

Improved Production Technology of Cut Rose

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SUMMARY

The present article is related to the improved production technology of Cut Rose. Which includes botanical description of Cut Rose, improved varieties, soil and climate, propagation and planting, after cultivation care, disbudding, dead shoot removal, defoliation, manuring and fertilization and harvesting etc. Information on Post harvest handling is also given in this article. There are 20,000 or more rose cultivars in the world, light is an important factor which decides the growth. Proper light and temperature can play a vital role in growth and development of rose which results in better yield for higher returns.

INTRODUCTION

Rose is the most ancient and popular flower grown in the world. In India, it is cultivated commercially for cut flowers. Rose is also cultivated for *rose attar* and other products like *gulkand*, *gulabjal* and *pankhurj*. The rose is grown in about 6,000 ha area. Karnataka, Tamil Nadu, Maharashtra, Bihar, West Bengal, Uttar Pradesh, Madhya Pradesh, Gujarat and Andhra Pradesh are major rose growing states.

Botanical name: *Rosa species*

Family: Rosaceae

Chromosome no: $2n=14$

Origin: Northern Hemisphere



Cultivation of Rose in Polyhouse

Varieties

Modern roses can be grown in gardens are Hybrid Teas, Floribunda, Polyantha, Climbers and Ramblers, Miniatures and Shrub-roses. There are 20,000 or more rose cultivars in the world. Pusa Gaurav, Pusa Bahadur, Pusa Priya, Pusa Virangana, Jawahar, Abhisarika, Pusa Christiana are some of the important rose varieties.



Different Species of Rose

Soil and Climate

It is generally suitable for higher elevation 1500 m and above. It can also be grown in the plains under ideal condition of fertile loamy soils with salt free irrigation water. The ideal climate for rose growing should have temperature with a minimum of 15⁰C and maximum of 28⁰C. Light is an important factor which decides the growth.

Propagation and planting

The crop can be propagated by rooted cuttings or by budding in hills and plains. December- February is ideal time for budding in northern plains and February- March in hills. One year old budded plants are planted in July – August at 75 cm x 75 cm spacing.



Rose Stem for Propagation

Planting of Rose

After cultivation: The plants should be watered daily until they establish and thereafter once in a week. Pruning is done during March and October. Spray Diuran 2.5 kg a.i./ha for weed control.

Disbudding: Varieties produce some side buds below the center bud. These side buds have to be removed or disbudded. The disbudding must be done regularly and also as soon as possible in order to avoid large wounds in the upper leaf axil.

Dead shoot removal: In the older plants the dead shoot or dried shoots on plants will serve as the host for fungi. So, regularly these have to be removed.

Defoliation: The removal of leaves is known as defoliation. It is done mainly to induce certain plant species to flower or to reduce transpiration loss during periods of stress. The shoots are defoliated after pruning. Defoliation may be done by removal of leaves manually or by withholding water.

Manuring and fertilization

Rose is a perennial crop, it requires regular nutrient feeding through manures and fertilizers at the time of pruning, plant growth and at the end of flowering. At three months interval, apply FYM at 10 kg and 8:8:16g NPK per plant after each pruning. The application of liquid fertilizers to rose plants growing in open is not necessary if adequate quantities of appropriate fertilizers have been provided to them.

Irrigation

The frequency of irrigation depends upon the soil texture and climate. Proper moisture maintenance is very much necessary. Drip irrigation is useful, sprinkler irrigation should be avoided as it encourages infection of leaf diseases.

Harvesting of Rose in Polyhouse

It is done with sharp secateurs at the tight bud stage when the colour is fully developed and the petals have not yet started unfolding. There should be 1-2 mature leaves left on the plant after the flower has been cut, reason for leaving these is to encourage production of new strong shoots. Harvesting is done preferably during early morning hours.

Yield

The Hybrid Tea roses can yield about 70-80 stems/plant/year, while the Floribundas yield may be 80-90 stems/plant/year.

**Post harvest handling**

Roses must be placed in a bucket of water immediately after harvesting. The flowers are graded according to the length. It varies from 40-70 cm depending on the variety and packed in a bunch of 10-12.



Packaging of Rose

CONCLUSION

Rose is cultivated commercially for cut flowers, it is now considered as good horticultural crop for income generation to farmers. Now-a-days it is grown with various techniques for better and quality flowers to get ample amount of economic returns. By adoption of proper production technology farmers can get many benefits in cultivation and marketing of rose.

REFERENCES

Chadha K.L. (2015) Handbook of Horticulture. pp: 578-582.
<http://agritech.tnau.ac.in/tnau>