

**Supplemental Table 3 online.** Genotype and treatment-specific activity of expressed genes. Green background: stable; yellow background: genotype-specific activity changes dependent on the treatment; dark green background: stable SPE\_M and SPE\_B genes; green frame: stable and dynamic SPE genes.

		Water defici treatment (-0.8 MPa)																	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
Control treatment (dH <sub>2</sub> O)	genotype-specific activity <sup>1</sup>	0-0-0-0	0-0-0-1	0-0-1-0	0-0-1-1	0-1-0-0	0-1-0-1	0-1-1-0	0-1-1-1	1-0-0-0	1-0-0-1	1-0-1-0	1-0-1-1	1-1-0-0	1-1-0-1	1-1-1-0	1-1-1-1	Σ	
	1	0-0-0-0	2712 <sup>2</sup>	23	52	14	106	10	9	16	89	14	18	23	4	1	1	28	3120
	2	0-0-0-1	32	11	7	16	11	1	0	9	2	1	0	7	0	1	0	2	100
	3	0-0-1-0	14	0	3	4	1	1	3	3	2	2	1	6	0	1	0	1	42
	4	0-0-1-1	7	2	2	11	2	2	2	6	1	3	1	5	1	0	1	3	49
	5	0-1-0-0	104	3	8	3	241	38	56	52	2	0	0	1	16	6	7	26	563
	6	0-1-0-1	6	3	3	3	31	16	19	75	2	0	0	0	2	1	0	13	174
	7	0-1-1-0	12	2	1	0	33	10	16	35	1	0	0	0	3	2	7	17	139
	8	0-1-1-1	8	3	1	5	28	28	34	857	0	0	0	3	0	4	1	172	1144
	9	1-0-0-0	77	2	5	6	1	0	0	2	114	12	18	22	8	5	5	9	286
	10	1-0-0-1	5	3	1	4	1	0	0	0	14	11	3	32	0	1	1	4	80
	11	1-0-1-0	7	2	1	2	0	1	0	0	20	6	11	19	1	0	4	10	84
	12	1-0-1-1	8	1	2	9	1	3	0	2	21	25	26	643	7	5	4	96	853
	13	1-1-0-0	5	1	1	0	4	1	1	1	6	0	3	2	9	3	9	10	56
	14	1-1-0-1	3	0	0	0	2	3	3	2	1	1	0	2	3	5	0	15	40
	15	1-1-1-0	3	0	1	1	1	0	2	4	6	1	2	4	8	2	9	32	76
	16	1-1-1-1	9	2	3	4	20	7	8	119	4	8	8	72	20	35	39	22,822	23,180
	Σ	3012	58	91	82	483	121	153	1183	285	84	91	841	82	72	88	23,260	Σ diagonal: 27,491	

<sup>1</sup> Expression in genotypes: B73-Mo17-B73xMo17-Mo17xB73

<sup>2</sup> 2,712 genes were inactive, as they did not reach the selected threshold T of  $\geq 3$  reads per thousand bases of gene length (see methods).