

Table 1 Progress of QTL mapping for some sorghum traits

Group	Trait	Number of QTL	Chromosome	Contribution ratio
CK60/PI229828	Hundred-grain weight	3	1, 9, 10	9%~11%
BTx623/IS3620C		3	4, 8, 9	12.3%~18.4%
Red Kafir/Takakibi		9	1, 2, 3, 4, 5, 7	<15.7%
296B/IS18551 BTx623/IS3620C RIL	Grain weight	3	1, 4, 6	7%~14.8%
E36-1/SPV570		11	Except of 5	
		3	2, 3, 4	<7.82%
IS2807/379 RIL	Germination rate	3	1, 7, 10	13.9%~32%
KS115/Macia	Carotenoid content	16	1, 7, 10	7.13%~25.4%
296B/IS18551	Number of blades	3	1, 3, 7	7.8%~14.1%
<i>S. bicolor</i> / <i>S. propinquum</i>	Plant height	5	1, 3, 6, 7, 9	
IS8525/R931945-2-2		4	1, 7, 9	>10%
SC56/Tx7000		2	1, 6	12.4%~24.2%
T70/P607 RIL		6	2, 3, 5	1%~10%
IS8525/R931945-2-2	Flag leaf height	3	1, 1, 7	6.25%~14.23%
SC56/Tx7000	Lodging	3	1, 5, 6	15%
R9188/t9403463-2-1	Total dry matter	2	1, 6	<15%
RTx7078/B35 RIL	Drought resistance	6		
B35/Tx7078 RIL		6	2, 3, 7	
SC56/Tx7000 RIL		4	2, 3, 4	11.9%~37.7%
Tx7078/B35 RIL	Green trait	7		53%
B35/Tx430 RIL		7		42%, 25%
Sureno/RTx430 RIL	Resistant to granulosis	5	2, 3, 4, 5	10%~24%
IS2807/379 RIL	Anti-grain mold	4	1, 2	13.9%~28.3%
IS8525/R931945-2-2	Spike length	3	2, 6	5.91%~6.85%
R9188/t9403463-2-1	Fructose content	2	6, 7	<15%
R9188/t9403463-2-1	Sucrose content	4	1, 3, 5, 6	<15%
R9188/t9403463-2-1	Total sugar content	4	1, 3, 5, 6	<15%
296B/IS18551 RIL	Resistance to leaf blight	17	3, 4, 6	6.9%~44.9%
BTx623/IS3620c	Blade angle	3	1, 6, 7	<45.3%
BTx623/IS3620c	Inflorescence length	4	1, 3, 7	10.6%~13.8%
M71/SS79	Fresh weight	7	Except of 3, 9, 10	<12.9%
B35/Tx430	Days from germination to2 flowering		1, 10	20.3%, 47.5%