Cascade Chrysanthemums TEXAS A&M UNIVERSITY TEXAS AGRICULTURAL EXTENSION SERVICE J. E. Hutchison, Director, College Station, Texas

Cascade Chrysanthemums

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Want to fill that "dead spot" in your home decor with a splash of color? Or brighten that drab office hallway? Try cascade chrysanthemums, plants that are becoming favorites again for interior decoration in homes and public buildings.

Success in growing cascade chrysanthemums depends upon training the plants from the time they are first started. This requires considerable attention to plants on an almost daily basis.

Vigorous varieties with long, flexible stems are best for training into large cascades. Less vigorous varieties, with moderate, slender stems and many flowers are suitable for small cascades.

There are several forms into which cascades can be trained. Most common are the heart shape, the fountain and standard forms. When plants are trained in the heart shape, they can be tubbed later to form pyramids, and also can be placed in baskets for hanging effects.

Six to 7 months are required to produce a trained plant of satisfactory size. The procedure outlined here is for normal blooming periods, but can be adapted readily to lighting and shading just as it is to other types, if sufficient time is allowed for the plant to develop properly.

Potting and Feeding

Plant rooted cuttings directly in 4-inch pots. As soon as plants are well established, shift to finish pots and tubs. Use either an 8 or 10-inch pot or tub for large specimens. For those to be tubbed for trained plants later, shift to 6-inch pots until time for developing the final form when buds are setting on the plants.

Be sure there is adequate drainage in the

finish pots. This can be provided best by filling the bottom fifth of the container with 1/4 inch aggregate charcoal. A soil mixture of 1/3 peat and 2/3 loam soil is ideal. After the initial potting in the 4-inch pot, the addition of a 4-inch pot of 5-10-5 complete fertilizer to each 21/2 bushels of soil can be made.

The cultural practices followed in training these plants will result in a rather large plant in a comparatively small pot. Since chrysanthemums are gross feeders, follow a regular feeding program as soon as the plants are established in the finish pots.

This program consists of liquid feedings every 10 days or 2 weeks, using 1 ounce of ammonium phosphate and 1 ounce of muriate of potash to 2 gallons of water or 1 ounce of a soluable 15-10-15 complete fertilizer at the rate of 1 ounce to 2 gallons of water at the same interval. Continue this feeding schedule from the time the plants are well established until bud formation.

The planting date for normal flowering depends on varieties, but since all require 6 to 7 months, first potting must be made in April or early May.

The training techniques outlined will hold true for all cascade varieties regardless of planting dates or flowering dates.

Training Cascades

All forms except the standard or tree forms are trained as the common heart-shaped form until final stages, so this system is outlined here.

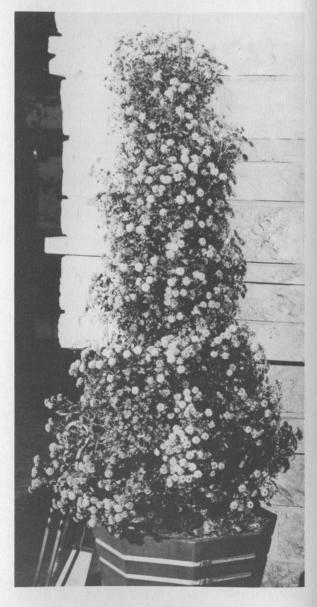
When the plant is 4 to 6 inches tall, pinch out the tip in the usual manner for chrysanthemums. This will cause base branching. When these breaks develop, choose the longest shoot nearest the stem's top as a leader and select two other strong shoots on the plant. Remove the others.

Then pinch all side shoots at every second or third node and continue pinching on all side shoots as growth progresses.

Begin training when the leader reaches a height of about 12 inches. Use a single 10-to-12 gauge wire, about 3 feet long for the leader. Place it in the soil as near the stem base as

possible and push it well into the pot. Tie the leader to this wire with a plant tie about 5 inches from the soil and bend the stem with the wire carefully to about a 45-degree angle from the soil surface.

Point this supporting wire toward the north, and as the leader continues to grow, keep it tied closely to the wire at about every three nodes



Tubbed pyramid form chrysanthemums.

as it produces them. As the plant grows, make a tie to the wire every 7 days.

If you want large, fan-shaped plants, train the 2 lateral leaders on wire stakes in the same manner. When the leaders approach the wire ends, add extensions by additional 3 to 4-foot lengths of the same gauge wire, tied tightly to the original one with plant ties.

Keep all lateral and sublateral shoots arising from both the main leader and lateral shoots pinched at every second or third node as they form. Practice this pinching continually until about the middle of September for normal blooming or until buds are ready to form on out-of-season plants. All shoots must be pinched at this time for uniform flowering over the entire plant.

As growth continues, lower the main leader by bending the wire or wires very gradually at regular intervals so that they are horizontal by the time flower buds set on the plants. When buds form, they will start the gradual vertical bending from the horizontal level of the wire supports.

If plants are to be trained on other wire forms or in other forms, do this training or panning at this time, and tie the stems to the wire forms. This training will be easy, if you have kept your stems tied to the wires as outlined above.

To make hanging baskets or cascades at this stage, place the plants on shelves or suspend them so that stems and wires can be bent down. Tips or stems should not touch the bench or ground.

Complete all final training on forms or for baskets or hanging cascades by the time buds begin to show color so that individual flowers will straighten and be on the outside of the plants when in full bloom.

Cascade plants tend to start blooming on the terminal growths or tips, ahead of side and lower branches. This tendency can be changed by timing the final pinching procedures as follows. Make the final pinch over a period of 15 days. Pinch the entire third of the plant closest to the soil first, 5 days later pinch the entire central part of the plant and 10 days later, pinch the third of the plant closest the terminal growths. This gradual completion of pinching-out from base to the tip over 15 days encourages an even maturity of flowers over the entire plant.

Formation of flower buds after this final pinching will weight the stems and help the wires in bending the plant downward.

Training Standards

Plant standard forms in the same manner as cascade forms, but instead of pinching out the top when the plant reaches 4 to 6 inches, remove lateral shoots and allow only the tip to

When growth reaches 12 to 15 inches, place a 10-gauge wire stake in the pot as close to the stem as possible in a vertical position and tie to the stem with plant ties.

When the stem has reached the desired height, usually 36 to 40 inches, pinch the tip out and pinch all laterals produced to two nodes until flower buds are ready to form. produces a tree-like form with the entire plant covered with flowers.

With careful attention to pinching and training and given a 6 to 7 months growing period, plants can be produced with a 4 to 5-foot spread and 8 to 10-foot leaders. Larger specimens can be produced by increasing the growing period accordingly.

NAME	TYPE	COLOR	NATURAL BLOOM DATE
Mary San			(Approx.)
*Anna	Daisy	White-yellow center	Oct. 20
Bridal Veil	Single	Snowy white	Oct. 1
Burning Ember	Anemone	Bright red	Oct. 1
Butterfly	Spider	Yellow	Oct. 25
*Illini Snowdrift	Feathery	White	Nov. 12
*Jane Harte	Daisy	Yellow	Oct. 20
Nuggets	Pompon	Yellow	Oct. 25 (small plants only)
*Princess	Single	Lavender	Nov. 1
Radiant	Daisy	Bright red	Nov. 5
Renown	Daisy	White	Oct. 10
Queen's Lace	Spider	White	Nov. 1
*Best for large co	ascades		

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