RESEARCH PAPER

## Effect of spacing and nutrient management on growth and yield of sunflower (*Helianthus annuus* L.) under south Gujarat condition

S.J. SANDHI\*, J.G. PATEL¹ AND C.K. DESAI
Department of Agronomy, N.M. College of Agriculture, Navsari Agriculture University,
NAVSARI (GUJARAT) INDIA

**Abstract :** A field experiment was conducted at College Farm, Navsari Agricultural University, Navsari (Gujarat) during *Rabi* season of the year 2011-12 to study the effect of spacing and nutrient management on growth and yield of sunflower (*Helianthus annuus* L.) under South Gujarat condition. Almost all the growth and yield attributes such as maximum plant height at 30 DAS, 60 DAS and at harvest, higher seed and stover yields were recorded with spacing 30 cm x 20 cm. While, maximum head diameter, number of seeds per head and 100 seed weight were recorded with spacing 60 cm x 20 cm. The highest net realization of Rs. 29990 ha<sup>-1</sup> with BCR value of 2.04 was accrued with spacing 30 cm x 20 cm. All the growth and yield attributes such as maximum plant height, seed and stover yields, head diameter, number of seeds per head and 100 seed weight were recorded with 125 per cent RDF *i.e.* 75: 37.5: 00 NPK kg ha<sup>-1</sup> which were remained at par with 100 % RDF. Same results recorded with the use of biofertilizer (*Azotobacter*). Treatment receiving 125 % RDF realized the highest net realization of 30019 Rs.ha<sup>-1</sup> with the highest BCR of 2.05. There was an appreciable increase in net realization due to biofertilizer.

Key Words: Spacing, Nutrient management, Growth, Yield, Sunflower

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