

## **GROWING SEEDLESS WATERMELONS**

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Watermelons have come a long way since the discovery of their seedy fruits. Through the wonders of science, we now have seedless varieties. How are these seedless watermelon seeds produced? They are created by crossing a tetraploid (seedless) inbred line female parent with a diploid (seeded) inbred line male parent. The resulting varieties are available in various shapes, sizes and colors.

Several factors differentiate seedless from seeded watermelons. First, a pollinator is required. These specially bred melons bloom early, produce large quantities of pollen, and are smaller than the desired melons. Ace and Companion are just two of the pollinators available. Seedless melons also lack the vigor of regular varieties. The seed is expensive and must be handled with great care. It has a greater chance of rotting if certain conditions are not met. A sterile soilless mixture is required. Because the seedlings don't do well if their roots are disturbed, the seed must be planted directly into peat pots. Fill the pots with well moistened, but not wet, soilless starting mixture. Warm the pots to 90 degrees and hold them at that temperature for four days.

It is now time to plant the seedlings. To keep track of the seedlings, make separated plantings of the seedless variety and the pollinator. To insure good fruit set, plant three seedless to one pollinator. Plant the narrow seed, tip down, ½ inch into the soil. Cover the containers with a thin layer of clean sand. This will help maintain soil temperature and moisture.

As soon as the plants emerge, lower the temperature to 75 degrees. Gradually, harden off the seedlings. When the threat of frost is completely gone and the plants have their second set of leaves, plant the pots in raised beds fertilized with 15-15-15 or its organic equivalent at the rate of six pounds per 1,000 feet of row. Black plastic or paper mulch can be applied before planting. Row covers can also be used, but only after the plants have established themselves. Otherwise, the plants will cook. Space the pots with two feet between plants and six feet between rows. To prevent the peat pots from drying out, be sure to cover them with soil. Inter space the triploid with the pollinator. Apply a liquid starter fertilizer.

When the vines begin to run, side dress the plants with nitrogen at the rate of forty pounds per acre. For the rest of the season, watermelons require limited care. They will tolerate drought, but lack the vigor to outgrow weed competition. Beds must be free of weeds. Careful cultivation is required to protect the plants' shallow root system. The use of bees will make for earlier fruit set and increased yields. Two hives per acre are suggested.

If you have followed all these tips and have a bountiful crop, how do you tell when the melons are ripe? There are three signs. First, the bottom of the melon will turn yellow. Second, the tendril closest to the fruit will be brown. Third, when tapped, the melon will make a thumping sound.

The implementation of the tips outlined in this presentation will help you to meet the increasing consumer demand for seedless watermelons.