

Scripps Miramar Seed Library

“Grow & Share”



Newsletter

AUGUST 23

HEIRLOOM GARDENING

In heirloom gardening, every seed has a story. Rich in flavor and history, heirloom vegetables have been passed down by generations of farming families and communities. “Heirlooms” are fruits and vegetables whose seeds have been saved and planted over several generations. These rare species are renowned for unique color, texture and flavor profiles which have been preserved for decades.



An heirloom plant, heirloom variety, heritage fruit (Australia and New Zealand), or heirloom vegetable (especially in Ireland and the UK) is an old cultivar of a plant used for food that is grown and maintained by gardeners and farmers, particularly in isolated or ethnic minority communities of the Western world.

The definition and use of the word *heirloom* to describe plants is fiercely debated.

One school of thought places an age or date point on the cultivars. For instance, one school says the cultivar must be over 100 years old, others 50 years, while others prefer the date of 1945, which marks the end of World War II and roughly the beginning of widespread hybrid use by growers and seed companies.

A true heirloom is a cultivar that has been nurtured, selected, and handed down from one family member to another for many generations. Seeds must also be open pollinated.

Open-pollinated plants produce seeds that breed ‘true to type’. This means when you save and then plant the seeds of

an open-pollinated variety, you’ll end up with a plant that is very similar to the original parent plant. If you plant seeds from a Brandywine



tomato you grew in your garden, you’ll end up with another Brandywine tomato plant.

For open-pollinated, heirloom vegetables that are self-pollinating like beans, peas, tomatoes, and lettuce; it’s easy to collect the seeds once they’ve dried or ripened. However, some types of open-pollinated crops, like cucumbers and squash, can cross pollinate if more than one variety is grown.

The Difference Between GMO, Hybrid, Organic, and Heirloom Seeds

Recently, there has been increasing concern as to the origins of our food. As people have become more involved with gardening, they may question where their seeds emerged from. Gardeners must be confident that the seeds they utilize to grow food are safe and the produce is also sound to eat.

There are multiple types of seed varieties such as GMO, Organic, heirloom, hybrid, F-1 hybrid and others. However, there are 4 main classifications of seeds which a gardener should be familiar with.

GMO Seeds

GMO stands for genetically modified organisms, and it can also be called Genetically Engineered or (GE) for short. GMO seeds are usually injected with genes from another plant or animal to give it traits that are favorable. Some of these traits could be enhanced frost tolerance or resistance to weed killers. Genetically modified seeds are only sold to large commercial farmers not to small home gardeners. Sometimes seed packets say “treated” or “improved” but that does not mean it is a GMO product. It means that farmers have cross pollinated different heirloom varieties or treated the seeds with a different



color so it cannot be mixed with the same type of seeds. Since all types of cucumber seeds look the same, they just treat the seeds with a light color to differentiate the variety.

Hybrid Seeds

A hybrid is the combination of genetics from two of the same species. So, if we took a red-hot pepper and pollinated it with yellow sweet pepper, the hybrid (offspring) might be a red sweet pepper! Saved seeds from hybrids will have unpredictable results.

What is the meaning of F1, F2, and F3 hybrid? - The F# just indicates the generation it comes from. Therefore, F1 is the most common and means it is the first generation. F2 means the second generation, etc.

Organic Seeds

One of the most frequently used terms in seed labeling, "organic" refers to how plants and seeds are grown. Seeds labeled as organic must be nurtured and processed in strict accordance with the USDA's National Organic Program (NOP) standards. These standards foster recycling of resources, promote ecological balance, and conserve biodiversity while prohibiting the use of synthetic fertilizers, pesticides, irradiation, genetically engineered seeds and materials, as well as sewage sludge. Therefore, a seed produced from a plant grown in this manner is considered organic and can be labelled as such.



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Heirlooms Seeds

"Heirlooms" are fruits and vegetables whose seeds have been saved and planted over several generations. These rare species are renowned for their unique color, texture and flavor profiles which have been preserved for decades. The seeds are grown to maturity, prevented from cross pollinating with other varieties and the genetics are preserved for the next year. If the crop is grown long enough, it goes through stabilization (the tendency to revert to the parent), and once the plant has been stabilized, it can be considered an heirloom. Heirlooms are reliable because they have been grown for so many years; their yields, growth habits, and disease resistance are well known by the gardener.



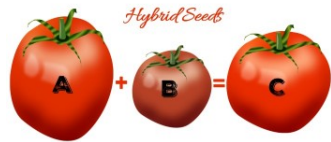
Why Heirloom?

Heirloom fruits and vegetables differ from hybrid or conventionally grown in four keyways- age, pollination, hardiness and quality.

Passed down over generations, many heirloom gardeners saved, selected, and passed down heirloom seeds dating back to the 1800s.

True-To-Type

Unlike hybrid varieties, heirloom plants rely on open pollination by insects, birds, and the wind to produce seeds. This type of pollination ensures that heirloom seeds produce plants that are true-to-type, meaning that each plant will have the same size, growth habit, color and flavor as its predecessor.



Hardier Plants

Growing the same crop year after year improves its strength over time. Due to this fact, heirloom plants can build resistance to regional pests and stressors, insuring a more robust plant and a higher yield.

Superior Quality

Heirloom vegetables are famous for their superior qualities and performance. While conventional farmers pick crops for transport when they are under-ripe, heirloom gardeners harvest plants at peak ripeness. For this reason, heirloom gardening tends to produce more flavorful fruit and vegetable varieties.

Heirloom Gardening

Choose Heirloom Vegetables Wisely

To pick heirloom varieties that are easy to grow and do well in a range of climates, start with produce like beets, beans, cucumbers, tomatoes, peppers, and lettuce. In addition, choose heirloom seeds that are native to your region.

Source Good Quality Seeds

You can purchase heirloom seeds from seed catalogs, seed exchanges and even farmers markets. However, "purists" tend to favor seeds sourced through exchanges or passed down from other gardeners.

Plant Your Crops Strategically

A healthy heirloom garden starts with healthy soil. In a small garden, it is best to plant only one variety of a species at a time to prevent cross-pollination.

Let Heirloom Vegetables Fully Ripen

When it comes to harvesting and saving seeds, heirloom vegetables must ripen on the plant. How do you know if your crop is ripe? Some gardeners advise taking a sample. If the seeds are soft, whitish, or hollow, they're probably not ripe. If given enough time, the seeds will mature. Once your seeds have ripened, you can pluck the vegetable from the vine.

Save Seeds for Future Planting

Saving seeds is as simple as plucking, drying, and storing them. Once you have harvested your crops, place the seeds on a flat surface in a cool area to dry. When they are fully dry (usually between two and three weeks), store the seeds in well-marked bags, jars, or envelopes.

Examples of Heirloom Varieties

Eggplant: The **old white egg eggplant** was an ornamental variety that was the size of a chicken egg, first appearing in England in the 1500's. Several non-white varieties were developed, the most stunning is the Black Egg. It has black stems as well which adds to its appearance. It is an old variety from China, developed in the 1930's. All the eggplants grow on compact bushes and will easily cross with one another. Therefore, they should not be grown together for seed-saving reasons, unless you are attempting to develop hybrid varieties.



Black Egg is a small fruited variety of eggplant closely resembling the type of eggplants known in the Middle Ages.

Tomatoes were viewed suspiciously until the 1830's but became very popular by the 1850's. Many different varieties of heirloom tomatoes were developed but some have slipped into obscurity as the diversification of the tomato increased.



The tomato is classified by its seasonality (early, midseason or late), by

determinate or indeterminate (how the vines fruit) and by leaf type (potato leaf, regular and ferny). In addition, some may attempt to classify by fruit type, oblongate (round but flat like a squash), carrot shaped (long and pointed) and globular (round).



Delicata Squash (*Cucurbita pepo*) is an heirloom squash approximately 120 years old. The fruit is 8-10 inches long, thin skinned and waxy. It has a deep orange-yellow flesh that is fine and sweet. The squash tends to spoil quickly if not stored in a dry pantry between 45-55 degrees. When cut in half lengthwise, it makes two single portions with easy removal of the seeds and can cook quickly in a microwave oven. This contributes to its



popularity, especially with chefs.

Lemon Cucumber (*Cucumis sativus*) was introduced in the 1890's as a novelty. It is round, white skinned with bright yellow streaks. It is harvested when it is 2.5-3 inches in diameter. The skin is thin with no bitterness. It is highly productive, tolerates drought and is resistant to fungal diseases. It is popular in California due its qualities but is attacked by the squash beetle.



The Lemon Cucumber does not require paring. Beside it, on the right, is a small Boothby's Blond Cucumber

SEED LIBRARY PICK – PLANT-Cucumber

The **cucumber** (*Cucumis sativus*) is a widely-cultivated creeping vine plant in the family Cucurbitaceae that bears cylindrical to spherical fruits, which are used as culinary vegetables. Considered an annual plant, there are three main types of cucumber—slicing, pickling,

and seedless—within which several cultivars have been created. The cucumber originated in Himalaya, China (Yunnan, Guizhou, Guangxi) and N. Thailand.

In 2020, world production of cucumbers and gherkins was 91 million tons, led by China with 80% of the total. Cultivated for at least 3,000 years, a great many varieties have been observed,

SEED LIBRARY PICK-RECIPE-Heirloom Tomato and Nectarine Salad with Whipped Feta

Ingredients

3/4 cup crumbled feta cheese (about 1/3 pound)

1/4 cup of whole milk

2 teaspoons of extra-virgin olive oil, plus more for drizzling

2 nectarines, quartered and sliced into wedges

1 pound of heirloom tomatoes, sliced 1/2-inch thick and halved



1/4 cup of marcona almonds

1/4 cup of fresh mint, coarsely chopped

1/4 cup of flat-leaf parsley

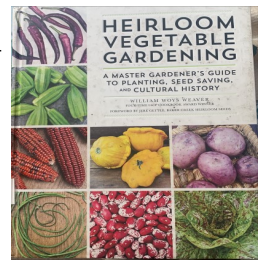
flaky sea salt for serving

Directions

In the bowl of a small food processor, combine the feta with the milk and olive oil and process until smooth. Press the cheese through a fine mesh strainer set over a small bowl to discard any cheese crumbs. The mixture should be very smooth. Add the whipped feta to a large serving plate and top with the nectarine and tomato slices. Add the almonds to the top and drizzle the fruit lightly with olive oil. Finish by garnishing with chopped mint and parsley and a sprinkling of flaky sea salt to serve.

SEED LIBRARY BOOK SUGGESTION– Heirloom Vegetable Gardening

A Master Gardener's guide to planting, seed saving and culture history.



Call no. 635/Weaver

Garden Events @ Scripps Ranch Library



Garden Share
Saturday: August 19th, Garden Share @ 11-1pm

Join us with your friends and family to share your garden. Bring what you know to know, take home something you really want. Be sure to bring a bag to take home your finds! What to bring: Any seeds (mostly from the garden), produce, fruit, herbs, flowers, plants in pots, seeds, seedlings, tools. *Assuming garden-related is welcome.* Come meet your fellow gardeners and share your experiences!

The library has several events going on this month if you are interested.

Garden Share- Aug 19th 11-1 pm

References:

Weaver, William Woy (2018) "Heirloom Vegetable Gardening". Published by Quarto Publishing Group Inc USA

There are multiple resources available at Scripps Ranch Library that are not cited here. We request that you share pictures of your garden and tells us about your experiences, which can be helpful for other gardeners. Also, we invite you to send in your garden related questions and we will answer them in the next newsletter.

This newsletter is composed by Ashu Agarwal and edited by Jeff Lash

For any questions, please contact Ashu Agarwal (seedlibrary@sfol.org)

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