

Table 1. Main effects of irrigation, proline and maize hybrids on the plant height, yield components and yield for maize in 2018 and 2019 seasons.

Characters	Plant height (cm)		Ear length (cm)		Ear diameter (cm)		Grains weight/ear (g)		100-grain weight (g)		Grain yield (ard./fed.)	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
Irrigation (I)												
I₁	211.1	237.1	18.2	18.1	3.8	4.5	87.9	163.4	21.7	31.6	11.3	22.0
I₂	203.5	209.7	17.7	17.4	3.5	4.4	70.8	147.8	19.5	29.4	9.9	19.3
I₃	186.9	206.4	16.2	17.3	3.3	4.3	53.3	141.4	19.0	29.3	6.0	13.9
F-test	**	**	*	NS	**	NS	**	**	**	NS	**	**
RLSD 5%	6.2	7.4	0.7	0.6	0.1	0.1	9.1	6.7	0.7	-	1.0	1.2
Proline (P)												
P₀	208.8	226.0	17.7	17.6	3.6	4.4	74.8	156.0	21.4	30.0	10.4	18.0
P₁	198.1	209.7	17.2	17.5	3.5	4.3	70.5	141.7	20.0	30.2	9.0	19.2
P₂	191.6	217.6	16.9	17.8	3.5	4.5	66.4	155.2	18.9	29.8	7.8	17.9
F-test	*	**	NS	NS	NS	*	NS	NS	NS	NS	**	*
RLSD 5%	8.9	4.1	0.4	-	0.09	0.1	-	-	1.8	-	1.1	1.1
Hybrids (H)												
H₁	205.1	224.1	17.4	17.9	3.5	4.3	72.2	146.6	18.9	30.1	9.8	18.4
H₂	195.9	211.4	17.1	17.4	3.6	4.5	68.9	155.1	21.3	31.2	8.4	18.4
F-test	**	**	NS	*	*	**	NS	NS	*	NS	**	NS

H₁= Single cross (S.C.) 10, H₂= Triple cross (T.C.) 321, I₁= 11 day, I₂= 16 day, I₃= 21 day; P₀= control (water), P₁= 100 ppm proline and P₂= 200 ppm proline.

*, ** indicated significantly and highly significantly at 5% and 1% levels of probability, respectively.

NS: Non-significant differences.

RLSD= Revised least significant difference.

Table 2. Interaction effect of maize hybrid and irrigation on the plant height, yield components and yield for maize in 2018 and 2019 seasons.

Characters Int. HxI		Plant height (cm)		Ear length (cm)		Ear diameter (cm)		Grains weight/ear (g)		100-grain weight (g)		Grain yield (ard./fed.)	
		2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
H₁	I₁	218.3	244.4	18.5	18.3	3.7	4.4	88.7	156.6	20.4	31.6	12.1	22.5
	I₂	211.4	216.0	17.9	17.7	3.5	4.3	74.3	145.4	18.5	28.7	10.9	18.7
	I₃	185.6	211.9	16.2	18.7	3.2	4.2	53.7	137.9	17.7	29.7	6.4	14.1
H₂	I₁	203.9	229.8	17.6	18.0	3.9	4.7	87.1	170.3	22.9	31.6	10.6	21.5
	I₂	195.6	203.4	17.6	17.3	3.6	4.5	67.3	150.1	19.6	30.1	9.0	19.9
	I₃	188.2	200.9	16.2	16.9	3.3	4.4	52.2	144.9	21.4	29.0	5.7	13.7
F-test		*	**	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
RLSD 5%		11.2	4.48	-	1.2	0.3	0.2	20.0	25.0	3.2	-	1.5	2.7

H₁= Single cross (S.C.) 10, H₂= Triple cross (T.C.) 321, I₁= 11 day, I₂= 16 day and I₃= 21 day.

*, ** indicated significantly and highly significantly at 5% and 1% levels of probability, respectively.

NS: Non-significant differences.

RLSD= Revised least significant difference.

Table 3. Interaction effect of maize hybrids and proline on the plant height, yield components and yield for maize in 2018 and 2019 seasons.

Characters Int. HxP		Plant height (cm)		Ear length (cm)		Ear diameter (cm)		Grains weight/ear (g)		100-grain weight (g)		Grain yield (ard./fed.)	
		2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
H₁	P₀	217.6	232.2	18.1	18.0	3.4	4.3	80.3	161.3	20.2	30.1	11.5	17.5
	P₁	199.7	215.1	17.8	17.8	3.4	4.2	68.6	129.1	18.4	30.2	9.2	19.5
	P₂	198.1	225.1	17.9	17.9	3.6	4.3	67.6	149.7	18.1	29.8	8.6	18.3
H₂	P₀	200.1	219.8	17.1	17.1	3.6	4.5	69.1	150.6	22.6	30.3	9.4	18.6
	P₁	196.4	204.3	17.2	17.2	3.6	4.5	72.4	154.2	21.6	30.3	8.9	18.9
	P₂	191.1	210.0	17.8	17.8	3.6	4.6	56.2	160.6	19.7	29.9	7.0	17.6
F-test		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*	NS
RLSD 5%		13.1	6.5	-	-	-	0.2	-	-	2.0	-	1.1	-

H₁= Single cross (S.C.) 10, H₂= Triple cross (T.C.) 321, P₀= control (water), P₁= 100 ppm and P₂= 200 ppm proline.

*significantly at 5% levels of probability.

NS: Non-significant differences.

RLSD= Revised least significant difference.

Table 4. Interaction effect of proline and irrigation on the plant height, yield components and yield for maize in 2018 and 2019 seasons.

Characters Int. P x I		Plant height (cm)		Ear length (cm)		Ear diameter (cm)		Grains weight/ear (g)		100-grain weight (g)		Grain yield (ard./fed.)	
		2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
P₀	I₁	221.7	244.3	18.8	18.1	3.9	4.5	96.3	165.6	23.1	32.5	13.5	22.1
	I₂	210.3	216.3	18.5	17.5	3.7	4.4	75.3	157.0	20.8	29.8	12.1	17.9
	I₃	194.5	217.3	15.9	17.1	3.3	4.3	52.7	145.0	20.2	28.6	5.8	14.1
P₁	I₁	201.5	231.0	18.0	18.2	3.7	4.4	85.3	161.0	22.0	32.3	10.1	22.5
	I₂	206.0	198.5	17.7	17.1	3.5	4.3	71.7	135.4	18.1	28.8	10.1	20.0
	I₃	186.7	199.7	16.2	17.1	3.3	4.3	54.5	128.3	19.8	29.6	7.0	15.2
P₂	I₁	210.2	236.0	17.1	18.1	3.8	4.6	82.2	163.8	19.9	30.0	10.5	21.3
	I₂	194.2	204.0	17.0	17.7	3.5	4.4	65.3	150.6	18.2	29.6	7.6	20.1
	I₃	179.5	212.7	16.4	17.7	3.2	4.4	51.7	150.9	18.7	29.9	5.4	12.4
F-test		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	*	NS
RLSD 5%		22.2	20.0	1.1	-	0.5	-	24.7	20.0	-	4.0	2.4	-

P₀= control (water), P₁= 100 ppm, P₂= 200 ppm proline, I₁= 11 day, I₂= 16 day and I₃= 21 day;

* significantly at 5% levels of probability.

NS: Non-significant differences.

RLSD= Revised least significant difference.

Table 5. Interaction effect of maize hybrids, proline and irrigation on the plant height, yield components and yield for maize in 2018 and 2019 seasons.

Characters Int. HxPxI			Plant height (cm)		Ear length (cm)		Ear diameter (cm)		Grains weight/ear (g)		100-grain weight (g)		Grain yield (ard./fed.)	
			2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
H₁	P₀	I₁	233.7	256.0	19.1	18.4	3.9	4.4	110.1	162.6	22.6	32.5	14.3	20.8
		I₂	220.7	225.3	19.3	18.1	3.6	4.3	78.2	174.4	19.2	28.5	13.6	17.5
		I₃	198.3	215.3	15.8	17.6	3.2	4.2	53.1	146.6	18.7	29.2	6.6	14.3
	P₁	I₁	206.7	235.3	18.5	18.5	3.5	4.2	73.5	150.4	19.2	32.0	10.9	23.9
		I₂	212.3	200.7	17.7	17.3	3.4	4.1	76.4	119.4	17.6	28.3	9.9	19.2
		I₃	180.0	209.3	15.7	17.7	3.3	4.3	55.9	117.4	18.3	30.4	6.8	15.4
	P₂	I₁	214.7	242.0	17.6	18.0	3.6	4.4	82.5	156.8	19.5	30.3	11.0	22.7
		I₂	201.3	222.0	16.7	17.6	3.4	4.3	68.3	142.4	18.6	29.3	9.1	19.4
		I₃	178.3	211.3	17.1	18.1	3.2	4.3	52.1	149.8	16.2	29.7	5.7	12.7
H₂	P₀	I₁	209.7	232.7	18.5	17.9	3.9	4.6	82.4	168.6	23.7	32.5	12.7	23.4
		I₂	200.0	217.3	17.6	16.8	3.7	4.5	72.5	139.8	22.3	31.1	10.6	18.3
		I₃	190.7	209.3	16.0	16.7	3.3	4.3	52.3	143.4	21.7	28.9	4.9	14.0
	P₁	I₁	196.3	226.7	17.5	17.9	3.8	4.6	97.1	171.7	24.7	32.7	9.3	21.1
		I₂	199.7	196.3	17.8	17.0	3.6	4.5	67.0	151.4	18.7	29.3	10.2	20.8
		I₃	193.3	190.0	16.8	16.6	3.2	4.3	53.1	139.2	21.3	28.8	7.1	15.0
	P₂	I₁	205.7	230.0	16.7	18.1	3.9	4.8	81.8	170.6	20.3	29.7	9.9	19.9
		I₂	187.0	196.7	17.4	17.9	3.5	4.5	62.4	159.0	17.8	29.8	6.0	20.7
		I₃	180.7	203.3	15.7	17.3	3.3	4.6	51.3	152.0	21.1	30.1	5.0	12.2
F-test			*	*	NS	NS	NS	NS	NS	NS	NS	NS	NS	
RLSD 5%			10.0	8.34	3.0	-	-	0.3	30.0	25.8	5.4	-	2.6	3.3

H₁= Single cross (S.C.) 10, H₂= Triple cross (T.C.) 321, I₁= 11 day, I₂= 16 day, I₃= 21 day; P₀= control (water), P₁= 100 ppm proline and P₂= 200 ppm proline.

*, ** indicated significantly and highly significantly at 5% and 1% levels of probability, respectively.

NS: Non-significant differences.

RLSD= Revised least significant difference.