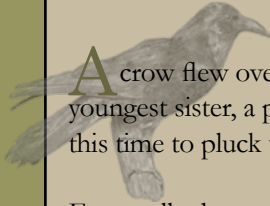


The Three Sisters

Here's an ancient practice that helps your garden and provides the same nutritious fare our forefathers enjoyed.



By Gregory LeFever



A crow flew over a field and saw three sisters happily playing in the summer sun. He swooped down and snatched up the youngest sister, a plump little girl dressed all in green, and carried her away. Days passed and the crow returned to the field, this time to pluck up the middle sister in her yellow dress.

Eventually the crow came back for the oldest sister, still standing tall in her green dress with yellow hair waving in the breeze. The crow could see that she desperately missed her two younger sisters.

But the crow was impressed with the oldest sister's dignity, and he flew back to his nest. There he gathered up the two sisters he'd abducted and returned them to the field. All three sisters rejoiced and, as the crow flew away, they thanked him for reuniting them.

Or something like that. There are many versions of the "three sisters" legend from Native American sources, usually Iroquois or Mohawk or Algonquin. Regardless of the story line, the purpose of tale is to describe how planting close together squash (the plump sister), beans (in her yellow dress) and corn (with her yellow hair) is a joy to each of the plants.

In fact, the practice of planting squash, beans and corn with each other goes back to prehistoric America, about 10,000 years ago. Yet the wisdom of the "three sisters" is borne out both in today's methods of companion planting and our knowledge of human nutrition.

Age-old Wisdom

Planting the "three sisters" was the foundation of all Native American agriculture and different tribes had their own variations. But the basic method remained surprisingly unchanged over the thousands of years it took to travel the many thousands of miles from Central America northward into Canada.

Indians usually planted corn in a checkerboard manner – not rows – with each patch having up to four stalks. They planted beans at the base of the emerging cornstalks so the stalks would serve as a trellis for the bean vines. Then they planted squash seeds in the areas between the corn-and-bean patches.

And here's why. Cornstalks provide a perfect support for bean vines, which achieve higher yields the higher they climb. In turn, beans are superior gatherers of nitrogen from the air to send it into the soil via their root systems. Corn yields improve in nitrogen-rich soil.

Meanwhile, squash leaves are broad, coarse and stiff as they grow on long and winding squash vines. These leaves shade the ground so that it remains moist and cool, helping corn to grow higher and bean vines to grow longer. Just as they curb



The traditional form of "three sisters" planting, with the cornstalks, beans and squash all planted in mounds rather than rows. Here the bean vines are beginning to climb the cornstalks while the squash leaves shield the ground.

(Photo courtesy of Warren County, Pennsylvania, Conservation District)



How to Plant 'Three Sisters'

Just as every Native American tribe had its own twist on "three sisters" planting, so does every contemporary gardening book.

Not only did tribes practice regional considerations – such as burying fish or eels as part of the initial sowing – but they also had special signs such as planting the corn when Canada geese were returning northward or postponing planting until dogwood leaves were the size of a squirrel's ear.

Here's a basic formula for "three sisters" planting:

- 1. Make a mound of soil a foot high and four feet long. Add fish scraps, wood ash or other nutritional amendments if you want.**
- 2. After the danger of frost has passed, plant about six kernels of corn an inch deep, about a foot apart, in a circle about two feet in diameter.**
- 3. When the cornstalks are five to six inches tall, plant four bean seeds around each stalk. (Be sure to use vine beans and not bush beans.)**
- 4. A few days later, plant six squash seeds around the edge of the mound.**

Be sure to use vine beans and not bush beans, and you may want to plant more squash seeds between the mounds. But this gives you a general idea of the method.

weed growth, these prickly leaves also discourage the foraging of animals such as deer and raccoons that love to feed on young corn and beans.

Most Native American tribes believed the wisdom of the "three sisters" planting method had been handed down from the spirit world. Likewise, many believed the plants possessed a special power when eaten together and would help protect the men, women and children who shared them as a meal.

As it turns out, the early Native Americans who began using the "three sisters" method were thousands of years ahead of modern nutritional findings. Corn, while high in calories, is low in protein and is deficient in two important amino acids. Today we know that beans are a rich source of protein and contain those amino acids. Squash is something of a powerhouse – high in calories, vitamins and minerals, with seeds containing beneficial proteins and oil.

Very Ancient History

Early European explorers in North America—whether the French and English along the Eastern Seaboard or the Spanish in the arid Southwest – all took note of the way local tribes were planting these three valuable crops together.

Scientists have since determined that the tribes had been doing so for several thousand years. Domestication of squash and pumpkin – itself a type of squash – dates back 10,000 years to Central America. By the time Europeans first landed in the Americas in the late 1400s, squash was already rampant, with Christopher Columbus introducing the pumpkin to Spain on a return voyage. English settlers in the early 1600s found squash plentiful all along the East Coast and deep into Canada.

*Squash from the gardens at Colonial Williamsburg.
(Photo courtesy of Colonial Williamsburg Foundation)*



Left: An early variety of squash still being cultivated in the gardens at Colonial Williamsburg. The more familiar acorn squash, which is the most popular varieties of squash in today's supermarkets, was seldom mentioned by gardeners in early America. (Photo courtesy of Colonial Williamsburg Foundation)

Below: Pattypan or scalloped squash was the most commonly grown squash in both early America and England. (Photo courtesy of Colonial Williamsburg Foundation)

Prehistoric beans have been found in caves in Peru, also going back about 10,000 years. As with squash, ancient people cultivated many varieties of beans in many locales, though nearly all were grown on vines, with the bush bean coming along much later. As he had with squash, Columbus first noticed beans growing profusely in the Bahamas and carried samples back to Europe.

Corn – or maize, as it's more commonly known throughout the Americas – also was domesticated at least 8,000 years ago, based on the archeological discovery of milling tools and maize residue in caves in Mexico. It was a favorite crop of the Olmecs and Mayan civilizations and spread rapidly to tribes living throughout North America due to its ability to grow in diverse climates.

The one significant departure from the traditional “three sisters” method occurred in the American Southwest, where tribes added a fourth sister. Known as “bee weed” or Navaho spinach, the purpose was to attract more bees for pollination of the other three plants. Tribes along the northern Atlantic coast buried fish and eels in the areas where they planted corn so



A Basic “Three Sisters” Succotash

Many Native Americans believed that the “three sisters” method of planting corn, beans and squash together was handed down from the spirit world, and that eating the vegetables together was powerful and protective.

Just as there is great variation among the actual planting methods, there are countless recipes for succotash – the most popular dish using the three vegetables. The word comes from “msickquatash” in the Algonquin language for “boiled corn kernels.”

It first became popular with English settlers in America in the early 1600s in the Rhode Island Colony, was a favorite during the Great Depression, and remains favored today in America, Europe and Africa.

Here’s a basic recipe for five one-cup portions.

Ingredients:

- 1-tbsp vegetable oil
- 2 cups fresh or frozen corn
- ½-cup onion, chopped
- 1 large red bell pepper, chopped
- 1 cup green or golden summer squash, chopped
- 2 cups canned Lima beans, drained or frozen frozen lima beans that are thawed.
- 2 garlic cloves, minced
- 1 tbsp ground cumin seed
- ¼-tsp black pepper
- 1 tsp salt
- ½-cup chicken or vegetable broth
- 2-tbsp fresh cilantro, chopped

Preparation:

- Heat up a large sauté pan.
- Add the oil and then sauté the corn and onion until the onion begins to caramelize, about 5 minutes.
- Add the squash, cumin, salt, black pepper and garlic.
- Cook for another 3 or 4 minutes on medium heat.
- Add the broth, cilantro, and lima beans.
- Simmer until all the vegetables are tender, about 5 minutes.

There are many regional variations of succotash, some using bacon, and a number of additional vegetables, often tomatoes. You should do just as our ancestors did – explore the variations or create a delicious version yourself!

that the soil would be beneficially rich when they planted the beans and squash when the young cornstalks were about six inches high.

A Proven Method

Wherever Europeans first settled in the New World, they found the local climate far different from what they were used to – New England much colder, Virginia much hotter, and the Southwest much drier. These settlers had to grow food in order to survive, so they copied the agricultural habits of the local tribes.

Accounts abound of early settlers adopting the “three sisters” method of planting, with a fair amount of folklore crediting it with them from starving. Whether it played a life-or-death role is a matter of conjecture, but it’s certain that the “three sisters” improved colonial agriculture – as it had for local tribes for thousands of years, and as it continued to do as American pioneers continued to conquer the wilderness – and contributed to the country’s culinary habits.

Succotash – from the word “msickquatash” in the Algonquin language – usually refers to a dish comprising at least corn and beans, with countless regional variations. Recipes vary according to geographic preferences and seasonal variations, with additions of various other vegetables as well as different meats. Numerous cookbooks during the 1800s contained succotash recipes, and it was especially popular during the Great Depression because it is economical, healthful and surprisingly delicious.

Another measure of the success of the “three sisters” planting method is the fact that it gained popularity during the 18th century in parts of Europe – as did eating succotash – and then moved on to parts of Africa. In these locales as well as in the Americas, to this day the sister in her green dress, the one in the yellow dress and their tall sister with the yellow hair still enjoy each other’s company wherever companion planting is practiced.

