

**Table S1 Markers**

Marker ID	Locus name	Physical position*	Forward primer 1	Forward primer 2	Common reverse primer
snp_01_0042	ch1_AC202158_78820	180,394,890	GAAGGTGACCAAGTTCATGC TGCCGATACCAATCACTGACA	GAAGGTCGGAGTCAACGGATTCTGC CGATACCAATCACTGACG	GCCCCGGTCGGTACACAGTTA
snp_01_0057	chr1 183107525 C/T	184,016,638	GAAGGTGACCAAGTTCATGC TCCCTCACCAGCGACCACC	GAAGGTCGGAGTCAACGGATTCTTC CCTCACCAGCGACCACT	GGCAGGCAAGGTCACAGAGGAA
snp_01_0015	PZA00068.1	183,986,082	GAAGGTGACCAAGTTCATGC TGACAGGGAACCGGATTCTA TAG	GAAGGTCGGAGTCAACGGATTGTG ACAGGGAACCGGATTCTATAA	GTTAATCTTCACCTGGTGCATCGTG TA
snp_01_0059	chr1 184516928 G/A	184,633,349	TCCAGGGCCTGCTAACGCTGT T	GAAGGTCGGAGTCAACGGATTCTCAG GGCCTGCTAACGCTGTC	CGTACATGTGCCGCGCTTTATATA
snp_01_0047	chr1 185582569 A/C	185,737,089	GAAGGTGACCAAGTTCATGC TGAATTGCTATTATTATATAA CTCAACCCGT	GAAGGTCGGAGTCAACGGATTAATT GCTATTATTATATAACTCAACCCGG	TCGGCCATCTCGGCAACCTCAA
snp_01_0136	ss229502009	187,090,230	GAAGGTGACCAAGTTCATGC TGCAATAACCATTGAACCAAC GAC	GAAGGTCGGAGTCAACGGATTCTGC AATAACCATTGAACCAACGAG	GTCCAGCTATAGGATAGGAAGAGC AT
snp_01_0137	ss229502244	187,245,104	GAAGGTGACCAAGTTCATGC TGCGTCATTTTCTCGTCAGGG C	GAAGGTCGGAGTCAACGGATTCTGC GTCATTTTCTCGTCAGGGA	ACTCCATTATTCATGCTTGATGGAC CTA
snp_01_0138	ss229502327	187,272,680	GAAGGTGACCAAGTTCATGC TACTGCTAGCAGCTACTGCAG G	GAAGGTCGGAGTCAACGGATTCTAC TGCTAGCAGCTACTGCAGA	CCAACCTTTACCTAACATGTTTGC TGTT
snp_01_0139	ss229502401	187,341,010	GAAGGTGACCAAGTTCATGC TGCGCCTCTCCTCCACGGC	GAAGGTCGGAGTCAACGGATTGCG CCTCTCCTCCACGGT	ACGGTGCCCGGCGCGTGAA
snp_01_0115	ss229502466	187,399,046	GAAGGTGACCAAGTTCATGC TCGTAACGGCAAGCTTCTCTG TGT	GAAGGTCGGAGTCAACGGATTGTA ACGGCAAGCTTCTCTGTGC	TCTCTGGCGTAGGGTCTCTCT

snp_01_0116	ss229502486	187,400,044	GAAGGTGACCAAGTTCATGC TTCCGCTGCCGCTGCGGA	GAAGGTCGGAGTCAACGGATTCCGC TGCCGCTGCGGG	GCAGTCGTGGCGGTCCGAGTA
snp_01_0117	ss229502506	187,401,161	GAAGGTGACCAAGTTCATGC TGGACAGCGAACCCGGGGA	GAAGGTCGGAGTCAACGGATTGGA CAGCGAACCCGGGGG	CCTTGGTCGCGTCTGGCTGCT
snp_01_0118	ss229502527	187,436,581	TTTGTTAAGCAAGCACACAGA AGCG	GAAGGTCGGAGTCAACGGATTTGTT AAGCAAGCACACAGAAGCA	CAGCTGCTCGTCTGTTGTTAAT
snp_01_0079	ss196501884	187,588,467	GAAGGTGACCAAGTTCATGC TACCGGAACATCGTCAAGAT	GAAGGTCGGAGTCAACGGATTCCG GAACATCGTCAAGATGGAG	CGGAGAGGATCACGCCGAAGTT
snp_01_0082	ss229504554	189,336,643	GAAGGTGACCAAGTTCATGC TCCTTGCGCTCTCAGGTTTT	GAAGGTCGGAGTCAACGGATTCTTG GCA	TCATTAGGTGGGCCAGGCT
snp_01_0083	ss196429231	189,352,206	GAAGGTGACCAAGTTCATGC TCAGCCCCCTGTGCCGTT	GAAGGTCGGAGTCAACGGATTCTTG CCCCCTGTGCCGTC	CCTCAAGCTCGAGCTGGGACT
snp_01_0085	ss196516288	190,594,339	GAAGGTGACCAAGTTCATGC TGTTTAAGAATTGGATATCAT	GAAGGTCGGAGTCAACGGATTCTTG TTAAGAATTGGATATCATTGATCGA	GGCGTTGCTGATATCGCGTTCAATT
snp_01_0061	chr1 193313487 C/T	193,478,836	GAAGGTGACCAAGTTCATGC TGGTTCGTCCATTGCCGGAAT	GAAGGTCGGAGTCAACGGATTCTTG TTCGTCCATTGCCGGAATT	CGAACTCAACAGAGGAATTCTTAC CTT
snp_01_0005	PZA00619.3	195,557,990	GAAGGTGACCAAGTTCATGC TGAAGCACTCAACGCCGCCA	GAAGGTCGGAGTCAACGGATTAGC ACTCAACGCCGCCAGG	GMCATGCATATATATATGGCTGCC TCAT
snp_01_0088	ss229511302	196,306,976	GAAGGTGACCAAGTTCATGC TGATGTCCATGAATTTCCAG	GAAGGTCGGAGTCAACGGATTGAT GTCCATGAATTTCCAGTCCAT	AGCTCAGTACACTAGTAAAAATTA GGGTAA

\*Physical positions are AGP\_V2.