

Table S3. Summary of the mixed effects models on the relationship between management and climatic variables and protein concentration and the glutenin to gliadin ratio in wheat grains.

Response variable	Independent variable	Estimate	Std. Error	Chi-square	p value	R ²	R ²
						marginal	conditional
Protein concentration	Intercept	1.1	0.02			0.39	0.87
	Fertilization	0.001	0.0003	6.5	0.01		
	Precipitation	-0.001	0.0002	11.8	<0.001		
	Preceding crop	-0.06	0.03	5.5	0.02		
Glutenin to gliadin ratio	Intercept	0.5	0.04			0.26	0.61
	Fertilization	-0.001	0.004	4.3	0.04		
	Precipitation	0.0004	0.0004	1.1	0.3		
	Preceding crop	0.18	0.05	11.4	<0.001		