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CULTIVATION OF ORNAMENTAL POT PLANTS

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Cultivation of pot plants is useful in several ways, but it is most advantageous to those who live in flats and have no land for growing plants. Another advantage is that it provides easy mobility, i.e., a potted plant can be handled easily and can be moved to any part of the garden or even inside the house for the purpose of beautification.. Other such beautiful flowering plants as chrysanthemum and dahlia are grown in pots and when they bloom, they are used for decorating various parts of the garden and the house-front. For example, if delicate seedlings are first pricked singly in 5-7 cm pots and then transferred to ground later there will be very few casualties.

Cultivation and management of pot plants

Pots: A porous pots important as it allows exchange of gas and moisture, which are essential for healthy root growth. Earthen pots come in various sizes; form the tiny 5 cm pot to the giant 45 cm pot. A pot is generally conical in shape, tapering towards the base, thus providing more soil for the feeding roots at the top. The small 5 cm pots are used for pricking seedlings. For sowing seeds, pans are used which are of a larger diameter (say 30 cm) but have less depth (say 7 cm). Plants having shallow root systems, such as certain categories of ferns, need pots having less depth that usual. For orchids, special pots are used with perforations all over the sides to allow plenty of aeration and drainage needed by them. It is even possible to grow some bog plants in specially made pots. These consist of one pot placed inside the other with a narrow space in between, meant for filling it with water, damp moss or sand, so that the soil . The top diameter of a pot is almost equal to the depth of the pot, but in

larger pot the depth may be little lesser than that of the diameter. Now-a-days pots made of special unbreakable polythene are used, which prove economical compared to earthen pots.

Potting: Before potting is done it is essential to clean the pot thoroughly, especially those, which were used earlier, with clean water or preferable with hot soda water. The idea is to get rid of any disease or fungus that may be hibernating. Moreover, a dirty pot is not very porous and will pot allow exchange of air properly. Dry pots are not affected by frost, whereas wet pots are likely to crack when the moisture inside is frozen and expanded.

Before filling the pot with compost, large crocks with the concave side down are place over the drainage hole to ensure that the hole is not blocked by the compost. Over this, several small pieces of crocks are placed. Then a layer of coarse leaf-mould or half-decayed leaves is spread. The compost is then filled in, leaving about 1.5-2.5 cm space of top, depending upon the size of the pot, to hold sufficient water. It is very difficult to keep these particles in place, as during forking the soil, these may get into the compost. The best way is to water the pots gently with a hose or water-can fitted with a hose. To preserve moisture, watering should be followed by forking. The ball of earth around the roots of the plants being clayey or sticky is broken by soaking before potting.

Potting Compost: the usual constituents of potting compost are a good garden soil, preferably loam, which generally forms the greater part of the compost, leaf-mould or peat moss, coarse sand and well-rotted manure. For plants, which need rich potting compost, the amount of soil in the compost is reduced and other constituents such as leaf-mould and manure are increased.. It has already been started that the proportion of the various ingredients in a soil will vary according to the type of the plant grown and the nature of the loam used, but the following compost with a little variation, depending on the situation, will be suitable for most of the general type of soft-wooded plants..

Good garden loam (preferably fibrous) : 2 parts
Leaf-mould or peat moss : 1 part
Well-rotted manure : ½ parts
Coarse river sand : ½ parts

The compost should be stored in putting sheds. The potting compost at the time of use should not be bone-dry, but should be moderately moist.

Method of Mixing the Ingredients: The ingredients of the compost are generally not sieved except to remove grass roots and large stones. In case of sowing of seeds or planting cuttings the compost is generally sieved. The ingredients are mixed thoroughly by placing them one above the other in layers. For example, to prepare the above compost two baskets of garden loam is first spread on the ground, over this one basket of leaf-mould is spread, following by half a basket of well-rotted manure, and finally half a basket of coarse sand. The process is repeated until a good heap is formed. Before putting, the subsequent layers all the spread-out layers are moistened lightly. After the heap is made, it is turned and the ingredients are mixed thoroughly.

Repotting: Repotting is an important operation. The time when repotting is to be done depends on several factors. When a potted plant is to be repotted with the ball of earth intact in a larger pot or in ground, this operation can be undertaken almost any time. When the ball of earth is to be disturbed or broken because of its being old or getting sour, the transplanting should be undertaken in a season when the roots are in active growth. However, orchids and some other plants, especially those that are transplanted bare root, are transplanted at the "resting period."

To ascertain good growth, repotting is essential. If the roots are seen to wind round the side of the pot, it is time for repotting, provided the plant is not in "resting" season. Under conditions in the Indian plains, the rainy season will be the best time for repotting. Plants, which have started new growth, should preferably be not repotted. For repotting a potted plant in a larger pot the plant is tossed out of the pot

gently. It is not always necessary to repot the plant in a larger pot. If the winding roots around the ball of earth are not many, the plant is repotted in the same sized pot after necessary root pruning. It the soil has become sour or old, a portion of it is removed and new compost is filled in between the ball of earth and the pot and then rammed firmly. When a larger pot is used, it should be just one size bigger than the previous one. Plants having sufficient root growth can be put in a pot slightly larger than the one needed.

It should be kept in mind that a right-sized pot because for potting and never an over-sized pot. While potting, a plant should be planted neither too deep nor very shallow, as both are harmful. A plant potted at shallow depth will not have sufficient hold and will be shaken by even a little disturbance. A safe method is to plant the old ball of earth at the same depth as it was in the previous pot.

Immediately after potting, the pots are removed to shade to enable the roots to get established. After the plant is established, it is brought out in the sun, gradually increasing the exposure time. The plant quickly uses up nutrients in pots and some of these are also washed out. To replenish them, potted plants need to be fed by liquid manure or by "top-dressing" at regular intervals. In the latter method, the top 2-7 cm compost is removed from the pot by scraping and the gap is filled with fresh compost. Top-dressing can be done once in 3-4 months, whereas liquid manure can be applied once in a fortnight. The hard crust on the surface of the compost is forked occasionally to depth of 1-2 cm to facilitated aeration and penetration of water. Termites and earthworms should not be allowed to enter the pots. The pots should be placed over a couple of bricks placed side by side.

Watering: It is often due to mismanagement in watering that potted plants suffer. The common mistake is to water either very little or too much. Over-watering will make the compost sour very soon as the compost is deprived of aeration. One way of knowing whether a pot needs watering is to gently tap the outside of the pot with a wooden hammer or rafter, on metallic sound, no watering required. The mode of watering will vary from plant to plant. Leafy and succulent plants need more frequent watering than the woody plants. Certain plants may need watering even twice a day during the summer.