



Chrysanthemum

THE AUTUMN QUEEN

Growing Chrysanthemums in Pots

CHRYSANTHEMUM IS A SOFT WOODED SHORT DAY PERENNIAL PLANT, SENSITIVE TO LIGHT, TEMPERATURE AND HUMIDITY. IT NEEDS PLENTY OF SUNSHINE FOR PROPER GROWTH. THESE HAVE ATTRACTIVE FLOWERS OF VARIOUS SHAPES, SIZE, FORMS AND COLOURS. THOUGH IT CAN BE GROWN IN ANY SOIL, YET FOR BETTER RESULTS SOIL IS SPECIALLY PREPARED WELL IN ADVANCE SOMETIME IN APRIL/ MAY. CHRYSANTHEMUMS FLOWER BETTER FROM THE CURRENT YEAR'S SEASONAL GROWTH, AS SUCH THE PRACTICE IS TO TAKE CUTTINGS FROM SUCKERS/ SHOOTS AT THE BASE OF HEALTHY PLANTS WHEN FLOWERING IS OVER, SOMETIME AROUND JANUARY FROM LARGE FLOWERING PLANTS AND LATER FROM SMALL FLOWERING ONES.

■ KASHYAP SHARMA

Common Practices

The common practice is to select healthy plants ~ large flowering & small flowering, separated and duly labelled. If there are suckers at the base of the plant, break the main stem four/ five inches from soil level and allow the suckers to grow and take suitable cuttings from them. However if suckers are not formed, break the main stem at approximately 10 inches to encourage new growth. This new growth is then used as cuttings when ready.

Before planting the cuttings wash them in plain water to clean them of any aphids etc. Shake off any excess water and treat the cuttings with rooting powder. Insert them into pots of clean washed sand for rooting. Keep the earthen container in shade for about 10 days. Thereafter expose them to morning sunlight and water as required. Roots are generally formed after 3 weeks and can be made out from the healthy looks and growth of the cutting.

After a week, bring the container in the open. When the cuttings are about 8" tall, plant 3 of them in a 20 cm pot. Remove/ cut upper tip along with two leaves at top. This is *hard pinching*. This will allow vigorous growth. Repeated pinching will bring about profuse branching & growth. This becomes a "stock plant" now. A well grown stock plant can give 15 to 20 cuttings by June. With this method one can make healthy cuttings of both large and small flowering varieties.

By middle of June, take cuttings from small flowering varieties and set them for rooting which would be ready by first week of July. Plant in 3" earthen pots and keep them in shade for a week. These pots are then brought into open gradually and protected from strong sun and rain. The cuttings of large





flowering varieties should be rooted in July. When rooted, these should be transplanted individually in 3" earthen pots latest by middle of August. Feeding during vegetative growth is very important, ie from start to September. At the beginning of October, bud settings start. This is the time to add potash-MOP or sulphate of potash to the liquid feed and also use it as a spray-foliar feed in plain water once a week. Do not give both the feeds together. Protect plants from overhead lights as this will hamper bud setting. Use malathion and not rogor as a pesticide against aphids etc.

Soil

The soil for the chrysanthemum should be such that:

- **While** it allows retention of sufficient moisture for use by the plant, it should also have sufficient aeration of fine roots.
- **There** should be no choking or rotting of roots. The plants can tolerate drought but not excess moisture.
- **Sandy** loam soil is ideal for chrysanthemums. Soil mixture for first potting is prepared around April/May or one month before planting time.
- **The** soil should not have large lumps.
- **It** should be exposed for solarization (baked in the sun) for about 2 weeks and also protected from rains.

- **The** potting mixture composition should be 4 parts soil+4 parts of cow dung manure+2 parts leaf mould+1 part sand (if necessary). These should be mixed well.
- **Final** potting mixture is used when the cuttings are transferred to 8 or 10" pots, and should have all the above ingredients plus 40 gm each of bone meal/ agro meal+ neem khali+10 gm of superphosphate.

Liquid Feed

In a 100 litre drum:

- **Add** 25 kg fresh cow dung + 5 kg mustard cake + 5 kg Neem oil cake.
- **Top** it up with water and stir the mixture twice/thrice daily. Keep it covered. The mixture will be ready for use after 6/7 days.
- **1 litre** of this sieved solution mixed with 10 litres of water can be used for liquid feeding the plants once a week.

Top Feed (Granular Feed)

- **Take** 1 kg each of soil mix + mustard oil cake powder + agro meal/bone meal. Mix these well.
- **One** fistful is to be given in each 8/10" pot by spreading it around the rim of the pot.
- **It** is to be gently mixed with soil and watered copiously for 2 days. No other feed is to be given in these 2 days.

Growing Green Plants

Needs of the small and large flowering plants are very different. The small flowering plants are hardy. These are grown in bush form, repeatedly pinched to keep them in vegetative growing phase. The large flowering plants are delicate and sensitive to over watering and excessive feeding and need special attention. For a new grower, the green plants are available from July onwards in thumb pots.

For Small Flowering Varieties

- **Dip** each cutting in fungicide like Bavistin or Diathane and pot them in 3" earthen pots individually using the first potting mixture.
- **Keep** the pots in shade for a week allowing only morning sunshine. Watering has to be done regularly. Protect the plants from strong sun and rain.
- **After** a week bring the pots out in the sun and start the liquid feed once a week. Start granular feed as a top dressing (a fistful per pot) and water copiously for next two days. No other feed is to be given in those two days.
- **After** the third week shift all small flowering plants into 10" earthen pots using the final potting mixture. Pinch the top central tip to encourage new growth at leaf axis if the plant has 8/10 open leaves. The feeds mentioned earlier should continue.
- **From** September onwards give 1 litre of liquid feed in 5 litres of water once a week as also the granular feed.

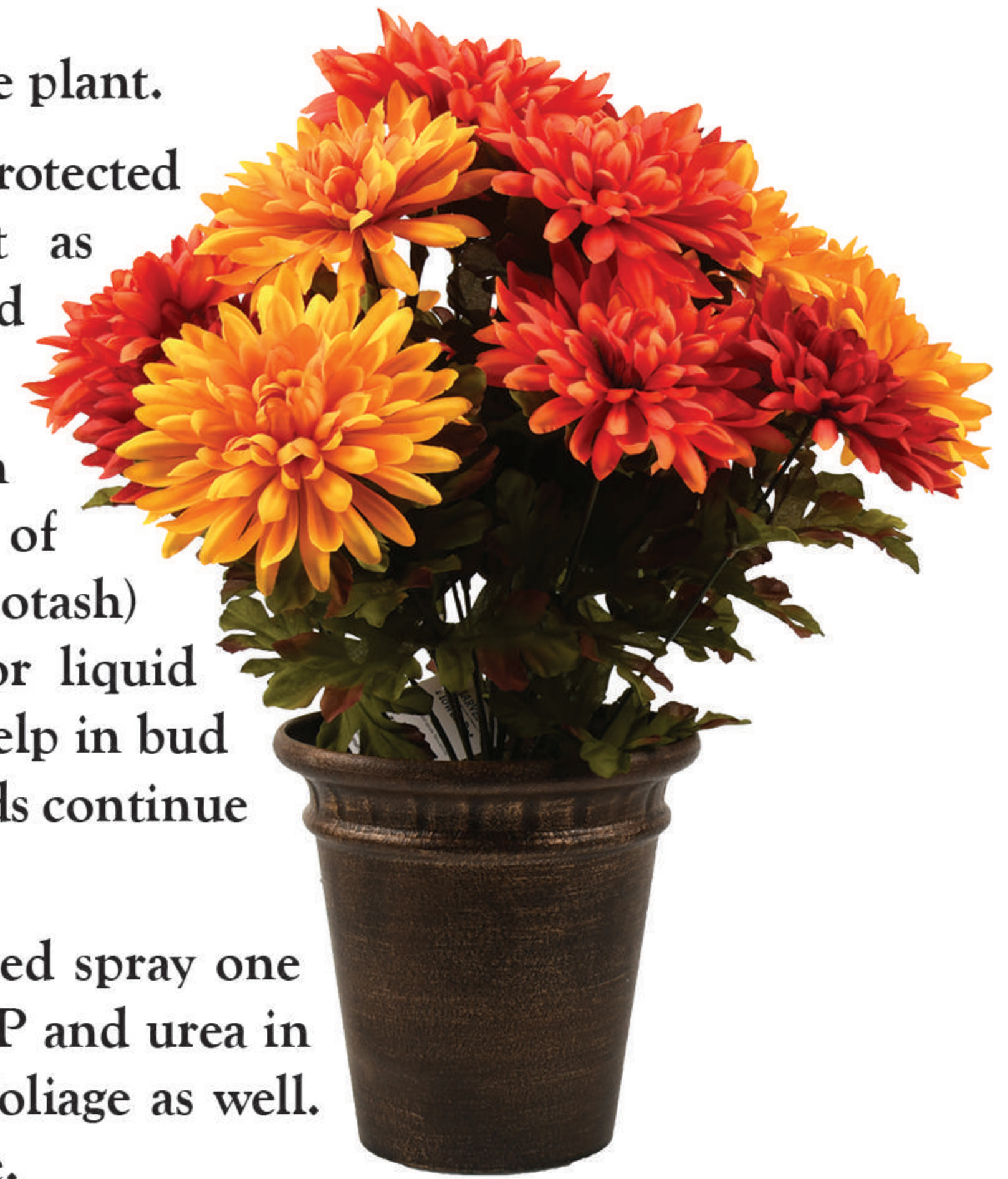


- **The** new growth should also be pinched when it is 6/7" long. Fix stakes slanting outwards allowing space for any new growth. Continue pinching till end September.

- **Rotate** the pot regularly every week to ensure

uniform growth of the plant.

- **Plant** needs to be protected from overhead light as this is the time for bud setting.
- **Use** one teaspoon of potash (muriate of potash/sulphate of potash) in 1 litre of water or liquid feed once a week to help in bud setting. The other feeds continue alongside.
- **When** buds are noticed spray one teaspoon each of MOP and urea in 1 litre water on the foliage as well. All the feeds continue.
- **When** the buds start to swell, gently remove the central bud as it will encourage the surrounding buds to develop uniformly and show a compact mass of colour on each crown thus forming a large area over the plant head. One needs to take care that the stakes are well in place, i.e lower than the flower buds and away from the florets. Each stem should be tied loosely with the stakes or a cordon be formed to loosely tie the stems.



Large Flowering Chrysanthemums

- **Allow** the cuttings to grow in 3" pots in the first potting mixture for 4 weeks.
- **Give** liquid feed once a week and granular feed from second week onwards.
- **If** the choice is one bloom per pot then no pinching needs to be done and transfer the plant to a 8" pot using the final potting mixture. However if three or more blooms is the need then pinching is to be done. When the plant has 8/10 fully open leaves, the central tip is to be pinched allowing new growth from the sides. Retain three stems in four, eight & twelve o' clock position when viewed from the top.
- **Shift** the plant into a 10" pot using the final potting mixture. Fix the stakes suitably right now, at a height lower than the buds. Continue all feeds and watering as mentioned earlier.
- **For** single bloom, all the other buds along the stem are disbudded regularly.

- **From** September onwards, the feeding pattern of large flowering plants is similar to that of the small flowering ones.
- **Rotate** the plants regularly and protect from overhead lights as this will hamper bud setting. At this stage to encourage bud setting give M.O.P or sulphate of Potash, 1 tsp in 1 litre of liquid solution once a week. Granular feed to continue as also watering.

- **Watch** for aphids or any other pests. In case required use malathion spray. Repeat after 10 days if needed.

- **For** yellowing of leaves, 1 tsp of ferrous sulphate added in 1 litre of water should be put in the soil of affected plants. Reduce water to these plants for a week after use of ferrous sulphate solution.

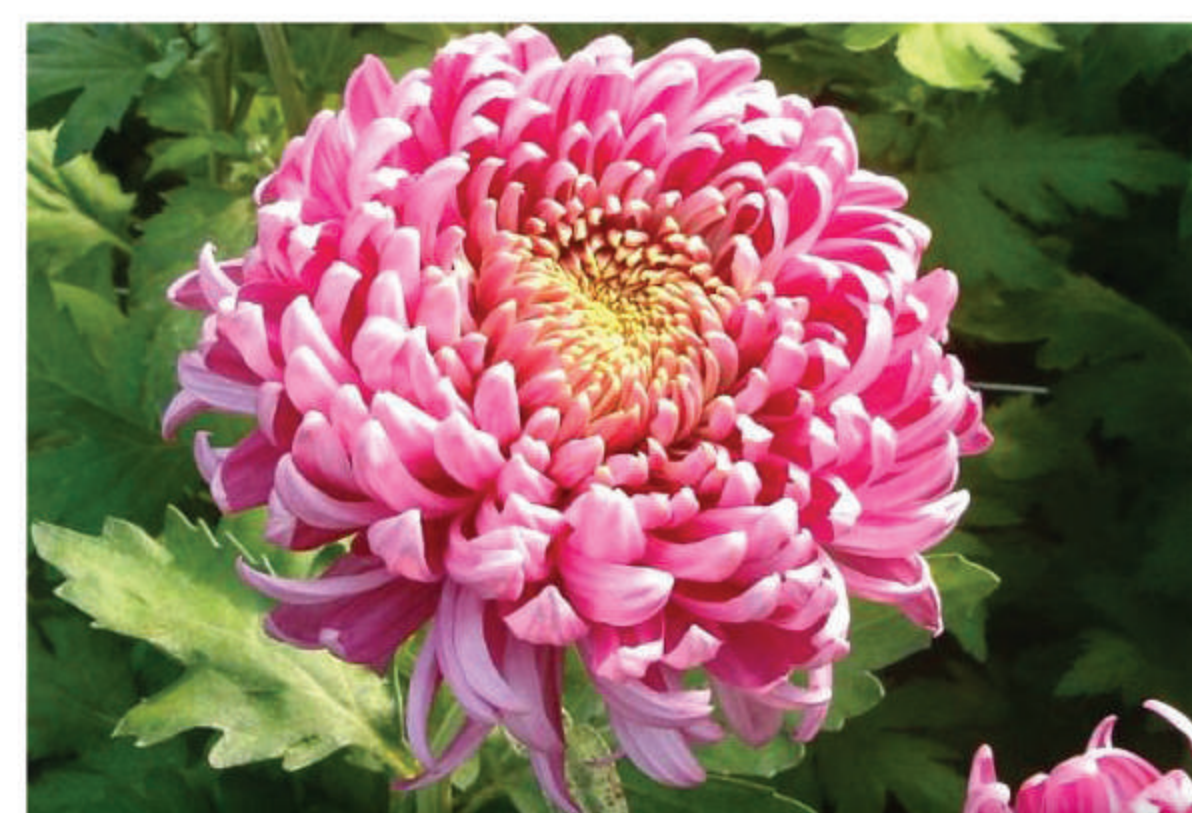
- **When** bud setting and swelling is noticed, remove all the side buds, retaining the central bud or the 3 buds as desired. A feed of magnesium sulphate 1 tsp in 1 litre of liquid feed should be given once a week.



- **When** the buds start showing colour then only one feed of M.O.P and urea, 1 tsp each in 1 litre of liquid feed is to be given. Thereafter no feed is to be given, only watering need be done when required. Now wait for the buds to open.
- **Protect** the plants from rain and strong winds. Also tie stakes to the stems should be lower than the buds and loosely tied to the stems so that they do not obstruct the florets when they develop.

**NOW WATCH AND ENJOY THESE BEAUTIES
AND SAY THANKS TO MOTHER NATURE...
REWARDING YOUR LABOUR & EFFORT.**

HAPPY GARDENING



B 70, SECTOR 48, NOIDA

