

Supplementary Table S7: Associative analysis of SNPs markers for phenotyping (visual score) of Brazilian soybean genotypes under flooding conditions, in experiment 4.

Experiment 4							
Molecular Marker	N ⁽¹⁾	1 st Phenotyping		2 nd Phenotyping		3 rd Phenotyping	
		M ⁽²⁾	<i>p-value</i>	M ⁽³⁾	<i>p-value</i>	M ⁽⁴⁾	<i>p-value</i>
GSM0599							
CC	74	6.93	0.33	6.96	0.21	7.01	0.49
GG	2	6.63		6.5		7	
GSM0600							
AA	65	6.96	0.19	6.95	0.4	7.02	0.44
CC	11	6.68		6.89		6.98	
GSM0601							
TT	53	6.88	0.28	6.95	0.31	6.95	0.14
AA	22	7.02		7.02		7.17	
GSM0602							
TT	52	6.91	0.39	6.96	0.32	7.01	0.46
AA	17	6.84		6.85		6.99	
GSM0603							
TT	37	6.74	0.09	6.83	0.15	6.87	0.09
GG	36	7.05		7.03		7.13	
GSM0604							
TT	51	6.82	0.15	6.86	0.12	6.88	0.03
AA	22	7.08		7.1		7.27	
GSM0605							
TT	23	6.41	0	6.53	0	6.59	0
GG	50	7.09		7.08		7.14	
GSM0611							
TT	45	6.86	0.27	6.91	0.39	6.91	0.08
CC	28	7		6.96		7.18	

GSM0612							
TT	32	6.73	0.06	6.94	0.06	6.94	0.22
CC	41	7.09		7.09		7.09	
GSM0613							
GG	32	6.73	0.08	6.8	0.08	6.94	0.25
AA	39	7.06		7.06		7.07	
GSM0614							
CC	26	6.71	0.1	6.68	0.11	6.85	0.12
AA	49	7.01		7.02		7.08	
GSM0615							
GG	42	6.86	0.36	6.86	0.15	6.9	0.12
AA	29	6.94		7.03		7.13	
GSM0616							
TT	42	6.92	0.38	6.92	0.46	6.99	0.49
CC	31	6.85		6.94		6.99	
GSM0617							
TT	23	6.9	0.48	6.9	0.33	6.9	0.25
AA	50	6.89		6.86		7.04	
GSM0618							
TT	21	6.88	0.37	6.86	0.21	6.88	0.17
CC	52	6.96		7		7.09	
GSM0619							
TT	73	6.91	0.44	7	0.25	7	0.37
GG	3	7		7.25		7.17	
GSM0620							
GG	74	6.93	nd	6.96	nd	7.3	nd
AA	1	5.75		6		6.25	
GSM0621							
AA	75	6.93	nd	6.96	nd	7.28	nd
TT	1	5.75		6		6.25	
GSM0622							

GG	43	6.93	0.5	6.9	0.25	7.03	0.48
AA	29	6.93		7.03		7.02	
GSM0623							
TT	22	7.06	0.2	7.09	0.15	7.14	0.17
AA	50	7		6.88		6.94	
GSM0625							
GG	46	6.84	0.21	6.88	0.22	6.92	0.14
AA	28	7.03		7.03		7.13	
GSM0626							
GG	47	6.95	0.34	6.97	0.37	7.04	0.33
AA	29	6.86		6.91		6.96	

(1) Number of genotypes classified in each group and (2) (3) (4) Average of visual damage scales performed 5, 10, 23 and 38 days after drainage, respectively from experiment 4 in the 2018/19 season; nd: data not available. The values in bold differ by the t test at 5% regarding phenotyping after flooding