



Phenotyping T-Core lines at Terbol station- Lebanon

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Figure 1: Samples of 447 T-CORE lines and 15 repeated checks under the experiment code (M1F22_ca) were planted on December 30, 2021, at Terbol station field, Lebanon with 2 replications. Each line is planted in two rows with a total of 14 seeds.



Figure 2: The first replication was affected by waterlogging (23.8%) and some light Fusarium wilt symptoms appear on a few plants in both replications.



Table 1: The results showed high significance for traits studied, except for day to emergence, number of emergence plants, number of pods per peduncle, and lowest pod height.

Traits	Mean	Replications	Genotypes	Error	CV%
		D.F.= 1	D.F.= 446	D.F.= 500	
Day to Emergence	55.99 ns	6326.42	63.26	57.91	13.6
Emerged Plants	9.9 ns	632.33	8.056	7.63	27.8
Day to first flower	117.19***	109.33	13.85	4.98	1.9
Day to first pod	127.96***	456.32	16.45	7.21	2.1
Flower ground color	3.62***	2.87	5.49	0.27	14.4
Day to full flower	119.99***	313.47	14.45	5.26	1.9
Day to end flower	123.17***	461.82	16.49	6.72	2.1
No. Pod/ peduncle	2.95 ns	0.98	0.049	0.044	7.1
Growth habit	2.28***	0.92	0.85	0.29	23.8
Day to 50% pod mat.	152.58***	243.98	80.74	39.2	4.1
No. plants with pods	8.99*	759.43	9.23	7.708	31.1
Lowest pod height	9.92 ns	636.19	8.61	7.83	28.2
Plant height (cm)	37.51***	3903.96	78.08	27.38	13.9
Plant width (cm)	11.77***	2.39	20.69	15.61	23.2
Day to Maturity	157.41***	358.38	55.6	15.5	2.5
Day to harvest	161.5***	341.95	61.07	16.6	2.5
Pod no./ plant	101.8***	737.89	4984	2841	52.4
No. seed/pod	1.04***	0.131	0.069	0.041	19.6
Grain yield (g)	123.2***	967600	14608	3811	50.1
100SW (g)	25.55***	2147.1	286.07	18.11	16.7
Seed shape	1.97***	0.006	1.72	0.021	7.5
Seed texture	1.71***	0.0004	1.77	0.012	6.6
Seed color	8.86***	1.05	93.97	4.13	23.4
Dot of seed coat	0.88***	0.301	0.19	0.038	22.3
Pod dehiscence	1.49***	7.14	0.703	0.243	33



Figure 3: At the flowering stage, increasing the number of lines affected by Fusarium wilt with a total of lines affected (9.5%) from both replications.



Figure 4: The plants were harvested in June 2022 to continue taking the yield and yield components traits.