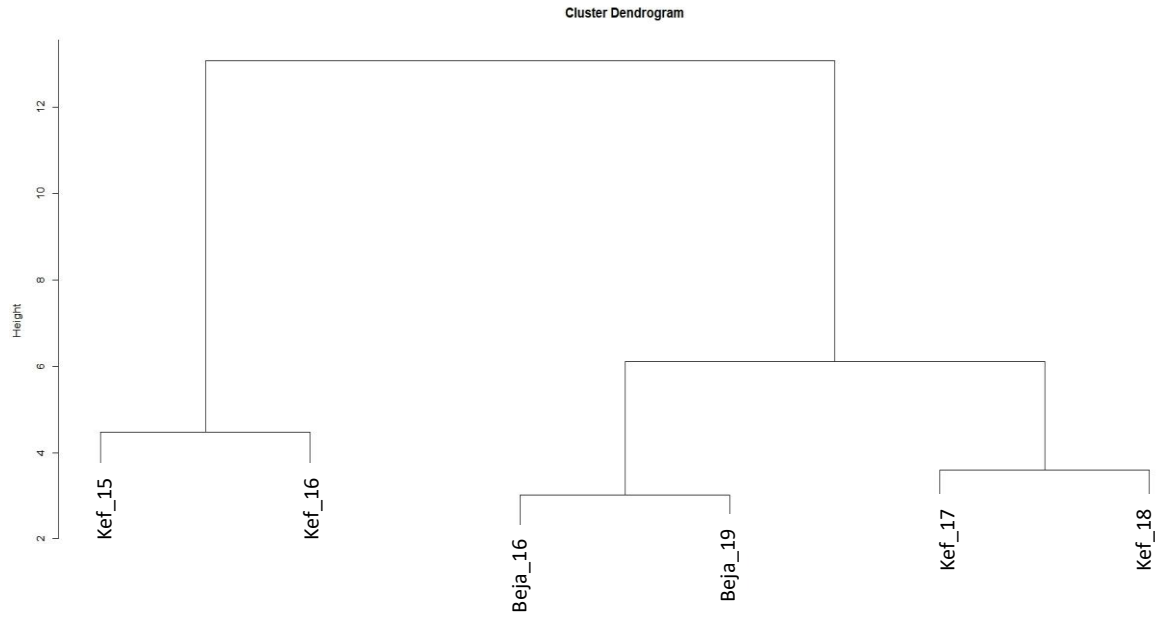


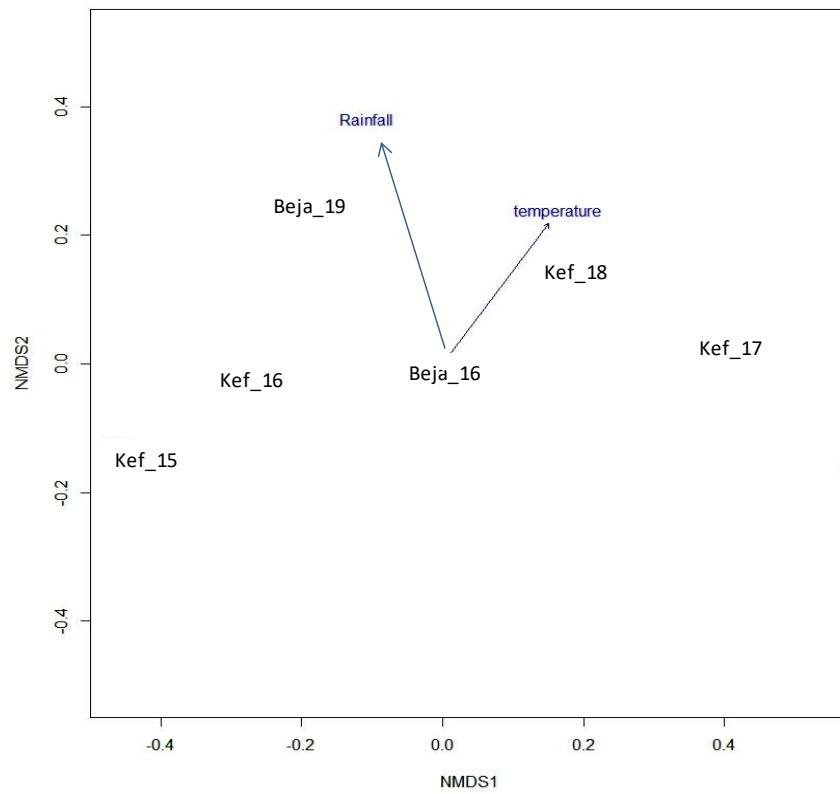
## Supplementary Materials

**Table S1.** Grain yield of the 25 genotypes across the six tested environments followed by the analysis of variance (ANOVA).

Line	Grain yield (t ha <sup>-1</sup> )						Mean
	Kef_15	Kef_16	Kef_17	Kef_18	Beja_19	Beja_16	
1	3.18	1.79	1.67	2.00	2.56	2.63	2.31
2	2.49	1.99	0.96	1.77	1.96	2.65	1.97
3	2.85	1.66	1.22	1.55	2.18	2.83	2.05
4	3.04	1.95	1.66	1.41	1.85	2.66	2.09
5	4.14	2.08	1.26	1.66	1.81	3.24	2.37
6	3.51	1.87	1.06	1.21	2.03	2.44	2.02
7	3.79	1.69	1.27	1.79	1.72	2.48	2.12
8	3.38	1.45	0.85	1.73	2.23	2.90	2.09
9	3.54	2.44	0.96	1.74	2.22	3.57	2.41
10	3.59	2.36	1.19	1.52	1.91	3.11	2.28
11	3.82	1.68	1.08	1.55	1.66	2.62	2.07
12	3.99	2.34	0.68	1.20	2.11	2.95	2.21
13	3.48	2.54	0.43	1.48	1.93	2.46	2.05
14	3.76	1.90	0.15	1.67	2.39	2.97	2.14
15	3.39	2.16	0.32	1.64	1.69	2.47	1.95
16	3.32	1.57	1.50	1.74	1.95	2.29	2.06
17	3.23	1.23	0.73	1.45	2.43	2.92	2.00
18	3.36	2.29	0.70	1.72	2.24	2.72	2.17
19	3.33	1.63	1.43	1.66	1.82	2.94	2.14
20	4.52	1.93	1.15	1.41	1.97	2.39	2.23
21	3.31	2.10	1.30	1.48	2.26	2.81	2.21
22	2.43	1.28	1.33	1.92	1.92	3.77	2.11
23	2.89	2.56	1.66	1.55	2.30	3.08	2.34
24	2.23	2.36	1.32	1.33	2.29	2.64	2.02
25 (Salim)	2.83	2.54	1.51	2.08	1.72	2.62	2.21
Elites	3.43	2.04	1.22	1.57	2.09	3.07	2.24
Commercial varieties	3.33	1.80	1.17	1.70	2.02	2.58	2.10
Wild relative-derived	3.33	1.95	0.98	1.57	2.06	2.75	2.10
Elites			2.06			2.58	
Commercial varieties			2.00			2.30	
Wild relative-derived			1.96			2.40	
Genotype variance	352 937.52	185 783.87	177 049.96	69 036.12	94 723.66	144 705.22	
Residual variance	157 815.80	65 627.28	7 333.51	52 985.04	84 090.49	38 690.31	
Grand mean	3 337.75	1 977.41	1 096.56	1 610.08	2 044.64	2 807.06	
LSD	776.06	539.77	200.36	429.03	539.89	384.18	
CV (%)	11.90	12.96	7.81	14.30	14.18	7.01	
Heritability	0.82	0.85	0.98	0.72	0.69	0.88	



**Figure S1.** Classification of the **six** environments based on grain yield.



**Figure S2.** NMDS analysis of climate variables including temperature ( $^{\circ}\text{C}$ ) and rainfall (mm) characterizing the six environments, used to assess the grain yield.