

## How to Grow Mouthwatering Melons in Northern Climates

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Watermelons and muskmelons are native to the hot climates of Africa and Asia, which provides a key to their successful growth. Their location of origin explains why melons are well-adapted to the Southern United States, where summers are long and hot.

Although North Dakota and Minnesota can experience stretches of heat in mid-summer, the growing season is shorter than some warm-loving crops require for full maturity. Our spring and fall months especially lack the long hot weeks preferred by crops such as sweet potatoes, peanuts and melons.

Growing sugar-sweet melons in northern climates is highly successful, though, if we follow a few simple steps to provide these heat-loving plants the environment they require for bountiful fruiting. The steps described below have worked well in my vegetable garden for the past 49 years. The process was developed through research at North Dakota State University's Horticulture Department in the late 1960's and early 1970's, and remains highly successful.

### Steps for Producing Melons:

1. Select cultivars adapted to Northern climates with days to maturity listed as 70 to 85 days. Types requiring over 90 days are too late. Muskmelons – Superstar, Sarah's Choice, Hanna's Choice, Halona, Aphrodite. Watermelons – Sweet Dakota Rose, Blacktail Mountain, Sangria.
2. Start seeds indoor approximately 21 days before the date you plan to transplant them to the garden after frost is likely past. For the Fargo area, I start melon seeds May 1 for transplanting to the garden about May 25. Sow seeds in germination mix with about 3 seeds per 2-1/2 inch or 3-inch pot. Water and cover with plastic wrap.
3. Place seeded pots on a germination heat mat, and be sure to provide high light immediately upon sprouting, or plants will stretch. Thin to 2 seedling per pot, if all germinate.
4. On warm sunny days, trays of pots can be moved outdoors in a wind-protected spot, and moved back indoors in evening.
5. When danger of frost is likely past, melons can be transplanted out into the garden, usually between May 25 and early June.
6. A key to success, revealed by NDSU research, is the use of clear plastic mulch, which creates a greenhouse-like effect when installed in contact with the garden soil, warming the soil below, which is vital for melon growth. Melon transplants are then planted into slits cut in the plastic, after the plastic is installed.
7. Use clear plastic mulch either 4 or 6 mils thickness, readily available at hardware stores, farm supply stores, and national chains. Rolls often come in various widths, but is best cut to 4 feet wide for final use. Black plastic warms its surface in sunshine, but does not

transmit heat into the soil the way clear plastic does. Other colors of plastic can provide benefits, but generally aren't widely available the way clear plastic is.

8. To lay the plastic, dig two shallow trenches in the soil, 3 feet apart, the length of the row you wish to plant. Lay the plastic over the soil with the edges in the trenches. Backfill the trenches with soil to secure edges of plastic. By using plastic 4 feet wide, six inches of the plastic will be buried in each trench, leaving a 3-foot wide surface of plastic.
9. If desired, plastic can be installed in early May weeks before planting, to begin warming the soil even earlier, or it can be done just before planting.
10. To transplant plants into the plastic, make X-shaped slits in the plastic, just large enough to install each plant. Melons are extremely sensitive to root disturbance. If roots are pulled apart during transplanting, the melon plants won't recover. To avoid root disturbance, I use peat pots, and gently break apart the pot sides and remove the rim when transplanting. Paper cups can also be used, and are easily torn away for transplanting. Plastic pots can be used if plants are very carefully removed.
11. Space plants about 18 inches apart within the row. If more than one row is desired, space rows 6 to 12 feet apart, the further the better to avoid crowding.
12. Secure the plastic slits around each plant with a few handfuls of soil, being certain wind cannot get beneath the plastic. Water after transplanting with a starter-type fertilizer.
13. Clear plastic admits sunshine, warms the soil beautifully, and conserves moisture. I've never had weed control problems. When weeds start, they are quickly solarized and fried. If heat-loving weeds, like purslane, escape solarization, melon vines soon totally cover the plastic, and weeds quickly languish in the dark below. Carefully remove any weeds that pop up next to plants in the planting holes.
14. Rain and irrigation water easily enter the plastic in the opening around each plant, and percolates in from the sides.
15. For additional earliness or frost protection, row covers can be used in addition to the surface plastic, although I've always enjoyed good crops of melons without.
16. Muskmelons are ripe when they separate easily and fully from the vine when given a slight tug.
17. Detecting watermelon ripeness is slightly more difficult. Check the curly wirelike tendrils near the stem. If still green, the melon isn't ripe. If brown and dry, the melon is possibly ripe, but not always at peak quality and sweetness, so check additional parameters. Ripe watermelons lose the glossy, waxy rind appearance, becoming slightly dull. The spot on which melons rest, the "ground spot" turns from cream to yellow on many cultivars. "Thump" or "flick" watermelons, using middle finger and thumb, listening for a sound similar to thumping the top of a leather shoe, or imagine thumping a water-filled rubber ball. Develop the technique by thumping a melon you know isn't ripe, and compare it to a ripe melon.
18. Flavor and sweetness of melons can vary year-to-year due to seasonal differences in temperature and moisture.
19. Happy Melon Growing!