

Supplementary materials

Table S1. Analysis of covariance of the effects of experimental factors and their interactions on grain yield, Thousand Kernel Weight (TKW), spike length and kernels per spike

Source of variation	2016-2017				2017-2018			
	df	F	P	η^2	df	F	P	η^2
Grain yield								
Fertilizer Ratio (R)	1	7.951	0.006	0.105	1	18.608	<0.001	0.215
Fertilizer Quantity (Q)	1	0.012	0.913	0.000	1	0.202	0.654	0.003
R×Q	1	3.534	0.064	0.049	1	7.887	0.006	0.104
Experimental Error	68				68			
TKW								
Fertilizer Ratio (R)	1	8.733	0.004	0.114	1	13.580	<0.001	0.166
Fertilizer Quantity (Q)	1	0.395	0.532	0.006	1	0.598	0.442	0.009
R×Q	1	2.640	0.109	0.037	1	4.183	0.045	0.058
Experimental Error	68				68			
Spike Length								
Fertilizer Ratio (R)	1	9.755	0.003	0.125	1	12.160	0.001	0.152
Fertilizer Quantity (Q)	1	5.241	0.025	0.072	1	6.532	0.013	0.088
R×Q	1	5.441	0.023	0.074	1	6.534	0.013	0.088
Experimental Error	68				68			
Kernels per spike								
Fertilizer Ratio (R)	1	0.437	0.511	0.006	1	1.075	0.303	0.016
Fertilizer Quantity (Q)	1	0.202	0.654	0.003	1	0.137	0.712	0.002
R×Q	1	0.663	0.418	0.010	1	1.519	0.222	0.022
Experimental Error	68				68			

η^2 : Partial Eta Squared

Table S2. Analysis of covariance of the effects of experimental factors and their interactions on crude fat, crude fiber, crude protein, Zinc content and iron content

Source of variation	2016-2017				2017-2018			
	df	F	P	η^2	df	F	P	η^2
Crude fat								
Fertilizer Ratio (R)	1	0.095	0.758	0.001	1	0.045	0.834	0.001
Fertilizer Quantity (Q)	1	0.130	0.720	0.002	1	2.576	0.113	0.036
R×Q	1	0.013	0.908	0.000	1	0.311	0.579	0.005
Experimental Error	68				68			
Crude fiber								
Fertilizer Ratio (R)	1	1.820	0.182	0.026	1	1.426	0.237	0.021
Fertilizer Quantity (Q)	1	8.950	0.004	0.116	1	7.508	0.008	0.099
R×Q	1	1.097	0.299	0.016	1	0.781	0.380	0.011
Experimental Error	68				68			
Crude protein								
Fertilizer Ratio (R)	1	12.880	0.001	0.159	1	17.049	<0.001	0.200
Fertilizer Quantity (Q)	1	0.059	0.809	0.001	1	0.342	0.560	0.005
R×Q	1	2.440	0.123	0.035	1	3.040	0.086	0.043
Experimental Error	68				68			
Zn								
Fertilizer Ratio (R)	1	45.723	<0.001	0.402	1	85.557	<0.001	0.557
Fertilizer Quantity (Q)	1	37.888	<0.001	0.358	1	72.843	<0.001	0.517
R×Q	1	19.815	<0.001	0.226	1	36.439	<0.001	0.349
Experimental Error	68				68			
Fe								
Fertilizer Ratio (R)	1	6.512	0.013	0.087	1	10.362	0.002	0.132
Fertilizer Quantity (Q)	1	1.010	0.319	0.015	1	1.837	0.180	0.026
R×Q	1	5.610	0.021	0.076	1	8.910	0.004	0.116
Experimental Error	68				68			

η^2 : Partial Eta Squared