Zn efficiency in a genotype and it is likely that different genotypes subjected to Zn deficiency under different environmental conditions will respond by one or more different efficient mechanisms. Because of differential zinc efficiency, the expression of zinc deficiency symptoms varied among the genotypes tested.

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Research Notes

Correlation analysis in bread wheat *(Triticum aestivum* L.)

R.K.KAMBOJ
SKN College of Agriculture, Jobner(Jaipur) Raj. 303 329.

Wheat (*Triticum aestivum* L.) is an important cereal crop of India. In a country like India, cereals are the major sources of food carbohydrate. In order to impart resistance to biotic and abiotic stresses , it is imperative to introduce desirable attributes in a good agronomic base. For this ,an inevitable requirement is to characterize the germplasm. Adams (1967) has shown that component compensation and negative correlations arise in response to competitions between developmentally flexible components. In absence of stress *viz.*, salinity or drought the correlations are trivial. In wheat the studies on correlations have been conducted by several

Table 1. Genotypic (G), phenotypic (P) and environmental (E) correlation coefficients in wheat.

Character		Days to 75% flowering	Days to 75% maturity	Tillers/ plant	100-grain weight (g)	Grain yield/ plant(g)	Grain yield/ plot(g)
Plant height	G	-9.72**	-1.19	-1.13	-5.76**	-0.27	0.04
	P	17.18**	0.91	-0.06	7.98**	-0.26	0.28
	E	48.42**	4.42**	0.42	24.77**	-0.25	0.71
Days to 75% flowering	G		-3.60**	1.59	-0.52	0.55	0.47
	P		0.32	1.24	-1.08	-0.50	-0.13
	E		4.34**	0.65	-1.48	-1.80	-2.18*
Days to 75% maturity	G			-13.74**	-2.00	0.25	0.05
	P			0.04	-0.50	0.15	0.06
	E			4.80**	0.79	0.01	-0.01
Tillers/ plant	G				-2.19*	0.25	0.15
	P				-0.34	0.16	0.18
	E				0.09	0.12	0.21
100 grain weight(g)	G					-0.16	-0.12
	P					-0.36	-0.02
	E					-0.59	-0.03
Grain yield/ plant(g)	G						0.35
	P						-0.45
	E						-2.64*

* P = 0.05; ** P = 0.01

workers (Smocek, 1977; Croy *et al.,* 1978; Simons and Hunt ,1983 and Jag Shoran,1995).

This paper reports the results of a study conducted to find out the correlations between yield and yield components among a set of salinity and drought tolerant genotypes.

The material consisted of 14 salinity and drought tolerant genotypes of bread wheat (*Triticum aestivum* L.).The lines were the advanced generation materials. The experiment was laid out in randomized block design with 4 replications in winter *(rabi)* at the farms of SKN College of Agriculture, Jobner. Each entry was sown in a eight row plot. A distance of 25 cm between rows and 10 cm between plants was maintained. Recommended package of practices was followed to raise a good crop.

Observations were recorded on 10 randomly selected plants in each plot on plant height (cm), days to 75% flowering, days to 75% maturity, number of tillers/plant, 100-seed weight, grain yield/ plant(g) and grain yield/

plot(g). Phenotypic, genotypic and environmental correlation coefficients between grain yield and yield components and among yield components themselves were calculated following the method of Searle (1961).

Correlation studies revealed that the association of grain yield/ plot and grain yield/ plant with different characters was positive but nonsignificant except that at environmental level. Grain yield/ plot showed significantly negative correlation with days to 75% flowering and grain yield/ plant (Table 1).

The 100-grain weight showed significant negative genotypic correlation with plant height and tillers/plant while highly significant positive correlations between 100-grain weight and plant height were observed at phenotypic and environmental level. Tillers/plant exhibited highly significant negative genotypic correlation and highly significant positive environmental correlation with days to 75 % maturity. A highly significant negative correlation at genotypic level was observed between days to 75% flowering and days to 75% maturity while days to 75% maturity showed highly significant positive environmental correlations with days to 75% flowering and plant height. Days to 75% flowering also exhibited highly significant negative genotypic correlation with plant height. The phenotypic and environmental correlations were also highly significant among these two characters. Grain yield has been reported to be positively correlated with spikes/plant, grains/ear, 100/ grain weight and grain weight/ spike (Smocek, 1977; Croy *et al.*, 1978; Simons and Hunt, 1983) and significantly positive correlations of grain yield/plant with spikes/ plant, grains/spike, grain weight/ spike, biological yield/plant and 100 grain weight had been reported by Jag Shoran (1995).

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