

Appendix 1 Summary of SSR markers used in the genetic relationship study among the 184 maize genotypes

Locus/Marker	Bin position	Repeat length	Allele sizerrange (bp)	No. of alleles for inbred lines (n=115)	No. of alleles for hybrids (n=83)	No. of alleles for OPVs and landraces (n=84)	Total number of alleles
nc133	2.05	5	106-113	2	2	2	2
phi008	5.03	3	55-96	8	5	1	9
phi014	8.04	3	147-162	3	4	4	4
phi015	8.09	4	82-108	5	7	7	7
phi022	9.03	4	134-166	2	2	1	2
phi029	3.04	2 and 4	144-158	3	5	4	7
phi031	6.04	4	185-222	5	5	5	5
phi041	10.00	4	187-210	5	4	5	6
phi050	10.03	4	73-84	3	1	1	4
phi051	7.05	3	135-144	3	3	2	4
phi053	3.05	4	170-195	3	4	3	4
phi056	1.01	3	234-244	5	5	5	7
phi059	10.02	3	124-158	5	5	6	6
phi062	10.04	3	160-164	2	1	1	2
phi063	10.02	4	150-222	5	4	8	9
phi064	1.11	4	72-107	7	9	9	9
phi072	4.01	4	136-161	4	7	6	7
phi075	6.00	2	222-239	5	5	4	8
phi076	4.11	6	153-176	3	5	5	5
phi079	4.05	5	179-193	4	3	3	4
phi084	10.04	3	148-160	4	4	4	5
phi085	5.07	5	230-257	4	4	5	6
phi089	6.08	4	86-94	2	2	2	2

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phi090	2.08	5	138-146	1	1	1	2
phi093	4.08	4	281-292	3	3	2	4
phi102228	3.04	4	100-132	2	0	2	4
phi104127	3.01	4	152-169	3	3	4	5
phi108411	9.06	4	110-139	3	1	2	7
phi109188	5.00	4	154-170	4	3	4	5
phi109275	1.00	4	51-137	7	10	6	11
phi112	7.01	2	133-158	4	3	2	5
phi114	7.02	4	128-169	5	5	5	6
phi115	8.03	2 and 4	280-301	2	2	2	5
phi123	6.07	4	142-146	2	2	2	2
phi127	2.08	4	109-129	3	1	4	6
phi227562	1.12	3	304-327	6	4	7	8
phi308707	1.10	3	109-131	4	5	5	5
phi331888	5.04	3	129-135	3	3	3	3
phi374118	3.02	3	205-233	4	6	6	7
phi453121	3.01	3	206-224	3	4	4	4
phi96100	2.00	4	266-298	5	7	8	9
umc1061	10.06	3	100-112	2	4	3	5
umc1136	3.10	3	130-157	6	7	5	7
umc1143	6.00	5	73-85	3	3	3	3
umc1161	8.06	6	136-149	3	2	3	3
umc1196	10.07	6	133-158	4	4	4	5

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umc1266	3.06	3	120-144	3	0	1	3
umc1304	8.02	4	124-133	2	1	5	3
umc1332	5.04	3	116-143	5	5	1	6
umc1367	10.03	3	146-159	0	0	3	3
umc1447	5.03	3	113-124	2	3	2	4
umc1545	7.00	4	69-85	3	2	3	3
umc1917	1.04	3	132-153	2	4	3	6
umc2047	1.09	4	100-134	7	7	7	8
umc2250	2.04	3	153-153	0	0	0	1