Table S11 SNPs significantly associated with seed weight and the seed weight QTL previously reported in similar regions based upon QTL analysis

Chromosome	Position (bp)	SNP	Significance level (-log(p))	Linkage Group	Previously reported QTL *	Markers associated with previously reported QTL
1	32259879	Gm01_32259879_A_G	3.1	D1a		
6	19735501	Gm06_19735501_A_G	3.0	C2	Sd wt 2-2 Sd wt 6-5 Sd wt 15-1	A635_1 Satt277 Satt277
11	28275032	Gm11_28275032_T_C	3.7	B1	Sd wt 10-3	Sat_095
11	28383645	Gm11_28383645_A_G	3.4	B1		
11	28631552	Gm11_28631552_A_G	3.8	B1		
11	30066578	Gm11_30066578_A_G	4.0	B1		
13	38442998	Gm13_38442998_C_T	2.9	F	Sd wt 35-10	Satt502-Satt383
14	28503986	Gm14_28503986_G_T	3.4	B2	Sd wt 10-4 Sd wt 13-3	BLT057_2 Satt070
14	28527246	Gm14_28527246_T_C	3.6	B2		
14	28574821	Gm14_28574821_A_G	3.6	B2		
14	29397454	Gm14_29397454_A_C	3.0	B2		
14	34265654	Gm14_34265654_T_C	3.2	B2		
17	2415553	Gm17_2415553_G_A	3.1	D2	Sd wt 3-1 Sd wt 13-5 Sd wt 14-1 Sd wt 18-2 Sd wt 21-2 Sd wt 22-3	A257_1 Satt154 Satt014 Satt002 B146_1 B146_1
17	2420297	Gm17_2420297_T_C	3.4	D2		
17	2425781	Gm17_2425781_T_C	3.5	D2		
17	2429917	Gm17_2429917_T_G	3.6	D2		
17	2431342	Gm17_2431342_T_G	3.4	D2		
17	2437182	Gm17_2437182_A_C	3.5	D2		
17	2437767	Gm17_2437767_C_A	3.4	D2		
17	2444576	Gm17_2444576_A_G	3.2	D2		
17	2500016	Gm17_2500016_T_C	4.3	D2		
17	2500333	Gm17_2500333_T_G	4.2	D2		
17	8735403	Gm17_8735403_G_A	3.2	D2		
17	8818072	Gm17_8818072_A_C	3.1	D2		
17	8827651	Gm17_8827651_C_T	3.1	D2		
19	42791352	Gm19_42791352_T_C	3.0	L	Sd wt 5-1 Sd wt 7-7 Sd wt 15-7 Sd wt 17-1	Satt527 Sat_099 Satt113 Satt156
19	42812863	Gm19_42812863_T_C	3.5	L		
19	43013222	Gm19_43013222_C_A	4.0	L		
19	43030068	Gm19_43030068_A_G	3.9	L		
19	43117852	Gm19_43117852_A_C	3.8	L		

* QTL names are those assigned by SoyBase (http://www.soybase.org/)

Sd wt 2-2/Sd wt 3-1: Mian et al. 1996. Theor. Appl. Genet 93:1011-1016.
Sd wt 5-1/Sd wt 6-5/Sd wt7-7: Orf et al. 1999. Crop Sci. 39(6):1624-1651.
Sd wt 10-3/Sd wt 10-4: Specht et al. 2001. Crop Sci. 41(2):493-509

Sd wt 13-3/Sd wt 13-5: Hoeck et al. 2003. Crop Sci. 43(1):68-74
Sd wt 14-1: Chapman et al. 2003 Euphytica 129(3):387-393
Sd wt 15-1/Sd wt 15-7: Hyten et al. 2004.Theor. Appl. Genet. 109(3):552-561
Sd wt 17-1: Stombaugh et al. 2004 Crop Sci. 44:2101-2106
Sd wt 18-2: Panthee et al. 2005 Crop Sci. 45(5):2015-2022
Sd wt 21-2: Gai et al. 2007 Front. of Ag. in China 1(1):1-7
Sd wt 22-3: Zhang et al, 2004 Theor. Appl. Genet. 108:1131-1139
Sd wt 35-10: Han et al. 2012 Theor. Appl. Genet. 125 (4):671-683.