

Table S3. The results of two-way ANOVA test to evaluate the significance of cultivar and agro-climatic conditions of year on the quinoa yield structure:

a) Grain weight

Source of variation	ss	df	ms	F_{05}	F
Total	1493.22	79	—	—	—
Variants	1438.56	19	75.71	1.75	83.11*
Factors					
A (cultivar)	46.96	4	11.74	2.76	12.89*
B (year)	1327.21	3	442.40	2.53	485.61*
Interactions (AB)	64.39	12	5.37	1.92	5.89*
Error	54.66	60	0.91	—	—

Abbreviations: ss – sum of squares; df –degrees of freedom; ms – mean square; F_{05} – critical F value at 5% significance level ($\alpha = 0.05$); F – F value; * – F test significant at $\alpha = 0.05$.

b) Grain amount in the panicle

Source of variation	ss	df	ms	F_{05}	F
Total	148045952.0	79	—	—	—
Variants	146456880.0	19	7708257.0	1.75	291.05*
Factors					
A (cultivar)	8331899.0	4	2082974.8	2.76	78.65*
B (year)	115792568.0	3	38597524.0	2.53	1457.36*
Interactions (AB)	22332410.0	12	1861034.1	1.92	70.27*
Error	1589072.0	60	26484.5	—	—

Abbreviations: ss – sum of squares; df –degrees of freedom; ms – mean square; F_{05} – critical F value at 5% significance level ($\alpha = 0.05$); F – F value; * – F test significant at $\alpha = 0.05$.

c) Thousand-seed weight

Source of variation	ss	df	ms	F_{05}	F
Total	22.34	79	—	—	—
Variants	21.36	19	1.12	1.75	68.68*
Factors					
A (cultivar)	2.26	4	0.56	2.76	34.45*
B (year)	14.45	3	4.82	2.53	294.22*
Interactions (AB)	4.65	12	0.39	1.92	23.70*
Error	0.98	60	0.02	—	—

Abbreviations: ss – sum of squares; df –degrees of freedom; ms – mean square; F_{05} – critical F value at 5% significance level ($\alpha = 0.05$); F – F value; * – F test significant at $\alpha = 0.05$.