



THE YEAR-ROUND FOOD GARDEN

GROWING FOOD WITH THE FOOD GARDENING SPECIALISTS

PLANTING A 3 SISTERS GARDEN



Originally developed in the New York region by the Iroquois Indians, 3 Sisters is a traditional companion planting method using corn, beans and squash. Planted together, they each benefit the other plants. The corn provides support for the beans, the beans provide nitrogen for the corn and squash and the squash spreads out to protect and cool the soil and suppress weeds for the beans and corn. All three eaten together provide a highly nutritious diet. Other crops such as sunflowers, amaranth and tobacco were considered to be “sisters” as well and were inter-planted with the beans and corn. Vining crops like watermelon, melons and gourds can be substituted for the squash.

Variety suggestions

Beans (Pole)

Fresh eating

Musica

Ideal Market

Santa Ana

Kentucky Wonder

Cherokee Trail of Tears (Fresh or Dried)

Dried

True Red Cranberry

Good Mother Stallard

Hidatsa Shield

Gold of Bacau

Mayflower (Fresh or Dried)

Corn

Choose varieties that are at least 6 ft. tall, giving the beans enough room to climb.

Fresh eating/Sweet

Country Gentleman – 7-8 ft. stalks

Silver Queen – 7 ft. stalks

Golden Bantam Improved – 6 ft. stalks

Dried/ Flour

Hopi Blue – 6-9 ft. stalks

Dakota Black Popcorn – 6 ft. stalks

Glass Gem – 6-9 ft. stalks

Roy's Calais – 7 ft. stalks

Oaxacan Green – 10 ft. stalks

Squash (Vining types)

Trombocino

Waltham Butternut

Spaghetti

Delicata Zeppelin

Cornfield Pumpkin

The following traditional 3 Sisters varieties are listed by [Native Seeds/SEARCH](#) in Arizona:

Corn:

Chapalote Pinole Popcorn

Dia de San Juan Dent

Flor del Rio Popcorn

Guarjio Red Sweet

Rio Grande Blue Flour

Beans:

Four Corners Gold

Hopi Purple String

Pima Orange Lima

Tarahumara Ojo de Cabra

Tohono O'odham Vayos

Squash:

Magdalena Big Cheese

Mayo Blusher

Navajo Orange Hubbard

Tarahumara Pumpkin

Tohono O'odham Ha:l

When to plant

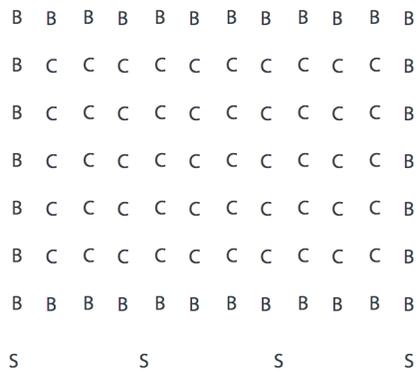
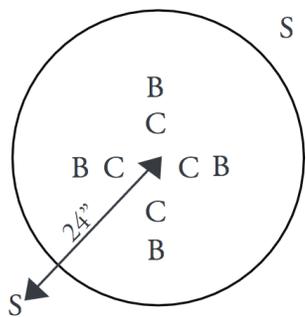
Corn, beans and squash are all warm season annuals. Corn is planted after all danger of frost has passed in the spring. Pole (climbing) beans are planted next when the corn is between 4- and 6-inches tall. Plant the squash about 1 week after the beans have sprouted.

How to plant

- Make sure you select a planting area that gets full sun
- Amend the soil with good quality compost
- Direct sow the seed for best results
- Plant all seeds 1-inch deep

There are several suggested ways to layout a 3 Sisters garden:

Native Seeds/SEARCH recommends the following layouts. One is a 4-foot wide by 4-inch high mound. The other is a large rectangular block.

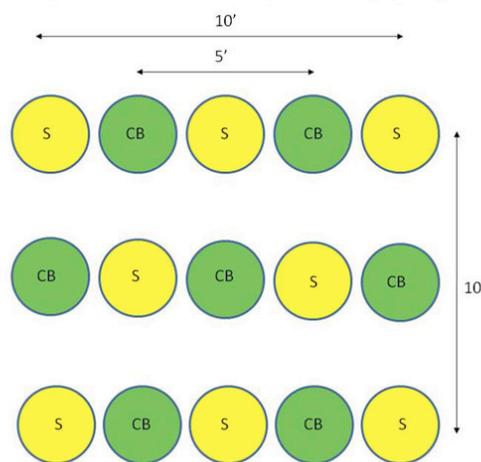


In mounds, plant 4 corn seeds 6-12 inches apart in the middle. Once the corn is 4-inches tall, plant a bean seed 3 inches from each of the stalks. One week after the beans sprout, plant 2 squash seeds 24 inches from the center on two sides of the mound or 1 seed on each of the four sides. (Some plant extra seed to ensure good germination.) The centers of additional mounds should be approximately 5 feet apart, leaving just enough space between mounds so you can harvest corn and beans from any side.

In blocks, plant corn 6-12 inches apart in an area no less than 4 square feet. Corn is wind pollinated. Therefore, the block planting ensures better transfer of pollen between plants than if corn is planted in a long single row. Plant bean seeds around the perimeter of the corn close enough so the vines can reach the corn and climb. Plant squash seeds on the sunniest side of the block 3 feet away from the beans, at least 1 week after the beans have sprouted.

One drawback to planting in a block is that it will be difficult to harvest the corn if it matures faster than the beans. To avoid this, try to match the days to maturity so both the beans and the corn are ready to harvest at about the same time.

In an article for Renee's Garden, Alice Formiga suggests another possible layout. She recommends a 10 square foot block of 15 round mounds. The corn and beans are planted together in one mound and the squash is planted in alternating mounds.



In her mounds, she uses 4 corn seeds and 4 bean seeds together. She uses 3 squash seeds in each of her squash mounds.

References used to prepare this document:

["How to Grow a Three Sisters Garden,"](#) Native Seeds/SEARCH, undated.

Formiga, Alice, ["Celebrate the Three Sisters: Corn, Beans and Squash,"](#) Renee's Garden, 2014