

Cooperative  
 North Dakota State University  
 Extension Service  
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# Hardy Chrysanthemums

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 NORTH DAKOTA

TODAY'S CHRYSANTHEMUM (mums) varieties are much hardier than those available a few years ago. In addition, many of the newer mum varieties bloom earlier than varieties of the past. Varieties failing to bloom by September 15 are of little value in North Dakota. Growers find that the degree of hardiness is quite variable. Variation in hardiness and flowering date make selection of varieties for North Dakota conditions a problem which deserves careful consideration.

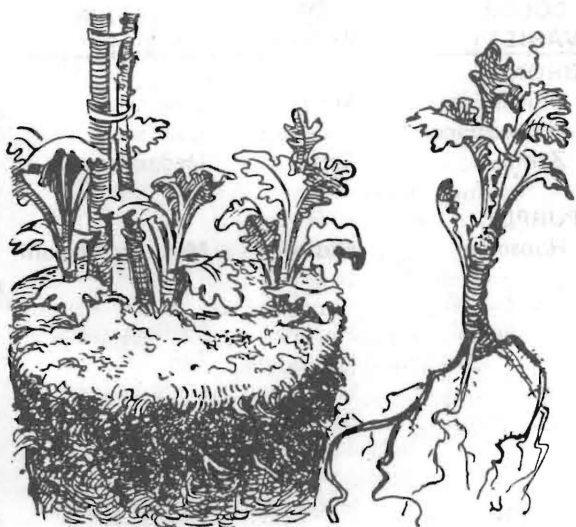
Not all hardy chrysanthemums are early bloomers, nor are all early blooming varieties hardy. Early blooming varieties exhibiting hardiness are most ideal for North Dakota conditions. Many varieties which bloom early are worth growing, even if not hardy. Reliable autumn bloom may compensate for the necessity of frequent replacement.

Since there is a great diversity in plant habit and flower form of mums, they are excellent subjects for both cut flower and landscaping purposes. The bright splashes of color are unrivaled in the autumn garden. They may be used to advantage in perennial borders, foundation plantings around your home or in the formal garden.

## CULTURE AND CARE

Size and Age of Planting Stock: Either well rooted cuttings or vigorous divisions of overwintered clumps qualify as good planting stock. Plants offered by nurseries as "Spring Bedding Mum Plants" are usually well rooted cuttings which have been pot-grown for a few weeks to provide sturdier plants.

When and Where to Plant: Chrysanthemums are best planted in May. Stock purchased from nurseries, especially rooted cuttings or started plants, should not be planted until 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 spring frosts. Divisions from overwintered plants (See illustration) may be moved and replanted about May 15. However, weak plants are best left in place until new growth is vigorous before transplanting.



Overwintered clump

Spring division

Mums should do well in most garden soils. A friable, well drained soil with sufficient organic matter is desirable. Well 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. Water-in well such fertilizer, especially if the soil is dry.

Space chrysanthemum plants 18 to 24 inches apart. Wider spacing is desirable where supplemental water is not readily available. Plant hardy mums where they will receive plenty of sun (two-thirds day of sunlight or more).

## WATERING

Never water chrysanthemums from above with a sprinkler due to potential foliar disease problems. Your mums may not need supplemental watering some years but when necessary lay the open end of the hose on the ground near the plant and let the water run slowly until the soil is thoroughly soaked. A thorough watering at 7 to 10 day intervals during dry periods is much better than more frequent light waterings. This method also conserves water.

## **PINCHING BACK**

To produce low-growing, sturdy, well-branched plants, pinch back the tips of shoots once or twice during the growing season. You can do this easily with your thumb and forefinger or with a knife. Remove about one inch of the soft growing tip of the main shoots. This first pinching should be done when your plants are about six inches tall. The plants will then produce side branches. When these side branches are six to eight inches long, pinch out their tips to produce additional branching. Do not pinch later than July 1, since many varieties start forming flower buds and later pinching simply delays flowering.

Cool summers may result in earlier flowering of mums, while hot summers may delay blooming by one to two weeks. Some mums 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 when there is little or no snow cover over the plants. Losses may be much greater on poorly drained sites.

Leave tops on your plants during the winter to help hold a snow cover. 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 become compressed, soggy and may smother the plants.

## **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. Evaluations at North Dakota State University indicate the following varieties have particular merit for our climate.

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<b>COLOR VARIETY</b>	<b>SEASON OF BLOOM</b>	<b>HEIGHT; FLOWER SIZE</b>
<b>WHITE</b>		
Minnwhite	Mid-late	Low; small
Powder River	Late	Low; medium
Spotless	Mid-season	Medium; medium
Snowbound	Mid-season	Low; medium
Wee Willie	Early	Low; small
White Darlingmum	Late	Low; small
White Prom	Early	Low; small
<b>CREAM</b>		
Cream Top	Mid-season	Tall; med.-large
<b>YELLOW</b>		
Goldstrike	Early	Low; medium
Little One	Mid-season	Low; small
Minnglow	Mid-season	Low; medium
Minnyellow	Mid-season	Low; medium
Muted Sunshine	Early	Medium; medium
Prairie Sun	Early	Tall; med.-large
Sea Urchin	Mid-season	Medium; medium
Wayzata	Late	Medium; medium
Wendy Ann (1974 Minn.)	Early	Tall; large
Yellow Darling- mum	Mid-late	Low; small
Yellow Glow	Mid-season	Medium; medium
<b>GOLD BUFF</b>		
Best Regards	Mid-season	Tall; med.-large
Companion	Early	Tall; med.-large
Golden Jubilee	Mid-season	Tall; med.-large
Pure Gold	Mid-season	Tall; med.-large
<b>ORANGE</b>		
Campaigner	Early	Medium; medium
Superior	Early	Medium; medium
Sunny Glow	Early	Medium; small
<b>RED</b>		
Fired Gold	Mid-season	Medium; medium
Flamboyant	Late	Tall; large
Minnruby (1974 Minn.)	Mid-season	Low; medium
Redheart	Late	Tall; medium
Red Headliner	Late	Medium; large

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