



Asian Journal of Plant Sciences

ISSN 1682-3974

science
alert

ANSI*net*
an open access publisher
<http://ansinet.com>

Akhtar *et al.*: Sowing dates, wheat varieties, yield components, Pakistan

Table 1: Wheat grain yield (kg ha⁻¹) of different varieties (V) at different sowing dates (D) of year 1997-98 to 1998-99

Varieties	Sowing dates						Mean
	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	
Inqalab-91	4470.5b	4765.5b	5000.0a	4416.50b	3860.0d	2552.0h	4177.3A
Punjab-96	4350.5bc	4392.5b	3993.0c	3480.0e	2885.5g	2274.5hi	3562.5C
95-IB-4173	3436.5e	4293.0c	4582.0b	3639.5d	2956.0g	2361.5hi	3544.8C
7061	3788.5d	4453.0bc	4819.0a	4628.50b	3825.5cd	2535.0h	4008.3B
MH-97	3837.0cd	4026.5b	3921.5cd	3819.0d	3344.0f	2180.5i	3521.5C
92128	3915.0cd	3941.5cd	3646.0d	3446.0e	2875.0g	2188.0hi	3335.16D
92145	3969.5c	3912.5cd	3528.5e	3605.5e	2996.5g	2102.0i	3352.4D
Mean	3966.78B	4255.0A	4212.85A	3862.2B	3248.9 C	2313.0 D	

Means not sharing a letter in common differ significantly at $p \leq 0.05$

Cd1 for varieties = 112.91

Cd1 for sowing dates = 202.24

Cd1 for varieties X sowing dates = 298.8

Table 2: 1000- grain weight (g) of different wheat varieties (V) at different sowing dates (D) of year 1997-1998 to 1998-99

Varieties	Sowing dates						Mean
	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	
Inqalab-91	39bc	44a	41ab	35	27e	20f	34
Punjab-96	37bcd	41ab	37bcd	35	24e	17g	32
95-IB-4173	36cd	39bc	37bcd	33	22f	16g	31
7061	38bc	40b	39bc	35	23ef	21f	33
MH-97	37bcd	40b	38bc	33	22f	16g	31
92128	37bcd	39bc	37bc	34	22f	16g	31
92145	38bc	40b	38bc	33	22f	17g	31
Mean	37A	40A	38A	34A	23B	18B	

Means not sharing a letter in common differ significantly at $p \leq 0.05$

Cd1 for sowing dates = 6.67

Cd1 for varieties X sowing dates = 3.98

Table 3: Number of fertile tillers (m⁻²) of different wheat varieties (V) at different sowing dates (D) of year 1997-1998 to 1998-1999.

Varieties	Sowing dates						Mean
	D ₁	D ₂	D ₃	D ₄	D ₅	D ₆	
Inqalab-91	310a	360	330	302a	290b	270b	310
Punjab-96	315a	352	322	298b	270d	250b	301
95-IB-4173	302a	353	315	295b	275b	255b	299
7061	318a	350	329	292b	260b	240b	298
MH-97	320a	355	345	300a	260b	242b	303
92128	305a	352	342	302a	236c	240b	297
92145	298b	343	322	303a	270b	232c	295
Mean	309.7B	352.0A	329.3A	298.8B	265.8C	247.0C	

Means not sharing a letter in common differ significantly at $p \leq 0.05$

Cd1 for sowing dates = 32.02

Cd1 for varieties X sowing dates = 61.5

No. of fertile tillers: The maximum number of fertile tillers were attained on 15th Nov. (D₂) for all varieties/cultivars followed non-significantly by 30th Nov. (D₃). Before or after these dates, this growth parameter was decreased significantly (Table 3). Similar findings were reported by Randhawa *et al.* (1981), Phadnavis and Saini (1992). The interaction between wheat varieties /cultivars and sowing dates was also significant, however mean values for all the varieties/cultivars were statistically same for this yield component. On the basis of two years results it was concluded that sowing of wheat crop from 15th Nov. (D₂) to 30th Nov. (D₃) resulted in a significantly higher values as compared to rest of sowing dates.

References

Ali, G., Z. Iqbal and M.S. Nazir, 1982. Grain yield and protein contents of some short duration wheat genotypes in relation to degree of late sowing. *J. Agric. Res. Pak.*, 20: 9-16.

Anonymous, 2002. Statistical Pocket Book of Pakistan, Federal Bureau of Statistics, Statistical Division Govt. of Pakistan, pp: 83.

Dabre, W.M., S.B. Lall and G.L. Ingole, 1993. Effects of sowing dates on yield, ear number, stomatal frequency and stomatal index in wheat. *J. Maharashtra Agric. Uni.*, 18 : 64-66.

Kalyan, S., H.D. Verma, P.P. Singh and D.K. Jasmini, 1985. Effect of sowing dates and nitrogen on growth and yield of some new wheat varieties. *Ind. J. Agron.*, 30 : 72-74.

Kumar, S., A.S. Bangarwa and V.S. Kadian, 2000. Response of wheat varieties to sowing dates and nitrogen level. *Ann. Agric. Bio. Res.*, 5: 99-103.

Lathwal, O.P. and S.K. Thakral, 1999. Performance of wheat varieties sown on different dates under rainfed conditions. *Crop Res.*, 18: 470-471.

Phadnavis, B.N. and A.D. Saini, 1992. Yield models in wheat based on sowing time and phenological developments. *Ann. Pl. Physiol.*, 6 : 52- 59.

Raj, S., D. Singh and U.V. Rao, 1992. Effect of date of sowing and row spacing on the yield of wheat. *Crop Res.*, 5: 199-206.

Randhawa, A.S., S.S. Dhillon and D. Singh, 1981. Productivity of wheat varieties as influenced by time of sowing. *J. Res. Pb. Agric. Univ.*, 18: 227-233.

Steel, R.G.D. and J.H. Torrie, 1984. Principles and Procedures of statistics. McGraw Hill Book Company, New York, pp: 187-188.