

**Table S1**

<b>samples</b>	<b>platform</b>	<b>library layout</b>	<b>Mean Coverage(X)</b>
MA1_1_G31_109_r1	Illumina GAIIx	Paired-end	10.75
MA1_1_G31_109_r2	Illumina GAIIx	Paired-end	7.53
MA1_1_G31_119_r1	Illumina GAIIx	Paired-end	9.91
MA1_1_G31_119_r2	Illumina GAIIx	Paired-end	10.5
MA1_1_G31_29_r1	Illumina GAIIx	Paired-end	7.91
MA1_1_G31_29_r2	Illumina GAIIx	Paired-end	13.53
MA1_1_G31_29_r3	Illumina GAIIx	Paired-end	7.86
MA1_1_G31_39_r1	Illumina GAIIx	Paired-end	12.29
MA1_1_G31_39_r2	Illumina GAIIx	Paired-end	6.98
MA1_1_G31_49_r1	Illumina GAIIx	Paired-end	8.71
MA1_1_G31_49_r2	Illumina GAIIx	Paired-end	11.26
MA1_1_G31_59_r1	Illumina GAIIx	Paired-end	11.05
MA1_1_G31_59_r2	Illumina GAIIx	Paired-end	7.07
MA1_1_G31_79_r1	Illumina GAIIx	Paired-end	11.28
MA1_1_G31_79_r2	Illumina GAIIx	Paired-end	13.77
MA1_1_G31_89_r1	Illumina GAIIx	Paired-end	9.28
MA1_1_G31_89_r2	Illumina GAIIx	Paired-end	7.94
MA1_1_G31_99_r1	Illumina GAIIx	Paired-end	10.83
MA1_1_G31_99_r2	Illumina GAIIx	Paired-end	7.18
MA1_1_G31_99_r3	Illumina GAIIx	Paired-end	12.96
MA1_1_G32_39_r1	Illumina GAIIx	Paired-end	9.81
MA1_1_G32_39_r2	Illumina GAIIx	Paired-end	9.43
MA1_1_G32_49_r1	Illumina GAIIx	Paired-end	8.65
MA1_1_G32_49_r2	Illumina GAIIx	Paired-end	6.6
MA1_1_G3_26_r1	Illumina GAIIx	Paired-end	7.99
MA1_1_G3_87_r1	Illumina GAIIx	Paired-end	10.97
MA1_1_G3_87_r2	Illumina GAIIx	Paired-end	7.66
MA1_3_G18_12_r1	Illumina NextSeq 500	Single-end	5.86
MA1_3_G19_12_r1	Illumina NextSeq 500	Single-end	6.25
MA1_3_G20_12_r1	Illumina NextSeq 500	Single-end	6.56
MA1_3_G21_12_r1	Illumina NextSeq 500	Single-end	8.55
MA1_3_G25_12_r1	Illumina NextSeq 500	Single-end	6.46
MA1_3_G26_12_r1	Illumina NextSeq 500	Single-end	6.75
MA1_3_G28_12_r1	Illumina NextSeq 500	Single-end	8.18
MA1_3_G29_12_r1	Illumina NextSeq 500	Single-end	6.67
MA1_3_G30_12_r1	Illumina NextSeq 500	Single-end	7.2
MA3_G0	Illumina NextSeq 500	Single-end	9.44
MA3_G11_L2	Illumina NextSeq 500	Single-end	10.31
MA3_G11_L8	Illumina NextSeq 500	Single-end	23.52
MA3_G1_L2	Illumina NextSeq 500	Single-end	8.85
MA3_G1_L8	Illumina NextSeq 500	Single-end	8.47
MA3_G2_L2	Illumina NextSeq 500	Single-end	9.91
MA3_G2_L8	Illumina NextSeq 500	Single-end	9.36
MA3_G4_L2	Illumina NextSeq 500	Single-end	9.8
MA3_G4_L8	Illumina NextSeq 500	Single-end	9.38
MA3_G5_L2	Illumina NextSeq 500	Single-end	8.82
MA3_G5_L8	Illumina NextSeq 500	Single-end	8.98
MA3_G8_L2	Illumina NextSeq 500	Single-end	8.97
MA3_G8_L8	Illumina NextSeq 500	Single-end	9.43

**Table S1:** WGBS information for MA pedigrees MA1\_1, MA1\_3 and MA3.