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Hardy
Chrysanthemums



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HARDY CHRYSANTHEMUMS

Varieties of chrysanthemums now available are much hardier than those available a few years ago. Also, many of the new varieties bloom earlier than varieties of the past. Growers find, however, that the degree of hardiness is somewhat variable. This, together with variation in blooming dates, makes the selection of chrysanthemum varieties for North Dakota conditions a problem to consider carefully.

Not all hardy chrysanthemums are early bloomers, nor are all early blooming varieties hardy. Varieties which exhibit both characteristics are nearly ideal for northern conditions. However, many gardeners will agree that varieties which bloom reliably early are worth growing, even if not hardy. Reliable autumn bloom may compensate for the necessity of frequent replacement.

The great variety of chrysanthemum types makes them excellent subjects for both cut flower and landscaping purposes. Their bright splashes of color are unrivaled in the autumn garden.

CULTURE AND CARE

Size and age of planting stock: Either well rooted cuttings or vigorous divisions of old clumps may be considered good planting stock. Plants offered by nurseries as "pot plants" are usually well rooted cuttings which have been grown for a few weeks in pots, thereby producing larger and sturdier plants.

When and where to plant: Chrysanthemums are best when planted in May. Stock purchased from nurseries, especially rooted cuttings or pot plants, should not be planted until all danger of hard frost is past, unless you are prepared to offer frost protection. Such chrysanthemums have been propagated in greenhouses and may not

have been hardened sufficiently to withstand frosts. Divisions of your own plants which have survived the winter may be planted or moved whenever the soil is workable.

Mums should do all right in any good garden soil. A friable, well drained soil with sufficient organic matter is desirable. Rotted barnyard manure worked into the soil is recommended. Work 2 tablespoons of 4-12-4 or similar fertilizer into the soil around each plant in the spring. Such fertilizer should be watered-in well, especially if the soil is dry.

Plant hardy mums where they will receive plenty of sun. Two-thirds day of sunlight is advised. They may be used to advantage in the perennial border, as part of the foundation planting around your home or in the formal garden.

WATERING

Do not water chrysanthemums from above with a sprinkler. It is better to lay the hose on the ground near the plant and let the water run slowly until the ground is soaked.

In mass plantings, a soil soaker type of hose is satisfactory. Such a hose will water the plants with the least waste of water. A thorough watering once or twice a month is much better than several light waterings. Remember, do not sprinkle the plants from overhead because this might encourage foliage diseases.

PINCHING BACK

To have low-growing, sturdy, well-branched plants, pinch back the end shoots once or twice during the growing season. You can do this easily with your thumb and forefinger, or with a knife.

Remove about 1 inch of the soft growing tip of the main shoots. This first pinching should be done when your plants are about 6 inches tall. The plants will then produce side branches. When these side branches are 6 to 8 inches long, pinch out their tips to produce additional branching. It is not advisable to pinch much later than July 1, since many plants are forming their flower buds later in July.

BLOOMING TIME

Garden chrysanthemums are to be considered fall blooming perennials. Some varieties naturally bloom so late as to be always caught by killing frosts in North Dakota. Other varieties may begin blooming by mid-August. Generally, varieties which do not begin to bloom by Sept. 15 are of little value in North Dakota gardens.

Cool summers will cause all of your mum varieties to bloom earlier. After a hot summer even the early varieties may be set back to mid-September, while your midseason types may bloom so late as to be caught by killing frosts. A few types have frost-resistant blooms and these are preferred, especially among the later blooming varieties.

WINTER CARE

Although there is considerable natural variation in the hardiness of garden chrysanthemums, most losses occur in early spring. Such losses are probably due to alternate freezing and thawing which occurs when there is little or no snow cover over the plants. Poorly drained sites having an accumulation of ice in the spring can contribute to your losses.

Leave the tops on your plants during the winter to help hold a snow cover over them. A coarse mulch, such as slough hay, wheat or soybean straw, is good but not very tidy. Leaves are not desirable since they tend to pack and become soggy. Plants may be smothered by a heavy, soggy mulch.

VARIETIES

Varieties of chrysanthemums are numerous and each year many new kinds are added to the list, some of which may be superior to older varieties. Tests at North Dakota State University indicate the following have merit for our climate.

<u>COLOR</u>	<u>HEIGHT - FLOWER SIZE</u>
WHITE	
Mt. Hood	Tall; large
Poise	Tall; large
Powder River	Low; med.
Snowbound	Low; med.
Wee Willie	Low; pompom
CREAM	
Cream Top	Tall; large
YELLOW	
Goldstrike	Low; small
Little One	Low; pompom
Muted Sunshine	Med; med.
Prairie Sun	Tall; large
Wayzata	Med; med.
ORANGE	
Superior	Med; med.
RED	
Cochise	Low; med.
Fired Gold	Med; med.
Flamboyant	Tall; large
Red Heart	Tall; med.
BRONZE	
Buffalo	Low; small
Minnautumn	Low; small
Tomato Red	Med; med.
Zonta	Med; small
PURPLE	
Hoback	Med; med.
LAVENDER	
Girl Friend	Tall; large
Tenstrike	Low; small
PINK	
Minnpink	Low; small
Princess	Med; small
Quarterback	Tall; very large
BLENDS	
Talisman	Tall; large

