

Table 2. Effect of shade, drought and nutrients on the growth characters of peas, during 2000 and 2001 seasons.

Treatments	Plant length		Stem diameter		Number of vegetative nodes		Number of reproductive nodes		Stem F.W		Stipule F.W		Tendrill F.W	
	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
Shade	88.0	87.67	0.47	0.45	14.67	14.67	3.00	3.33	12.81	12.67	9.46	9.54	12.38	12.70
Shade, Drought and Nutrient	94.33	93.67	0.60	0.63	15.00	15.33	3.00	3.33	15.64	15.31	11.09	11.31	11.47	11.73
Nutrient 200	99.00	99.83	0.53	0.52	14.33	15.50	3.33	3.67	18.73	18.79	17.51	17.59	17.28	17.33
Drought	94.67	95.00	0.50	0.48	14.33	14.50	2.67	3.17	13.91	13.74	7.81	8.09	9.37	9.56
Control	91.00	91.83	0.53	0.53	14.33	14.067	2.33	2.50	14.56	14.62	11.12	10.85	12.84	12.41
L.S.D (0.05)	NS	8.19	NS	0.07	NS	N. S.	NS	N. S.	3.55	2.95	3.91	2.79	3.25	2.64

Table 3. Effect of shade, drought and nutrients on dry weight of growth characters of peas, during 2000 and 2001 seasons

Treatments	Stem D.W		Stipule D.W		Tendrill D.W		Total D W	
	2000	2001	2000	2001	2000	2001	2000	2001
Shade	3.36	3.41	2.19	2.19	4.34	4.36	9.89	9.95
Shade, Drought and Nutrient	3.89	3.89	2.54	2.57	3.94	3.94	10.37	10.41
Nutrient 200	4.32	4.33	3.55	3.56	4.91	4.91	14.44	12.80
Drought	3.62	3.62	1.93	1.97	3.51	3.54	9.06	9.13
Control	3.75	3.70	2.58	2.12	4.54	3.46	10.79	10.28
L.S.D (0.05)	NS	N. S.	0.82	0.53	NS	N. S.	NS	2.33

Table 4. Effect of shade, drought and nutrients on the yield and its components of peas, during 2000 and 2001 seasons

Treatments	Number of pods/ plant		Pod F.W		Pod D.W		Seed D.W		Number of seeds /plant		Pod length		Pod diameter		Pod thickness		Number of seeds /pod	
	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
Shade	14.67	14.83	17.20	17.19	12.12	11.80	9.45	9.51	37.67	37.67	5.83	5.63	1.50	1.40	0.77	0.64	2.62	2.56
Shade, Drought and Nutrient	12.00	11.83	19.30	18.61	13.42	12.98	11.78	11.78	45.67	45.17	5.73	5.70	1.40	1.47	0.97	0.952	3.80	3.81
Nutrient 200	12.67	13.00	24.53	23.78	14.97	14.59	12.87	12.80	46.00	45.50	6.20	6.13	1.47	1.50	0.97	1.05	3.63	3.50
Drought	10.33	10.83	12.93	12.76	9.16	9.11	7.55	7.51	31.33	31.17	5.83	5.77	1.47	1.43	0.90	0.95	3.06	2.91
Control	12.33	13.00	16.63	16.58	12.66	12.63	10.74	10.70	41.00	41.00	6.40	6.27	1.50	1.40	0.90	0.92	3.39	3.21
L.S.D (0.05)	NS	2.42	4.78	4.06	1.61	1.16	1.69	1.69	7.18	6.79	NS	N. S.	NS	N. S.	NS	0.16	NS	N.S.

Table 5. Effect of shade, drought and nutrients on photosynthetic activity of peas during 2000 season at bottom leaves (71 days from sowing)

Treatments	e ref	Delta e	c ref	Delta c	Q leaf	U	Ci	E	g _s	A
Shade	11.50	2.00	358.17	4.50	78.50	203.00	286.5	1.27	0.09	2.64
Shade, Drought and Nutrient	11.47	1.27	350.50	2.50	75.00	203.23	309.33	0.83	0.06	1.56
Nutrient 200	13.17	3.39	339.67	14.50	288.00	204.00	245.17	2.38	0.24	9.33
Drought	13.90	1.50	341.17	5.67	222.17	202.77	219.33	0.97	0.06	3.70
Control	14.97	2.50	347.0	5.83	489.67	203.77	271.33	1.60	0.10	3.96
L.S.D (0.05)	1.85	NS	10.00	NS	264.22	NS	NS	NS	NS	NS

Table 6. Effect of shade, drought and nutrients on photosynthetic activity at top leaves of peas, during 2000 season (71 days from sowing).

Treatments	e ref	Delta e	c ref	Delta c	Q leaf	U	Ci	E	g _s	A
Shade	11.33	1.47	356.67	5.00	94.50	203.90	257.33	0.95	0.06	2.92
Shade, Drought and Nutrient	11.53	2.67	349.00	8.83	121.33	203.97	261.00	1.71	0.14	5.82
Nutrient 200	13.70	4.77	340.00	23.67	443.33	204.47	214.67	3.10	0.30	15.62
Drought	13.73	2.87	344.00	11.83	326.83	203.90	208.33	1.82	0.11	7.75
Control	15.33	5.17	339.67	16.67	412.17	203.10	224.00	3.35	0.21	11.13
L.S.D (0.05)	1.50	1.65	NS	7.38	143.65	NS	33.88	1.06	0.14	4.88

Table 7. Effect of shade, drought and nutrients on photosynthetic activity at bottom leaves of peas, during 2000 season (82 days from sowing).

Treatments	e ref	Delta e	c ref	Delta c	Q leaf	U	Ci	E	g _s	A
Shade	13.73	6.77	360.33	30.00	93.67	203.53	298.00	4.42	1.60	19.43
Shade, Drought and Nutrient	14.03	6.07	355.67	17.00	86.50	202.97	306.67	3.95	0.72	11.10
Nutrient 200	15.27	9.30	362.33	42.33	159.33	202.83	298.67	5.74	4.37	27.02
Drought	16.17	5.40	362.33	19.33	128.33	203.37	298.00	3.50	0.63	12.59
Control	16.50	6.27	364.00	0.67	153.83	204.13	358.83	4.08	1.05	1.10
L.S.D (0.05)	0.73	2.20	NS	12.32	NS	NS	30.69	NS	NS	7.7

Table 8. Effect of shade, drought and nutrients on photosynthetic activity at top leaves of peas, during 2000 season (82 days from sowing).

Treatments	e ref	Delta e	c ref	Delta c	Q leaf	U	Ci	E	g _s	A
Shade	13.70	6.77	355.67	20.00	90.83	203.97	311.67	4.39	1.25	12.91
Shade, Drought and Nutrient	14.13	7.97	356.33	46.00	95.00	203.40	267.67	5.14	1.57	29.53
Nutrient 200	15.60	9.07	360.34	68.00	221.17	204.17	264.00	5.87	4.10	43.85
Drought	16.07	7.57	361.35	28.67	165.33	204.10	313.00	4.91	1.88	20.39
Control	16.77	9.17	365.33	38.00	191.67	203.80	306.67	5.93	4.22	24.62
L.S.D (0.05)	0.65	NS	NS	NS	64.40	NS	40.37	NS	NS	NS

Table 9. Effect of shade, drought and nutrients on photosynthetic activity at bottom leaves of peas, during 2000 season (93 days from sowing).

Treatments	e ref	Delta e	c ref	Delta c	Q leaf	U	Ci	E	g _s	A
Shade	13.77	4.03	348.00	2.17	506.00	202.23	305.67	2.61	0.21	6.56
Shade, Drought and Nutrient	13.90	1.80	348.00	9.00	425.00	203.23	241.00	1.16	0.10	5.96
Nutrient 200	13.87	5.60	347.33	35.00	228.67	203.23	252.00	3.01	0.59	22.71
Drought	13.30	5.80	348.00	25.00	274.67	203.93	279.00	3.80	0.73	16.03
Control	13.63	4.80	347.00	10.00	632.00	201.90	312.00	3.12	0.35	6.27
L.S.D (0.05)	0.23	NS	0.49	10.28	145.48	NS	26.42	1.55	0.40	9.38

Table 10. Effect of shade, drought and nutrients on photosynthetic activity at top leaves of peas (93 days from sowing), during 2000 season.

Treatments	e ref	Delta e	c ref	Delta c	Q leaf	U	Ci	E	g _s	A
Shade	13.60	2.53	348.67	15.33	551.67	204.93	308.00	2.64	0.16	6.22
Shade, Drought and Nutrient	14.13	4.27	348.67	44.00	302.00	202.37	182.33	2.81	0.40	27.15
Nutrient 200	13.87	7.30	347.00	49.67	379.00	203.47	235.33	4.91	1.63	32.29
Drought	13.20	0.97	348.00	1.67	623.67	203.23	293.00	0.78	0.04	0.83
Control	13.13	2.23	347.33	2.17	252.33	212.03	302.00	1.33	0.13	1.41
L.S.D (0.05)	0.46	1.99	NS	18.01	189.95	NS	63.37	1.50	0.40	11.47

Table 11. Effect of shade, drought and nutrients on photosynthetic activity at bottom leaves of peas (100 days from sowing) during 2000 season.

Treatments	e ref	Delta e	c ref	Delta c	Q leaf	U	Ci	E	g _s	A
Shade	13.93	3.30	349.00	7.00	81.00	203.47	312.00	2.15	0.29	4.42
Shade, Drought and Nutrient	12.87	1.77	352.00	2.33	127.00	203.03	321.33	1.16	0.11	1.46
Nutrient 200	12.43	6.00	356.00	21.00	83.00	203.03	297.33	3.93	0.74	13.36
Drought	12.30	3.57	354.00	2.33	83.00	203.03	335.33	2.36	0.28	1.58
Control	12.20	2.80	354.00	3.00	60.67	203.70	328.33	1.85	0.19	1.89
L.S.D (0.05)	0.10	0.06	NS	1.19	2.92	NS	9.65	0.03	0.01	0.77

Table 12. Effect of shade, drought and nutrients on photosynthetic activity at top leaves of peas (100 days from sowing), during 2000 season.

Treatments	e ref	Delta e	c ref	Delta c	Q leaf	U	Ci	E	g _s	A
Shade	13.40	3.73	353.00	2.67	130.00	203.47	330.67	2.00	0.24	1.99
Shade, Drought and Nutrient	12.73	2.53	350.00	7.33	103.00	202.53	294.00	1.69	0.17	4.50
Nutrient 200	12.30	6.37	353.00	23.00	88.00	203.60	293.00	4.15	0.81	14.82
Drought	--	-	-	-	-	-	-	-	-	-
Control	12.27	5.23	366.00	3.33	78.67	202.67	349.00	3.44	0.53	2.34
L.S.D (0.05)	0.06	0.09	NS	2.13	10.98	1.89	9.39	0.45	0.02	1.22