



Table 2. SSR markers utilized in the ASTA study and commonality with SSRs selected by the French organization SEPROMA (La Chambre Syndicale des Entreprises de Semences de Maïs). Primer sequences can be sourced from the Maize Genetics and Genomics Database (www.maizegdb.org).

ASTA does not assume any liability of any kind whatsoever resulting from the use of the information contained in this table.

SSR Name	ASTA Marker set	Chromosome	Distance	Map coordinates from:	Common to SEPROMA 223	Common to SEPROMA 163
bnlg149	1	1	-0.12	IBM2 2005 neighbors	Y	Y
umc1106	1	1	68.31	IBM2 2005 neighbors		
umc1269	1	1	86.3	IBM2 2005 neighbors		
bnlg1007	1	1	170.06	IBM2 2005 neighbors		
bnlg147	1	1	227.22	IBM2 2005 neighbors		
bnlg1866	1	1	290.1	IBM2 2005 neighbors	Y	Y
umc1452	1	1	328.57	IBM2 2005 neighbors		
bnlg2086	1	1	401.2	IBM2 2005 neighbors	Y	
umc1906	1	1	467	IBM2 2005 neighbors		
umc1590	1	1	517	IBM2 2005 neighbors		
umc1709	1	1	588.2	IBM2 2005 neighbors		
umc1278	1	1	658.74	IBM2 2005 neighbors	Y	Y
umc1128	1	1	711.5	IBM2 2005 neighbors		
umc2181	1	1	774.5	IBM2 2005 neighbors		
umc2047	1	1	842.3	IBM2 2005 neighbors		
umc1306	1	1	883.06	IBM2 2005 neighbors	Y	Y
umc2149	1	1	898.7	IBM2 2005 neighbors		
umc1885	1	1	907.11	IBM2 2005 neighbors	Y	Y
phi064	1	1	1103	IBM2 2005 neighbors	Y	Y
umc1797	1	1	1136.02	IBM2 2005 neighbors	Y	Y
umc1227	1	2	57.6	IBM2 2005 neighbors	Y	

umc1824a	1	2	92.6	IBM2 2005 neighbors		
umc1261a	1	2	154.6	IBM2 2005 neighbors	Y	Y
umc1845	1	2	197.17	IBM2 2005 neighbors		
umc1448	1	2	269.6	IBM2 2005 neighbors	Y	Y
bnlg1018	1	2	294.2	IBM2 2005 neighbors		
bnlg108	1	2	306.3	IBM2 2005 neighbors	Y	Y
umc1454	1	2	339.3	IBM2 2005 neighbors		
umc1410	1	2	339.32	IBM2 2005 neighbors		
bnlg1396	1	2	376.14	IBM2 2005 neighbors	Y	
bnlg1329	1	2	401.95	IBM2 2005 neighbors		
bnlg1633	1	2	452.19	IBM2 2005 neighbors		
bnlg1662	1	2	509.12	IBM2 2005 neighbors		
umc1551	1	2	591.51	IBM2 2005 neighbors		
bnlg1520	1	2	591.52	IBM2 2005 neighbors	Y	Y
umc1736	1	2	601.71	IBM2 2005 neighbors		
g2	1	3	2	IBM2 2004 neighbors		
umc1970	1	3	28.2	IBM2 2005 neighbors		
umc2049	1	3	38.7	IBM2 2005 neighbors		
bnlg1325	1	3	78.5	IBM2 2005 neighbors	Y	Y
umc1886	1	3	78.5	IBM2 2005 neighbors		
bnlg1523	1	3	78.51	IBM2 2005 neighbors	Y	Y
umc1425	1	3	165	IBM2 2005 neighbors		
umc1025	1	3	186.49	IBM2 2005 neighbors	Y	Y
umc1908	1	3	213.6	IBM2 2005 neighbors		
umc1174	1	3	299.2	IBM2 2005 neighbors		
umc1307	1	3	339.61	IBM2 2005 neighbors		
bnlg1449	1	3	394.8	IBM2 2005 neighbors		
bnlg1160	1	3	491.4	IBM2 2005 neighbors	Y	Y
umc1135	1	3	540.2	IBM2 2005 neighbors		
umc1844	1	3	605.81	IBM2 2005 neighbors		
umc1273	1	3	634.8	IBM2 2005 neighbors		
bnlg1182	1	3	702.21	IBM2 2005 neighbors	Y	Y
bnlg1496	1	3	760.9	IBM2 2005 neighbors		
umc1136	1	3	826.71	IBM2 2005 neighbors	Y	Y
mtl1	1	4	9.9	IBM2 2005 neighbors	Y	Y
mtl1	1	4	9.9	IBM2 2005 neighbors	Y	
cyp3	1	4	24.61	IBM2 2005 neighbors	Y	Y
umc1757	1	4	81	IBM2 2005 neighbors		
adh2	1	4	147.21	IBM2 2005 neighbors	Y	
umc2061	1	4	250.8	IBM2 2005 neighbors		
bnlg252	1	4	271.41	IBM2 2005 neighbors		

umc1299	1	4	362.44	IBM2 2005 neighbors		
bnlg2291	1	4	392.2	IBM2 2005 neighbors		
dupssr34	1	4	403.3	IBM2 2005 neighbors	Y	Y
umc1651	1	4	411.31	IBM2 2005 neighbors		
umc1856	1	4	535.5	IBM2 2005 neighbors		
umc2135	1	4	544.1	IBM2 2005 neighbors		
umc1940	1	4	581.8	IBM2 2005 neighbors		
bnlg589	1	4	670.2	IBM2 2005 neighbors	Y	Y
umc1180	1	4	698.9	IBM2 2005 neighbors		
cat3	1	4	744.1	IBM2 2005 neighbors		
umc1308	1	5	22.7	IBM2 2005 neighbors	Y	Y
umc1097	1	5	40.8	IBM2 2005 neighbors		
umc1478	1	5	90.2	IBM2 2005 neighbors	Y	Y
umc1365	1	5	124.69	IBM2 2005 neighbors		
bnlg105a	1	5	189.79	IBM2 2005 neighbors	Y	Y
umc1274	1	5	281.21	IBM2 2005 neighbors		
umc1221	1	5	368.4	IBM2 2005 neighbors	Y	Y
bnlg278	1	5	413.72	IBM2 2005 neighbors	Y	Y
umc2305	1	5	479.7	IBM2 2005 neighbors		
bnlg1237	1	5	488.22	IBM2 2005 neighbors	Y	Y
umc2013	1	5	528.89	IBM2 2005 neighbors		
bnlg1118	1	5	590.4	IBM2 2005 neighbors		
umc1792	1	5	625.8	IBM2 2005 neighbors	Y	Y
umc1225	1	5	641.4	IBM2 2005 neighbors	Y	Y
bnlg386	1	5	666.01	IBM2 2005 neighbors		
umc1153	1	5	676.7	IBM2 2005 neighbors	Y	Y
fdx2	1	6	9.1	IBM2 2005 neighbors		
bnlg238	1	6	23.2	IBM2 2005 neighbors	Y	Y
bnlg249a	1	6	98.4	IBM2 2005 neighbors		
phi126	1	6	149	ASTA-member location	Y	Y
umc2006	1	6	228.9	IBM2 2005 neighbors		
bnlg1154	1	6	253	IBM2 2005 neighbors		
umc1805	1	6	319.21	IBM2 2005 neighbors		
umc1424	1	6	396.06	IBM2 2005 neighbors	Y	Y
phi299852	1	6	450.7	IBM2 2005 neighbors		
umc1248	1	6	504.8	IBM2 2005 neighbors		
umc1653	1	6	534.6	IBM2 2005 neighbors	Y	Y
bnlg2132	1	7	53.3	IBM2 2005 neighbors	Y	Y
umc1159	1	7	92	IBM2 2005 neighbors		
o2	1	7	122.4	IBM2 2005 neighbors	Y	Y

bnlg1022a	1	7	273.8	IBM2 2005 neighbors		
php20569a	1	7	300	IBM2 2005 neighbors		
umc1275	1	7	343.01	IBM2 2005 neighbors		
umc1944	1	7	444.71	IBM2 2005 neighbors		
umc1671	1	7	547.74	IBM2 2005 neighbors		
umc35a	1	7	593.4	IBM2 2005 neighbors		
umc1406	1	7	598.9	IBM2 2005 neighbors		
umc1799	1	7	611.51	IBM2 2005 neighbors	Y	Y
umc1786	1	8	4.36	IBM2 2005 neighbors		
umc1327	1	8	55	IBM2 2005 neighbors		
umc2004	1	8	115.31	IBM2 2005 neighbors		
umc1034	1	8	160.81	IBM2 2005 neighbors	Y	Y
bnlg669	1	8	179.51	IBM2 2005 neighbors	Y	Y
bnlg162	1	8	367	IBM2 2005 neighbors		
umc1287	1	8	400.88	IBM2 2005 neighbors		
bnlg1782	1	8	410.95	IBM2 2005 neighbors	Y	Y
umc1149	1	8	413.9	IBM2 2005 neighbors		
bnlg1350b	1	8	467.93	IBM2 2005 neighbors		
umc1055	1	8	486.42	IBM2 2005 neighbors		
umc1673	1	8	546.9	IBM2 2005 neighbors	Y	
bnlg1056	1	8	550.4	IBM2 2005 neighbors	Y	Y
umc1638	1	8	621.6	IBM2 2005 neighbors	Y	
bnlg1724	1	9	11.8	IBM2 2005 neighbors	Y	Y
bnlg1810	1	9	62.3	IBM2 2005 neighbors		
shl	1	9	80.3	IBM2 2005 neighbors	Y	Y
umc1170	1	9	101.1	IBM2 2005 neighbors		
umc1037	1	9	162.5	IBM2 2005 neighbors		
umc1893	1	9	162.5	IBM2 2005 neighbors		
bnlg127	1	9	226.31	IBM2 2005 neighbors	Y	Y
umc1107	1	9	285.8	IBM2 2005 neighbors		
umc1771	1	9	318.89	IBM2 2005 neighbors		
umc1357	1	9	344.8	IBM2 2005 neighbors		
bnlg1191	1	9	429.76	IBM2 2005 neighbors		
umc1310	1	9	526	IBM2 2005 neighbors	Y	
umc1804	1	9	538.5	IBM2 2005 neighbors		
umc1714	1	9	567.3	IBM2 2005 neighbors		
bnlg1129	1	9	633.6	IBM2 2005 neighbors	Y	Y
umc1380	1	10	16.6	IBM2 2005 neighbors		
phi041	1	10	30.9	IBM2 2005 neighbors		
umc1291	1	10	53.02	IBM2 2005 neighbors		
umc2018	1	10	81.1	IBM2 2005 neighbors		

umc1432	1	10	106.98	IBM2 2005 neighbors		
phi050	1	10	225.7	IBM2 2004 neighbors		
umc1911	1	10	273.6	IBM2 2005 neighbors		
umc1930	1	10	306.9	IBM2 2005 neighbors		
umc1506	1	10	344.8	IBM2 2005 neighbors	Y	Y
bnlg1028	1	10	380.5	IBM2 2005 neighbors		
bnlg1839	1	10	466.4	IBM2 2005 neighbors		
umc1613	2	1	-11.7	IBM2 2005 neighbors		
bnlg1179	2	1	48.71	IBM2 2005 neighbors		
gst12	2	1	85.2	IBM2 2005 neighbors	Y	Y
umc2012	2	1	87.4	IBM2 2005 neighbors		
umc1685	2	1	103	IBM2 2005 neighbors		
umc2224	2	1	110.9	IBM2 2005 neighbors		
umc1166	2	1	133.6	IBM2 2005 neighbors		
bnlg1484	2	1	219	IBM2 2005 neighbors		
bnlg1016	2	1	326.71	IBM2 2005 neighbors		
bnlg1811	2	1	386.4	IBM2 2005 neighbors		
umc2025	2	1	417	IBM2 2005 neighbors		
umc1395	2	1	471.7	IBM2 2005 neighbors		
umc1811	2	1	526.4	IBM2 2005 neighbors		
umc1848	2	1	737.24	IBM2 2005 neighbors		
bnlg1643	2	1	800.72	IBM2 2005 neighbors		
umc1914	2	1	809.9	IBM2 2005 neighbors		
sgb102	2	1	883.04	IBM2 2005 neighbors		
umc2189	2	1	892.2	IBM2 2005 neighbors		
umc1500	2	1	972.99	IBM2 2005 neighbors		
umc1630	2	1	1055.9	IBM2 2005 neighbors	Y	
fdx3	2	1	1098.4	IBM2 2005 neighbors		
tufm1	2	1	1121.9	IBM2 2005 neighbors		
umc1542	2	2	57.6	IBM2 2005 neighbors		
umc1265	2	2	77.7	IBM2 2005 neighbors		
umc1934	2	2	94.44	IBM2 2005 neighbors		
umc1518	2	2	155.43	IBM2 2005 neighbors		
b1	2	2	197.2	IBM2 2004 neighbors		
ole1	2	2	203.13	IBM2 2005 neighbors		
umc1024	2	2	250.1	IBM2 2005 neighbors	Y	Y
prp2	2	2	284.7	IBM2 2005 neighbors		
bnlg1909	2	2	306.3	IBM2 2005 neighbors		
umc1259	2	2	310.2	IBM2 2005 neighbors		
hrg1	2	2	323.3	IBM2 2005 neighbors		
umc1635	2	2	344.8	IBM2 2005 neighbors		

pbfl	2	2	368.1	IBM2 2005 neighbors		
umc1841	2	2	374.02	IBM2 2005 neighbors		
umc1946a	2	2	394.89	IBM2 2005 neighbors		
bnlg1940	2	2	577.6	IBM2 2005 neighbors		
umc1525	2	2	601.63	IBM2 2005 neighbors		
umc1458	2	3	67.2	IBM2 2005 neighbors		
ckol	2	3	97.6	IBM2 2005 neighbors		
phi036	2	3	159	IBM2 2004 neighbors		
umc1495	2	3	177.4	IBM2 2005 neighbors		
umc2033	2	3	181.7	IBM2 2005 neighbors		
umc1527	2	3	279.3	IBM2 2005 neighbors		
umc1773	2	3	280.4	IBM2 2005 neighbors		
umc1907	2	3	306.1	IBM2 2005 neighbors		
umc1167	2	3	319.2	IBM2 2005 neighbors		
bnlg420	2	3	345.99	IBM2 2005 neighbors	Y	Y
umc1949	2	3	523.52	IBM2 2005 neighbors		
umc1767	2	3	542	IBM2 2005 neighbors		
umc1489	2	3	567.6	IBM2 2005 neighbors		
umc1915	2	3	617.5	IBM2 2005 neighbors		
umc1813	2	3	748.5	IBM2 2005 neighbors		
umc1594	2	3	828.9	IBM2 2005 neighbors		
umc1232	2	4	-1.2	IBM2 2005 neighbors		
bx1	2	4	37.51	IBM2 2005 neighbors		
umc1509	2	4	101.1	IBM2 2005 neighbors		
umc1969	2	4	248.6	IBM2 2005 neighbors		
umc1031	2	4	286	IBM2 2005 neighbors		
umc1317	2	4	294.46	IBM2 2005 neighbors		
umc1346	2	4	304.3	IBM2 2005 neighbors		
umc1329	2	4	373.4	IBM2 2005 neighbors	Y	Y
bnlg1784	2	4	392.42	IBM2 2005 neighbors		
bnlg2162	2	4	475.7	IBM2 2005 neighbors		
umc1101	2	4	655	IBM2 2005 neighbors	Y	Y
cpn10	2	4	730.34	IBM2 2005 neighbors		
bnlg1917	2	4	733.52	IBM2 2005 neighbors		
bnlg1890	2	4	750.2	IBM2 2005 neighbors		
umc1496	2	5	47.5	IBM2 2005 neighbors	Y	Y
ohp2	2	5	82.03	IBM2 2005 neighbors		
umc1587	2	5	156.9	IBM2 2005 neighbors		
bnlg1046	2	5	216.3	IBM2 2005 neighbors		
umc1557a	2	5	245.1	IBM2 2005 neighbors		
dwfl	2	5	286.5	IBM2 2005 neighbors		

bnlg1902	2	5	297.5	IBM2 2005 neighbors		
bnlg653	2	5	307.01	IBM2 2005 neighbors		
bnlg1287	2	5	316.26	IBM2 2005 neighbors		
umc1332	2	5	338.01	IBM2 2005 neighbors		
umc51a	2	5	493.7	IBM2 2005 neighbors		
umc51a	2	5	493.7	IBM2 2005 neighbors		
bnlg118	2	5	609.4	IBM2 2005 neighbors	Y	Y
				ASTA-member		
fdx1	2	6	6.2	location	Y	
bnlg1371	2	6	72.7	IBM2 2005 neighbors	Y	Y
phi077	2	6	133.24	IBM2 2005 neighbors	Y	Y
umc1257	2	6	145.7	IBM2 2005 neighbors	Y	
umc1887	2	6	166.8	IBM2 2005 neighbors		
umc1857	2	6	203.2	IBM2 2005 neighbors		
bnlg1922	2	6	235.85	IBM2 2005 neighbors		
pdk1	2	6	323.5	IBM2 2005 neighbors	Y	
roa2	2	6	373.84	IBM2 2005 neighbors		
umc1520	2	6	426.4	IBM2 2005 neighbors		
mlg3	2	6	452.7	IBM2 2005 neighbors	Y	Y
umc1127	2	6	542.7	IBM2 2005 neighbors		
cka4	2	7	13.8	IBM2 2005 neighbors		
umc1695	2	7	45.6	IBM2 2005 neighbors		
bnlg2160a	2	7	130.59	IBM2 2005 neighbors		
umc1036	2	7	228.72	IBM2 2005 neighbors		
umc1929	2	7	249.1	IBM2 2005 neighbors		
bnlg1305	2	7	300.36	IBM2 2005 neighbors		
umc1768	2	7	481.1	IBM2 2005 neighbors		
umc1412	2	7	518.9	IBM2 2005 neighbors		
phi069	2	7	545.2	IBM2 2005 neighbors		
umc1139	2	8	26.8	IBM2 2005 neighbors		
bnlg1194	2	8	105.4	IBM2 2005 neighbors		
umc1790	2	8	145.06	IBM2 2005 neighbors		
umc1289	2	8	229.96	IBM2 2005 neighbors		
bnlg1176a	2	8	330.4	IBM2 2005 neighbors		
bnlg1812	2	8	377.76	IBM2 2005 neighbors		
umc1728	2	8	432.4	IBM2 2005 neighbors	Y	
bnlg1065	2	8	460.8	IBM2 2005 neighbors	Y	
umc1384	2	8	494.71	IBM2 2005 neighbors		
umc1933	2	8	540.3	IBM2 2005 neighbors		
gst1	2	8	571.5	IBM2 2005 neighbors	Y	Y
umc1663	2	8	608.1	IBM2 2005 neighbors	Y	Y

umc1279	2	9	4.88	IBM2 2005 neighbors		
bnlg2122	2	9	21.3	IBM2 2005 neighbors		
umc1588	2	9	82.3	IBM2 2005 neighbors		
umc1743	2	9	254	IBM2 2005 neighbors		
umc1267	2	9	257.6	IBM2 2005 neighbors		
sbp4	2	9	266	IBM2 2005 neighbors		
umc1231	2	9	342	IBM2 2005 neighbors		
umc1417	2	9	386.22	IBM2 2005 neighbors		
umc1675	2	9	541.4	IBM2 2005 neighbors	Y	Y
umc1104	2	9	603.5	IBM2 2005 neighbors	Y	Y
umc1942	2	9	603.5	IBM2 2005 neighbors		
umc1293	2	10	16.6	IBM2 2005 neighbors		
umc1152	2	10	91.4	IBM2 2005 neighbors		
gdcp1	2	10	97.9	IBM2 2005 neighbors		
umc1962	2	10	180.7	IBM2 2005 neighbors		
umc1367	2	10	183.8	IBM2 2005 neighbors		
umc1115	2	10	295.9	IBM2 2005 neighbors		
umc1507	2	10	322.77	IBM2 2005 neighbors		
bnlg1450	2	10	483.7	IBM2 2005 neighbors		
umc2021	2	10	505.5	IBM2 2005 neighbors		