

Table S2: AFI SNPs included in the final forward selection model. BTA and position denote the chromosome and chromosomal position from the Btau4.0 assembly, respectively. Abs( $\alpha$ ) denotes the absolute value of the allele substitution effect.  $2pq\alpha^2$  describes the genetic variance for each locus where the allele frequencies are p and q=1-p.

Marker ID	BTA	Position (Mb)	Abs( $\alpha$ )	p	$2pq\alpha^2$
<i>ss61531716</i>	1	105.8293	0.0177	0.3696	0.0001458301
<i>ss105242396</i>	1	113.8799	0.0434	0.4219	0.0009207200
<i>ss105254260</i>	2	31.07949	0.0346	0.6870	0.0005137263
<i>ss86316304</i>	2	67.08311	0.0594	0.4011	0.0016969339
<i>rs29015763</i>	3	18.49514	0.0128	0.7049	0.0000676351
<i>ss86341694</i>	3	23.35313	0.0682	0.2600	0.0017904500
<i>ss61517428</i>	3	70.78155	0.0089	0.1447	0.0000195622
<i>ss86331253</i>	4	62.29809	0.0379	0.5595	0.0007065932
<i>ss86297489</i>	6	90.41552	0.0042	0.5215	0.0000089004
<i>ss86336887</i>	6	106.3529	0.0664	0.2085	0.0014558350
<i>ss64249818</i>	7	32.4503	0.0137	0.3789	0.0000884855
<i>ss86335346</i>	8	91.54707	0.0044	0.6934	0.0000082466
<i>rs29022959</i>	8	91.71922	0.016	0.7213	0.0001026578
<i>ss117969435</i>	8	97.33553	0.032	0.8818	0.0002131990
<i>ss61493344</i>	9	78.2669	0.0373	0.6368	0.0006444193
<i>ss86278343</i>	11	5.66063	0.0326	0.0831	0.0001623506
<i>ss86293568</i>	11	39.35181	0.0182	0.4097	0.0001609282
<i>ss117970126</i>	11	40.35811	0.0495	0.1218	0.0005230355
<i>ss86289943</i>	11	78.30539	0.0299	0.7729	0.0003138842
<i>rs29014508</i>	12	23.42551	0.0139	0.3489	0.0000876509
<i>ss86274979</i>	12	32.53872	0.0079	0.8546	0.0000156294
<i>ss61516394</i>	12	48.75502	0.0574	0.3274	0.0014530141
<i>ss65270148</i>	12	61.90864	0.0099	0.1827	0.0000290295
<i>ss86330336</i>	14	14.98921	0.0374	0.3782	0.0006580700
<i>ss117964737</i>	14	70.09761	0.0052	0.4986	0.0000136554
<i>ss86295351</i>	15	61.34966	0.0413	0.5845	0.0008292738
<i>ss86277466</i>	15	78.10219	0.0317	0.9226	0.0001430937
<i>ss117972192</i>	17	4.094041	0.0358	0.6132	0.0006066270
<i>ss61467852</i>	17	27.83249	0.0274	0.6053	0.0003598838
<i>ss61538007</i>	17	29.24063	0.0198	0.7285	0.0001555952
<i>ss117965075</i>	18	52.35454	0.0445	0.0953	0.0003418681
<i>ss61540370</i>	19	29.93895	0.026	0.4362	0.0003327094
<i>ss86328551</i>	19	36.05319	0.0292	0.1060	0.0001618659
<i>ss117965335</i>	19	48.73815	0.0352	0.6139	0.0005873731
<i>ss86318895</i>	19	49.81029	0.0141	0.2299	0.0000702066
<i>ss62644539</i>	20	43.75955	0.007	0.6648	0.0000219648
<i>ss86339752</i>	21	31.52957	0.0415	0.8660	0.0003988280

<i>ss86277953</i>	21	33.92316	0.037	0.8875	0.0002738874
<i>ss61545215</i>	22	25.57142	0.0631	0.6519	0.0018042927
<i>ss61523365</i>	22	31.36968	0.0285	0.4599	0.0004035109
<i>ss61494684</i>	23	32.16787	0.035	0.2894	0.0005038349
<i>ss86341078</i>	23	38.86096	0.0354	0.2615	0.0004845156
<i>rs29019360</i>	24	62.80138	0.0384	0.8116	0.0004508341
<i>ss61550290</i>	27	13.17559	0.0103	0.7744	0.0000372182
<i>ss86301648</i>	28	14.75985	0.0319	0.2550	0.0003862190
<i>ss86331294</i>	28	34.27463	0.0401	0.6375	0.0007439119
<i>ss86329884</i>	29	18.94255	0.0556	0.5723	0.0015132079
<i>ss86291606</i>	29	41.28812	0.0601	0.8438	0.0009528913
<i>ss86323038</i>	29	48.72363	0.0047	0.3739	0.0000102112
<i>ss65170459</i>	Un		0.0024	0.2149	0.0000019275
<i>ss86331954</i>	Un		0.0234	0.7342	0.0002132906
<i>ss86275593</i>	Un		0.0127	0.2701	0.0000639601
<i>ss117974956</i>	Un		0.036	0.5974	0.0006228456

---