Effect of different planting densities on performance of gerbera under polyhouse conditions

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ABSTRACT: Before a decade the concept of protective cultivation / polyhouse technology was introduced in India. Now-a-days it is popularized among the farmers in Maharashtra and some other States. The farmers have realized the importance of this technology and started cultivation of different floricultural, vegetable and fruit crops under the protective cover. Gerbera is one of the most important cash crop which requires less maintenance than the other floricultural crops. Planting density plays an important role in success of crop. In general the planting density should be such that it provides a congenial root environment and results in healthy growth of plants. Gerbera cultivation under polyhouse is quite popular in Maharashtra, but very meagre work related with the systematic study regarding the planting density has been reported. Planting density plays a vital role in influencing the quality of flowers as well as the incidence of diseases and pests. Keeping in view the importance of planting density on growth and quality of flowers the experiment was undertaken at Precision Farming Development Center, Mahatma Phule Krishi Vidyapeeth, Rahuri, Dist. Ahmednagar (M.S) continuously for three consecutive years on different planting densities viz., 30 x 30 cm, 30x 37.5 cm, 30x 45 cm, 37.5 x 37.5 cm and 45 x 45 cm. Plants grown at 30x 30 cm produced maximum flowers/ m²/year (317.00) followed by 37.5 x 37.5 cm (304.17). The average stalk length, top diameter of flower and number of flowers/plant/year were significantly superior in 30x 30 cm. Among the varieties cultivar Diablo proved to be the vigorous and yielded 335.63 flowers/ m²/year.

KEY WORDS: Polyhouse, Gerbera, Planting density, Irrigation, Fertigation