

Supplementary Table 3. Significant Pearson's correlation coefficients between chemical characteristics and between chemical and agronomic characteristics per environment for bread wheat

	PA	P _i	P _i /P _i	YP	WSPH	PSH
YLD	-0.696** (ZP11)	-0.643** (ZP11)	0.680** (RS12)		-0.601* (ZP12)	
PH	0.539* (RS11), 0.604* (ZP11)					
SL	-0.541* (RS12), -0.561* (ZP11)	-0.573* (ZP12), -0.633* (PS 11)				
GNS		-0.597* (PS 11)				
GL	-0.640* (RS11), -0.553* (ZP11)	-0.538* (RS12)				
GW						-0.611* (ZP11)
GT				-0.524* (RS11)		0.577* (PS 12)
PTC						0.550* (PS 11)
PA		0.822** (RS11), 0.782** (RS12), 0.656** (PS 11), 0.648** (PS 12)	0.520* (ZP12)	-0.575* (RS11), -0.519* (RS12)		
P _i /P _i		-0.882** (RS11), -0.887** (ZP11), -0.952** (ZP12), -0.727** (PS 11), -0.889** (PS 12)			-0.524* (RS11)	
YP		0.531* (ZP12)	-0.636* (RS12), -0.584* (ZP12)			

YLD = grain yield; PH = plant height; SL = spike length; GNS = grain number per spike; GL = grain length; GW = grain width; GT = grain thickness; PTC = productive tillering coefficient; PA = phytic acid; P_i = inorganic phosphorus; P_i/P_i = phytic phosphorus/inorganic phosphorus; YP = yellow pigment; WSPH = water soluble phenolics; PSH = free protein sulphydryl groups; RS = Rimski Šančevi; ZP = Zemun Polje; PS = Padinska Skela; 11 = 2010–2011 growing season; 12 = 2011–2012 growing season; * = significant at $p < 0.05$; ** = significant at $p < 0.01$.