

Table S1. P-values of maize grain starch, amylopectin, amylose, protein, total non-essential amino acids (Σ NEAA), total essential amino acids (Σ EAA), oil, total unsaturated fatty acids (Σ UFA) and total saturated fatty acids (Σ SFA) in response to treatment (irrigation, planting date, cultivar and nitrogen rate) effects in 2018 and 2019.

Effect	Starch		Amylopectin		Amylose		Protein		Σ NEAA		Σ EAA		Oil		Σ UFA		Σ SFA	
	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2019
I	0.056	0.937	0.043	0.565	0.035	0.133	0.206	0.337	0.042	0.137	0.012	0.334	0.068	0.022	0.065	0.022	0.083	0.005
PD	0.509	0.814	0.757	0.663	0.154	0.129	0.898	0.254	0.309	0.400	0.007	0.421	0.191	0.291	0.194	0.447	0.143	0.016
I×C	0.328	0.467	0.392	0.705	0.040	0.030	0.468	0.704	0.569	0.052	0.162	0.149	0.288	0.309	0.325	0.386	0.194	0.160
I×N	<.001	0.518	<.001	0.331	0.048	0.255	0.468	0.728	0.836	0.238	0.028	0.312	0.001	<.001	0.001	<.001	0.005	<.001
I×C×N	0.596	0.607	0.382	0.049	0.776	0.007	0.483	0.733	0.974	0.470	0.630	0.380	0.634	0.058	0.645	0.055	0.619	0.088
C	0.628	0.011	0.895	0.251	0.015	<.001	0.056	0.212	<.001	0.866	<.001	0.012	0.955	0.188	0.881	0.181	0.697	0.194
N	0.316	0.878	0.049	<.001	<.001	<.001	0.006	<.001	<.001	<.001	<.001	0.009	0.669	<.001	0.743	<.001	0.214	<.001
PD×C	0.037	0.241	0.067	0.145	0.812	<.001	0.189	0.262	0.316	<.001	0.362	0.003	0.182	0.407	0.176	0.414	0.166	0.685
PD×N	0.603	<.001	0.466	0.065	0.217	<.001	0.603	0.834	0.492	0.141	0.001	0.280	0.067	0.684	0.079	0.814	0.059	0.229
PD×C×N	0.253	0.018	0.303	0.241	0.009	0.192	0.842	0.122	0.505	0.958	0.093	0.323	0.413	0.713	0.406	0.596	0.320	0.852
C×N	0.902	0.786	0.771	0.304	0.231	0.150	0.117	0.203	0.798	0.971	0.765	0.540	0.445	0.154	0.474	0.148	0.387	0.128

I, irrigation; PD, planting date; C, cultivar; N, nitrogen fertilizer