

Special Horticultural Practices of Flower Crops

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Introduction

Flower crops like rose, chrysanthemum, gladiolus, tuberose, carnation, China aster, crossandra, jasmine, anthurium, are being grown commercially under open field condition and protected condition in greenhouses. These flowers have good demand in the market and mostly liked by the consumers. Under open field condition and protected condition these flowers are grown. Some special horticultural practices like pinching, disbudding, defoliation, staking, netting, de-suckering are followed for successful cultivation of flower crops. These special horticultural practices helps to build a proper structure of plant, improving growth and increase branches, quality flowers also obtained by following these practices and ultimately increase the production of flowers.

1. Pinching

Pinching is an important special horticultural practice in flower crops which reduces the size of plant and make the plant bushy. Pinching helps in controlling the height of plant and increases the number of branches. Pinching is the removal of apical buds with two to three open leaves. It is followed in flower crops like marigold, chrysanthemum, carnation, rose, gaillardia, China aster, annual chrysanthemum etc.



2. Disbudding

Disbudding is the removal of buds to control the size of flowers. This operation is done to increase the size of flowers. In standard chrysanthemum and standard carnation the lateral buds are removed and the central buds keep intact and in spray chrysanthemum and

spray carnation central buds are removed and the lateral buds are retained on the plant. Disbudding is generally followed in rose, chrysanthemum, carnation and dahlia etc.



3. Dis-shooting

Dis-shooting is the removal of side shoots or branches of the flower plant for improving the size and form of the flowers. e. g. For taking three blooms plant⁻¹, three lateral strong shoots are allowed to grow and others are removed at an early growth stage. Dis-shooting is followed in chrysanthemum, rose and carnation etc.



4. Staking

Some flower crops are tall and for proper growth they require support to grow straight. Crops like gladiolus, chrysanthemum grow tall and require proper support to grow. The plants are tied to bamboo stakes, or metal hog wire or sturdy wooden sticks to keep them erect. In India generally bamboo as a whole or their splits are used to stake the plant depending upon the size of plants to be staked.



5. Desuckering

In plants, during their vegetative growth phase, plants grow upwards and the new plant develop or arise continuously at the base of plants. That small arising plant from the base of main plant is called as suckers and the removal of suckers is called as desuckering. Suckers are remove to prevent the improper and vigorous growth of plant. Practice of desuckering is generally followed in chrysanthemum.

6. Mulching

Mulching is the laying of plastic sheets or other organic mulches like wheat straw, cotton seed hull, peanut hulls on the beds on which plants are grown for retaining the soil moisture and avoiding the growth of weeds. Wheat straw, pine needles, straw, etc. are also used as a mulches in flower crops. Mulching with plastic sheet reduces the growth of weeds and improves the root system.



7. Netting

Netting is the most important practice in carnation flower crops. Carnation flowers requires proper support for proper growth. Both standard and spray types of carnations are supported. So the netting of wire mesh in three to four layers are followed. When the plants grow, the nets are lifted accordingly. First layer is 7.5x7.5 cm, second layer is 10x10 cm, third layer is 12.5x12.5 cm and fourth layer is 20x20 cm. Lack of support result in bent stems, reduced stem length and obtained poor quality flowers.



8. Defoliation

Defoliation is the removal of leaves for improving the size of flowers and flowering and reduce the transpiration rate during the water stress condition. Defoliation practice is generally done manually or by using chemicals. Defoliation is generally followed in jasmine and anthurium.

9. Bending of shoots

Bending is the most important operation for developing the good number of lower or basal shoots for buildup of strong framework of the plant. Bending operation is generally followed in rose. After four weeks of planting the mother shoot is bent on the second leaf or close to the crown region.



10. Pruning

Pruning is the proper and judicious removal of plant parts such as shoots, spurs, leaves, roots or nipping away of terminal parts etc. to correct or maintain plant structure and increase its usefulness. Pruning gives definite shapes to the plant and develop a strong framework. Pruning is generally followed in rose and jasmine flower crops.

Conclusion

By following special horticultural practices like pinching, disbudding, dis-shooting, desuckering, mulching, bending, staking, netting and defoliation under open field and protected condition found beneficial for achieving quality flower production which improve



the economic condition of farmers and growers. In some flower crops like marigold, chrysanthemum and carnation different types of pinching are followed and found better for vegetative growth and increasing flower yield.

References

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