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Performance of Gerbera (*Gerbera jamesonii*) under naturally ventilated polyhouse condition

S.D. MAGAR, S.D. WARADE, N.A. NALGE AND C.A. NIMBALKAR

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SUMMARY

The study was carried out to evaluate the performance of 28 genotypes of gerbera at the Hi-tech Floriculture and Vegetable Improvement Project, College of Agriculture, Pune during 10th January, 2007 to 10th January, 2008. The observations in respect of growth and yield characters were recorded. The varieties were tested qualitatively with regards to flower colour, flower grade and vase life in tap water. The varieties Esmara, Lomboegine, Sonata, Verginia and Devil produced higher number of suckers indicating their capacity to give higher sucker yield. The varieties Martinque, Banesa, Esmara, Devil, Verginia, Gucci and Opium observed with large flower diameter and flower stalk length while, the varieties Solem, Pink snow, Opium and Maidemoselli produced highest stalk thickness were best suited for cut flower production. The varieties Banesa, Esmara, Opium and Grizzly had more vase life in tap water. The high yielding varieties Sonata, Esmara, Opium, Solem, Gucci, Diana, Naome, Martinque, and Maidemoselli were useful for obtaining higher returns under naturally ventilated polyhouse. During investigation Sonata, Esmara, Opium, Solem, Devil, Banesa, Verginia, Naome, Diana, Martinque and Maidemoselli were superior over the rest of the varieties under study in terms of flower quality and flower yield and can be recommended for commercial cultivation under naturally ventilated polyhouse conditions.

Key words : Gerbera, Performance, Polyhouse

Gerbera is an important flower crop cultivated throughout the world and grown over an area of 98.40 ha. Producing 1,476 lakh stems annually in Maharashtra (Anonymous, 2007). A large number of gerbera cultivars are available to suit the requirement of the growers. However, selection for commercial cultivation should be made considering several factors, particularly on the basis of their performance and market demand. Exportable or superior quality cut blooms of gerbera for domestic as well as distant market are not produced easily under open field condition.

Gerbera jamesonii is commonly known as Transvaal, African or Barberton Daisy. The genus Gerbera was named in honour of the German naturalist Traugott Gerber and the species jamesonii in honour of Captain Jamson (Das *et al.*, 1989).

The present investigation was, therefore planned and undertaken under naturally ventilated polyhouse

Authors' affiliations:

conditions, to record the standardised description of some of the important exotic gerbera cultivars and to determine the outstanding gerbera cultivars for commercial cultivation under naturally ventilated polyhouse conditions.

MATERIALS AND METHODS

The experiment was undertaken at Hi-tech Floriculture and Vegetable Improvement Project, College of Agriculture, Pune in Completely Randomised Design replicated thrice with twenty eight gerbera varieties and 5 plants as a unit under naturally ventilated polyhouse conditions during 10th January, 2007 to 10th January, 2008. Eight week old tissue cultured plantlets of twenty eight gerbera genotypes were procured from different private Ltd. Companies.

The plantlets were planted at spacing 25x25 cm in pots using coco peat as growing media. Cultural practices like fertigation and plant protection were carried out as per standard recommendations and kept common for all treatments. The observations on growth and quality parameters were recorded in each replication per treatment.

RESULTS AND DISCUSSION

The results obtained from the present investigation as well as relevant discussion have been presented under following heads :

Correspondence to:

S.D. MAGAR, Department of Horticulture, College of Agriculture, DHULE (M.S.) INDIA

S.D. WARADE, Department of Horticulture, Mahatma Phule Krishi Vidyapeeth, Rahuri, AHMEDNAGAR (M.S.) INDIA

C.A. NIMBALKAR, Department of Agriculture Statistics, Mahatma Phule Krishi Vidyapeeth, Rahuri, AHMEDNAGAR (M.S.) INDIA

N.A. NALGE, Department of Horticulture, College of Agriculture, AKLUJ (M.S.) INDIA