



FRUITS & VEGETABLES

Cucumbers, Pumpkins, Squash and Melons no. 7.609

by C.W. Basham and J.E. Ells¹ (6/2010)

Quick Facts...

Muskmelons, pumpkins, winter squash and watermelons require a long, warm growing season and are most productive at elevations below 5,000 feet.

Cucumbers and summer squash, while they need warm weather, produce in a relatively short season.

Winter squash and pumpkins can be conveniently stored for use through the winter.

Cucumbers, pumpkins, squash, muskmelons and watermelons are warm weather plants. Their growth, yield and quality is best when days are warm and sunny and the season is long. Cucumbers and summer squash usually require 50 to 65 days for first production. Watermelon and muskmelon need 80 to 95 days.

Delay planting until a week after the average last spring frost date for the area. If the weather is chilly, delay longer. Ideally, the temperature of the soil at a 2-inch depth should be 60 degrees F.

In Colorado, temperature and length of growing season are closely related to elevation. At elevations below 5,000 feet, all these vegetables generally are productive. Above 5,000 feet, cucumbers and summer squash are most satisfactory because they mature in a relatively short time.

It is possible to lengthen the growing season by starting seedlings indoors and transplanting them to the garden when the weather warms. None of these plants tolerate disturbance of their root system. The only feasible method for transplanting is to start seedlings in pots and move them without damage to the roots.

Planting

These vegetables usually are planted in hills or mounds so excess water drains away from the seedlings. Plant five or six seeds together in hills 4 to 6 feet apart. Cover the seeds with about 1 inch of soil. After emergence, thin each hill to the two or three strongest seedlings. Cucumbers can be planted next to fences or trellises, to which they will cling.

If the soil has not been tested for nutrient levels, then apply 1 pound of nitrogen per 1,000 square feet. This may be obtained with 2 pounds of urea, which contains about 46 percent active ingredients. Work the fertilizer into the top 4 inches of soil prior to planting the seed.

If organic fertilizers are preferred, use 2 bushels of manure, or 1 cup of bone meal and 1 cup of dried blood per 100 square feet. These organic fertilizers also can be divided up and worked in around the hills rather than spread over the whole area.

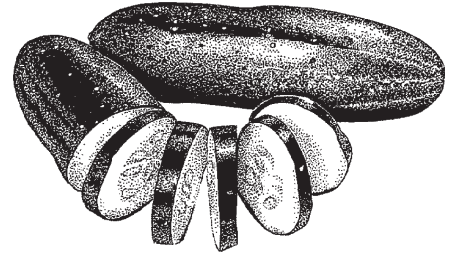
If the seeds are planted in moist soil, no further watering should be needed until after the seedlings emerge. As the plants grow and the weather becomes warmer, more water will be required. When the plants cover the soil surface and in warm weather, the plants may use 1 to 1 1/2 inches of water per week. It is better to irrigate thoroughly every five to seven days than to sprinkle lightly every day. Temporary wilting in the heat of the afternoon is common, but wilted plants in the morning is a distress signal — water them.

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Pests

These vegetables are subject to attack by a number of insects, each of which has a recommended chemical for control. However, it is not practical for a home gardener to maintain a large arsenal of chemicals for insect control. Instead, produce healthy plants and deal with insect problems when they arise. Try an insecticidal soap first. It is the least toxic and most environmental friendly control.



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Before using pesticides, positively identify the target pest. Then follow the label instructions for the pesticide to be used. Regulations regarding the use of chemicals for pest control are continually changing.

When diseases strike these vegetables, assess the situation. If only a few leaves are affected, remove them. This may solve the problem. If it is more general, then chemical control may be in order.

Among cucumber diseases, the most likely is Angular Leaf Spot. This bacterial disease causes angular-shaped lesions on the leaves and also attacks the fruit. These lesions become necrotic, producing the angular areas which give the disease its name. The first course of action is to stimulate growth by applying nitrogen and water. Reduce competition for sunlight and space by removing competing foliage. If six uninfected leaves can be maintained at the ends of the vines, the plants will remain productive. After having accomplished this, the foliage may be sprayed with a copper compound to control the disease.

Late season diseases are associated with the natural dying of the plant and their control affords no benefits.

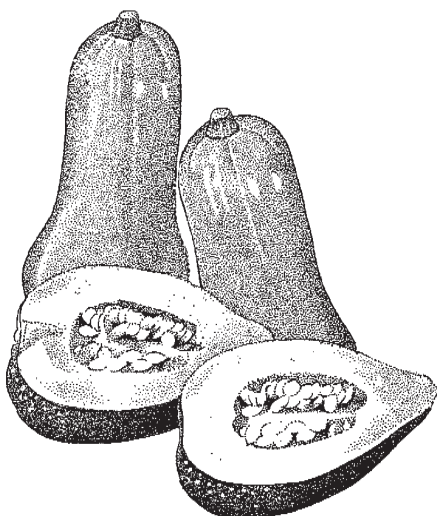
Weeds are most safely controlled by sanitation and mechanical means. Do not allow weeds to go to seed in the garden. Do not apply materials known to contain weed seeds. When weeds do arise, remove them while they are small, before they become competitive.

Pollination

Gardeners often become concerned when these plants begin to flower but no fruits are produced. Most varieties produce several male flowers before female flowers appear and fruits are set. It is easy to differentiate between male and female flowers.

If female flowers are being produced, there are two common reasons for failure to set fruit:

1. If there are growing fruits already on the plant, they will inhibit further fruit set until they mature or are harvested.
2. These plants depend upon insects, mainly honeybees, for pollination. If insect activity is very low, fruits may not set due to lack of pollination. Insufficient pollination sometimes results in deformed fruits.



Harvesting

Cucumbers and summer squash are harvested and used as immature fruit. Time of harvesting depends on fruit size. For summer squash, fruits about 6 inches long are of prime quality. Cucumbers for slicing usually are harvested at about 6 to 8 inches. For pickling it is wise to select the size best for the kind of pickles desired. Harvest often and thoroughly. Fruits left on the plants will inhibit further fruit set until they mature.

Winter squash and pumpkins are harvested when mature. The skin will harden so it can't be penetrated easily by a thumbnail. These mature fruits can be

stored most of the winter if protected from freezing. For more information, see fact sheet 7.601, *Storage of Home-Grown Vegetables*.

Winter melons (casaba, crenshaw, honeydew) also can be stored for several weeks if harvested before they begin to soften.

Harvest watermelons and cantaloupes when fully ripe. They don't store well. Watermelon ripeness can be judged by thumping — a dull sound indicates ripe, a ringing sound not ripe — or by a buttery-yellow color of the soil where the fruit rests on the ground.

Ripe cantaloupes slip easily from the vine when picked up; unripe ones require more force to pull them away from the vine. The background color of cantaloupes also changes from grayish green to yellowish as they ripen, and the characteristic musky odor develops.

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