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Studied Vase Life of different genotypes of Rose (Rosa Hybrida) grown under Polyhouse condition

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Abstract: *A polyhouse experiment was conducted to study the vase life of rose grown under polyhouse condition. The experiment consisting twelve cultivars of four colours each (red, yellow, orange and white) were selected for study. The experiment was laid out in completely randomized block design (CRBD) with twelve treatments and three replications. The influences of different genotypes of rose on yield contributing parameters and vase life of flower were studied. The maximum vase life of flowers (10.66 days) was recorded by Mericlear cultivar and it was significantly superior over rest of the cultivars except Naranga and Spinx. More values of vase life attributes to the significantly the highest diameter (0.51 cm) and length of stalk (61.23 cm) were observed in this genotype. The minimum vase life (6.00 days) was observed in Ice berg and Snow white it was on par with rest of the cultivars except Mericlear, Spinx and Naranga. The cultivar Spinx and Naranga recorded more or less similar vase life of flowers.*

Keywords: *Cultivar, genotype and vase life.*

I. Introduction

Rose (Rosa hybrida) is called as the 'Queen of flowers', which is the most beautiful nature's creation. It is certainly the best known and most popular of all cut flowers throughout the world. The commercial rose production especially under polyhouse conditions and vast scope for building up a flourishing commercial cut flower industry to meet the growing internal demand of India.The rose is a very important for cut flower production. Rose being a perennial plant and it has a various types of colors. It is used for beautification, making garlands, bouquets and also for cut flowers. The variation in growing medias, climatic conditions, better genotypes and nutritional aspects through fertigation which affects the quality as well as quantity of flowers. In the jurisdiction of Pune area the most of the floriculturist grows rose under polyhouse condition. The market value of cut flowers of rose depends on color and vase life of flower. Vase life is a most important accepts for production of cut flower. The color and vase life of flower depends on the genotypes

II. Materials And Methods

The experimental material consists oftwelve cultivars of four colours each (red, yellow, orange and white) were selected for study. The experiment was laid out in completely randomized block design (CRBD) with twelve treatments and three replications.The influences of different genotypes of rose on yield contributing parameters and vase life of flower were studied. These cultivars are procured by I/C, floriculture project from Trimurti Rose Nursery, Rawet (Pune) and they were cultivated under protected conditions for two years and four months. These plants were selected for studied The pinhole size opened flowers were harvested from plants at same stalk length and placed in conical flask containing 200 ml tap water. On the every days, cut little stalk from bottom and change the water, at the fully opening of flowers and starting of petals dropping measured the vase life in terms of days experiment was laid down at Hi- Tech Floriculture and VegetableProject, College of Agriculture. Pune- 5The analysis was carried out in computer using software INDOSTAT as per standard procedure .

III. Results And Discussion

A polyhouse experiment was conducted to study the vase life of rose grown under polyhouse condition. The experiment consisting twelve cultivars of four colours each (red, yellow, orange and white) were selected for study. The experiment was laid out in completely randomized block design (CRBD) with twelve treatments and three replications. The influences of different genotypes of rose on yield contributing parameters and vase life of flower were studied.The data on vase life of flowers are presented in Table 6 and Fig. 6. The maximum vase life of flowers (10.66 days) was recorded by Mericlear and it was significantly superior over rest of the cultivars except Spinx. More values of vase life attributes to the significantly the highest diameter (0.51 cm) and length of stalk were observed in this genotype (Table 5). The minimum vase life (6.00 days) was observed in Ice

berg and Snow white it was on par with rest of the cultivars except Mericlear, Spinx and Naranga. The cultivar Spinx and Naranga recorded more or less similar vase life of flowers.

Among the red cultivars the Grand gala recorded significantly higher vase life (7.66 days) as compared First red (6.66 days) and it was on par with Passion. In respect of yellow cultivars Spinx recorded significantly maximum vase life (9.00 days) than Gold strike (6.33 days) and Sunking (7.33 days). Among the orange cultivars Mericlear observed significantly superior vase life (10.66 days) over rest of the cultivars. The Ice berg and snow white are the white cultivars recorded lowest vase life.

Table no. 1
Vase life of flowers as affected by different cultivars of rose grown under polyhouse condition.

Colour of genotypes	Genotypes	Vase life of flowers in days
Red	**Passion**	7.33
	Grand gala	7.66
	First red	6.66
	Mean	7.21
Yellow	**Gold strike**	6.33
	Spinx	9.00
	Sunking	7.33
	Mean	7.55
Orange	**Naranga**	8.66
	Mericlear	10.66
	Sakira	6.66
	Mean	8.66
White	**Bianca**	6.66
	Ice berg	6.00
	Snow white	6.00
	Mean	6.22
	S.E. ±	0.57
	CD 5%	1.68

IV. Conclusions

The Mericlear an orange genotype recorded significantly the highest vase life as compared with rest of the cultivars except Spinx (Yellow) and Grand gala (Red). The grand gala (red), Passion (red) and Spinx (yellow) is recommended for obtaining higher benefits to the growers under polyhouse condition.

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