

Supplementary materials

The supplementary materials include results of genotyped population of sorghum, table S 1 shows results of BC₂F₁ sorghum populations scored with heterozygous allele using SNP markers and table S 2 shows results of Genotypes of BC₂F₃ populations scored by favourable allele using SNP markers

Table S 1: BC₂F₁ sorghum populations scored with heterozygous alleles using SNP markers

NS	SNP markers	H. Allele	DP alleles	RP alleles	NS	SNP markers	H. Allele	DP alleles	RP alleles
BC ₂ F ₁ (B35*Wahi)					BC ₂ F ₁ (B35*Seguifa)				
22	snpSB0102	G/A	AA	GA	418	snpSB0072	A/G	GG	AA
44	snpSB0103	G/C	CC	CC	441	snpSB0072	A/G	GG	AA
59	snpSB0103	G/C	CC	CC	463	snpSB0072	A/G	GG	AA
70	snpSB0103	G/C	CC	CC	566	snpSB0072	A/G	GG	AA
82	snpSB0102	G/A	AA	GA	567	snpSB0103	G/C	CC	CC
90	snpSB0102	G/A	AA	GA	569	snpSB0103	G/C	CC	CC
94	snpSB0102,	G/A,	AA,	GA,	581	snpSB0103	G/C	CC	CC
	snpSB0103	G/C	CC	CC	582	snpSB0103	G/C	CC	CC
BC ₂ F ₁ (S35*Hakika)					BC ₂ F ₁ (S35*Pato)				
111	snpSB0103	G/C	CC	CC	586	snpSB0103	G/C	CC	CC
117	snpSB0103	G/C	CC	CC	589	snpSB0102,	G/A,	A,	
125	snpSB0103	G/C	CC	CC		snpSB0103	G/C	CC	
127	snpSB0103	G/C	CC	CC	595	snpSB0049,	G/A,	GG,	AA,
128	snpSB0103	G/C	CC	CC		snpSB0102	C/T	AA	AA
131	snpSB0102,	G/A,	AA,	GA,	601	snpSB0103	G/C	CC	CC
	snpSB0103	G/C	CC	CC	606	snpSB0049	G/A	GG	AA,
138	snpSB0103	G/C	CC	CC	610	snpSB0049,	G/A,	GG,	CC
157	snpSB0103	G/C	CC	CC		snpSB0103	G/C	CC	
BC ₂ F ₁ (NACO Mtama 1)					624	snpSB0102	G/A	AA	AA
175	snpSB0102	G/A	AA	AA	625	snpSB0103	G/C	CC	CC
190	snpSB0102	G/A	AA	AA	631	snpSB0102	G/A	AA	AA
207	snpSB0102	G/A	AA	AA	634	snpSB0102	G/A	AA	AA
210	snpSB0103	G/C	CC	CC	637	snSB0102,	G/A,	AA,	AA,
213	snpSB0103	G/C	CC	CC		snpSB0103	G/C	GG	CC
241	snpSB0102,	G/A,	AA,	AA	638	snpSB0102	G/A	AA	AA
	snpSB0103	G/C	CC		639	snpSB0102,	G/A,	AA,	AA,
255	snpSB0102	G/A	AA	AA		snpSB0103	G/C	GG	CC
266	snpSB0103	G/C	CC	CC	640	snpSB0103	G/C	CC	CC
272	snpSB0103	G/C	CC	CC	644	snpSB0103	G/C	CC	CC
276	snpSB0103	G/C	CC	CC	645	snpSB0102	G/A	AA	AA
284	snpSB0103	G/C	CC	CC	647	snpSB0103	G/C	CC	CC

304	snpSB0102	G/A	AA	AA	656	snpSB0103	G/C	CC	CC
307	snpSB0102,	G/A,	AA,	AA,	659	snpSB0102	G/A	AA	AA
	snpSB0103	G/C	CC	CC	661	snpSB0102,	G/A,	AA,	A,
319	snpSB0103	G/C	CC	CC		snpSB0103	G/C	CC	CC
320	snpSB0103	G/C	CC	CC	663	snpSB0103	G/C	CC	CC
BC ₂ F ₁ (B35* Macia)					668	snpSB0103	C/T,G/C	CC	CC
347	snpSB0103	G/C	CC	CC	671	snpSB0103	G/C	CC	CC
348	snpSB0102,	G/A,	AA,	AA,	679	snpSB0103	G/C	CC	CC
	snpSB0103	G/C	CC	CC	681	snpSB0103	G/C	CC	CC
352	snpSB0103	G/C	CC	CC	685	snpSB0102,	G/A,	AA,	AA,
391	snpSB0103	G/C	CC	CC		snpSB0103	G/C	CC	CC
395	snpSB0103	G/C	CC	CC	703	snpSB0102	G/A	AA	AA
					725	snpSB0102	G/A	AA	AA

H-Heterozygous, DP-Donor parent, NS-Number of sample, RP-Recurrent parent

Table S 2: Genotypes of BC₂F₃ populations scored by favourable alleles using SNP markers

Genotype	SNP markers	FA	No. of FA	Genotype	SNP markers	FA	No. of FA
BC ₂ F ₃ (B35*NACO)				BC ₂ F ₃ (B35*Seguifa)			
NA241A	snSB00049	GG	115	SE408	snSB00049	GG	55
	snSB00053	AA	122		snSB00053	AA	55
	snSB00054	GG	124		snSB00054	GG	55
	snSB00072	AA	6		snSB00089	CC	73
	snSB00089	CC	124		snSB00101	CC	73
	snSB00101	CC	124		snSB000102	AA	73
	snSB000102	AA	123	SE438	snSB00049	GG	23
NA241B	snSB00049	GG	113		snSB00053	AA	51
	snSB00053	AA	122		snSB00054	GG	51
	snSB00054	GG	122		snSB00072	AA	26
	snSB00072	AA	4		snSB00089	CC	52
	snSB00089	CC	122		snSB00101	CC	52
	snSB00101	CC	122		snSB000102	AA	52
	snSB000102	AA	122				

NA316A	snSB00049	GG	116	Seguifa (Recurrent Parent)	snSB00049	GG	3
	snSB00053	AA	120		snSB00053	AA	3
	snSB00054	GG	120		snSB00054	GG	3
	snSB00072	AA	2		snSB00089	CC	3
	snSB00089	CC	121		snSB00101	CC	3
	snSB00101	CC	121		snSB000102	AA	3
	snSB000102	AA	121				
NA316B	snSB00049	GG	70	B35 (Donor Parent)	snSB00042	TT	2
	snSB00053	AA	115		snSB00049	GG	2
	snSB00054	GG	115		snSB00053	AA	2
	snSB00072	AA	40		snSB00054	GG	2
	snSB00089	CC	115		snSB00089	CC	2
	snSB00101	CC	115		snSB00098	GG	2
	snSB000102	AA	115		snSB00101	CC	2
NA316C	snSB00049	GG	92	Wahi	snSB000102	AA	2
	snSB00053	AA	122		snSB00103	GG	2
	snSB00054	GG	122				
	snSB00072	AA	27		snSB00049	GG	3
	snSB00089	CC	122		snSB00053	AA	3
	snSB00101	CC	121		snSB00089	CC	3
	snSB000102	AA	121		snSB00101	CC	2
					snSB000102	AA	3
NACO Mtama 1 (Recurrent parent)	snSB00053	AA	3				
	snSB00054	GG	3				
	snSB00072	AA	3				
	snSB00089	CC	3				
	snSB00101	CC	3				
	snSB000102	AA	3				