

Supplementary Table S5: Associative analysis of SNPs markers and phenotyping (visual score and productivity) of soybean Brazilian genotypes submitted to flooding (Experiment 2).

Experiment 2									
Molecular Marker	N ⁽¹⁾	1 st Phenotyping		2 nd Phenotyping		3 rd Phenotyping		Productivity	
		M ⁽²⁾	<i>p-value</i>	M ⁽³⁾	<i>p-value</i>	M ⁽⁴⁾	<i>p-value</i>	M ⁽⁵⁾ (kg ha ⁻¹)	<i>p-value</i>
GSM0599									
CC	30	6.4		6.08		6.24		1509.79	
GG	1	6	nd	5	nd	5.75	nd	1479.2	nd
GSM0600									
AA	29	6.39		6.04		6.23		1504.48	
CC	3	6.79	0.22	6.5	0.23	6.54	0.27	1285.39	0.22
GSM0601									
TT	23	6.03		6.53		6.53		1357.26	
AA	9	5.9	0.01	5.39	0.01	5.57	0	1807.69	0.01
GSM0602									
TT	22	6.34		5.99		6.12		1591.09	
AA	9	6.69	0.15	6.44	0.13	6.64	0.06	1222.54	0.02
GSM0603									
TT	19	6.46		6.14		6.28		1477.47	
GG	13	6.38	0.4	6.22	0.37	6.22	0.42	1493.41	0.46
GSM0604									
TT	23	6.7		5.43		6.52		1385.58	
AA	8	5.64	0	5.2	0	5.41	0	1777.87	0.02
GSM0605									
TT	14	6.67		6.26		6.29		1445.02	
GG	15	6.25	0.09	5.91	0.17	6.26	0.45	1542.09	0.28
GSM0611									
TT	20	6.4		6.4		6.1		1566.45	
CC	12	6.47	0.41	6.47	0.38	6.52	0.08	1346.43	0.1

GSM0612									
TT	12	6.06	0.03	5.53	0.01	5.72	0	1770.12	0
CC	20	6.65		6.42		6.58		1312.23	
GSM0613									
GG	12	6.06	0.04	5.53	0.01	5.72	0	1770.12	0
AA	19	6.57		6.37		6.54		1347.16	
GSM0614									
CC	12	6.4	0.44	6.01	0.37	6.29	0.43	1526.35	0.35
AA	20	6.44		6.13		6.24		1458.5	
GSM0615									
GG	19	6.59	0.12	6.31	0.07	6.37	0.21	1415.02	0.15
AA	12	6.21		5.75		6.11		1596.94	
GSM0616									
TT	23	6.59	0.04	6.25	0.07	6.27	0.44	1433.02	0.17
CC	9	6		5.66		6.22		1614.09	
GSM0617									
TT	7	6.25	0.28	5.8	0.2	5.98	0.17	1576.17	0.27
AA	24	6.48		6.18		6.33		1448.16	
GSM0618									
TT	7	6.25	0.27	5.8	0.18	5.98	0.2	1576.17	0.27
CC	22	6.5		6.23		6.3		1445.55	
GSM0619									
TT	30	6.48	0.09	6.18	0.02	6.3	0.13	1469.78	0.26
GG	2	5.63		4.63		5.62		1696.34	
GSM0620									
GG	30	6.47	0.15	6.15	0.07	6.31	0.09	1472.51	0.3
AA	2	5.81		5.06		5.5		1655.39	
GSM0621									
AA	30	6.47	0.15	6.15	0.07	6.31	0.09	1472.51	0.3

TT	2	5.81		5.06		5.5		1655.39	
GSM0622									
GG	18	6.28		5.99		6.16		1565.24	
AA	14	6.61	0.15	6.21	0.28	6.38	0.22	1379.42	0.14
GSM0623									
TT	16	6.6		6.3		6.48		1416.24	
AA	16	6.26	0.13	5.87	0.12	6.04	0.06	1551.64	0.21
GSM0625									
GG	20	6.55		6.24		6.42		1378.23	
AA	12	6.23	0.16	5.83	0.14	5.98	0.07	1660.12	0.05
GSM0626									
GG	17	6.3		6.01		6.21		1524.07	
AA	15	6.58	0.18	6.17	0.34	6.31	0.37	1438.47	0.31

(1) Number of genotypes classified in each allele group; (2), (3) and (4) Mean of visual damage scales performed 8, 23 and 43 days after water drainage, respectively; (5) Average productivity; nd: data not available. Values in bold highlights p-values < 0.05 obtained by t-test.