Appendices

Appendix 1: ANOVA analysis of number of leaves

ANOVA: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
number of leaves (100litres)	15	207	13.8	0.45714
number of leaves (50litres)	15	201	13.4	1.11429
number of leaves (0litre)	15	200	13.3333	0.95238

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1.911111111	2	0.955556	1.135849	0.330815	3.219942
Within Groups	35.33333333	42	0.84127			
Total	37.24444444	44				

Appendix 2: ANOVA analysis of plant height

SUMMARY

Groups	Count	Sum	Average	Variance
plant height (cm) 100litres	15	2490	166	260
plant height(cm) 50litres	15	2633	175.5333	170.4095
plant height 0 litre	15	2388	159.2	196.0286

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	2019.511	2	1009.756	4.8357	0.012882	3.219942
Within Groups	8770.133	42	208.8127			
Total	10789.64	44				

Appendix 3: ANOVA analysis of leaf area

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
Leaf Area cm2 (100 litres)	15	8510.62	567.374667	11648.47197
Leaf Area cm2 (50 Litres)	15	9530.95	635.396667	3370.310881
Leaf Area cm2 (0 litre)	15	8762.13	584.142	8428.284374

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	37675.884	2	18837.942	2.410272701	0.10211	3.219942
Within Groups	328258.94	42	7815.68907			
Total	365934.83	44				

Appendix 4: ANOVA analysis of chlorophyll content

SUMMARY

Groups	Count	Sum	Average	Variance
SPAD Value (100litres)	5	129.8	25.96	14.153
SPAD Value (50 litres)	5	130.7	26.14	12.408
SPAD Value (0 litre)	5	133.9	26.78	59.167

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1.8573333	2	0.928667	0.032498	0.968109	3.885294
Within Groups	342.912	12	28.576			
Total	344.76933	14				

Appendix 5: ANOVA analysis of Plant Girth
Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
plant girth/100 litres	15	29	1.9333333	0.050952381
plant girth/50 litres	15	27	1.8	0.062857143
plant girth/0 litre	15	25.4	1.6933333	0.10352381

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	0.433777778	2	0.2168889	2.993865031	0.060884	3.219942
Within Groups	3.042666667	42	0.0724444			
Total	3.476444444	44				

Appendix 6: ANOVA analysis of maize lines per cob

SUMMARY

Groups	Count	Sum	Average	Variance
Lines/cob/100 Litres	10	146	14.6	1.82222222
Lines/cob/50 Litres	10	157	15.7	4.67777778
Lines/cob/0 Litre	10	139	13.9	2.98888889

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	16.46666667	2	8.233333	2.6030445	0.0925226	3.354131
Within Groups	85.4	27	3.162963			
Total	101.8666667	29				

Appendix 7: ANOVA analysis of average maize lines

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
Longest maize Line/Plot1/100L	10	181	18.1	34.32222
Longest maize Line/Plot2/50L	10	211	21.1	20.1
Longest maize Line/Plot3/0L	10	195	19.5	19.38889

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	45.06666667	2	22.53333	0.915851	0.412251	3.354131
Within Groups	664.3	27	24.6037			
Total	709.3666667	29				

Appendix 8: ANOVA analysis of weight of cobs

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
Weight of Cob/Plot1/100L	10	483.09	48.309	1006.29
weight of cob (g)/Plot2/50L	10	633.6	63.36	303.765
weight of cob (g)/Plot3/0L	10	544.3	54.43	236.536

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	1145.813807	2	572.907	1.1113	0.34372	3.35413
Within Groups	13919.30629	27	515.53			
Total	15065.1201	29				