

Table(2): Mean squares for days to heading, plant height, 1000-grain weight and grain yield/plant for each level of soil available water over two seasons .

S O V	df	Means of squares							
		Days to heading				Plant height (cm)			
		25%	50%	75%	100%	25%	50%	75%	100%
Years (Y)	1	996.74**	1557.41**	1866.78**	2611.12**	1410.67**	2059.67**	1728.34**	3512.23**
R/Y	4	21.41	39.62	56.80	20.81	41.36	19.38	36.22	145.19
Genotypes(G)	35	174.13**	171.64**	187.19**	226.08**	257.37**	211.11**	236.30**	298.28**
Parents(P)	7	322.52**	307.26**	311.24**	414.05**	400.81**	358.48**	280.52**	419.14**
P vs. C	1	289.10**	295.31**	154.26**	410.38**	191.01**	223.44**	202.74**	50.56**
Crosses(C)	27	131.40**	131.90**	156.25**	170.52**	222.63**	172.45**	226.08**	276.13**
GCA	7	759.10**	770.17**	825.87**	991.54**	986.12**	735.71**	704.55**	1028.54**
SCA.	28	27.88**	22.00**	27.52**	34.72**	75.18**	79.96**	119.24**	115.72**
Y x G	35	7.33**	13.22**	11.35**	4.16	19.76**	13.22**	12.05**	14.90**
Y x GCA	7	14.63**	18.13**	14.80**	7.23	22.04**	9.25**	39.20**	42.42**
Y x SCA.	28	5.51**	11.99**	10.49**	3.40	19.19**	14.22**	5.27	8.02
Error(a)	140	3.48	4.06	3.40	3.01	2.14	3.47	5.22	6.44
GCA/ SCA @	-	2.97	4.27	3.27	3.00	1.35	0.96	0.61	0.94
S O V		1000-grain weight				Grain yield/plant			
Years (Y)	1	307.35	726.66*	1430.82**	1207.99**	358.75*	1108.31*	1170.36**	1365.49*
R/Y	4	57.92	78.48	33.52	41.96	44.40	54.73	53.01	100.94
Genotypes(G)	35	43.42**	46.28**	57.73**	41.63**	22.67**	24.60**	38.36**	47.96**
Parents(P)	7	39.53**	26.95**	42.53**	42.04**	15.91**	25.15**	35.25**	82.33**
P vs. C	1	30.55**	24.79**	648.85**	309.35**	170.40**	406.37**	302.85**	427.37**
Crosses(C)	27	44.90**	52.09**	39.78**	31.61**	18.95**	10.32**	29.38**	24.99**
GCA	7	120.72**	126.60**	120.78**	118.08**	60.60**	43.38**	78.06**	119.22**
SCA.	28	24.06**	26.22**	42.00**	22.50**	13.20**	19.92**	28.44**	30.12**
Y x G	35	10.40**	13.20**	10.65**	4.57**	4.26**	3.83**	5.06**	10.67**
Y x GCA	7	7.26**	12.57**	13.35**	10.50**	3.51**	2.22	9.09**	12.57**
Y x SCA.	28	11.22**	13.35**	9.93**	3.12**	4.44**	4.20**	4.05**	10.23**
Error(b)	140	1.70	1.35	1.84	1.82	0.82	1.46	2.01	1.42
GCA/ SCA @	-	0.53	0.50	0.30	0.56	0.48	0.23	0.29	0.41

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

@, The ratio was estimated according to Griffing 1954, Method II, Model I.

Table (4): Mean days to heading, plant height and 1000-grain weight for parents and F₁ crosses under each level of soil available water over two seasons and over all environments

Parents	Days to heading					Plant height (cm)					1000-grain weight (g)				
	25%	50%	75%	100%	Mean	25%	50%	75%	100%	Mean	25%	50%	75%	100%	Mean
P ₁	74.17	78.50	81.33	84.67	79.67	68.50	73.17	82.33	85.83	77.46	27.79	32.66	36.12	43.22	33.35
P ₂	63.33	67.00	69.17	72.00	67.88	74.00	79.17	88.17	89.17	82.63	30.56	36.60	41.92	45.62	37.08
P ₃	68.67	71.67	75.67	78.17	73.54	72.50	78.00	87.83	92.50	82.71	25.29	32.17	35.28	44.97	32.23
P ₄	75.83	78.17	82.50	88.67	81.29	81.50	88.17	95.33	104.00	92.25	25.50	31.35	34.95	41.81	31.87
P ₅	77.33	80.50	84.17	89.33	82.83	60.50	70.00	78.50	82.00	72.75	28.32	32.71	35.32	38.35	33.00
P ₆	82.67	85.00	88.00	91.33	86.75	61.17	64.67	75.50	80.00	70.33	25.48	29.99	32.54	39.52	30.47
P ₇	81.33	83.67	87.00	92.83	86.25	82.33	85.00	93.00	100.33	90.17	23.07	29.76	36.77	39.60	30.67
P ₈	85.17	89.00	91.67	97.67	90.92	68.83	73.83	83.83	90.67	79.29	29.85	32.52	36.09	41.13	33.93
Crosses															
P ₁ x P ₂	69.83	71.17	74.00	76.17	72.79	75.67	80.50	87.00	91.00	83.54	25.19	33.00	41.86	47.06	36.78
P ₁ x P ₃	68.67	72.83	77.33	79.17	74.50	74.83	81.00	89.00	91.50	84.08	26.66	29.32	39.07	43.62	34.67
P ₁ x P ₄	71.50	75.33	80.83	83.50	77.79	74.00	83.00	90.00	96.00	85.75	26.17	34.01	40.89	44.31	36.34
P ₁ x P ₅	70.33	75.00	80.17	84.50	77.50	67.00	74.00	79.00	84.00	76.00	28.31	33.91	39.43	42.23	35.97
P ₁ x P ₆	74.33	78.00	81.17	84.50	79.50	70.50	76.83	84.83	89.17	80.33	22.59	27.80	34.82	42.42	31.91
P ₁ x P ₇	73.00	79.33	81.17	85.50	79.75	76.33	84.83	97.83	100.50	89.88	25.17	30.16	38.48	47.50	35.33
P ₁ x P ₈	75.83	80.50	86.17	87.83	82.58	66.67	82.33	81.00	84.67	76.17	26.36	34.63	40.44	44.38	36.45
P ₂ x P ₃	64.83	67.83	71.33	74.17	69.54	72.50	76.50	91.17	93.17	83.33	28.01	35.68	43.45	46.63	38.44
P ₂ x P ₄	66.50	69.17	70.50	74.83	70.25	77.50	79.17	82.33	84.67	80.92	31.14	38.90	45.26	48.83	41.03
P ₂ x P ₅	68.33	70.17	73.00	77.00	72.13	63.17	70.83	82.17	83.67	74.96	30.40	35.44	41.57	43.27	37.67
P ₂ x P ₆	69.17	71.50	74.00	79.17	73.46	67.00	72.83	81.67	84.00	76.38	30.04	36.00	41.47	45.76	38.32

Table 4 . Cont.

Crosses	Days to heading					Plant height (cm)					1000-grain weight (g)				
	25%	50%	75%	100%	Mean	25%	50%	75%	100%	Mean	25%	50%	75%	100%	Mean
P ₂ x P ₇	69.50	73.67	79.33	81.67	76.04	78.50	80.67	84.00	86.17	82.33	24.99	35.15	42.18	46.67	37.25
P ₂ x P ₈	74.00	76.50	82.67	84.00	79.29	70.50	76.33	87.83	92.33	81.75	30.06	38.04	43.56	46.32	39.49
P ₃ x P ₄	69.83	72.83	74.50	77.50	73.67	82.83	85.67	96.17	99.00	90.92	24.21	35.43	39.82	48.41	36.97
P ₃ x P ₅	70.33	72.83	76.67	79.67	74.88	73.83	77.33	85.00	89.00	81.29	26.28	33.22	39.54	43.25	35.57
P ₃ x P ₆	69.33	71.83	76.33	77.50	73.75	66.00	71.67	80.67	84.00	75.58	23.46	31.26	41.61	43.06	34.84
P ₃ x P ₇	72.33	75.67	81.67	83.50	78.29	78.33	82.83	90.00	93.67	86.21	28.43	38.13	44.35	47.61	39.63
P ₃ x P ₈	76.50	80.00	85.50	88.50	82.63	70.67	75.67	82.00	86.50	78.71	26.67	33.14	42.54	45.68	37.00
P ₄ x P ₅	75.67	77.83	84.17	86.17	80.96	78.00	83.67	91.17	95.33	87.04	24.49	30.67	36.74	42.89	33.70
P ₄ x P ₆	72.50	75.33	79.83	80.33	77.00	83.00	87.83	98.00	102.67	92.88	26.00	32.67	41.37	45.22	36.31
P ₄ x P ₇	76.00	79.50	85.83	90.83	83.04	83.50	83.83	98.83	105.83	93.00	20.48	30.67	40.89	46.23	34.57
P ₄ x P ₈	79.67	82.17	84.67	90.33	84.21	84.17	89.17	99.83	105.33	94.63	26.25	32.51	40.23	45.94	36.23
P ₅ x P ₆	73.00	76.50	80.17	85.00	78.67	63.67	72.17	81.83	83.00	75.17	22.61	30.07	38.07	41.54	33.07
P ₅ x P ₇	79.33	82.33	84.50	87.83	83.50	72.83	81.33	89.00	93.67	84.21	21.67	29.20	36.98	40.05	31.97
P ₅ x P ₈	79.17	80.50	84.67	88.83	83.29	70.50	80.83	87.83	90.00	82.29	27.80	33.78	39.39	42.58	35.89
P ₆ x P ₇	77.83	80.50	84.33	86.50	82.29	77.50	81.17	91.50	97.50	86.92	22.69	28.35	34.50	41.33	31.72
P ₆ x P ₈	80.00	82.67	87.50	89.67	84.96	65.50	68.50	81.00	86.67	75.42	28.48	32.25	39.72	44.51	36.24
P ₇ x P ₈	84.50	87.00	89.33	94.33	88.79	71.50	80.00	90.33	95.33	84.29	25.53	31.61	39.97	43.02	35.03
LSD _{0.05}	2.11	2.65	2.09	1.96	1.10	1.66	2.27	2.59	2.87	1.17	1.48	1.31	1.53	1.53	0.77
LSD _{0.01}	2.77	3.48	2.74	2.57	1.44	2.17	2.97	3.39	3.77	1.54	1.93	1.72	2.01	2.00	1.01
Parent mean	76.06	79.19	82.44	86.88	81.14	71.17	76.50	85.56	90.56	80.95	26.98	32.22	36.12	41.77	34.27
F ₁ mean	73.28	76.38	80.41	83.52	78.39	73.32	79.01	87.89	91.73	82.99	26.07	33.03	40.29	44.65	36.01
General mean	73.90	77.00	80.86	84.26	79.00	72.84	78.45	87.37	91.47	82.53	26.28	32.85	39.36	44.01	35.63

Table(5): Mean grain yield/plant for parents and F₁ crosses under each level of soil available water over two seasons and over all environments drought tolerance index (DTI) and drought susceptibility index (DSI) .

Parents	Grain yield/plant (g)										
	25%	50%	75%	100%	Mean	(DTI) ₁ ⁺	(DTI) ₂ ⁺	(DTI) ₃ ⁺	(DSI) ₁ ⁺⁺	(DSI) ₂ ⁺⁺	(DSI) ₃ ⁺⁺
P ₁	13.01	17.23	22.60	26.37	19.80	49.34	65.34	85.70	0.96	0.93	0.88
P ₂	9.25	11.94	17.24	20.28	14.68	45.61	58.88	85.01	1.03	1.08	0.88
P ₃	10.82	13.39	20.74	24.23	17.29	44.66	55.26	85.60	1.04	1.18	0.85
P ₄	8.06	10.79	15.58	19.60	13.51	41.12	55.05	79.49	1.11	1.18	1.21
P ₅	10.96	13.48	18.99	21.17	16.15	50.88	62.58	88.16	0.93	0.98	0.70
P ₆	10.24	12.53	17.03	20.23	15.01	50.62	61.94	84.18	0.93	1.00	0.84
P ₇	12.33	15.45	21.54	30.30	19.90	40.69	50.99	71.09	1.12	1.29	1.70
P ₈	9.48	12.52	19.46	22.95	16.10	41.31	54.55	84.79	1.11	1.20	0.89
Crosses											
P ₁ x P ₂	13.55	17.77	21.60	26.84	19.94	50.48	66.21	80.48	0.93	0.89	1.15
P ₁ x P ₃	15.56	18.33	21.02	26.29	20.30	59.19	69.72	79.95	0.77	0.80	1.18
P ₁ x P ₄	13.43	17.12	23.39	28.86	20.70	46.53	59.32	81.05	1.01	1.07	1.11
P ₁ x P ₅	15.86	18.14	22.75	26.77	20.88	59.25	67.76	84.98	0.77	0.85	0.88
P ₁ x P ₆	14.63	17.24	26.10	30.16	22.03	48.51	57.16	86.54	0.97	1.13	0.79
P ₁ x P ₇	15.31	18.52	23.95	30.27	22.01	50.58	61.18	79.12	0.93	1.02	1.23
P ₁ x P ₈	15.85	18.69	25.30	28.73	22.14	55.17	65.51	88.06	0.85	0.92	0.70
P ₂ x P ₃	11.32	15.62	21.16	25.92	18.50	43.67	60.26	81.64	1.06	1.05	1.08
P ₂ x P ₄	10.08	16.28	17.74	23.57	16.92	42.77	69.07	75.27	1.08	0.81	1.45
P ₂ x P ₅	12.40	16.71	20.10	25.59	18.70	48.46	65.30	78.55	0.97	0.91	1.26

Table 5 . Cont.

Crosses	Grain yield/plant										
	25%	50%	75%	100%	Mean	(DTI) ₁ ⁺	(DTI) ₂ ⁺	(DTI) ₃ ⁺	(DSI) ₁ ⁺⁺	(DSI) ₂ ⁺⁺	(DSI) ₃ ⁺⁺
P ₂ x P ₆	10.89	16.10	20.70	23.28	17.74	46.78	69.16	88.92	1.00	0.81	0.65
P ₂ x P ₇	11.24	16.81	22.18	26.94	19.29	41.72	62.40	82.33	1.10	0.99	1.04
P ₂ x P ₈	10.40	14.11	19.66	24.46	17.16	42.52	57.69	80.38	1.08	1.11	1.15
P ₃ x P ₄	11.25	16.06	21.83	24.81	18.49	45.34	64.73	87.99	1.03	0.93	0.71
P ₃ x P ₅	12.99	16.58	25.72	28.17	20.86	46.11	58.86	91.30	1.02	1.08	0.51
P ₃ x P ₆	14.04	15.94	21.82	27.37	19.79	51.30	58.24	79.72	0.92	1.10	1.19
P ₃ x P ₇	13.56	17.56	21.17	26.68	19.74	50.82	65.82	79.35	0.93	0.90	1.21
P ₃ x P ₈	12.90	17.64	21.74	26.05	19.58	49.52	67.72	83.45	0.95	0.85	0.97
P ₄ x P ₅	12.69	15.25	19.30	24.18	17.85	52.48	63.07	79.82	0.90	0.97	1.19
P ₄ x P ₆	13.81	15.71	20.83	25.00	18.84	55.24	62.84	83.32	0.84	0.98	0.98
P ₄ x P ₇	9.68	14.05	19.80	23.72	16.81	40.81	59.23	83.47	1.12	1.07	0.97
P ₄ x P ₈	11.48	17.57	23.33	26.63	19.75	43.11	65.98	87.61	1.07	0.90	0.73
P ₅ x P ₆	10.17	15.60	19.12	24.29	17.29	41.87	64.22	78.72	1.10	0.94	1.25
P ₅ x P ₇	12.40	18.12	24.59	27.64	20.68	44.86	65.56	88.97	1.04	0.91	0.65
P ₅ x P ₈	11.13	14.76	20.78	25.22	17.97	44.13	58.52	82.39	1.05	1.09	1.04
P ₆ x P ₇	12.83	16.92	20.66	26.46	19.22	48.49	63.95	78.08	0.97	0.95	1.29
P ₆ x P ₈	12.74	16.20	23.40	28.09	20.10	45.35	57.67	83.30	1.03	1.11	0.83
P ₇ x P ₈	12.12	18.62	26.16	30.65	21.89	39.54	60.75	85.35	1.14	1.03	0.86
LSD _{0.05}	1.02	1.37	1.60	1.35	0.68	-	-	-	-	-	-
LSD _{0.01}	1.34	1.79	2.10	1.77	0.89	-	-	-	-	-	-
Parent mean	10.52	13.41	19.15	23.21	16.57	-	-	-	-	-	-
F ₁ mean	12.65	16.71	21.99	26.64	19.47	-	-	-	-	-	-
General mean	12.18	15.98	21.36	25.88	18.85	-	-	-	-	-	-

+ , (DTI)₁, (DTI)₂ and (DTI)₃ = Drought tolerance index at 25, 50 and 75% level of soil available water, respectively.

++ , (DSI)₁, (DSI)₂ and (DSI)₃ = Drought susceptibility index at 25, 50 and 75% level of soil available water, respectively.

Table(6): Estimates of general combining ability (GCA) effects for days to heading, plant height, 1000-grain weight and grain yield/plant under each level of soil available water over two seasons and over all environments.

Parents	Days to heading					Plant height				
	25%	50%	75%	100%	Over all	25%	50%	75%	100%	Over all
P ₁	-1.325**	-0.383	-0.421	0.779**	-0.729**	-1.433**	-0.679**	-1.304**	-1.471**	-1.222**
P ₂	-5.625**	-5.900**	-6.454**	-6.729**	-6.179**	-0.350*	-1.046**	-1.388**	-2.988**	-1.443**
P ₃	-3.592**	-3.583**	-3.304**	-4.196**	-3.671**	0.767**	0.104	0.329	-0.138	0.266*
P ₄	-0.175	-0.450	-0.238	0.254	-0.154	6.967**	6.304**	6.063**	7.362**	6.674**
P ₅	0.575*	0.317	0.396	0.937**	0.554**	-4.633**	-2.546**	-3.338**	-4.054**	-3.643**
P ₆	1.642**	1.333**	1.162**	0.704	1.208**	-4.083**	-4.529**	-3.588**	-3.621**	-3.955**
P ₇	3.008**	3.233**	3.246**	3.754**	3.317**	4.683**	3.904**	4.113**	5.012**	4.428**
P ₈	5.492**	5.433**	5.612**	6.054**	5.654**	-1.917**	-1.513**	-0.888**	-0.104	-1.105**
S.E.	0.225	0.243	0.223	0.210	0.117	0.177	0.225	0.276	0.306	0.125
Parents	1000-grain weight					Grain yield/plant				
P ₁	-0.048	-0.754**	-0.707**	0.182	-0.332**	2.059**	1.643**	1.704**	1.872**	1.820**
P ₂	2.445**	2.972**	2.889**	1.966**	2.568**	-1.123**	-0.654**	-1.465**	-1.479**	-1.180**
P ₃	-0.221	0.483**	0.664**	1.206**	0.533**	0.366**	0.066	0.366*	0.180	0.245**
P ₄	-0.675**	0.187	0.081	0.931**	-0.131	-1.108**	-1.021**	-1.488**	-1.597**	-1.304**
P ₅	0.170	-0.398**	-1.193**	-2.361**	-0.946**	-0.006	-0.172	-0.193	-0.776**	-0.287**
P ₆	-0.967**	-1.730**	-1.765**	-1.325**	-1.447**	-0.002	-0.507**	-0.556**	-0.684**	-0.437**
P ₇	-2.140**	-1.290**	-0.340*	-0.454**	-1.056**	0.217*	0.766**	0.932**	2.103**	1.004**
P ₈	1.435**	0.530**	0.373*	-0.145	0.548**	-0.403**	-0.122	0.702**	0.379**	0.139
S.E.	0.157	0.140	0.164	0.163	0.078	0.109	0.146	0.171	0.144	0.072

Table (7): Estimates of specific combining ability (SCA) effects for days to heading and plant height under each level of soil available water over two seasons and over all environments.

Crosses	SCA									
	Days to heading					Plant height				
	25%	50%	75%	100%	Over all	25%	50%	75%	100%	Over all
P ₁ x P ₂	2.885**	0.450	0.019	-0.580	0.695	4.524**	3.822**	2.317**	3.991**	3.663**
P ₁ x P ₃	-0.315	-0.200	0.202	-0.113	-0.105	2.574**	3.172**	2.600**	1.641	2.497**
P ₁ x P ₄	-0.898	-0.833	0.635	-0.230	-0.330	-4.459**	-1.028	-2.133*	-1.359	-2.245**
P ₁ x P ₅	-2.815**	-1.933**	-0.665	0.087	-1.330*	0.141	-1.178	-3.733**	-1.943*	-1.678**
P ₁ x P ₆	0.119	0.050	-0.431	0.320	0.016	3.091**	3.639**	2.350**	2.791**	2.968**
P ₁ x P ₇	-2.581**	-0.517	-2.515**	-1.730**	-1.842**	0.157	3.206**	7.650**	5.491**	4.126**
P ₁ x P ₈	-2.231**	-1.550*	0.119	-1.696**	-1.346**	-2.909**	-3.878**	-4.183**	-5.226**	-4.049**
P ₂ x P ₃	0.152	0.317	0.235	0.837	0.387	-0.843	-0.961	4.850**	4.824**	1.968**
P ₂ x P ₄	-1.598*	-1.483*	-3.665**	-2.946**	-2.421**	-2.043**	-4.494**	-9.717**	-11.176**	-6.857**
P ₂ x P ₅	-0.515	-1.250	-1.798**	-1.463*	-1.252**	-4.776**	-3.978**	-0.483	-0.759	-2.499**
P ₂ x P ₆	-0.748	-0.933	-1.565*	0.937	-0.575	-1.493**	0.006	-0.733	-0.859	-0.770*
P ₂ x P ₇	-1.781**	-0.667	-1.685*	0.387	-0.100	1.241*	-0.594	-6.100**	-7.326**	-3.195**
P ₂ x P ₈	0.235	-0.033	2.652**	0.420	0.812	-0.159	0.489	2.733**	3.957**	1.755**
P ₃ x P ₄	-0.298	-0.133	-2.815**	-2.813**	-1.513**	2.174**	0.856	2.400**	0.307	1.434**
P ₃ x P ₅	-0.548	-0.900	-1.281	-1.330*	-1.013**	4.774**	1.372*	0.633	1.724	2.126*
P ₃ x P ₆	-2.615**	-2.917**	-2.381**	-3.263**	-2.792**	-3.609**	-2.311**	-3.450**	-3.709**	-3.270**
P ₃ x P ₇	-0.981	-0.983	0.869	-0.313	-0.359	0.043	0.422	-1.817*	-2.676**	-1.028**
P ₃ x P ₈	0.702	1.150	2.335**	2.387**	1.637**	-1.109*	-1.328	-4.817**	-4.726**	-2.995**
P ₄ x P ₅	1.369**	0.967	3.152**	0.720	1.554**	2.741**	1.506*	1.067	0.557	1.468**
P ₄ x P ₆	-2.865**	-2.550**	-1.948**	-4.880**	-3.059**	7.191**	7.656**	8.150**	7.457**	7.613**
P ₄ x P ₇	-0.731	-0.283	1.969**	2.570**	0.875*	-1.076**	-4.778**	1.283	1.991*	-0.645
P ₄ x P ₈	0.452	0.183	-1.565*	-0.230	-0.296	6.191**	5.972**	7.283**	6.607**	6.513**
P ₅ x P ₆	-3.115**	-2.150**	-2.248**	-0.896	-2.100**	-0.543	0.839	1.383	-0.793	0.222
P ₅ x P ₇	1.852**	1.783*	0.002	-1.113	0.625	-0.143	1.572*	0.850	1.241	0.880*
P ₅ x P ₈	-0.798	-2.250**	-2.198**	-2.413**	-1.921**	4.124**	6.489**	4.683**	2.691**	4.497**
P ₆ x P ₇	-0.715	-1.067	-0.931	-2.213**	-1.238**	3.974**	3.389**	3.600**	4.641**	3.901**
P ₆ x P ₈	-1.031	-1.100	-0.131	-1.346*	-0.909*	-1.426**	-3.861**	-1.900*	-1.076	-2.066**
P ₇ x P ₈	2.102**	1.333	0.381	0.270	0.816*	-4.193**	-0.794	-2.267**	-1.043	-1.574**
S.E.	0.691	0.746	0.683	0.642	0.360	0.542	0.690	0.846	0.939	0.384

Table (8): Estimates of specific combining ability (SCA) effects for 1000-grain weight and grain yield/plant under each level of soil available water over two seasons and over all environments.

Crosses	SCA									
	1000-grain weight					Grain yield/plant				
	25%	50%	75%	100%	Over all	25%	50%	75%	100%	Over all
P ₁ x P ₂	-3.483**	-2.07**	0.310	0.895	-1.087**	0.436	0.801	0.000	0.677	0.479*
P ₁ x P ₃	0.653	-3.267**	-0.250	-1.785**	-1.162**	0.957**	0.636	-2.416**	-1.537**	-0.590**
P ₁ x P ₄	0.612	1.725**	2.148**	-0.820	0.916**	0.301	0.513	1.808**	2.815**	1.360**
P ₁ x P ₅	1.907**	2.205**	1.962**	0.397	1.618**	1.624**	0.684*	-0.122	-0.095	0.523*
P ₁ x P ₆	-2.671**	-2.568**	-2.076**	-0.449	-1.941**	0.395	0.124	3.591**	3.202**	1.828**
P ₁ x P ₇	1.082*	-0.653	0.163	3.760**	1.088**	0.851*	0.131	-0.052	0.526	0.364
P ₁ x P ₈	-1.308**	1.996**	1.411**	0.326	0.606*	2.016**	1.184**	1.528**	0.709	1.359**
P ₂ x P ₃	-0.494	-0.628	0.534	-0.554	-0.286	-0.101	0.228	0.893	1.449**	0.617**
P ₂ x P ₄	3.094**	2.888**	2.927**	1.921**	2.707**	0.128	1.976**	-0.667	0.876*	0.578**
P ₂ x P ₅	1.509**	0.008	0.505	-0.347	0.419	1.351**	1.556**	0.392	2.071**	1.343**
P ₂ x P ₆	2.281**	1.905**	0.977	1.107*	1.568**	-0.163	1.276**	1.361**	-0.327	0.537*
P ₂ x P ₇	-1.591	0.615	0.262	1.141*	0.107	-0.037	0.718	1.353**	0.542	0.644**
P ₂ x P ₈	-0.096	1.685**	0.929	0.487	0.751**	-0.252	-1.094*	-0.942	-0.215	-0.626**
P ₃ x P ₄	-1.170**	1.907**	-0.288	2.260	0.677**	-0.186	1.030*	1.586**	0.457	0.722**
P ₃ x P ₅	0.050	0.282	0.701	0.392	0.356	0.452	0.706	4.181**	2.992**	2.083**
P ₃ x P ₆	-1.633**	-0.351	3.343**	-0.834	0.132	1.498**	0.404	0.649	2.099**	1.162**
P ₃ x P ₇	4.515**	6.079**	4.658**	2.840**	4.523**	0.799**	0.743	-1.489**	-1.372**	-0.330
P ₃ x P ₈	-0.825	-0.726	2.135**	0.601	0.296	0.759*	1.711**	-0.689	-0.279	0.375
P ₄ x P ₅	-1.281	-1.977**	-1.511**	0.302	-1.117**	1.626**	0.463	-0.380	0.779	0.622**
P ₄ x P ₆	1.366**	1.355**	3.686**	1.601**	2.002*	2.737**	1.258**	1.514**	1.511**	1.755**
P ₄ x P ₇	-2.981**	-1.085*	1.786**	1.735**	-0.136	-1.607**	-1.675**	-1.004*	-2.555**	-1.710**
P ₄ x P ₈	-0.786	-1.060	0.413	1.141*	-0.073	0.813*	2.728**	2.751**	2.078**	2.093**
P ₅ x P ₆	-2.869**	-0.654	1.665**	1.213*	-0.161	-2.000**	0.294	-1.492**	-0.024	-0.806**
P ₅ x P ₇	-2.641**	-1.964**	-0.850	-1.148*	-1.651**	0.006	1.546**	2.485**	0.539	1.144**
P ₅ x P ₈	-0.081	0.791	0.842	1.073*	0.656**	-0.639	-0.926*	-1.095*	-0.157	-0.704**
P ₆ x P ₇	-0.477	-1.482**	-2.759**	-0.909	-1.407**	0.437	0.676	-1.081*	0.728	-0.174
P ₆ x P ₈	1.736**	0.597	1.749**	1.967**	1.512**	0.966**	0.844	1.890**	2.620**	1.580**
P ₇ x P ₈	-0.046	-0.488	0.569	-0.399	-0.091	0.123	1.996**	3.166**	2.399**	1.921**
S.E	0.483	0.430	0.502	0.499	0.240	0.335	0.447	0.525	0.441	0.221

