong, healthy, disease-free plants produce healthy seeds and seedlings that are larger, more viable and more vigorous.
- Mark the vegetables to save for seeds with a permanent marker.

# Save Me!



# You Don't Know What You'll Get With Hybrids



- Hybrid varieties are those produced from the crossing of two different inbred lines. Seed saved from hybrid varieties will not breed true in the next generation.
- Hybrid seeds are designed to produce very nice plants the first time around. They are the result of a grower's deliberate pollination of one plant by another, usually done by hand. Often this involves many crosses that would be unlikely to happen without human intervention.



# Cross Pollination



- For a serious seed saver cross pollination must be considered.
- To keep your plant true to it's variety you must prevent it from being pollinated by another variety.
- This can be done by planting the varieties a specified distance apart, sometimes up to half a mile.
- Or by building a blind between the varieties.
- Plant varieties that bloom at different times.
- The easiest way is to plant just one variety that you want to save seeds from.

# Seed Storage



- Keep your seeds alive by storing them properly.
- Humidity and heat will cause the quickest deterioration.
- Optimum storage is in a labeled paper envelope then into a zip lock bag with a packet of silica gel.
- Seeds can be stored in the refrigerator or a dark room at 60 degrees.
- Never store seed in a humid, warm or sunny spot.
- Don't ever leave it in a greenhouse for even a few hours.
- Most seed stored properly will last for several years. A few seeds are good for one year only, such as onions, parsnips, parsley, and chives.

# Germination Testing



- Use any plastic or glass container that will hold a damp paper towel, newspaper, or moistened cotton along with 10 seeds.
- Label type and date.
- After a week or so check on your sprouts. If eight out of 10 seeds in any given test sprout, you can assume the germination rate to be 80 percent ,which is good.

# Bean, Lettuce, Pea, Pepper, Tomato



These vegetables offer the beginning seed saver the best chance for successful seed saving. They produce seeds the same season as planted and are mostly self-pollinating.

# Beans & Peas



Allow pods to dry brown before harvesting, about six weeks after eating stage. If frost threatens, pull entire plant, root first, and hang in cool, dry location until pods are brown.

Once the pods are dry they can be opened by hand and remove the seeds.



# Dry Green Bean & Pea



# Lettuce



- Most lettuces start to bolt when the temperature gets too hot.
- Then the plant will start sending up its seed stalk.
- This will produce clusters of small yellow flowers resembling tiny dandelions
- The seed will take anywhere from twelve to twenty-four days after blooming to ripen.
- You can cut off a piece with dried flowers and put in a baggie to shake seeds loose.

# Lettuce Going To Seed





# Tomatoes



- Tomato seeds need to ferment
- Cut off top and squeeze seeds into a bowl or jar, remove any green seeds
- Add a little bit of water and ferment 3-5 days
- There will be mold on top
- Rinse seeds in a strainer
- Lay on a non porous surface such as an aluminum pan to dry before storing



Cut Tomato



Squeeze Out Seeds



Add Water



Ferment 3-5- Days



Rinse



Strain



Lay Out To Dry



# Peppers



- Allow some fruits to stay on the plants until they become fully ripe and start to wrinkle.
- Remove the seeds from the peppers and spread them out to dry.



# Cucumber



- Harvest the fruits, then cut them in half lengthwise.
- Over a bowl, scoop out the seeds from the center of each half.
- Add about as much water to the bowl as the amount of seeds, and set aside in a warm, sheltered spot to ferment.
- Fermentation of cucumber seeds can occur in as little as one to three days; once most of the seeds have sunk to the bottom of the container, they are finished fermenting.
- Add more water to the bowl at this point to clean your seeds.
- Debris and bad seeds will float to the top, where you can discard them easily. The good seeds will be at the bottom.
- Rinse, then strain them and place them on a non porous surface to dry.
- Once they are completely dry, label your seeds and store them in a cool, dry place.

# Melons & Squash



- Melons & squash are very easy to save.
- Rinse the seeds.
- Dry on a non porous surface.
- Watermelon seeds should be rinsed with a bit of dish soap to remove any sugar.
- Summer squash must ripen past the tender stage.
- When you can't dent the fruit with your fingernail it's at the right stage for seed saving.

# Corn



- Allow the ears to dry on the plant and harvest when husks are dry and papery.
- Once harvested some additional drying under cover or indoors may be necessary before they can be shelled easily.
- Shell corn by rubbing two ears together.
- Once shelled use a 1/2" screen on top of a 1/4" screen to help with cleaning.
- Corn seed can remain viable for 5-10 years under cool and dry storage conditions.

# Removing corn seed





# Biennial Vegetables



- You will not get seeds from a biennial vegetable in the first year.
- Takes two years to complete its biological lifecycle.
- First year the plant grows leaves, stems, and roots.
- They go dormant over the winter.
- Second year the plants will flower.
- Examples are onions, parsley, carrots, cabbage, beets, celery, Brussels sprouts, cauliflower, chard.

# Additional Information



- Organic Gardening.com [www.organicgardening.com](http://www.organicgardening.com)
- Natural Life Magazine  
[www.naturallifemagazine.com](http://www.naturallifemagazine.com)
- Garden and Hearth [www.gardenandhearth.com](http://www.gardenandhearth.com)
- International Seed Saving Institute  
[www.seedsave.org](http://www.seedsave.org)
- Seed Savers Exchange [www.seedsavers.org](http://www.seedsavers.org)
- Terroir Seeds [www.underwoodgardens.com](http://www.underwoodgardens.com)