

Supplementary Material

Soybean Breeding Effects on Seed Yield Determination Under Contrasting Water Supply

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Table S1. Pearson's correlation (*r*) matrix for evaluated traits. Significant ($p \leq 0.05$) probability levels are indicated in bold.

	SY	B _T	HI	PARinc	PARint	ei	RUE	ETc	WUE	SN	SW	PN
B _T	0.91 < 0.0001											
HI	0.77 < 0.0001	0.44 0.023										
PARinc	-0.83 < 0.0001	-0.64 0.0004	-0.83 < 0.0001									
PARint	-0.25 0.2774	0.04 0.8555	-0.63 0.0006	0.67 0.0002								
ei	0.6 0.0012	0.77 < 0.0001	0.11 0.6073	-0.25 0.2219	0.56 0.0032							
RUE	0.96 < 0.0001	0.95 < 0.0001	0.63 0.0005	-0.82 < 0.0001	-0.27 0.1859	0.57 0.0023						
ETc	0.56 0.0031	0.64 0.0005	0.21 0.2954	-0.3 0.1428	0.24 0.2369	0.66 0.0003	0.54 0.0048					
WUE	0.89 < 0.0001	0.97 < 0.0001	0.46 0.018	-0.66 0.0002	-0.02 0.9179	0.71 0.0001	0.95 < 0.0001	0.45 0.0224				
SN	0.94 < 0.0001	0.84 < 0.0001	0.77 < 0.0001	-0.77 < 0.0001	-0.26 0.1973	0.52 0.0067	0.89 < 0.0001	0.49 0.0104	0.83 < 0.0001			
SW	0.77 < 0.0001	0.73 < 0.0001	0.55 0.0039	-0.7 0.0001	-0.21 0.3066	0.51 0.0072	0.77 < 0.0001	0.48 0.0131	0.71 < 0.0001	0.53 0.0059		
PN	0.8 < 0.0001	0.76 < 0.0001	0.56 0.0028	-0.5 0.0094	0.04 0.8584	0.6 0.0013	0.73 < 0.0001	0.38 0.0549	0.77 < 0.0001	0.89 < 0.0001	0.32 0.1122	
B _p	0.86 < 0.0001	0.83 < 0.0001	0.62 0.0007	-0.77 < 0.0001	-0.17 0.3964	0.64 0.0005	0.85 < 0.0001	0.58 0.0017	0.79 < 0.0001	0.81 < 0.0001	0.69 0.0001	0.66 0.0003

B_p: total pod biomass at R7; B_T: total aboveground biomass at R7; ei: seasonal light interception efficiency; ETc: seasonal crop evapotranspiration; HI: harvest index; PAR: photosynthetically active radiation, PARinc: seasonal cumulative incident photosynthetically active radiation; PARint: seasonal cumulative intercepted PAR; PN: pod number; RUE: seasonal radiation use efficiency; SN: seed number; SW: individual seed weight; SY: seed yield; WUE: seasonal water use efficiency for biomass production.