



Chrysanthemums in the Home Garden
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The chrysanthemum has long been known as the 'Queen of Autumn', for it provides flowers of various sizes and shapes in many shades of yellow, orange, red, purple, bronze, pink, and white. A wealth of flower forms and sizes are available: formal, ball-shaped, pompons; simple daisy-like singles; "spoons"; and showy "football" types. The most popular ones are the dwarf 'cushion' mums that are useful as edging plants along a flower border. The tall kinds are suitable for the back of the border and are often grown for exhibition.

Where to Plant: Full sunlight and a well-drained soil are the keys to success with garden mums. The plants need at least 6 hours a day of full sunlight and preferably all day long. A southern exposure at the base of a wall or foundation protects late-flowering varieties against frost and is an excellent site if plenty of moisture is supplied during the summer. Chrysanthemums grow well in almost any well-drained soil. Select a site that is somewhat elevated and has excellent drainage. Avoid areas on which water accumulates after heavy rains.

Preparing the Soil – Chrysanthemums can be grown in any soil capable of producing good crops of flowers or vegetables. Problem soils can be improved by adding organic matter such as coarse peat, leaf mold, or well-rotted manure. Apply a 2-4 inch layer of one of these materials to the area to be planted and spade it in thoroughly. Mums are heavy feeders and respond well to the addition of fertilizer. The fertility of the soil can be raised by applying 1/4 to 1/2 pound of a complete fertilizer such as 13-3-13 or the equivalent for each 10 square feet of garden area. Spread the fertilizer evenly over the soil and spade it in to a depth of 6 inches.

Planting – If you purchased containerized plants, set them at the same depth at which they were grown. Carefully remove the plant from the pot, break up any roots that are growing in a circular pattern on the bottom of the soil ball, and set the plant in the hole. Firm soil back around the soil ball and water thoroughly. Space the plants 18 inches apart to allow them to branch.

Pinching – In order to have sturdy, well-branched plants, most chrysanthemums need to be pinched 2 or 3 times during the growing season. Pinching is the

removal of about an inch of the tip of each branch or shoot by snapping it out with your thumb and forefinger. Make the first pinch when the plant is about 6 to 8 inches tall. As the buds in the top 3 or 4 leaf axils start to grow after pinching, the plant develops a bushy, branched appearance. After these branches grow 6 inches, again pinch out the tips as before. You can continue pinching until about July 4th. If you continue pinching beyond this date, the plants may not flower properly. This procedure may seem drastic, but the results will be bushy, well-shaped, flowering plants in the fall.

Watering – Typically, chrysanthemums will survive adverse weather conditions. They do, however, require large amounts of water to grow and flower properly. If allowed to wilt frequently, the plants become stunted and the lower leaves turn brown and die. Chrysanthemums have a large shallow root system and quickly deplete the water from the soil during periods of hot, dry weather. When watering is necessary, apply enough water to soak the soil to a depth of 6 inches. Frequent, light watering should be avoided. Do not water again until the soil is dry and the plants begin to wilt slightly. Apply the water to the soil; water splashed on the foliage encourages the spread of diseases.

Summer mulches – A mulch applied to the soil in late spring or early summer after the soil is warm is of definite advantage. The mulch keeps the soil cooler, protects it from the compacting action of beating rains, conserves water, and prevents weeds from growing. Apply about 2-3 inches of mulch to the entire planting area or in a 2-foot circle around the base of each plant.

Fertilizer – In most soils, chrysanthemums require fertilizing several times during the summer. Plants growing properly make rapid growth and have thick leaves and stems, and have a dark green color. An all-purpose fertilizer such as 13-13-13 or similar analysis should be applied at the rate of 1/4 pound per 10 square feet or 2 tablespoonful spread over a 2-foot circle around each plant. Lightly cultivate the fertilizer into the soil and then water thoroughly. A soluble fertilizer can also be used; follow the recommended rate on the container.

Care after flowering – After the plants have finished flowering, do not remove the stems. While it may be desirable to clean up the garden in the fall, you should leave mum plants alone. The stems will catch leaves that provide some winter protection. In the spring, cut the plants back close to the ground before growth begins.

Winter protection – Chrysanthemums grown in gardens are generally referred to as 'hardy'. Unfortunately, many varieties are not reliably winter hardy in Illinois. When purchasing mums, ask the garden center operator which cultivars they've had better success with and which ones they would recommend. Winter

injury is most common in poorly drained soils. Therefore, the first step in protecting the plants is to make sure there is excellent drainage so water does not collect around the plants. Plants that are to be carried over winter should have winter protection in the form of mulch. The purpose of mulch is to keep the soil uniformly cold after it has once become frozen, eliminating alternate freezing and thawing. The mulch must be of a loose material that does not become compacted about the base of the plant. Such materials as evergreen branches, twiggy shrub branches, or cornstalks are useful. Avoid peat moss, leaf mold, or other materials that would compact and stay too wet. Gradually remove the mulch in the spring as the plants begin to grow.