

Table (2): Analysis of variance of traits for 24 genotypes for drought tolerance grown under water regimes and two nitrogen fertilizer levels.

SOV	D.F	MS							
		leaf area	Heading date	Plant height	No. of spikes / plant	No. of kernels /spike	1000-kernels weight	Grain yield	biomass
Year (Y)	1	15.13**	69.35*	102.18	1.88	16.15	47.54	0.083	0.039
Rep./Year	4	0.38	0.80	0.24	0.001	0.108	0.12	0.12	0.017
Irrigation (I)	2	11730.67**	1971.39**	111435.12**	539.39**	27019.27**	5160.53**	7851.29**	2830.29**
Y*I	2	1.46	0.64	2.2	4.35	0.0013	0.064	0.35	0.0072
Error (a)	6	59.18	11.56	416.26	1.956	65.04	32.42	13.71	4.87
Nitrogen (N)	1	1254.81**	2521.91**	24382.13**	247.43**	2955.67**	692.37**	203.76**	157.33**
Y*N	1	7.58	34.77 *	51.2	0.94	8.12	23.8	0.23	0.028
I*N	2	5878.63**	986.45**	55843.9**	270.27**	13539.67**	2581.93**	3934.33**	1419.56**
Y*I*N	2	0.73	0.36	1.103	2.18	0.0089	0.036	0.236	0.007
Error (b)	12	57.78	8.63	388.03	1.668	61.58	31.68	13.46	4.68
G	23	1058.71**	282.55**	9187.83**	35.07**	1554.42**	939.48**	286.08**	107.79**
Y* G	23	1.45**	3.52**	5.03**	2.0569**	0.866**	2.042**	1.38**	0.018
I*G	46	1000.45**	95.67**	7111.53**	32.56**	1470.48**	325.73**	425.74**	148.83**
Y* I *G	46	1.02**	0.419*	0.53**	1.77**	0.1136**	0.039	0.31**	0.0204*
N* G	23	54.58**	105.29**	1035.88**	10.38**	126.62**	29.43**	9.62**	6.86**
Y* N *G	23	0.0033	0.095	0.0114	0.0046	0.109**	0.01	9.62**	0.0143
I*N*G	46	2.268**	0.105	16.13**	0.07**	3.313**	0.22**	1.49**	0.507**
Y* I *N*G	46	0.0023	0.052	0.0012	0.004	0.048	0.0077	0.23**	0.0123
Error (c)	552	0.255	0.28	0.02	0.0056	0.0538	0.083	0.0168	0.0145

*, ** Significant at 0.05 and 0.01 levels, respectively.

Table (13): Pearson's correlations coefficients (r) between 8 traits studied under water regimes and two nitrogen fertilizer levels.

		Leaf area		Heading		plant height		No. of spikes /plant		No. of kernels / spike		1000-kerenles weight		Yield	
		N70	N100	N70	N100	N70	N100	N70	N100	N70	N100	N70	N100	N70	N100
Leaf area	I ₁														
	I ₂														
	I ₃														
Heading	I ₁	0.24**	0.25**												
	I ₂	-0.21**	-0.23**												
	I ₃	-0.16	-0.15												
plant height	I ₁	0.09	0.09	-0.35**	-0.35**										
	I ₂	0.04	0.04	-0.59**	-0.6**										
	I ₃	0.19*	0.19*	-0.19*	-0.19*										
No. of spikes /plant	I ₁	-0.25**	-0.24**	0.19*	0.20*	-0.36**	-0.36**								
	I ₂	-0.06	-0.059	0.23**	0.22**	-0.29**	-0.29**								
	I ₃	0.023	-0.023	0.26**	0.26**	-0.51**	-0.51**								
No. of kernels / spike	I ₁	0.06	0.06	0.017	0.16	-0.18*	-0.17*	-0.32**	-0.33**						
	I ₂	0.022	0.025	0.07	0.104	-0.21*	-0.21**	-0.31**	-0.31**						
	I ₃	-0.22**	-0.21*	0.057	0.069	-0.58**	-0.58**	0.15	0.16						
1000-kerenles weight	I ₁	0.38**	0.38**	0.30**	0.30**	0.005	0.0012	-0.24**	-0.24**	0.46**	-0.45**				
	I ₂	-0.15**	-0.15	-0.008	0.0088	-0.23**	-0.23**	0.12	0.12	-0.16	-0.17*				
	I ₃	-0.15	-0.15	-0.037	-0.024	-0.28**	-0.28**	0.16*	0.17*	0.33**	0.33**				
Yield	I ₁	-0.42**	-0.39**	-0.061	-0.05	-0.09	-0.014	0.23**	0.21*	0.035	-0.06	-0.06	-0.016		
	I ₂	-0.30**	-0.28**	0.092	0.081	0.21*	0.17*	-0.021	-0.002	-0.0001	-0.02	-0.065	0.0008		
	I ₃	0.15	0.21*	0.03	-0.036	0.48**	0.52**	-0.12	-0.12	-0.33	-0.38**	-0.13	-0.16		
Biomass	I ₁	-0.10	-0.10	-0.27**	-0.27**	0.35**	0.35**	-0.055	-0.049	-0.35**	-0.35**	-0.23**	-0.22**	0.34**	0.30**
	I ₂	-0.005	-0.013	-0.086	-0.081	0.18*	0.17*	0.086	0.091	-0.43**	-0.44**	-0.005	0.005	0.17*	0.22**
	I ₃	0.15	0.15	-0.17*	-0.17*	0.55**	0.55**	-0.38**	-0.38**	-0.32**	-0.32**	-0.49**	-0.5**	0.29**	0.31**

*, ** Significant at 0.05 and 0.01 levels, respectively.

