

Horticulture Notes

Harvesting and Post-Harvest Care of Muskmelon (Cantaloupe)

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Muskmelons are harvested according to the degree of stem slip, which is the point when the stem separates from the melon. Growers producing melons for local sale can harvest the melons at full slip (when the fruit is completely separated from the vine). At this point, the fruit has reached full maturity and peak flavor, but will soften too quickly for shipping. For shipping, it is best to harvest when the muskmelons begin to slip usually “ $\frac{1}{2}$ slip” or “ $\frac{3}{4}$ slip.” Fruit harvested at this stage are not as soft as those at full slip, but do not have as high a sugar content as those at full maturity.

Fruit are generally ready to be harvested 30 to 35 days following pollination. Frequent or daily harvests are necessary to ensure that melons are of good quality especially if temperatures are high at the time of harvest. Assuming good cultural practices, one can expect to harvest 2,000 to 5,000 melons per acre when grown on bare ground or from 6,000 to 12,000 melons when using plastic mulch.

Muskmelons need precooling soon after harvest to reduce field heat. Field heat is heat accumulated by the fruit growing in a field. On days with high air temperatures, internal temperatures within the fruits is often equal to the air temperature. If field heat is not removed, melons degrade prematurely

resulting in poor quality melons with a greatly reduced shelf life. Precooling can be done with cold water, cold air, or ice. Hydrocooling is the most efficient method, but the choice among cooling methods depends primarily on economic factors and the type of shipping container used. Buyers generally specify packaging and shipping requirements. Room cooling and forced-air cooling are also suitable for melons.

Room cooling is necessary after precooling in order to maintain fruit quality. Muskmelons harvested at partial slip can be held for up to 15 days at 36 to 41°F at 95% relative humidity. Muskmelons harvested at full slip can be held for 5 to 14 days at 32 to 36°F at 95% relative humidity.

The major quality factor in melons is the sugar content of the fruit or soluble solids. A full-slip melon can have as high as 15% soluble solids. Melons harvested at partial slip can have soluble solids ranging from 8 to 12%. Soluble solids can be measured quickly in the field with a hand-held refractometer. To maintain the sugar content as high as possible, keep the foliage healthy by controlling foliar diseases, nematodes, insect pests, and weeds. Also maintain a good fertilizer and irrigation program.



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For more information, call your county Extension office. Look in your telephone directory under your county's name to find the number.

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