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APPENDIX

Table (1 Appendix): Analysis of variance of the effect of relative humidity, temperature and their interaction on conidial germination after 24 hours and germ tube length after 48 hours.

Source of variation [a]	D.F.	Conidial germination b			Length of germ tube (μ)		
		M.S.	F. value	P > F	M.S.	F. value	P > F
Relative humidity (H)	6	10.389	61.473	0.0000	130.587	80.959	0.0000
Temperature (T)	6	10.603	62.740	0.0000	87.963	54.534	0.0000
H x T	36	0.620	3.669	0.0000	13.347	8.275	0.0000
Error	98	0.169			1.613		

[a] Relative humidity and temperature were fixed.

[b] Percentage data were transformed into $\sqrt{\sqrt{X+0.5}}$ before carrying out analysis of variance where X is the percentage value.

Table (2 Appendix): Analysis of variance of the effect of seed rate, nitrogen fertilization and phosphorus fertilization on powdery mildew, incidence on flax under field conditions in Sakha in 1995 based on arc-sine transformed data.

Source of variation [a]	D.F.	M.S.	F-value	P > F
Replication	3	2641.280	6.8629	0.000
Seed rate (S)	3	192.271	0.4996	
Nitrogen (N)	4	511.586	1.3293	0.2609
S x N	12	276.100	0.7174	
Phosphorus (P)	2	2829.617	7.3523	0.0009
S x P	6	915.073	2.3777	0.0311
N x P	8	491.379	1.2968	0.2853
S x N x P	24	310.579	0.8070	
Error	177	384.862		

[a] Replications are random while seed rate, nitrogen, phosphorus are fixed.

Table (3 Appendix): Analysis of variance of the effect of seed rate, nitrogen fertilization and phosphorus fertilization on powdery mildew severity on flax Giza 7 cv. under field conditions in Sakha in 1995 based on arc-sine transformed data.

Source of variation [a]	D.F.	M.S.	F-value	P > F
Replication	3	1451.659	5.7782	0.0009
Seed rate (S)	3	35.440	0.1411	
Nitrogen (N)	4	580.993	2.3126	0.0594
S x N	12	206.755	0.8230	
Phosphorus (P)	2	72.896	0.2902	
S x P	6	305.356	1.2154	0.3004
N x P	8	185.990	0.7403	
S x N x P	24	148.428	0.5908	
Error	177	251.232		

[a] Replications are random while seed rate, nitrogen, phosphorus are fixed.

Table (4 Appendix): Analysis of variance of the effect of seed rate, nitrogen fertilization and phosphorus fertilization on seed yield of flax Giza 7 cv. under field conditions in Sakha in 1995.

Source of variation [a]	D.F.	M.S.	F-value	P > F
Replication	3	64727.438	4.8511	0.0029
Seed rate (S)	3	4884.238	0.3661	
Nitrogen (N)	4	86260.923	6.4650	0.0001
S x N	12	37127.137	2.7826	0.0017
Phosphorus (P)	2	6843.638	0.5129	
S x P	6	7214.754	0.5407	
N x P	8	14242.773	1.0675	0.3880
S x N x P	24	20561.383	1.5410	0.0598
Error	177	13342.782		

[a] Replications are random while seed rate, nitrogen, phosphorus are fixed.

Table (5 Appendix): Analysis of variance of the effect of seed rate, nitrogen fertilization and phosphorus fertilization on straw yield of flax Giza 7 cv. under field conditions in Sakha in 1995.

Source of variation [a]	D.F.	M.S.	F-value	P > F
Replication	3	4.832	12.0204	0.0000
Seed rate (S)	3	0.242	0.6018	
Nitrogen (N)	4	2.151	5.3505	0.0004
S x N	12	0.464	1.1533	0.3205
Phosphorus (P)	2	2.425	6.0323	0.0029
S x P	6	0.535	1.3303	0.2459
N x P	8	0.242	0.6020	
S x N x P	24	0.280	0.6968	
Error	177	0.402		

[a] Replications are random while seed rate, nitrogen, phosphorus are fixed.

Table (6 Appendix): Analysis of variance of the effect of seed rate, nitrogen fertilization and phosphorus fertilization on powdery mildew incidence on flax Giza 8 cv. under field conditions in Sakha in 1996 based on arc-sine transformed data.

Source of variation [a]	D.F.	M.S.	F-value	P > F
Replication	3	2262.521	15.9411	0.0000
Seed rate (S)	3	60.873	0.4289	
Nitrogen (N)	4	218.930	1.5425	0.1919
S x N	12	128.344	0.9043	
Phosphorus (P)	2	139.962	0.9861	
S x P	6	123.892	0.8729	
N x P	8	158.127	1.1141	0.3558
S x N x P	24	105.982	0.71467	
Error	177	141.930		

[a] Replications are random while seed rate, nitrogen, phosphorus are fixed.

Table (7 Appendix): Analysis of variance of the effect of seed rate, nitrogen fertilization and phosphorus fertilization on powdery mildew severity on flax Giza 8 cv. under field conditions in Sakha in 1996 based on arc-sine transformed data.

Source of variation [a]	D.F.	M.S.	F-value	P > F
Replication	3	836.276	4.4630	0.0048
Seed rate (S)	3	86.796	0.4632	
Nitrogen (N)	4	105.581	0.5635	
S x N	12	224.412	1.1976	0.2879
Phosphorus (P)	2	49.627	0.2649	
S x P	6	63.541	0.3391	
N x P	8	6.542	0.3551	
S x N x P	24	113.551	0.6060	
Error	177	187.379		

[a] Replications are random while seed rate, nitrogen, phosphorus are fixed.

Table (8 Appendix): Analysis of variance of the effect of seed rate, nitrogen fertilization and phosphorus fertilization on straw yield of flax Giza 8 cv. under field conditions in Sakha in 1996.

Source of variation [a]	D.F.	M.S.	F-value	P > F
Replication	3	10.328	11.7881	0.0000
Seed rate (S)	3	1.164	1.3280	0.2668
Nitrogen (N)	4	2.408	2.7489	0.0298
S x N	12	0.909	1.0370	0.4171
Phosphorus (P)	2	0.589	0.6726	
S x P	6	2.086	2.3808	0.0309
N x P	8	1.508	1.7207	0.0964
S x N x P	24	0.824	0.9410	
Error	177	0.876		

[a] Replications are random while seed rate, nitrogen, phosphorus are fixed.

Table (9 Appendix 5): Analysis of variance of the effect of seed rate, nitrogen fertilization and phosphorus fertilization on seed yield of flax Giza 8 cv. under field conditions in Sakha in 1996.

Source of variation [a]	D.F.	M.S.	F-value	P > F
Replication	3	8882896.982	13.5409	0.0000
Seed rate (S)	3	127258.938	1.9518	0.1230
Nitrogen (N)	4	374453.515	5.7430	0.0002
S x N	12	55178.628	0.8463	
Phosphorus (P)	2	62231.487	0.9544	
S x P	6	63253.021	0.9701	
N x P	8	46104.737	0.7071	
S x N x P	24	64713.316	0.9925	
Error	177	65202.222		

[a] Replications are random while seed rate, nitrogen, phosphorus are fixed.