

**Self-Fertility in a Cultivated Diploid Potato Population Using the Infinium 8303 Potato  
SNP Array**

Brenda A. Peterson, Sarah H. Holt, F. Parker E. Laimbeer, Andreas G. Doulis, Joseph Coombs,  
David S. Douches, Michael Hardigan, C. Robin Buell and Richard E. Veilleux\*

B.A. Peterson, S.H. Holt, P.E. Laimbeer, A.G. Doulis and R.E. Veilleux, Dep. of Horticulture,  
Virginia Tech, 220 Ag Quad Lane, Blacksburg, VA 24061; A.G. Doulis, Hellenic Agricultural  
Organization DEMETER (ex. NAGREF), Heraklion, Greece, J. Coombs and D.S. Douches, Dep.  
of Crop and Soil Sciences, Michigan State Univ., East Lansing, MI 48824, M. Hardigan and  
C.R. Buell, Dep. of Plant Biology, Michigan State Univ., East Lansing, MI 48824.

**Supplemental Material**

**Supplemental Table S1** Allele specific primers for KASP bioassays to determine allelic states of individuals in the S<sub>1</sub>, S<sub>2</sub> and S<sub>4</sub> generations after self-pollination of DRH F<sub>1</sub> plants

Primers	SNP Targeted	Allele	Sequence <sup>a</sup>
1	solcap_snp_c2_23308	C/T	TTCCGATGTAATGTAGCCTTTTCTACCAGAATGTCTCTCTTTATAGTTTG[C/T]TGTTTATGGGATC TATCAGCTTATCTGTTCAGCAAGATCTTGTTGGTTTC
2	solcap_snp_c2_40748	G/A	AAGATCAACAATCTTCTTCTACAACCTCCGAATCTCTCAACAATCATGATC[G/A]AATTCCAAAAGG TAACAGTCCTAAACCCCAAGAAAACTAGAAGATCTCA
3	solcap_snp_c2_50824	T/C	CAGAAAACAGAATTAAGTACTACATTTTAAGCCCTTTCACCCCTAATACG[T/C]CTAGCTAATTGC ATATCCTTAGGCATAATCGTGACTCTTTTAGCATGAAT
4	solcap_snp_c2_5713	A/T	AAGAAGGGTGTCCCTAAATTTGCTGAAGATGGTATGGATGATGTTGTTGT[A/T]GAAGCACAAAC TTGTGAGTATAGTTTTAATTATTATAATAAATTGGATTT
5	solcap_snp_c2_57398	T/C	CTCAACAAAACTCAAGGTACTTTATAGTTTTCGGCTATATGGGGAGCTGG[T/C]GGCGGAGGCCGT GAGGCTTGCTAATCTCGGAAATCAAGGTCAAAACGATTG
6	solcap_snp_c2_51811	C/G	TAAACATGCCTCTGGGAGTGGAACAAGCTAGTTGTATTAAAAGAGCCAA[C/G]AGGGCAAAAT ATACATGATAAGTATGATTTGGGTCTGTGAGCTCGGAAGAG
7	solcap_snp_c2_46898	G/C	TTTGTTC AAGTGATAAGCATCAAGACCGCAAGATGTTAATTCTGATGCCG[G/C]TGCAGTCCCTTG ATACTCAAAATTATGGCATGTAAAGCAAATCCTCGCTG
8	solcap_snp_c2_17858	T/C	AAATTTCATTTTTTATGGACAAAGGATGGGGTCTTACCCTTGAACTTCT[T/C]CTTCTAATTCTGA TAGAGCTGGTTTCTTCAAGAACAAGCCTGTTTTTGGT
9	solcap_snp_c2_40636	T/C	TGCACTTAGTTCAAATTAATGCAAAAACATGCCCTCAAGCTGAAGACA[T/C]AGTAATGAAGG TTGTTAAGGAGGAAGCACAGAAAGACAGAAGAGTGCCCC
10	solcap_snp_c2_15021	A/G	AGAATTTGGGAACATCGATCAGTACAATATTTATGCTCCTCCTTGTAACA[A/G]TTCTGATGGTAG CAGTTCAACTAGGCAGACCATGAATTTACCCACCGAC

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11	solcap_snp_c1_10607	G/T	AAGATTGTTTGTAAATTCAGTGATATGGCTTCTGGCAGTATTATGTCTTCA[G/T]CAGCTGGCAAAC CTATTACTGATGCTATGCTTATTGACAACCTACCTAAA
12	solcap_snp_c2_21574	A/G	TGATAAGCGTTAATGTTGACAAGTGAAGCATAAATCCCAACAGCTCGCTC[A/G]TAGAGTGCTAC TAGAGCTCCAACAGATCTAGGTGTCACCTCCTGCACAGT
13	solcap_snp_c2_34604	C/T	AAAGGGTACTTTTGAATTCAATCCATAAACAGAAGCTTGACGAAGCCCAAA[C/T]AATACTAGGTT GTGGATTAGCCATTTTACATGCTTCAAGCAAACCTAACAA
14	solcap_snp_c1_10391	C/T	TTCTGAGTCTCTTTTATCATTCTGATGAATCATCAGCATCCTTTCTTC[C/T]GTTGTTTGGCTCGT TGGAACTTCCACCACTACCATCCTTTGGGGCACCAG
15	solcap_snp_c2_15528	A/T	TGCTGCTAGCATGTTGCAAAAACCATTTGAAGAATTGTTTCAGTGATCTTA[A/T]GCCTAGTCCTTG TTGCATAATATCTGGGAAAAACATGGCGTGGACTGTGC
16	solcap_snp_c2_28666	G/A	NNNAACAACACTAACAAAGAAGAGAAGCAATAATTTGAAGATGGAAGCA[G/A]CAAAGAAAA CCGCAGCTAATGTTGCAGCTTCAGCTAAGTCTGGCATGGAA
17	solcap_snp_c2_51811	C/G	TAAACATGCCTCTGGGAGTGGAACAAGCTAGTTGTATTAAGAGCCAA[C/G]AGGGCAAAT ATACATGATAAGTATGATTTGGGTCGTGAGCTCGGAAGAG
18	solcap_snp_c2_46898	G/C	TTTGTTCAAGTGATAAGCATCAAGACCGCAAGATGTTAATTCTGATGCCG[G/C]TGCAGTCCCTTG ATACTCAAATATGGCATGTAAAGCAAATCCTCGCTG
19	solcap_snp_c2_17858	T/C	AAATTTCATTTTTATGGACAAAGGATGGGGTCTTACCCTTGAACTTCT[T/C]CTTCTAATTCTGA TAGAGCTGGTTTCTTCAAGAACAAGCCTGTTTTTGGT
20	solcap_snp_c2_40636	T/C	TGCACTTAGTTCAAATTAATGCAAAAACATGCCCTCAAGCTGAAGACA[T/C]AGTAATGAAGG TTGTAAAGGAGGAAGCACAGAAAGACAGAAGAGTGCCCCG
21	solcap_snp_c2_15021	A/G	AGAATTTGGGAACATCGATCAGTACAATATTTATGCTCCTCCTTGTAACA[A/G]TTCTGATGGTAG CAGTTCAACTAGGCAGACCATGAATTTACCCACCGAC
22	solcap_snp_c1_10607	G/T	AAGATTGTTTGTAAATTCAGTGATATGGCTTCTGGCAGTATTATGTCTTCA[G/T]CAGCTGGCAAAC CTATTACTGATGCTATGCTTATTGACAACCTACCTAAA
23	solcap_snp_c2_21574	A/G	TGATAAGCGTTAATGTTGACAAGTGAAGCATAAATCCCAACAGCTCGCTC[A/G]TAGAGTGCTAC

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			TAGAGCTCCAACAGATCTAGGTGTCACTTCCTGCACAGT
24	solcap_snp_c2_34604	C/T	AAAGGGTACTTTTGAATTCAATCCATAAACAGAACTTGACGAAGCCCAA[C/T]AATACTAGGTT GTGGATTAGCCATTTTACATGCTTCAAGCAAATAACAA
25	solcap_snp_c1_10391	C/T	TTCTGAGTCTCTTTTATCATTTTCTGATGAATCATCAGCATCCTTTCTTC[C/T]GTTGTTTGGCTCGT TGGAAGTCCACCACTACCATCCTTTGGGGCACCAG
26	solcap_snp_c2_15528	A/T	TGCTGCTAGCATGTTGCAAAAACCATTTGAAGAATTGTTTCAGTGATCTTA[A/T]GCCTAGTCCTTG TTGCATAATATCTGGGAAAAACATGGCGTGGACTGTCTG
27	solcap_snp_c2_28666	G/A	NNNAACAATACTAACAAGAAGAGAAGCAATAATTTGAAGATGGAAGCA[G/A]CAAAGAAAA CCGCAGCTAATGTTGCAGCTTCAGCTAAGTCTGGCATGGAA

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<sup>a</sup>Sequences were submitted to KbioScience for primer design. Not all nucleotides included in the sequence were necessarily incorporated

**Supplemental Table S2.** Conditions for real-time PCR for KASP bioassays using allele-specific primers

Step	Denaturation	Time	Annealing	Time	Cycles
1	94°C	15 min	--	--	1
2	94°C	20 sec	65°C	60 sec	1
3	94°C	20 sec	64.2°C	60 sec	1
4	94°C	20 sec	63.4°C	60 sec	1
5	94°C	20 sec	62.6°C	60 sec	1
6	94°C	20 sec	61.8°C	60 sec	1
7	94°C	20 sec	61.0°C	60 sec	1
8	94°C	20 sec	60.2°C	60 sec	1
9	94°C	20 sec	59.4°C	60 sec	1
10	94°C	20 sec	58.6°C	60 sec	1
11	94°C	20 sec	57.8°C	60 sec	1
12	94°C	20 sec	57.0°C	60 sec	35

**Supplemental Table S3.** SNPs significantly linked with fruit and seed set in a population of 91 DRH  $F_1$  plants (Generation =  $F_1$ ) from a cross of DM by RH, and in a population of 132  $S_3$  derivatives (Generation =  $S_3$ ) after self-pollination of three  $F_1$  plants and advancing them to the  $S_3$ .

Generation	Trait	SNP	P-value	Chr	Location	Alleles
$F_1$	Fruit	solcap_snp_c2_57482	1.34E-10	chr00†	32655412	A/G
$F_1$	Fruit	solcap_snp_c2_57483	1.34E-10	chr00	32655491	A/C
$F_1$	Fruit	solcap_snp_c2_57484	1.81E-10	chr00	32655517	T/C
$F_1$	Fruit	solcap_snp_c2_44932	1.40E-05	chr12	11740317	T/C
$F_1$	Fruit	solcap_snp_c2_44928	1.40E-05	chr12	11740934	A/G
$F_1$	Fruit	solcap_snp_c2_44926	3.60E-05	chr12	11741117	T/C
$F_1$	Fruit	solcap_snp_c2_52691	3.60E-05	chr12	12034745	A/G
$F_1$	Fruit	solcap_snp_c2_40748	1.00E-05	chr12	12654160	T/C
$F_1$	Fruit	solcap_snp_c1_14577	1.40E-05	chr12	12834376	T/C
$F_1$	Fruit	solcap_snp_c2_51099	1.37E-05	chr12	13152409	A/G
$F_1$	Fruit	solcap_snp_c1_403	1.00E-05	chr12	13617956	T/G
$F_1$	Fruit	solcap_snp_c2_10042	1.20E-05	chr12	22677921	T/C
$F_1$	Fruit	solcap_snp_c2_40524	1.02E-05	chr12	26157851	A/G
$F_1$	Fruit	solcap_snp_c2_49334	1.02E-05	chr12	26423442	A/G
$F_1$	Fruit	solcap_snp_c2_9486	1.00E-05	chr12	27966948	A/G
$F_1$	Fruit	solcap_snp_c1_8581	1.20E-05	chr12	35675934	A/G
$F_1$	Fruit	solcap_snp_c2_45807	3.70E-06	chr12	40126341	A/G
$F_1$	Fruit	solcap_snp_c2_45808	2.70E-06	chr12	40126394	T/G
$F_1$	Fruit	solcap_snp_c2_45811	1.10E-05	chr12	40126773	A/G
$F_1$	Fruit	solcap_snp_c2_45812	3.70E-06	chr12	40126787	T/C
$F_1$	Fruit	solcap_snp_c2_18992	1.20E-05	chr12	40655145	A/C
$F_1$	Fruit	solcap_snp_c2_19722	1.00E-05	chr12	41670282	T/C
$F_1$	Fruit	solcap_snp_c1_10050	1.00E-05	chr12	42295148	T/C
$F_1$	Fruit	solcap_snp_c1_4502	1.40E-05	chr12	43554547	A/G

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F <sub>1</sub>	Fruit	solcap_snp_c2_30296	1.00E-05	chr12	45433626	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_33630	1.00E-05	chr12	45970798	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_51049	1.00E-05	chr12	48167367	A/C
F <sub>1</sub>	Fruit	solcap_snp_c2_51047	1.00E-05	chr12	48177610	T/G
F <sub>1</sub>	Fruit	solcap_snp_c2_48687	2.70E-06	chr12	48851340	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_48011	2.70E-06	chr12	49624689	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_43152	6.10E-07	chr12	49994628	T/C
F <sub>1</sub>	Fruit	solcap_snp_c1_14870	4.40E-07	chr12	50896643	T/C
F <sub>1</sub>	Fruit	solcap_snp_c1_14869	4.40E-07	chr12	50896655	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_18822	6.10E-07	chr12	51561780	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_18827	5.20E-07	chr12	51817147	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_18836	4.40E-07	chr12	51862256	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_18838	4.40E-07	chr12	51885239	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_18848	5.20E-07	chr12	51908158	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_52568	6.10E-07	chr12	51963149	A/C
F <sub>1</sub>	Fruit	solcap_snp_c2_52567	6.10E-07	chr12	51963155	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_42328	6.10E-07	chr12	52418813	A/C
F <sub>1</sub>	Fruit	solcap_snp_c2_57478	1.60E-06	chr12	52956364	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_23337	4.40E-07	chr12	53037279	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_23308	6.10E-07	chr12	53190167	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_23284	6.10E-07	chr12	53304636	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_23235	2.30E-07	chr12	53690152	A/C
F <sub>1</sub>	Fruit	solcap_snp_c2_23259	2.30E-07	chr12	53792521	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_23258	2.30E-07	chr12	53792603	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_23256	2.30E-07	chr12	53792920	A/C
F <sub>1</sub>	Fruit	solcap_snp_c2_23254	2.30E-07	chr12	53793483	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_23253	8.40E-07	chr12	53793515	A/T

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F <sub>1</sub>	Fruit	solcap_snp_c2_23252	2.30E-07	chr12	53793673	A/C
F <sub>1</sub>	Fruit	solcap_snp_c1_11644	3.90E-07	chr12	54173482	A/G
F <sub>1</sub>	Fruit	solcap_snp_c1_11668	3.90E-07	chr12	54234293	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_39410	3.90E-07	chr12	54234680	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_39409	3.90E-07	chr12	54234744	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_39393	2.70E-07	chr12	54259896	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_50821	3.90E-07	chr12	54426391	T/G
F <sub>1</sub>	Fruit	solcap_snp_c2_50824	3.90E-07	chr12	54479773	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_48482	3.90E-07	chr12	54727908	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_48483	3.90E-07	chr12	54727971	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_48470	2.30E-07	chr12	54861282	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_57400	2.70E-07	chr12	55091253	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_57399	2.70E-07	chr12	55091259	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_57398	1.70E-08	chr12	55092128	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_32517	8.10E-08	chr12	55185429	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_32522	5.50E-08	chr12	55185750	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_32466	8.10E-08	chr12	55216911	A/C
F <sub>1</sub>	Fruit	solcap_snp_c2_32467	8.10E-08	chr12	55220113	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_32482	2.70E-07	chr12	55312422	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_32498	8.10E-08	chr12	55411765	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_32505	2.70E-07	chr12	55428946	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_32082	2.70E-07	chr12	55723634	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_32077	1.10E-08	chr12	55762243	T/C
F <sub>1</sub>	Fruit	solcap_snp_c1_2331	1.10E-10	chr12	56876911	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_8037	5.30E-13	chr12	57705706	T/C
F <sub>1</sub>	Fruit	solcap_snp_c1_2689	1.80E-12	chr12	58047342	T/C
F <sub>1</sub>	Fruit	solcap_snp_c1_1944	1.30E-11	chr12	59760444	A/G



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F <sub>1</sub>	Fruit	solcap_snp_c1_1923	8.40E-12	chr12	59870038	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_5713	1.20E-10	chr12	59957346	A/T
F <sub>1</sub>	Fruit	solcap_snp_c2_5594	3.10E-10	chr12	60306388	A/G
F <sub>1</sub>	Fruit	solcap_snp_c1_1985	6.70E-10	chr12	60307321	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_5507	7.90E-10	chr12	60477931	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_5474	1.30E-10	chr12	60707179	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_5463	1.30E-10	chr12	60753284	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_5461	1.30E-10	chr12	60754698	A/G
F <sub>1</sub>	Fruit	solcap_snp_c2_5446	7.90E-10	chr12	60809422	T/C
F <sub>1</sub>	Fruit	solcap_snp_c2_5524	6.60E-10	chr12	61060537	T/C
F <sub>1</sub>	Seed	solcap_snp_c2_57484	0.0001	chr00	32655517	T/C
F <sub>1</sub>	Seed	solcap_snp_c2_20445	0.0001	chr02	2060425	T/C
F <sub>1</sub>	Seed	solcap_snp_c2_48734	0.0001	chr02	5552574	T/C
F <sub>1</sub>	Seed	solcap_snp_c2_11584	0.0001	chr02	6068801	A/G
F <sub>1</sub>	Seed	solcap_snp_c1_3753	0.0001	chr02	6891436	T/C
F <sub>1</sub>	Seed	solcap_snp_c2_4505	0.0001	chr02	8202528	T/C
F <sub>1</sub>	Seed	solcap_snp_c2_54579	0.0001	chr02	9299863	T/G
F <sub>1</sub>	Seed	solcap_snp_c2_16347	0.0001	chr02	14356628	T/C
F <sub>1</sub>	Seed	solcap_snp_c2_16348	0.0001	chr02	14356660	A/C
F <sub>1</sub>	Seed	solcap_snp_c2_16341	0.0001	chr02	14614439	A/C
F <sub>1</sub>	Seed	solcap_snp_c2_54473	0.0001	chr02	15060346	A/G
F <sub>1</sub>	Seed	solcap_snp_c2_16362	0.0001	chr02	15157259	A/G
F <sub>1</sub>	Seed	solcap_snp_c2_41874	0.0001	chr02	15518745	T/G
F <sub>1</sub>	Seed	solcap_snp_c2_41906	0.0001	chr02	15695583	A/C
F <sub>1</sub>	Seed	solcap_snp_c2_41904	0.0001	chr02	15695730	T/C
F <sub>1</sub>	Seed	solcap_snp_c2_30946	0.0001	chr02	15929182	T/C
F <sub>1</sub>	Seed	solcap_snp_c2_30940	0.0001	chr02	16034562	A/G

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F <sub>1</sub>	Seed	solcap_snp_c2_30937	0.0001	chr02	16050745	A/G
F <sub>1</sub>	Seed	solcap_snp_c1_868	0.0001	chr02	17236308	T/C
F <sub>1</sub>	Seed	solcap_snp_c2_49068	0.0001	chr02	17379552	T/C
F <sub>1</sub>	Seed	solcap_snp_c2_41124	0.0001	chr02	17834472	A/G
F <sub>1</sub>	Seed	solcap_snp_c1_15974	0.0001	chr02	18501334	A/C
F <sub>1</sub>	Seed	solcap_snp_c1_15973	0.0001	chr02	18501382	T/C
F <sub>1</sub>	Seed	solcap_snp_c1_15972	0.0001	chr02	18501607	A/G
F <sub>1</sub>	Seed	solcap_snp_c2_17387	0.0001	chr02	20193466	A/C
F <sub>1</sub>	Seed	solcap_snp_c2_17415	0.0001	chr02	20497672	T/C
F <sub>1</sub>	Seed	solcap_snp_c2_17428	0.0001	chr02	20681320	A/T
F <sub>1</sub>	Seed	solcap_snp_c1_11344	0.0001	chr02	21725617	A/G
F <sub>1</sub>	Seed	solcap_snp_c1_3495	0.0001	chr04	71866559	T/C
F <sub>1</sub>	Seed	solcap_snp_c1_3494	0.0001	chr04	71868365	T/C
F <sub>1</sub>	Seed	solcap_snp_c1_3484	0.0001	chr04	71945107	T/C
F <sub>1</sub>	Seed	solcap_snp_c2_10568	0.0001	chr04	71954528	T/A
F <sub>1</sub>	Seed	solcap_snp_c2_10563	0.0001	chr04	71956350	C/G
F <sub>1</sub>	Seed	solcap_snp_c2_10546	0.0001	chr04	72023252	A/G
F <sub>1</sub>	Seed	solcap_snp_c1_3462	0.0001	chr04	72026868	T/A
F <sub>1</sub>	Seed	solcap_snp_c1_3461	0.0001	chr04	72026885	A/G
F <sub>1</sub>	Seed	solcap_snp_c2_5713	0.0001	chr12	59957346	A/T
F <sub>1</sub>	Seed	solcap_snp_c2_5594	0.0001	chr12	60306388	A/G
F <sub>1</sub>	Seed	solcap_snp_c2_5524	0.0001	chr12	61060537	T/C
S <sub>3</sub>	Fruit	solcap_snp_c1_16258	8.82E-05	chr04	10390793	T/C
S <sub>3</sub>	Fruit	solcap_snp_c2_3962	6.48E-05	chr09	4889182	A/G
S <sub>3</sub>	Fruit	solcap_snp_c2_13345	2.87E-05	chr11	436865	T/C
S <sub>3</sub>	Fruit	solcap_snp_c2_13419	2.87E-05	chr11	761409	A/G
S <sub>3</sub>	Fruit	solcap_snp_c1_4322	2.87E-05	chr11	939924	T/C

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S <sub>3</sub>	Fruit	solcap_snp_c2_33657	1.18E-05	chr11	2274063	T/C
S <sub>3</sub>	Fruit	solcap_snp_c1_15641	8.03E-05	chr12	823935	A/G
S <sub>3</sub>	Fruit	solcap_snp_c1_15642	8.03E-05	chr12	823953	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_54803	0.0001	chr01	811709	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_54797	0.0001	chr01	817205	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_6793	0.0001	chr01	1314398	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_6684	0.0001	chr01	1828475	T/G
S <sub>3</sub>	Seed	solcap_snp_c1_6668	0.0001	chr01	2753906	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_21234	0.0001	chr01	2956294	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_21247	0.0001	chr01	3087549	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_57284	0.0001	chr01	11774418	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_27677	0.0001	chr01	37071429	A/T
S <sub>3</sub>	Seed	solcap_snp_c1_14249	0.0001	chr01	44696600	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_52477	0.0001	chr01	45567820	T/G
S <sub>3</sub>	Seed	solcap_snp_c1_6294	0.0001	chr01	73340313	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_14274	0.0001	chr01	74061521	T/G
S <sub>3</sub>	Seed	solcap_snp_c2_5226	0.0001	chr03	7337144	A/G
S <sub>3</sub>	Seed	solcap_snp_c1_9141	0.0001	chr03	42570907	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_45700	0.0001	chr03	43326700	G/C
S <sub>3</sub>	Seed	solcap_snp_c2_13811	0.0001	chr03	43573501	A/C
S <sub>3</sub>	Seed	solcap_snp_c2_13821	0.0001	chr03	43631694	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_48808	0.0001	chr04	55441858	T/C
S <sub>3</sub>	Seed	solcap_snp_c1_15495	0.0001	chr04	55550962	T/C
S <sub>3</sub>	Seed	solcap_snp_c1_6905	0.0001	chr04	56622443	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_57883	0.0001	chr04	57242921	A/T
S <sub>3</sub>	Seed	solcap_snp_c2_57884	0.0001	chr04	57242937	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_52890	0.0001	chr04	57285169	T/C

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S <sub>3</sub>	Seed	solcap_snp_c2_54335	0.0001	chr04	58532735	T/C
S <sub>3</sub>	Seed	solcap_snp_c1_10751	0.0001	chr04	58845309	T/A
S <sub>3</sub>	Seed	solcap_snp_c2_36053	0.0001	chr04	58951832	T/G
S <sub>3</sub>	Seed	solcap_snp_c2_36060	0.0001	chr04	59098892	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_39804	0.0001	chr04	59825374	T/C
S <sub>3</sub>	Seed	solcap_snp_c1_15505	0.0001	chr04	60551488	A/C
S <sub>3</sub>	Seed	solcap_snp_c2_34566	0.0001	chr08	53217188	A/G
S <sub>3</sub>	Seed	solcap_snp_c1_10384	0.0001	chr08	53250100	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_34608	0.0001	chr08	53386131	T/G
S <sub>3</sub>	Seed	solcap_snp_c2_34632	0.0001	chr08	53456449	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_34635	0.0001	chr08	53457076	A/C
S <sub>3</sub>	Seed	solcap_snp_c2_34636	0.0001	chr08	53457133	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_34639	0.0001	chr08	53457649	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_34640	0.0001	chr08	53459520	T/A
S <sub>3</sub>	Seed	solcap_snp_c2_34647	0.0001	chr08	53491874	A/C
S <sub>3</sub>	Seed	solcap_snp_c2_34655	0.0001	chr08	53494603	A/C
S <sub>3</sub>	Seed	solcap_snp_c1_8297	0.0001	chr08	53823394	T/C
S <sub>3</sub>	Seed	solcap_snp_c1_8293	0.0001	chr08	53877072	T/G
S <sub>3</sub>	Seed	solcap_snp_c1_8282	0.0001	chr08	54022113	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_26654	0.0001	chr08	54286383	A/G
S <sub>3</sub>	Seed	solcap_snp_c1_8237	0.0001	chr08	54357787	A/G
S <sub>3</sub>	Seed	solcap_snp_c1_16495	0.0001	chr08	54454507	T/C
S <sub>3</sub>	Seed	solcap_snp_c1_5499	0.0001	chr08	54831485	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_16996	0.0001	chr08	54836870	A/C
S <sub>3</sub>	Seed	solcap_snp_c2_16997	0.0001	chr08	54837744	T/C
S <sub>3</sub>	Seed	solcap_snp_c1_5529	0.0001	chr08	54914652	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_17060	0.0001	chr08	55114519	T/G

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S <sub>3</sub>	Seed	solcap_snp_c1_5559	0.0001	chr08	55114819	T/C
S <sub>3</sub>	Seed	solcap_snp_c1_5560	0.0001	chr08	55114825	T/C
S <sub>3</sub>	Seed	solcap_snp_c1_5566	0.0001	chr08	55137894	A/G
S <sub>3</sub>	Seed	solcap_snp_c1_5567	0.0001	chr08	55137903	A/G
S <sub>3</sub>	Seed	solcap_snp_c1_5587	0.0001	chr08	55187986	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_16135	0.0001	chr08	56196743	T/C
S <sub>3</sub>	Seed	solcap_snp_c1_8765	0.0001	chr08	56753066	A/G
S <sub>3</sub>	Seed	solcap_snp_c1_8763	0.0001	chr08	56753185	T/C
S <sub>3</sub>	Seed	solcap_snp_c1_8760	0.0001	chr08	56785347	C/G
S <sub>3</sub>	Seed	solcap_snp_c1_8759	0.0001	chr08	56785385	T/G
S <sub>3</sub>	Seed	solcap_snp_c2_49642	0.0001	chr09	9656631	A/G
S <sub>3</sub>	Seed	solcap_snp_c1_15780	0.0001	chr09	10511206	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_58234	0.0001	chr09	11226418	A/C
S <sub>3</sub>	Seed	solcap_snp_c2_57401	0.0001	chr09	21044695	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_26517	0.0001	chr09	21264610	A/C
S <sub>3</sub>	Seed	solcap_snp_c1_6183	0.0001	chr09	48173462	A/C
S <sub>3</sub>	Seed	solcap_snp_c2_40879	0.0001	chr09	52027191	A/C
S <sub>3</sub>	Seed	solcap_snp_c2_40848	0.0001	chr09	52148880	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_42964	0.0001	chr09	52519931	A/C
S <sub>3</sub>	Seed	solcap_snp_c2_43012	0.0001	chr09	52657843	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_27003	0.0001	chr09	52996314	T/C
S <sub>3</sub>	Seed	solcap_snp_c1_12178	0.0001	chr09	53687100	T/G
S <sub>3</sub>	Seed	solcap_snp_c2_54325	0.0001	chr09	53858653	A/G
S <sub>3</sub>	Seed	solcap_snp_c1_6936	0.0001	chr09	53911437	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_22067	0.0001	chr09	54546742	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_46778	0.0001	chr09	54962067	T/G
S <sub>3</sub>	Seed	solcap_snp_c2_46777	0.0001	chr09	54965286	A/C

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S <sub>3</sub>	Seed	solcap_snp_c2_46776	0.0001	chr09	54976074	A/G
S <sub>3</sub>	Seed	solcap_snp_c1_13886	0.0001	chr09	55051108	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_29981	0.0001	chr09	55794340	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_30008	0.0001	chr09	56184931	A/C
S <sub>3</sub>	Seed	solcap_snp_c2_20668	0.0001	chr09	57070316	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_20640	0.0001	chr09	57134490	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_40032	0.0001	chr09	57252013	T/C
S <sub>3</sub>	Seed	solcap_snp_c1_11866	0.0001	chr09	57422065	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_40085	0.0001	chr09	57423104	T/C
S <sub>3</sub>	Seed	solcap_snp_c2_3079	0.0001	chr09	58240294	A/G
S <sub>3</sub>	Seed	solcap_snp_c1_914	0.0001	chr09	58272671	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_3068	0.0001	chr09	58358462	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_2998	0.0001	chr09	58689196	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_2992	0.0001	chr09	58997370	A/G
S <sub>3</sub>	Seed	solcap_snp_c1_14205	0.0001	chr09	59225663	A/G
S <sub>3</sub>	Seed	solcap_snp_c1_16106	0.0001	chr09	59475851	A/C
S <sub>3</sub>	Seed	solcap_snp_c2_55484	0.0001	chr09	59483296	A/C
S <sub>3</sub>	Seed	solcap_snp_c2_47952	0.0001	chr09	59560440	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_47939	0.0001	chr09	59598694	A/C
S <sub>3</sub>	Seed	solcap_snp_c2_35612	0.0001	chr09	60416070	A/G
S <sub>3</sub>	Seed	solcap_snp_c2_32498	0.0001	chr12	55411765	T/C

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†Chr00 refers to the residual unanchored sequences after assembly of version 4.03 of the potato genome.

**Supplemental Table S4.** The  $S_3$  generation SNPs with greater than 50% retained heterozygosity compared to the  $F_1$  generation

SNP	Chr	Location (bp)	$F_1$ heterozygosity	$S_3$ heterozygosity	Percent retained heterozygosity
solcap_snp_c2_56402	chr00†	17371035	0.60	0.54	0.90
solcap_snp_c2_2332	chr00	23352986	0.60	0.54	0.90
solcap_snp_c2_51812	chr01	4258102	0.62	0.51	0.83
solcap_snp_c2_51811	chr01	4258195	0.62	0.51	0.83
solcap_snp_c2_51810	chr01	4258310	0.62	0.51	0.83
solcap_snp_c2_51805	chr01	4262991	0.62	0.59	0.95
solcap_snp_c2_51804	chr01	4263036	0.62	0.65	1.05
solcap_snp_c2_55009	chr01	4952099	1.00	0.52	0.52
solcap_snp_c2_45058	chr01	5347312	1.00	0.53	0.53
solcap_snp_c2_45071	chr01	5386865	1.00	0.54	0.54
solcap_snp_c2_27887	chr01	6142925	1.00	0.58	0.58
solcap_snp_c2_48155	chr01	7165230	1.00	0.55	0.55
solcap_snp_c2_48154	chr01	7165940	1.00	0.55	0.55
solcap_snp_c2_50010	chr01	7444530	1.00	0.56	0.56
solcap_snp_c2_50011	chr01	7447081	0.60	0.55	0.92
solcap_snp_c2_38354	chr01	7866002	0.60	0.57	0.94
solcap_snp_c2_52712	chr01	8645593	0.60	0.57	0.95
solcap_snp_c2_52709	chr01	8645709	0.60	0.55	0.92
solcap_snp_c2_52705	chr01	8653509	1.00	0.55	0.55
solcap_snp_c2_52704	chr01	8653542	0.60	0.57	0.95
solcap_snp_c2_27677	chr01	37071429	0.60	0.66	1.10
solcap_snp_c2_52477	chr01	45567820	0.60	0.66	1.10
solcap_snp_c2_46907	chr02	29925751	1.00	0.50	0.50
solcap_snp_c1_12257	chr02	34211649	1.00	0.53	0.53
solcap_snp_c2_40155	chr02	35112246	1.00	0.57	0.57
solcap_snp_c2_17973	chr02	36229830	1.00	0.54	0.54
solcap_snp_c1_12377	chr02	37341815	1.00	0.53	0.53
solcap_snp_c2_42244	chr02	37369714	1.00	0.53	0.53
solcap_snp_c2_42172	chr02	37439083	1.00	0.54	0.54
solcap_snp_c1_12373	chr02	37530501	1.00	0.54	0.54

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solcap_snp_c2_25897	chr02	40132605		1.00	0.59	0.59
solcap_snp_c2_39333	chr04	64234719		1.00	0.54	0.54
solcap_snp_c2_21574	chr04	64781064		1.00	0.52	0.52
solcap_snp_c2_26758	chr04	65600291		1.00	0.54	0.54
solcap_snp_c1_7990	chr04	65866827		1.00	0.55	0.55
solcap_snp_c2_25284	chr04	65872176		1.00	0.55	0.55
solcap_snp_c2_55793	chr04	65970096		1.00	0.55	0.55
solcap_snp_c2_55791	chr04	65970282		1.00	0.55	0.55
solcap_snp_c2_55785	chr04	65970953		1.00	0.55	0.55
solcap_snp_c2_55784	chr04	65970986		1.00	0.55	0.55
solcap_snp_c2_55783	chr04	65971150	91	1.00	0.55	0.55
solcap_snp_c2_55782	chr04	65971159	91	1.00	0.55	0.55
solcap_snp_c2_55777	chr04	65971441	91	1.00	0.55	0.55
solcap_snp_c2_55775	chr04	65972399	91	1.00	0.55	0.55
solcap_snp_c2_55772	chr04	65972586	91	1.00	0.55	0.55
solcap_snp_c2_55768	chr04	65972774	91	1.00	0.55	0.55
solcap_snp_c2_26740	chr04	66204641	91	1.00	0.66	0.66
solcap_snp_c2_57623	chr10	53132218	91	1.00	0.92	0.92

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†Chr00 refers to the residual unanchored sequences after assembly of version 4.03 of the potato genome.



**Supplemental Table S5.** Loci with fixed alleles in the  $S_3$  generation

SolCAP_SNP_ID	Chr	ver 4.03 position	DM	RH	Fixed allele
solcap_snp_c2_53198	chr00†	29279410	TT	TC	TT
solcap_snp_c2_36232	chr03	419098	GG	TG	GG
solcap_snp_c2_51389	chr03	983008	AA	AG	AA
solcap_snp_c2_54288	chr03	1269875	CC	AC	CC
solcap_snp_c1_15782	chr03	1276837	GG	AG	GG
solcap_snp_c2_52800	chr03	1536781	GG	AG	GG
solcap_snp_c2_52815	chr03	1612323	AA	AG	AA
solcap_snp_c2_20347	chr03	44336061	AA	AG	AA
solcap_snp_c1_6348	chr03	44344381	GG	GC	GG
solcap_snp_c2_54785	chr03	47137231	GG	TG	GG
solcap_snp_c2_12981	chr04	69026707	TT	TC	TT
solcap_snp_c2_12928	chr04	69322253	TT	TC	TT
solcap_snp_c1_4171	chr04	69336216	TT	TC	TT
solcap_snp_c2_12924	chr04	69345026	TT	TG	TT
solcap_snp_c1_4140	chr04	69649074	CC	AC	CC
solcap_snp_c2_35970	chr04	70731750	AA	AG	AA
solcap_snp_c2_35942	chr04	70878916	GG	AG	GG
solcap_snp_c1_10670	chr04	70880221	CC	TC	CC
solcap_snp_c1_10668	chr04	70880906	TT	TC	TT
solcap_snp_c2_33517	chr05	1413732	AA	AC	AA
solcap_snp_c1_3840	chr05	3134967	TT	TG	TT
solcap_snp_c2_47646	chr05	5921198	TT	TC	TT
solcap_snp_c2_47611	chr05	5972571	GG	AG	GG
solcap_snp_c2_47284	chr05	6354190	GG	AG	GG
solcap_snp_c1_11078	chr05	8166198	GG	AG	GG
solcap_snp_c2_54372	chr05	48878549	GG	AG	GG
solcap_snp_c2_54371	chr05	48887625	GG	AG	GG
solcap_snp_c2_8521	chr05	50584500	TT	TC	TT
solcap_snp_c2_24311	chr06	35933697	TT	TC	TT
solcap_snp_c1_12409	chr06	36765007	GG	AG	GG
solcap_snp_c2_43093	chr06	37602254	AA	AG	AA
solcap_snp_c2_33375	chr06	38883066	TT	TG	TT
solcap_snp_c2_52390	chr06	41062247	GG	AG	GG
solcap_snp_c2_49052	chr06	41927092	CC	TC	CC
solcap_snp_c2_49053	chr06	41927126	GG	TG	GG
solcap_snp_c2_37762	chr06	43304876	CC	TC	CC
solcap_snp_c2_55700	chr06	43621182	TT	TC	TT
solcap_snp_c2_39627	chr06	43893360	GG	AG	GG
solcap_snp_c2_47782	chr06	44393449	GG	AG	GG
solcap_snp_c2_31873	chr06	46349187	GG	TG	GG

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solcap_snp_c2_54191	chr06	46612395	CC	TC	CC
solcap_snp_c1_15755	chr06	46662403	GG	AG	GG
solcap_snp_c2_54194	chr06	46662915	GG	AG	GG
solcap_snp_c2_46171	chr06	47053493	TT	TC	TT
solcap_snp_c2_16863	chr06	47604700	TT	TC	TT
solcap_snp_c2_16785	chr06	48053032	AA	AG	AA
solcap_snp_c2_16793	chr06	48069921	TT	TG	TT
solcap_snp_c2_16804	chr06	48122388	AA	AG	AA
solcap_snp_c1_15371	chr06	48416539	TT	TC	TT
solcap_snp_c2_52905	chr07	288431	TT	AT	TT
solcap_snp_c2_46081	chr07	539619	GG	AG	GG
solcap_snp_c2_46100	chr07	563935	GG	AG	GG
solcap_snp_c2_46107	chr07	565983	CC	TC	CC
solcap_snp_c2_46110	chr07	572511	GG	GC	GG
solcap_snp_c2_43960	chr07	2300074	TT	TG	TT
solcap_snp_c2_26197	chr07	2498400	GG	AG	GG
solcap_snp_c2_26296	chr07	2531707	GG	AG	GG
solcap_snp_c2_26145	chr07	2584839	CC	TC	CC
solcap_snp_c2_26154	chr07	2593153	CC	TC	CC
solcap_snp_c2_26166	chr07	2609204	TT	TG	TT
solcap_snp_c1_8186	chr07	3246279	AA	AG	AA
solcap_snp_c2_36882	chr07	3314985	GG	TG	GG
solcap_snp_c2_36818	chr07	3476491	TT	TC	TT
solcap_snp_c2_36833	chr07	3505922	AA	AG	AA
solcap_snp_c2_36838	chr07	3508158	CC	GC	CC
solcap_snp_c1_10974	chr07	3509670	TT	TG	TT
solcap_snp_c2_36859	chr07	3579340	GG	AG	GG
solcap_snp_c2_36872	chr07	3633771	TT	TC	TT
solcap_snp_c2_55831	chr07	3892550	CC	TC	CC
solcap_snp_c2_55833	chr07	3892715	CC	TC	CC
solcap_snp_c1_16221	chr07	3894102	AA	AT	AA
solcap_snp_c1_16227	chr07	3896435	GG	AG	GG
solcap_snp_c2_46379	chr07	4100017	GG	AG	GG
solcap_snp_c2_43574	chr07	4403363	TT	TC	TT
solcap_snp_c1_15485	chr07	6420869	AA	AG	AA
solcap_snp_c2_29015	chr08	141850	AA	AG	AA
solcap_snp_c2_29046	chr08	495242	AA	TA	AA
solcap_snp_c1_8854	chr08	513465	GG	TG	GG
solcap_snp_c1_9779	chr08	1067135	GG	AG	GG
solcap_snp_c1_9785	chr08	1179922	TT	TG	TT
solcap_snp_c2_32667	chr08	1218944	CC	TC	CC
solcap_snp_c1_9786	chr08	1220894	CC	TC	CC
solcap_snp_c1_15756	chr08	2903601	AA	AC	AA

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solcap_snp_c2_54204	chr08	2907179	CC	AC	CC
solcap_snp_c2_24407	chr08	3215967	AA	AC	AA
solcap_snp_c2_34103	chr08	4235737	GG	TG	GG
solcap_snp_c2_30052	chr08	4911088	TT	TA	TT
solcap_snp_c2_30053	chr08	4911152	AA	TA	AA
solcap_snp_c2_49541	chr08	6371823	GG	TG	GG
solcap_snp_c1_15451	chr08	7440493	CC	TC	CC
solcap_snp_c2_52856	chr08	7443846	TT	TA	TT
solcap_snp_c2_52857	chr08	7445492	GG	AG	GG
solcap_snp_c1_5713	chr08	9226857	AA	AG	AA
solcap_snp_c1_14542	chr08	35553321	AA	AG	AA
solcap_snp_c2_49245	chr08	35651378	CC	AC	CC
solcap_snp_c2_56491	chr08	35731349	CC	TC	CC
solcap_snp_c2_41463	chr08	35922019	CC	TC	CC
solcap_snp_c1_12162	chr08	36109390	AA	AG	AA
solcap_snp_c1_838	chr08	37259543	GG	AG	GG
solcap_snp_c2_51329	chr08	38877340	TT	TC	TT
solcap_snp_c2_45770	chr08	39115651	TT	TC	TT
solcap_snp_c2_45751	chr08	39257244	CC	TC	CC
solcap_snp_c2_44331	chr08	39563855	GG	AG	GG
solcap_snp_c1_13043	chr08	39670914	TT	TG	TT
solcap_snp_c2_44335	chr08	39693615	AA	AG	AA
solcap_snp_c2_44334	chr08	39698106	AA	AG	AA
solcap_snp_c1_15045	chr08	39908319	CC	CG	CC
solcap_snp_c2_51370	chr08	39908658	AA	AG	AA
solcap_snp_c2_51374	chr08	39959936	AA	AG	AA
solcap_snp_c2_51372	chr08	39999345	CC	TC	CC
solcap_snp_c2_47468	chr08	40097312	CC	AA	CC
solcap_snp_c2_48182	chr08	41087520	TT	TC	TT
solcap_snp_c2_48184	chr08	41087752	AA	AG	AA
solcap_snp_c1_14271	chr08	41088132	GG	AG	GG
solcap_snp_c1_12166	chr08	41635071	GG	AG	GG
solcap_snp_c2_18918	chr08	43308600	GG	AG	GG
solcap_snp_c2_15834	chr08	45161929	GG	AG	GG
solcap_snp_c2_50153	chr08	45991126	TT	TG	TT
solcap_snp_c2_50150	chr08	46018693	CC	TC	CC
solcap_snp_c2_51052	chr08	46359102	GG	AG	GG
solcap_snp_c2_53903	chr08	47499196	GG	AG	GG
solcap_snp_c1_10397	chr08	50310526	AA	AC	AA
solcap_snp_c2_34709	chr08	50368198	GG	TG	GG
solcap_snp_c2_34698	chr08	50386164	GG	AG	GG
solcap_snp_c2_34717	chr08	50543373	AA	AC	AA
solcap_snp_c2_36748	chr08	51098940	GG	AG	GG

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solcap_snp_c2_36749	chr08	51167954	CC	TC	CC
solcap_snp_c2_36779	chr08	51263284	GG	AG	GG
solcap_snp_c2_19144	chr08	52270205	AA	AG	AA
solcap_snp_c1_6052	chr08	52291866	GG	AG	GG
solcap_snp_c2_34587	chr08	53326021	CC	TC	CC
solcap_snp_c2_34590	chr08	53349021	CC	TC	CC
solcap_snp_c2_34634	chr08	53457013	GG	TG	GG
solcap_snp_c2_40086	chr09	57423038	TT	TC	TT
solcap_snp_c2_3021	chr09	58582477	AA	AG	AA
solcap_snp_c2_48041	chr09	59300365	TT	TC	TT
solcap_snp_c1_10579	chr09	60562325	AA	AG	AA
solcap_snp_c1_1944	chr12	59760444	GG	AG	AA

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†Chr00 refers to the residual unanchored sequences after assembly of version 4.03 of the potato genome.

### Self-Fertility in a Cultivated Diploid Potato Population Using the Infinium 8303 Potato SNP Array

Supplemental Figure S1. Sequence alignment of monoploid CNV8 (M8: T7 49 C2 AR1) against the DM reference genome ver. 4.04 at chr02:25050050..25050300 flanking solcap\_snp\_c2\_21752. CNV8 appeared to be heterozygous for this SNP on the Infinium array and the alignment reveals two “alleles” in the monoploid indicative of copy number variation (CNV). At the position of the SNP, bases annotated in green have the A nucleotide whereas those in gray are G and resemble the DM genome). Alignment was viewed using the Integrative Genomics Viewer (Thorvaldsdóttir et al., 2013).

M8

