

Table S3. Marker diversity statistics of SSRs utilized in the analysis of breeders' collection.

Marker	Repeat motif	Allelic size/range (bp)	A _R ^a	A _N ^b	H _O ^c	H _E ^d	PIC ^e
MESTSSR 31	(GA) ₁₆	200-248	1	8	0.84	0.91	0.82
MESTSSR 46	(AG) ₁₂	202-240	0	3	0.82	0.78	0.79
MESTSSR 123	(CT) ₁₂	114-144	3	8	0.80	0.75	0.77
MESTSSR 73	(CT) ₁₂	250-290	1	5	0.76	0.67	0.72
MulSTR 3	(GA) ₃₃	116-156	5	9	0.70	0.53	0.68
MulSSR 253	(CT) ₁₁	217-244	0	4	0.71	0.78	0.66
MulSSR 96A	(AC) ₁₁	164-206	3	7	0.69	0.75	0.65
MulSSR 26	(AC) ₁₁	164-206	3	7	0.69	0.78	0.64
MESTSSR 42	(AG) ₂₀	242-308	3	7	0.66	0.63	0.62
Mul3SSR 9	(GT) ₇ (GA) ₁₀	241-281	3	6	0.65	0.58	0.61
Mul3SSR 41	(AAAAG) ₄	274-360	4	1	0.63	0.97	0.57
MESTSSR 48	(TC) ₈	216-238	1	2	0.61	0.50	0.55
MESTSSR 101	(CCATCA) ₃ (TCT) ₇	650-690	1	4	0.61	0.43	0.55
MulSSR 258	(CT) ₉	160-210	2	5	0.61	0.61	0.54
MulSSR 147	(AC) ₁₁	169-190	1	4	0.59	0.69	0.52
MulSTR 5	(CCA) ₈	160-166	0	3	0.58	0.35	0.51
MulSSR 96B	(CA) ₅ (AC) ₁₁	288-340	2	6	0.48	0.50	0.46
MESTSSR 115	(A) ₁₉ (AC) ₈	182-200	0	3	0.50	0.67	0.45
Mul3SSR 17	(GT) ₁₄	376-470	2	2	0.55	1.00	0.45
MESTSSR 37	(CTTTC) ₃ (T) ₁₀	208-270	1	3	0.54	0.64	0.44
MESTSSR 126	(TTC) ₇	203-218	1	3	0.54	0.71	0.44
MulSTR 4	(GAA) ₆	132-144	1	3	0.52	0.47	0.42
MESTSSR 74	(GAA) ₄ (GAG) ₄	256-280	0	3	0.44	0.56	0.39
SS 20	CA ₁₄ CA ₁₂	272-286	1	3	0.51	0.37	0.39
MESTSSR 13	(CAAAAG) ₂ (AAAATA) ₂	222-248	3	5	0.42	0.25	0.38
MulSSR 306	(TTG) ₄	208-215	0	2	0.49	0.61	0.37
Mul3SSR 6	(GT) ₁₄	364-396	3	7	0.38	0.34	0.35
MulSSR 28S	(GGGGT) ₂ (GTGGT) ₂	190-210	0	3	0.37	0.44	0.34
MESTSSR 52	(TATTTT) ₃	260-280	0	2	0.41	0.42	0.33
MulSSR 270	(CT) ₈	164-184	0	2	0.39	0.36	0.31
MulSTR 2	(GTT) ₁₁	181-190	0	2	0.35	0.29	0.30
MulSSR 313	(CT) ₈	149-159	0	2	0.33	0.42	0.28
MulSSR 338	(CT) ₈	154-164	0	2	0.30	0.36	0.25
Mul3SSR 26	(TC) ₇ (TC) ₁₀	202-208	1	2	0.27	0.08	0.24
MulSTR 1	(GTT) ₆ (GTT) ₄	186-192	0	2	0.27	0.28	0.24
MulSSR 271	(GTG) ₆	118-139	3	4	0.19	0.03	0.18
Mul3SSR 19	(GAA) ₅	251-276	0	2	0.18	0.19	0.16
Mul3SSR 25	(AAG) ₆	260-275	0	3	0.18	0.19	0.16
MESTSSR 47	(CTC) ₅	217-223	0	4	0.16	0.00	0.15
MESTSSR 109	(TTTGTT) ₃	244-250	1	2	0.15	0.00	0.14
MulSTR 6	(GT) ₁₅	134-144	1	2	0.15	0.06	0.14
MESTSSR 41	(AAAAG) ₄	125-130	2	3	0.13	0.03	0.13
SS 18	(CA) ₂₇	168-178	2	3	0.13	0.03	0.13
MESTSSR 40	(AAAAT) ₃	317-327	2	3	0.11	0.11	0.11
MulSSR 183	(TC) ₉	237-241	2	3	0.11	0.09	0.11
MESTSSR 59	(TCATGA) ₂	236-242	1	1	0.11	0.00	0.10
MESTSSR 66	(TTTTTG) ₂	266-278	1	1	0.11	0.00	0.10
MESTSSR 79	(AAAAAC) ₃	230-236	1	1	0.10	0.00	0.10
Mul3SSR 39	(CT) ₈	290-310	0	7	0.10	0.11	0.10
MulSSR 219	(ATTT) ₄	117-130	1	2	0.10	0.00	0.10
SS 05	(CA) ₅ CA ₂₇	396-428	1	2	0.10	0.00	0.10
MESTSSR 51	(GCG) ₅	214-223	1	2	0.08	0.09	0.08
MulSSR 264	(CT) ₈	176	0	2	0.08	0.00	0.08
MulSSR 244	(CT) ₈	180	0	2	0.08	0.00	0.07
MESTSSR 113	(AAAACA) ₂	200-206	1	2	0.05	0.00	0.05

MESTSSR 26	(AGCTGG) ₂	219	0	1	0.00	0.00	0.00
MESTSSR 27	(CGG) ₅	217	0	1	0.00	0.00	0.00
MESTSSR 28	(ATA) ₅	217	0	1	0.00	0.00	0.00
MESTSSR 61	(AAAAAC) ₃	245	0	2	0.00	0.00	0.00
MESTSSR 76	(CTCCGT) ₂	200	0	1	0.00	0.00	0.00
MESTSSR 78	(AAGTGG) ₂	242	0	2	0.00	0.00	0.00
MESTSSR 99	(CCTAAC) ₂	203	0	4	0.00	0.00	0.00
MESTSSR 108	(GAGTTG) ₃	264	0	1	0.00	0.00	0.00
MESTSSR 122	(CAACT) ₃	266	0	1	0.00	0.00	0.00
MESTSSR 127	(CGG) ₅	297	0	1	0.00	0.00	0.00
Mul3SSR 52	(TTTTTC) ₂ (TTTCT) ₂	360	0	5	0.00	0.00	0.00
MulSSR 130	(CT) ₇	131	0	1	0.00	0.00	0.00
MulSSR 202A	(CT) ₇	118	0	1	0.00	0.00	0.00
MulSSR 202B	(CT) ₇	175	0	1	0.00	0.00	0.00
SS 19	(TG) ₁₈	392	0	1	0.00	0.00	0.00

^aRare Alleles (A_R) = Alleles present in $\leq 10\%$ of genotypes

^bAllele Number (A_N) = Total number of alleles recorded in a particular primer pair

^c H_O = Observed Heterozygosity

^d H_E = Expected Heterozygosity

^ePIC = Polymorphism Information Content