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Short Communication

Effect of sowing time on performance of wheat genotypes

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Wheat is the important cereal crop sown in winter season. Sowing time of wheat varies from region to region as it is governed by the maturity period and planting time of previous crop, especially in the areas where it follows after Rice, Cotton or Sugarcane. Genotypes and sowing time are the two key factors in determining the yield and grain quality of wheat. The importance of timely sowing of wheat for higher production has also been advocated by Nainwal and Singh (2000). Therefore, the present study was undertaken to evaluate the suitability of timely sown genotypes for late sown conditions.

The experiment was conducted on medium to black soil with available N-214, P-12.3 and K-521 Kg/ ha. during *rabi*-2005-06 at Agricultural Research Station, Niphad, Dist. Nashik (M.S.). Three sowing dates *viz*., D_1- 8th November, D_2- 30th November and D_3- 20th December as main plot treatment and six genotypes *viz*., V_1- raj-4037, V_2- GW-322, V_3-MACS-2846, V_4-HI-977, V_5-NIAW-34 and V_6- PBW-533 as sub plot treatment were tried in Split Plot Design to assess the suitability of genotypes for late sown conditions. The experimental gross plot size was 2.07 m x 8.0 m and net plot size was 1.61 m x 7.0 m. The crop was subjected to recommended package of agronomic and plant protection practices to obtain a healthy crop. The net plot yield is converted in to quintal per hectare by using hectare factor.

The data presented in table revealed that, the grain yield differences were statistically significant due to

Table : Mean grain and straw yield of wheat (qt/ha.) and ancillary data as influenced due to different treatments.

Treatments	Yield (qt/ha.)		Ear heads /sq.mt.	No. of grains /ear head	1000 grain wt (gm.)
	Grain	Straw			
A) Main plot (Dates of Sowing)					
D_1= 8th Nov	41.22	79.95	407.39	42.44	48.01
D_2= 30th Nov	40.89	73.13	402.44	39.16	47.93
D_3= 20th Dec	37.58	71.06	377.56	37.47	44.13
S.E.±	0.14	0.55	1.24	0.40	0.06
C.D. at 5 %	0.43	1.64	3.72	1.19	0.17
B) Sub-Plot (Genotypes)					
Raj-4037	40.32	78.87	413.78	35.56	46.42
GW-322	43.66	70.41	400.22	45.76	42.33
MACS-2846	34.62	73.82	377.89	36.38	53.52
HI-977	39.55	77.67	388.67	38.93	44.63
NIAW-34	40.21	78.89	396.44	42.51	43.22
PBW-533	41.03	68.62	397.78	39.00	50.01
S.E.±	0.17	0.51	0.92	0.27	0.15
C.D. at 5%	0.51	1.53	2.76	0.80	0.46
Interaction					
S.E.±	1.01	3.06	5.53	1.60	0.93
C.D. at 5%	N.S.	N.S.	N.S.	N.S.	N.S.
C.V. %	7.60	12.30	4.19	12.07	5.96

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different sowing dates. The early sowing (8th Nov.) gave significantly more grain yield (41.22 q/ha) than late sowing (20th Dec.) (37.58 q/ha) but was on par with D2 treatment (30th Nov.) with yield of 40.89.q/ha. The grain yield of wheat was decreased with each delay in sowing. This might be because of shorter period available for anthesis and grain development in delayed sowing of wheat. Reduction in yield due to late sowing has also been reported by Sardana *et al*. (2002)

The grain yield differences due to different genotypes were statistically significant. The variety GW-322 (43.66 q/ha.) out yielded all other varieties. Variation in yield of wheat varieties due heterogeneity in genetical constitution has also been reported by Rawat *et al. (2000).* The interaction effect was non-significant.

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