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Economics of Different Sowing Dates, Plant Populations and Genotypes for Summer Grown Sunflower

P. M. Sobarad* and M. N. Sheelavantar

Department of Agronomy, UAS, Dharwad-580 005, Karnataka

Sunflower being not as choicy for soil and climate as groundnut, is gaining prominence among the cultivators, owing to its photoperiodinsensitive nature, higher oil production per unit area and short duration. Sunflower, eventhough can be grown all the year round, it responds to the seeding time in a particular season (Habeebullah *et al.,* 1933) and is creeping in the project areas and grown during summer under irrigated conditions. Therefore, an investigation was carried out to study the economics of growing summer sunflower genotypes at different sowing dates and plant populations.

A field experiment was carried out on black clay loam at the Agricultural College Farm, Dharwad during summer 1992. Two genotypes viz., Morden (V_1) and BSH-1 (V_2) were sown on three dates viz., January 15th (D_1), January 30th (D_2) and Fabruary 15th (D_3) at population levels of 0.83 (P_1) and 1.11 lakh plants per ha (P_2). A fertilizer dose of 62.5; 75;

TABLE 1

Economics of different sowing dates, plant populations and genotypes for summer grown sunflower.

Treatments	*Gross Income (Rs/ha)*	*Cost of cultivation (Rs/ha)*	*Net Income (Rs/ha)*	*Benefit : Cost ratio*
$D_1P_1V_1$	14,300.00	6,271.50	8,028.50	1.28
$D_1P_1V_2$	17,780.00	6,962.50	10,817.50	1.55
$D_1P_2V_1$	13,800.00	6,230.00	7,570.00	1.21
$D_1P_2V_2$	15,490.00	7,050.00	8,440.00	1.19
$D_2P_1V_1$	18,180.00	6,412.50	11,767.50	1.83
$D_2P_1V_2$	20,790.00	7,115.00	13,675.00	1.92

*Present address : Ph. D. Scholar, Division of Agronomy, IARI, Pusa, New Delhi-110 012.

1.	2.	3.	4.	5.
$D_2P_2V_1$	14,770.00	6,277.50	8,492.50	1.35
$D_2P_2V_2$	16,690.00	7,110.00	9,580.00	1.34
$D_3P_1V_1$	10,610.00	6,032.50	4,577.50	0.75
$D_3P_1V_2$	13,300.00	6,740.00	6,560.00	0.97
$D_3P_2V_1$	9,740.00	6,027.50	3,712.50	0.61
$D_3P_2V_2$	12,530.00	6,900.00	5,630.00	0.81

62.5: N; P_2O_5; K_2O kg per ha was applied uniformly and crop was irrigated at an interval of 13-15 days. Economics of each treatment combinations was worked out and data is presented in Table 1.

The highest net income of Rs. 13,675.00 per ha with the highest benefit : cost ratio was realised by growing hybrid BSH-1 (V_2), when sown on January 30th (D_2) at a population of 0.83 lakh plants per ha (P_1). The next best combination was sowing of morden (V_1) on January 30th (D_2) at population of 0.83 lakh plants per ha (P_1) which gave a net income of Rs. 11,767.50 per ha with a benefit : cost ratio of 1.83. The lowest net return (Rs. 3712.50/ha with benefit : cost ratio 0.61) was recorded when Morden (V_1) was sown on February 15th (D_3) at a population of 1.11 lakh plants per ha (P_2) among all the treatment combinations.

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