

CUCUMBERS & MELONS

Vegetable Gardens



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Vine crops such as cucumbers, muskmelons and watermelons take up considerable garden space, but recent breeding has developed compact growing varieties for backyard gardens. These crops are members of the same family and have common growth requirements. Contrary to popular thinking, however, they will not “cross” with one another to influence flavor. When “off flavor” occurs, it is usually the result of bitter flavor compounds that develop during hot, dry weather. Under poor growing conditions sugars do not mask other flavor compounds.

These crops are well adapted to the warm, drier weather of Kansas. Cucumbers are native to India; melons originated in the Middle East.

Varieties

Choose a variety that will produce the characteristics you prefer. Diseases are less of a problem in many newer varieties. Compact or “bush” varieties are well adapted to small gardens.

Cucumbers. Both slicing and pickling types are available. Pickling cucumbers are firm, blocky shaped, and mild in flavor. Many new hybrid varieties are available in both. Slicing types include Gemini, Triumph, Marketmore, Burpee Hy., and others. Several excellent small-vined cucumbers are available including Spacemaster, Pot Luck, Patio Pik, and others. Picking types include Earli-pik, Pioneer, Liberty, and others. The mild-flavored “burpless” types are hard to grow in exposed areas where heat and wind can damage the vines.

Muskmelons. We use the terms “muskmelon” and “cantaloupe” interchangeably. Hybrid varieties such as Burpee’s Hy., Supermarket, Harper Hy., Ambrosia and others offer excellent flavor and vine vigor. Several new small-vined types such as Minnesota Midget and Musketeer

are available. An early maturing honeydew melon, Earli-Dew, has done well in K-State trials.

Watermelon. Crimson Sweet, Supersweet, and Petite Sweet—all developed at K-State—offer a choice of medium- to small-sized fruit. Small-fruited varieties also have smaller vines. Consider Sugar Doll, Sweet Baby, Family Fun, or Yellow Doll (yellow) for small-vined, “ice box” melons. Seedless types include King of Hearts, Tiffany, or Crimson Trio.

Soils and Fertilizer

Vine crops are warm-season vegetables that prefer deep, well drained soils. Muskmelon and especially watermelon do best in sandy areas while cucumbers can be grown well in heavier soils. Apply 1 to 2 pounds of 10-10-10 or 12-12-12 per 100 square feet of garden area, unless a soil test recommendation is available, and incorporate the fertilizer before planting. Vine crops usually benefit from a light “side-dressing” of fertilizer trickled along the row when the vines are 10 to 12 inches long. This will improve yields and summer vine vigor. Use 1 to 2 pounds of ammonium nitrate per 100-foot row.

Planting

Soils must be warm to encourage good germination—65° to 70°F. Plant after all danger of frost is past. Early to mid-May in most of eastern and central Kansas usually is the earliest planting time. Plant one to three seeds per “hill” or cluster of plants, with hills spaced 2 feet apart in rows 5 to 6 feet apart for cucumbers and muskmelons. Small-vined watermelons can be planted at this rate but large-fruited types will require spacing plants 5 to 6 feet apart. Plant seeds ½ to 1 inch deep and firm soil around the seed.

Transplanting

Many gardeners like to speed production by starting seeds indoors and transplanting outside after danger of frost. Start seeds 10 days to two weeks before you are ready to transplant them. Peat pots or plantable containers work best. The melon plants should have only one or two small sets of leaves when transplanted. These crops are sensitive to transplanting, so be careful not to damage the tap root when you set them out. Cover the plants with hot caps or other covers to lessen the chance of frost damage or wind injury. Transplanting is best combined with the use of plastic mulch to warm the soil and prevent evaporation. Apply strips of plastic before planting, and set plants or plant seeds through small holes cut in the plastic. Plastic is available at garden centers and nurseries.

Flowering and pollination

Vine crops all produce separate male and female flowers on the same plant. Both flower types are yellow, but the female flowers have a miniature fruit at the base of the flower. Only the female flowers will develop fruit. Male flowers usually appear first and often outnumber the female flowers. Pollen is transferred to the female flowers by bees. The flowers are open in the morning and early afternoon, when bees are active. Poor pollination will result in misshapen or underdeveloped fruit. Avoid spraying any insecticides on the plants when the flowers are open. The insecticide Sevin is especially deadly to bees. Spraying when the flowers are closed in the evening will allow you to control insects without harming insect pollinators.

Cultivation and care

Vine crops are easy to cultivate. Control weeds before they become large by a light scraping with a hoe. Irrigation is needed in dry periods to encourage heavy yields. When vines are vigorously growing and starting to set fruit they have the greatest requirement for water. Reduce watering as the plants begin production. Too much watering can encourage foliar diseases and reduce sweetness of muskmelon and watermelon. Soaking the soil or using furrow irrigation will lessen the chance of foliar diseases.

Harvest

Higher yields result if you keep the fruit harvested as it ripens. Harvest cucumbers when they are full sized and while the skin color is still dark green. Older, soft fruit will have hard seeds and poor flavor. Pick muskmelons when the stem slips easily from the melon, leaving a clean, dish-

shaped scar on the fruit. At this full slip stage you will also notice a strong, musky aroma from the fruit. Harvest watermelon when the underside turns a buttery yellow color. The small tendril, a curled, string-like projection where the fruit attaches to the main vine, usually dries up when the melon is fully ripe.

Nutritional value and use

Cucumbers are usually grown for their unique flavor rather than nutritional benefits. Muskmelon provides some vitamin A and C. All vine crops provide minerals in varying degrees. Cucumbers are used in a variety of salad dishes or pickled. For more information on pickling, consult K-State Research & Extension publications. Melons are usually eaten fresh, but some gardeners freeze melon balls in a sugar syrup.

Insects

Two types of cucumber beetles are harmful pests to cucumbers and melons. One is yellow and black spotted and the other is striped. Both beetles feed on the plants early in the season and "inject" a bacteria that later causes the plants to wilt and die. The only means of controlling this bacterial wilt is to be alert for cucumber beetles and destroy them immediately. Several insecticides can be used for beetle control including Sevin, malathion, endosulfan, and methoxychlor.

Aphids also can feed on plants, sucking juices and causing a twisted, distorted growth. The above insecticides, except Sevin, will control aphids as well. Other insects are of minor importance, but may develop in certain years.

Diseases

Vine crops also can develop foliar leaf blight diseases in warm, damp periods. Anthracnose and alternaria are the most common. They appear as brown spots (black on watermelon), usually on older leaves near the base of the plants. Use fungicides such as maneb, zineb, or benomyl as suggested on the label. Powdery mildew may also develop on muskmelons and cucumbers. As the name implies, this disease organism produces a powdery white growth which spreads to cover the leaves if not controlled. Warm, damp weather favors disease development. Use karathane or benomyl for control.

Diseases can be reduced by rotating crops, using quality seed, and correcting problems when they first develop. For more information, consult K-State Research & Extension publication, *Pest Control in Vegetable Gardens*, C-595.

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