

RELATIVE PERFORMANCE OF SOME CULTIVARS OF GLADIOLUS IN RELATION TO DATE OF PLANTING THE CORMS

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ABSTRACT

An experiment was conducted at Horticulture Research Farm, Raja Balwant Singh, Bichpuri, Agra under the field condition during the winter season of 2002-2003 to find out the "Relative performance of some cultivars of gladiolus in relation to date of planting the corms". Based on the performance of crop it is inferred that gladiolus cultivation may be a productive enterprise with the date of planting 10 October, 20 October and 30 October and varieties Jester, Red beauty, Pink and White Prosperity.

Key word : Gladiolus, Cultivars, Date of planting

Gladiolus is an important cut flower crop both in domestic and international market. Its cut spikes remain fresh at least for a week and they are in great demand for presentation and interior decoration. Gladiolus requires different environmental conditions for its growth and development.

Time of planting is mainly governed by temperature, light, relative humidity, wind velocity etc. In view of it, time of planting is determined mostly by the climatic features of the region. Each variety of Gladiolus need a definite time of planting for exhibiting its best performance in respect to growth and development variety grows very well in a specific period in a particular region but when it is grown in the same duration in another region it does not come to the level as noted in farmer one. It, itself, has great potential to bring out variation in growth, flowering, yield and vase life of gladiolus. Moreover, variety in general is held responsible for the make up of plant as it is a genetic capsule, which carrier hereditary characters in off spring. Keeping this fact in mind, varieties namely Jester, Red beauty, Pink and White prosperity of gladiolus were choosen for assessment of their performance with regard to growth, showing and corm yield in the present experiment.

MATERIALS AND METHODS

The experiment was carried out at the Raja Balwant Singh College, Bichpuri, Agra (U.P.) during 2002-2003 on sandy loam soil with 7.5 pH to test the relative

performance of some cultivars of Gladiolus in relation to date of planting the corms. The present experiment comprising four cultivars of gladiolus Jester (V_1), Red beauty (V_2) Pink (V_3) and White prosperity (V_4) and three date of planting the corms October 10 (D_1), October 20 (D_2) and October 30 (D_3) was laid out in a Randomized Block Design (single row plot) with three replication. Corms were treated with 0.2% Bavistin solution before their planting. The corms were planted in 5 cm deep trenches at spacing of 30 cm x 30 cm and covered with soil. Irrigation, weeding, hoeing, earthing and top-dressing were done at appropriate time.

RESULTS AND DISCUSSION

The behaviour of varieties tested in this investigation was significantly different in their vegetative growth, flowering, corm and cormel production (Table 1). The cultivars have shown significant difference in their plant height in this experiment. The plant of variety White prosperity attained the maximum height (76.26 cm) while those Pink, Red beauty and Jester were at par having 47.79 cm, 47.76 cm and 47.74 cm height respectively. The plant of variety White prosperity attained the maximum diameter of neck also, i.e. 1.33 cm, while the plants of Jester attained the minimum diameter being, however, at par with Red beauty and pink (0.9, 0.97 and 0.89 cm) respectively. Similar variations among the cultivars of Gladiolus have been reported by Leena (1993). The maximum number of leaves per plant was found to be in the plants of variety White Prosperity. While the other 3 varieties were identical in this study. Vats and