Supplementary Information

Journal	Journal of Crop Science and Biotechnology
Title	Harvest Index a key trait to select tolerant potato genotypes (*Solanum tuberosum*) under drought stress condition

Table S1: Summary statistics and variance components for 18 traits under water deficit experiment in 15 potato genotypes. Standard deviation (std), Genetic variance (V.g), Error variance (V.e), and plot-based heritability (H2).

Trait	mean	std	min	max	V.g	V.e	H2
Chlorophyll concentration (SPAD) at 29 dap	56.36	4.14	46.93	61.96	16.2	9.19	0.88
Chlorophyll concentration (SPAD) at 59 dap	46.84	3.32	40.88	52.97	10.4	6	0.87
Chlorophyll concentration (SPAD) at 76 dap	43.88	3.6	39.03	52.1	11.43	15.04	0.75
Chlorophyll concentration (SPAD) at 83 dap	42.02	3.66	37.14	50.59	11.57	17.6	0.72
Plant height (cm)	141.19	13.62	111.4	161.3	169.19	163.2	0.81
Relative water content (%)	63.46	2.73	58.67	70.53	1.19	62.53	0.07
Leaf osmotic potential (MPa)	-2.55	0.1	-2.69	-2.39	0	0.17	0
Leaf dry weight (g)	14.62	4.17	3.42	20.03	16	14.12	0.82
Stem dry weight (g)	12.6	4.75	2.82	22.3	19.96	9.41	0.89
Root dry weight (g)	3.54	1.76	0.82	6.45	3.02	0.63	0.95
Tuber dry weight (g)	31.66	12.18	11.63	53.15	131.65	168.57	0.76
Tuber number (N°)	12.04	3.43	6	17.4	9.55	21.9	0.64
Total transpiration (mL)	6.18	1.39	2.77	8.37	1.49	4.53	0.57
Leaf area (cm^2)	4938.49	1467.31	1027.44	7072.8	1431807.63	7188488.76	0.44
Root length (cm)	32.85	4.72	24.6	39.5	20.57	16.6	0.83
Total dry biomass (g)	62.74	15.58	26.42	87.8	209.08	341.65	0.71
Harvest index (HI)	0.5	0.14	0.18	0.72	0.02	0	0.96
Specific leaf area ($cm^2\ g^{-1}$)	319.39	43.38	256.34	410.06	115.92	14981.6	0.03
Relative chlorophyll content (RCC)	0.01	0.01	0.01	0.04	0	0	0.8
Biomass water use efficiency ($g\ L^{-1}$)	10.35	0.92	9.21	12.12	0.64	1.54	0.62
Tuber water use efficiency ($g\ L^{-1}$)	5.19	1.7	1.81	7.95	2.83	0.73	0.94

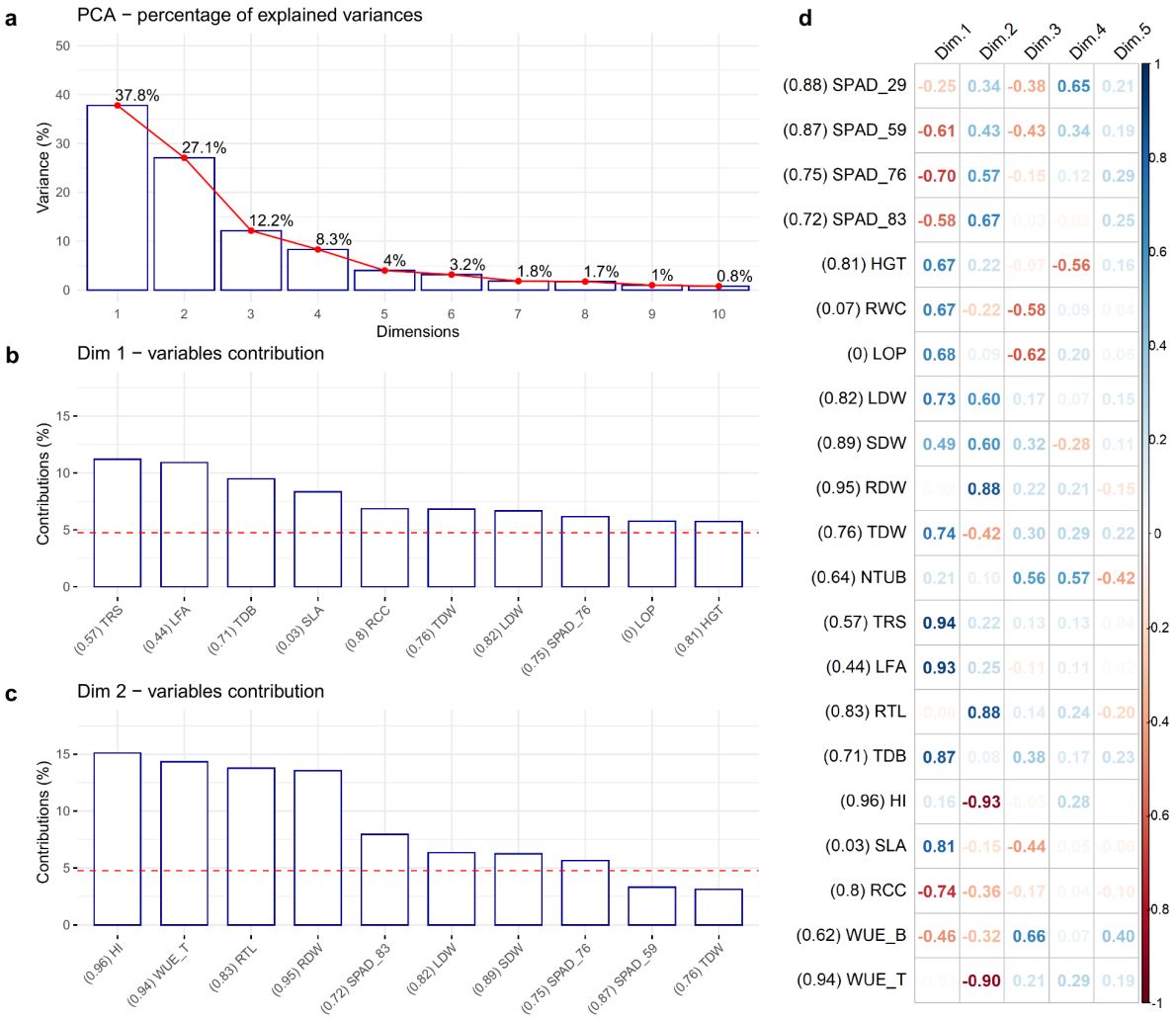

Fig. S1: Principal Component Analysis (PCA) from traits measured in 15 potato genotypes under well-watered (WW) and water deficit (WD) conditions. (a) Percentage of the explained variance for each dimension. (b) Variance contribution of the first 10 traits in dimension 1. (c) Variance contribution of the first 10 traits in dimension 2. (d) Correlation between the studied traits and among the first 5 dimensions. The reference dashed lines on the bar plot correspond to the expected value if the contribution between the traits were uniform.