

Table 2. Means of number of capsules and number of seeds/capsule as affected by plant densities and flax genotypes during 2005/2006 and 2006/07 seasons

Treatments	Number of capsules/ plant				Number of seeds/capsule			
	2005/06		2006/07		2005/06		2006/07	
	EL-Gemmeiza	Sakha	EL-Gemmeiza	Sakha	EL-Gemmeiza	Sakha	EL-Gemmeiza	Sakha
Plant densities :								
1800/m²	18.12	16.12	18.27	17.68	7.93	7.14	7.91	7.92
2200/m²	12.27	10.78	12.35	11.64	7.80	7.19	7.84	6.89
2600/m²	8.32	7.79	8.23	7.80	7.70	7.45	7.78	7.23
L.S.D. 0.05	1.24	1.00	1.28	1.00	1.74	1.09	1.00	1.04
Varieties :								
Herms	12.68	11.30	12.98	12.53	7.90	7.24	7.43	6.98
Blenka	12.83	11.47	12.86	12.42	7.74	7.18	7.91	7.44
Olina	12.74	11.43	13.03	12.36	7.92	7.54	7.94	7.48
Marlina	13.11	11.68	12.96	12.41	7.52	7.01	6.98	6.90
Scalina	13.03	11.67	12.91	12.37	7.80	7.21	7.85	7.17
Eriana	12.77	11.41	13.03	12.61	7.64	6.96	7.42	7.05
Giza 4	13.05	11.67	12.82	12.24	7.85	7.33	7.76	7.40
Giza 7	13.06	11.77	12.87	12.40	7.57	7.02	7.55	6.87
Giza 8	12.80	11.56	13.24	12.37	8.23	7.58	7.61	7.22
Sakha 1	12.97	11.55	12.84	12.24	8.17	7.54	7.28	6.97
Sakha 2	13.04	11.70	13.84	12.24	9.70	9.33	8.64	8.22
Sakha 3	12.76	11.55	12.93	12.31	7.72	7.16	7.57	7.36
L.S.D. 0.05	0.18	0.23	0.29	0.18	0.29	0.05	0.29	0.23

Table 3. Means of seed index and seed yield Fadan (kg) as affected by plant densities and flax Genotypes during 2005/2006 and 2006/07 seasons.

Treatments	Seed index				Seed yield Fadan (kg)			
	2005/06		2006/07		2005/06		2006/07	
	EL-Gemmeiza	Sakha	EL-Gemmeiza	Sakha	EL-Gemmeiz	Sakha	EL-Gemmeiz	Sakha
Plant densities :								
1800/m ²	6.79	6.50	6.79	6.47	533.63	515.72	536.30	512.61
2200/m ²	6.72	6.42	6.77	6.48	496.27	474.02	490.75	468.49
2600/m ²	6.76	6.45	6.76	6.47	466.75	443.47	468.47	452.36
L.S.D. 0.05	NS	NS	NS	NS	47.60	42.88	55.33	53.61
Varieties :								
Herms	4.27	4.11	4.22	4.06	243.66	231.77	243.77	233.22
Blenka	4.23	3.96	4.28	3.93	240.55	232.00	246.11	232.33
Olina	4.17	3.98	4.24	36.96	256.44	243.33	256.77	242.00
Marlina	4.17	4.47	4.80	4.45	246.66	234.22	256.33	242.44
Scalina	4.52	4.36	4.65	4.22	259.22	247.44	253.44	240.88
Eriana	4.71	4.42	4.74	4.30	241.88	231.33	247.66	234.00
Giza 4	9.78	9.45	9.76	9.42	708.33	275.55	710.55	682.77
Giza 7	9.81	9.36	9.81	9.52	741.66	703.33	766.66	738.33
Giza 8	10.78	10.08	10.78	10.36	873.77	835.00	837.22	802.22
Sakha 1	9.96	9.41	10.01	9.67	758.33	725.55	761.11	734.44
Sakha 2	10.14	9.56	10.14	9.95	817.77	812.22	820.00	791.66
Sakha 3	3.95	3.98	4.04	3.95	598.33	261.11	582.44	560.33
L.S.D. 0.05	0.07	0.02	0.02	0.07	15.37	15.56	18.66	16.43

Table 4. Means of oil yield/ faddan (kg) and Straw yield/fad (Ton) as affected by plant densities and flax genotypes during 2005/2006 and 2006/07 season

Treatments	Oil yield/ faddan (kg)				Straw yield/fad (Ton)			
	2005/06		2006/07		2005/06		2006/07	
	EL-Gemmeiza	Sakha	EL-Gemmeiza	Sakha	EL-Gemmeiza	Sakha	EL-Gemmeiz	Sakha
Plant densities :								
1800/m ²	159.52	152.49	160.04	151.07	4.10	3.04	4.03	3.02
2200/m ²	149.52	140.95	147.32	138.81	4.11	3.91	4.07	3.65
2600/m ²	140.18	132.00	140.18	134.37	4.96	3.99	3.78	3.66
L.S.D. 0.05	14.97	14.26	17.36	16.17	0.33	0.28	0.38	0.28
Varieties :								
Herms	60.08	56.31	59.88	56.36	3.85	3.70	3.71	3.35
Blenka	59.28	56.21	60.24	56.46	3.85	3.96	3.77	3.43
Olina	63.01	58.60	62.95	58.38	3.70	3.55	3.62	3.28
Marlina	61.30	56.91	63.58	59.27	3.80	3.62	3.63	3.27
Scalina	63.59	61.15	62.13	57.97	3.76	3.61	3.56	3.20
Eriana	60.18	56.36	61.38	56.87	3.77	3.63	3.70	3.33
Giza 4	231.44	218.04	231.79	219.89	4.40	4.24	4.37	4.05
Giza 7	239.26	223.78	246.17	234.58	4.62	4.45	4.48	4.19
Giza 8	292.47	276.96	278.95	261.80	4.74	4.52	4.52	4.14
Sakha 1	249.18	234.72	249.72	240.90	4.57	4.39	4.50	4.10
Sakha 2	266.20	261.56	267.16	255.96	4.51	4.33	4.43	4.02
Sakha 3	150.46	141.19	146.21	138.54	3.73	3.56	4.30	3.36
L.S.D. 0.05	5.21	5.21	5.29	4.44	0.05	0.05	0.07	0.05

Table 1. Sowing density (no. of seeds / m²) for studied varieties.

Sowing density No. of seeds / m ²	Seed rate / fad. (kg)											
	Herms	Blenka	Olina	Marlina	Scalina	Eriana	Giza 4	Giza 7	Giza 8	Sakha 1	Sakha 2	Sakha 3
1800	32	30	30	32	32	30	65	67	70	71	72	35
2200	34	36	36	34	34	36	85	85	86	87	88	38
2600	55	50	50	55	55	50	95	95	96	98	100	58

The seeding rates / feddan were differed by different seed index for each variety which seed index of imported and Sakha 3 varieties (4 to 5 g), while Giza 4, Giza 7, Giza 8, Sakha 1 and Sakha 2 were (8 or 10 gm).

Table 5. Means of fiber percentage and fiber yield/fad. (kg) as affected by plant densities and flax genotypes during 2005/2006 and 2006/07 seasons

Treatments	Fiber percentage				Fiber yield/fad. (kg)			
	2005/06		2006/07		2005/06		2006/07	
	EL-Gemmeiza	Sakha	EL-Gemmeiza	Sakha	EL-Gemmeiza	Sakha	EL-Gemmeiza	Sakha
Plant densities :								
1800/m²	16.90	16.83	17.10	16.28	673.40	643.94	671.50	572.52
2200/m²	17.43	17.16	17.69	17.03	698.71	654.89	701.21	605.65
2600/m²	18.75	18.31	18.78	18.33	741.25	695.24	719.79	652.62
L.S.D. 0.05	1.38	1.38	1.28	1.24	18.46	12.55	14.12	18.43
Varieties :								
Herms	21.22	20.98	21.45	20.73	784.74	735.10	797.62	696.99
Blenka	21.30	20.96	21.55	20.81	798.21	753.51	813.73	716.61
Olina	21.93	21.80	22.11	21.36	812.51	774.31	801.73	701.75
Marlina	22.81	22.31	22.73	21.92	861.01	804.31	867.04	717.49
Scalina	22.28	21.88	22.402	21.68	838.55	788.02	787.98	693.70
Eriana	20.67	20.20	20.82	20.27	780.18	732.63	771.88	674.4
Giza 4	11.86	11.67	12.03	11.58	526.88	494.93	526.57	469.66
Giza 7	12.45	12.25	12.37	11.73	570.70	545.22	554.19	491.99
Giza 8	12.15	12.28	12.43	11.90	577.65	555.73	561.91	493.69
Sakha 1	12.18	11.97	12.31	11.70	557.25	525.52	551.54	480.35
Sakha 2	12.45	12.20	12.48	12.06	561.41	528.76	557.58	486.42
Sakha 3	21.01	20.68	21.59	20.82	784.37	738.26	778.00	700.89
L.S.D. 0.05	0.18	0.10	0.13	0.10	17.21	3.72	22.63	20.16