

Table S1. The SSR abundance and composition in broomcorn millet and other five Panicoideae species

Species	Mono	Di	Tri	Tetra	Penta	Hexa	Total
<i>P. miliaceum</i>	36	6	45	10	0	0	97
<i>P. virgatum</i>	27	7	44	10	1	0	89
<i>Z. mays</i>	33	5	50	10	0	0	98
<i>S.officinarum</i>	32	5	47	9	1	0	94
<i>S. italica</i>	21	5	42	9	1	0	78
<i>S. bicolor</i>	25	6	47	8	0	1	87

Table S2. The potential SSR markers developed for Panicoideae species identification

Marker Name	F_primer(5'-3')	R_primer(5'-3')	T _m (°C)	Zea mays		Panicum miliaceum		Saccharum hybrid		Setaria italica		Sorghum bicolor		Panicum virgatum	
				Fragment Size	Motif	Fragment Size	Motif	Fragment Size	Motif	Fragment Size	Motif	Fragment Size	Motif	Fragment Size	Motif
PM1	AGGCCAATCGCTCTTTG	TGGAAGGATCCCCGATC	56.1	219	(A)11	217	(A)9	217	(A)9	215	(A)9	217	(A)9	217	(A)9
PM2	TATGGGCTCGCGTGAGTA	CTCGCATAAGGACTCCGA	55.3	233	(AGA)3	236	(AGA)4	233	(AGA)3	233	(AGA)3	233	(AGA)3	236	(AGA)4
PM3	GTCCAATTGACACGTC CGA	CCCATGCAATAGTCAGGA	56.7	279	(A)8	279	(A)8	279	(A)8	279	(A)8	279	(A)8	279	(A)8
PM4	CAGCCCTTTTCCAATG	ATGGTCAGCAAAGTTGT	51.4	189	(A)8	190	(A)9	189	(A)8	189	(A)8	190	(A)9	192	(A)11
PM5	GAAACAACCTTGTGACCAT	CTCTCCCGCTCCTTTTTTC	52.4	195	(A)8	195	(A)8	195	(A)8	195	(A)8	196	(A)8	195	(A)8
PM6	GCGGATCCTCCCTCTCCAT	GCTCATGAACGGACACCTTTGG	60.9	233	(A)9	244	(A)12	233	(A)9	233	(A)9	233	(A)9	241	(A)9
PM7	TTCACCTCACCTTCCCA	CAACCTCGGGGAAAAAAG	56.0	166	(A)11	177	(A)11g(A)10	164	(A)9	168	(A)12	168	(A)8	177	(A)11g(A)10
PM8	TAGGAAGAAGGGGTCATCTT	GCTAAAGCCCCAAACCATAGA	53.0	251	(TA)6	252	(TA)5	251	(TA)5	247	(TA)5	251	(TA)5	252	(TA)5
PM9	ACCGTTGGCATGTCGTATG	TATATACATACGACATGCCA	57.1	204	(TCA)3	211	(TCA)3	204	(TCA)3	207	(TCA)3	209	(TCA)3	211	(TCA)3
PM10	GCCAAAGATGCCAAATTGCT	TGTCTCAAAGGGCCAATATACATA	60.3	242	(AAG)3	245	(AAG)4	242	(AAG)3	195	(T)8	242	(AAG)3	245	(A)12
PM11	AAAGCTCTTCGCAAGGCA	CATAATGGATGTCGACCTCCTA	56.7	263	(T)9	264	(TAT)3	266	(TAT)3	267	(TAT)3	267	(TAT)3	264	(TAT)3
PM12	CAGGAGGATAGATGGGGCGA	TCACCCAGAATGAAAGGGGT	62.1	259	(G)9	259	(G)9	259	(G)9	260	(G)10	260	(G)10	259	(G)9
PM13	AACGTCAACGTTTGTGG	GAGGGCGAATATCGTCTTA	52.8	272	(A)8	300	(A)9	290	(A)8	272	(A)8	272	(A)8	272	(A)8