Most plants in the vegetable garden require a few square feet of space in order to grow well. Members of the family Cucurbitaceae (commonly called cucurbits or the squash family) are the exception. While Cucurbitaceae is the most widely cultivated plant family in the world, most American gardeners limit their production of this family to cucumbers, zucchini, and yellow squash. Available space may be partly to blame for this phenomenon, but gardeners with ample space should consider adding at least one more member of this family. Watermelons are a fun and rewarding crop for the home garden.

Hills are commonly built up in the garden where watermelons will be planted. These hills allow for warmer soil conditions and better drainage. The latter of these two is the most important, especially in gardens with heavier soils since watermelons prefer sandy-loam soils which are very well-drained. Additionally, gardeners who plant melons on hills are more certain that they are delivering water to the root zone of the plants later in the season when extensive vine growth tends to hide the plants’ crown on level planting beds.

While watermelons can be transplanted into the garden, it is easiest to directly seed them into the hills. Each hill should be at least 3 or 4 inches above grade and 12 to 18 inches in diameter. Each hill should have about 64 square feet of clear space around it. For multiple hills, space them 8 feet apart. Plant 4 or 5 seeds per hill and after germination, select the best performing 2 to grow on, removing all others.

Like all other cucurbits, watermelons produce separate male and female flowers. The first flush of flowers is typically all male, so do not expect fruit from them. Their purpose, instead, is to attract pollinators and to provide pollen when female flowers are open. Pollinators are critical to ensure that the female flowers get pollinated. Research indicates that in order to get fully pollinated and to produce a good fruit, female watermelon flowers will need to be visited by a pollinator between 6 and 12 times.

The key to developing high quality fruit is ensuring good vegetative growth early on. When the plants begin to send out runners, a light application of nitrogen will help to create this vegetative growth. Apply nitrogen at this stage at a rate of 0.5 pounds per 1000 square feet. Do not apply fertilizer after the runner stage as it can delay flowering or cause the fruit to crack after it sets. A watermelon patch that has good cover will set and ripen more fruit and provide its own weed control.

Watermelons can be a great addition to spacious home gardens. However, because they are vining plants, gardeners with limited space can still include watermelons in their plantings. Vining crops are easy to train onto a vertical plane, just be sure that the scaffold you’ll be training the plant onto is sturdy enough to hold the plant along with its fruit. The developing melons will need to be tethered to the trellis with a sling-like support made from a material that is quick to dry.

For more information on growing watermelons for home use, visit http://extension.missouri.edu and search for watermelons.