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Mums for Fall Beauty

Tips on Growing Chrysanthemums

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Chrysanthemums, or "mums," are one of our most popular perennials. You can select from a wide variety of mums that will bloom from late summer through the entire fall. Whether you choose the short, compact "cushion" mums, or the taller varieties for cut mums, you are sure to find a color and size of flower that pleases you.

Mums are easy to grow. Many varieties overwinter well in Wisconsin and will bloom outdoors for several years.

Early-flowering varieties work best for our state's climate; select varieties that bloom in August or September. However, in the southern part of the state, you can grow varieties that flower in October. But these later blooming varieties rarely flower following an early hard frost.

Florist Mums

Most flowering chrysanthemums obtained from a florist cannot bloom outdoors until well after a killing frost has occurred. Plant only those varieties or cultivars identified as early-blooming garden mums.

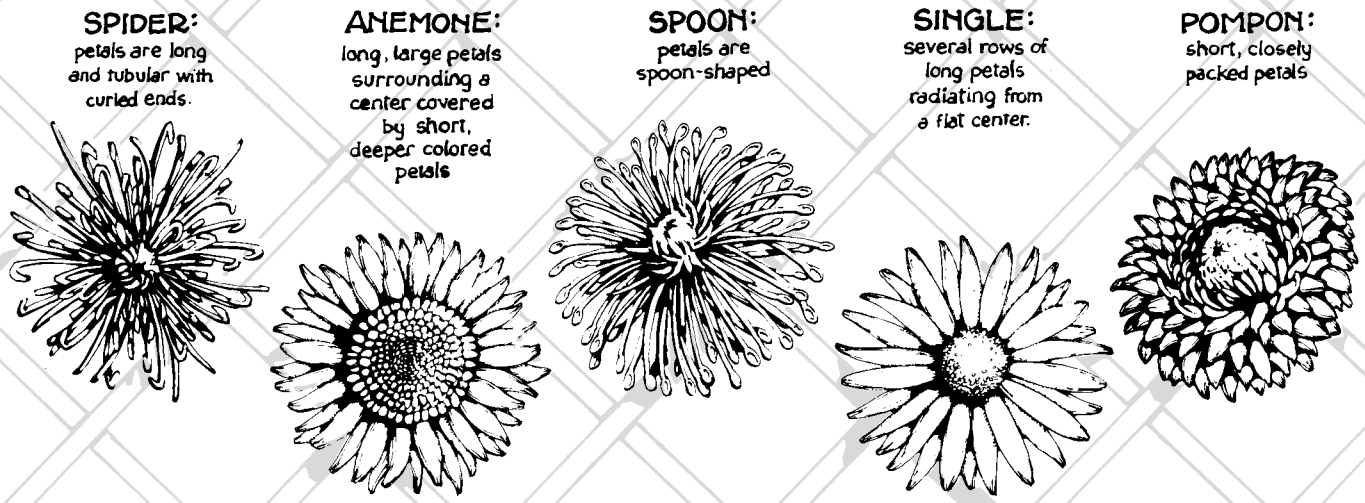
Soil and Location

Chrysanthemums grow well in a variety of soils but must have excellent drainage conditions. They don't grow well and are likely to winterkill in "wet" soils. Thus, avoid poorly drained low spots. Plants do best in a sunny location somewhat protected from strong winter winds. Mums grown in shaded locations are generally weak and produce fewer and smaller flowers.

Before planting, work the soil to a depth of 8–12 inches. Mix a layer of 2–4 inches of organic matter—peat moss, well-rotted manure or compost—into the soil. The amount of organic matter you add depends on the quality of organic matter already in the soil.

Fertilizers

Mums need a rich soil, but the amount of fertilizer required depends partly on the fertility of your soil. You don't need to apply commercial fertilizers at planting time if the soil is naturally rich or if you've added a large quantity of well-rotted manure or compost. But if you know the soil is not very rich and you added only peat moss, then also add a complete fertilizer such as 5-10-5 or 10-10-10



when preparing the soil. Mix 3–4 lb of material into every 100 ft^2 of soil.

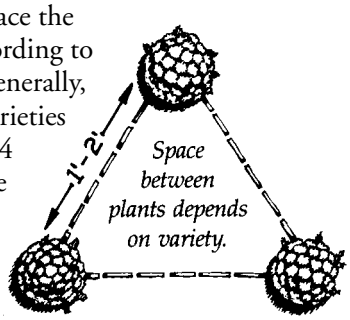
Established plantings generally require this same amount of commercial fertilizer each spring soon after danger of late frost is past.

Once the plants are actively growing, feed them every 7–10 days with the same complete fertilizer. Mix a heaping tablespoon in each gallon of water and apply the mixture to the soil surrounding the plant. This way you feed the plants while you water them. Continue this until early August.

An alternative method, though not as good, is to add the complete fertilizer at a rate of 3–4 lb/100 ft^2 of soil again in early July. Be sure the soil is moist before adding dry fertilizer. Yellowing of lower leaves may be due to lack of nitrogen, drought or crowding (divide the plants next spring).

Planting

When planting, space the chrysanthemums according to their type and size. Generally, the taller spreading varieties require spacings 18–24 inches apart, while the short compact plants need about 12-inch spacings. Taller varieties may need supports to keep them upright. There are several ways to establish a chrysanthemum planting. One way is to buy young, potted blooming plants from local florists or nurseries. Keep them in the house until they finish blooming. Then cut them back 2–3 inches above the rim of the pot. After danger of frost is over, put them in your garden. Plant the soil ball so it is in a slight depression.



You can divide established plants every spring. Remove the clumps from the ground when new growth is 4 inches high and after danger of frost is over. The stronger shoots are usually in the outside of the clump. Remove them with sufficient roots and replant them in the desired location. Set the growing tip of each division just above the ground level. For an attractive mass of color the first year, plant three shoots in a triangular pattern.

Another method of starting a planting is to buy field-grown plants in the fall. Divide the clumps next spring, just as described for established plants.

You also can start mums from cuttings. When shoot growth is 8–10 inches high, remove the upper 3 inches of each shoot with a sharp knife. This is the cutting. Trim off the lower leaves and place the cuttings in sand, vermiculite or a 50-50 combination of peat moss and perlite. Once they establish good root systems, transplant to 3-inch pots or directly into your garden. Unless the cuttings are made late in the season (July), they should flower in the fall.

Pinching

Both new and established chrysanthemum plants can be pinched in June to get compact bushy plants instead of tall plants. Remove the tips of young shoots when they are 7–9 inches long. Also pinch back any new shoots resulting from this first pinch when they are 7–9 inches long. Continue this pinching until mid-June for most early flowering varieties, late June for late September varieties, and early July for early October varieties. Late pinching delays blooming and may even prevent it if there is frost. Very high summer temperatures also may delay flowering.

Summer Care

Water your chrysanthemums if the summer is especially dry or if the soil is particularly light. Wet the soil to a depth of 6–8 inches. Water again when the soil is dry and plants begin to wilt slightly. Stake tall growing plants to prevent breakage during strong winds in the fall.

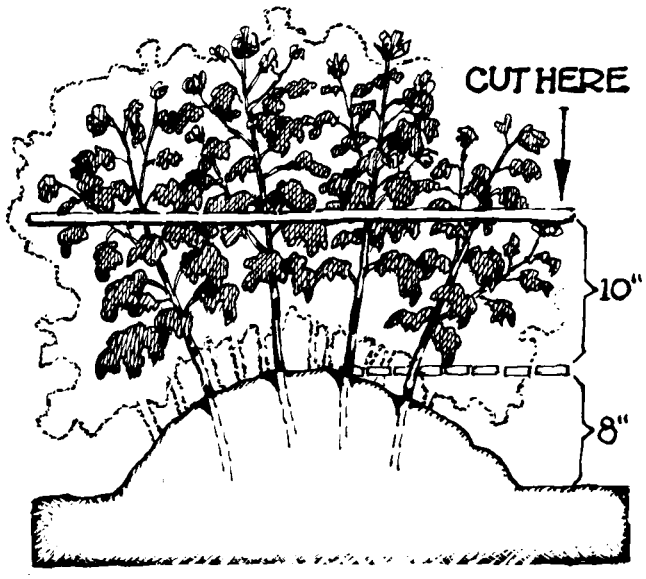
Apply 2–3 inches of a mulch such as peat moss, grass clippings, straw or other suitable material to save soil moisture and reduce weeds. Cultivate lightly and regularly if you don't want to mulch your plants.

Winter Care

Gardeners are frequently disappointed with chrysanthemums because they winter-kill easily. Be sure to select hardy varieties and avoid poorly drained locations. Freezing and thawing throughout the winter often destroys a large part of the plant's root system, but you can prevent this by mulching and mounding plants.

After the flowers and most of the leaves have browned from frost, mound up soil 8 inches high around the base of the plants. Simply place a few shovelfuls of soil over the center of each plant. Then cut the branches back to 10 inches above the mounded soil line.

Apply 2–4 inches of mulch around the plants as soon as the soil surface freezes. Mulching before this time invites plant-damaging rodents to make their homes next to the plants. Mulch with materials such as evergreen branches, marsh hay, clean straw or corn stalks. Leaves aren't good because they pack solid when wet.



Mulching and mounding protects plants' roots.

In spring, remove the protective covering gradually. By the time the new green shoots are visible, the mulch and mound of soil should be entirely removed.

Managing Pest Problems

Many different diseases and insects attack mums. These pests vary in severity from area to area. You can control most of them if you follow these recommendations:

- Buy plants that are free of diseases and insects.
- Select disease-resistant varieties.
- Plant in a sunny location.
- Allow plenty of air circulation by avoiding overcrowding.
- Keep your garden free of weeds and disease or insect-infested plants.
- Apply insecticides only as needed.
- Apply fungicide every 7–10 days during susceptible periods.

Three types of conventional pesticides are used on mums: fungicides for diseases; insecticides for insects, and miticides for spider mites. They are usually applied as sprays. Alternative products include insecticidal soaps, horticultural oils, sticky traps and selective stomach poisons, such as *Bacillus thuringiensis* (Dipel, Bactur or Thuricide). Select pesticides by studying the following disease and insect descriptions and by reading pesticide container labels. Make sure the pest you want to control is listed on the label. Follow label directions for dilution and care in handing. Commercial pesticides that contain both a fungicide and a pesticide are available. Since labels for various fungicides change frequently, check with your local garden center for currently registered products.

Diseases

Verticillium Wilt (fungus)

Symptoms of Verticillium wilt appear first in older leaves and then progress up the stem. Leaves of infected plants generally turn pale and eventually brown, hanging limply attached to the stem. However, in some cases, the areas between veins and the lower leaves turn pale green and then brown, but without any wilting.

Control. Do not take cuttings from infected plants and don't replant mums in a previously infected location.

Septoria Leaf Spot (fungus)

Septoria leaf spot causes dark brown to black spots to develop on leaves. The disease works upward and may destroy half of the leaves by September. The fungus overwinters on the ground and on old leaves sticking to the stems.

Control. Remove and destroy diseased foliage as it occurs; thoroughly rake up and burn all foliage at the end of the season. If the disease has occurred in previous years, you may wish to spray the foliage with a labeled fungicide when symptoms first appear. Newer varieties are generally more tolerant of Septoria.

Powdery Mildew (fungus)

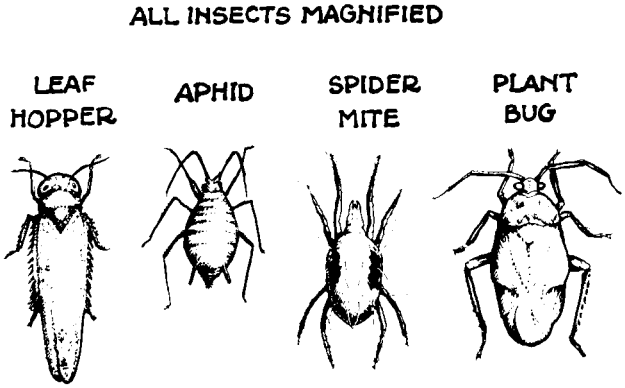
Powdery mildew appears as a grayish-white powder on young leaves. The leaves may eventually turn yellow and wither. This is the same fungus frequently found on roses, phlox and zinnias. The fungal spores are spread by wind. The pathogen overwinters on infected plant debris.

Control. If desired, spray plants every 7–10 days with an appropriate fungicide as soon as symptoms appear.

Viruses

Many viruses—such as mosaic, stunt or yellows—can attack chrysanthemums, but they are only an occasional problem in Wisconsin. Infected plants have symptoms ranging from mottled and yellowed leaves to severely stunted and distorted leaves, flowers and stems. One virus—yellows—produces green flowers instead of the variety's normal color.

Control. While there is little you can do to control virus infections in your garden, early control of virus-carrying aphids and leafhoppers is worthwhile. Destroy plants you suspect of harboring these insects.



Insects

Aphids

These green to black, soft-bodied insects are about ⅛ inch long and attack under the growing tips of plants. Aphids suck juices from leaves and buds, distorting growth, causing leaf drop and perhaps affecting flowering. Plants often become coated with sticky honey dew.

Control. Insecticidal soap is a relatively safe product with low toxicity that effectively controls aphids. Plants must be thoroughly covered with this soap for good results. You also can use other appropriately labeled insecticides.

Caterpillars

Several types of caterpillars may eat holes in the foliage, tie foliage together or feed on buds.

Control. Usually, caterpillars can be controlled with the same pesticides listed for aphids. *Bacillus thuringiensis* (Dipel, Bactur, or Thuricide) can be used with one of the aphid sprays, but is most effective on young caterpillars. Insecticidal soap is often not effective against caterpillars.

Leafhoppers

Leafhoppers are tiny, wedge-shaped insects, usually green, that fly or run sideways when disturbed. They are always found on the undersides of leaves where they suck plant juices for food. Leaves of infested plants become mottled, curled or withered due to the removal of plant sap from the underside of the leaves.

Control. Control leafhoppers as you would aphids. Systemics are also an effective treatment. Follow label directions for proper use.

Leafminers

When leafminers attack mums, leaves develop irregular light-colored mines over the surface. Heavily infested leaves frequently dry up but remain attached to the plant. If the entire plant is attacked and stunted, poor quality flowers may result.

Control. Foliar sprays of labeled insecticides will help control adults during summer egg laying (year-round indoors). Some products are systemic and will also help control the mining stage.

Plant Bugs

Plant bugs are flattened, oval-bodied insects up to ¼ inch long, with a somewhat triangular shape. Plant bugs are usually light brown with dark brown markings, or greenish with black markings. They remove sap from plants causing deformed leaves and flowers. They are attracted to pastel-colored flowers.

Control. Control is the same as for aphids.

Spider Mites

These pests are closely related to insects and may seriously affect mums when conditions are hot and dry. Their feeding causes foliage to turn paler and turn brown along the leaf margins. Mites prefer the undersides of leaves and usually are associated with fine silken threads.

Control. Insecticidal soap is effective against mites but spray coverage must be thorough and you may need one to two repeat applications at intervals of 5–7 days.

You are responsible for using pesticides according to the manufacturer's current label directions. Follow directions exactly to protect the environment and people from pesticide exposure. Failure to do so violates the law.

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