**Table S1** Characteristics of the sorghum SSR primer pairs used in the study

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Multiplex set | Primer | Flanking sequences (5'-3') b | Repeat motif | LGc | Size range (bp) | Topt d |
| Earlier studies  | This study |
| 1 | Sb5-206 | F: HEX-8ATTCATCATCCTCATCCTCGTAGAA | (C)13/(G)20 | E | 92-156 | 104-144 | 57 |
|  |  | R: AAAAACCAACCCGACCCACTC |  |  |  |  |  |
|  | Sb1-1 | F: FAM-6TCCTGTTTGACAAGCGCTTATA | (G)16 | H | 241-300 | 236-302 | 60 |
|  |  | R: AAACATCATACGAGCTCATCAATG |  |  |  |  |  |
|  | Sb6-34 | F: HEX-8AACAGCAGTAATGCCACAC | [(C)/(CG)]15 | I | 168-208 | 185-203  | 60 |
|  |  | R: TGACTTGGTAGAGAACTTGTCTTC |  |  |  |  |  |
|  | Sb5-256  | F: FAM-6AATTTGCTTTTTGGTCCGTTT | (G)8 | C | 162-214 | 159-171 | 58 |
|  |  | R: TAGGAAAGACAGTACTAGAGGTCA |  |  |  |  |  |
|  | Sb4-72 | F: NED-TGCCACCACTCTGGAAAAGGCTA | (G)16  | B | 182-350  | 174-214 | 60 |
|  |  | R: CTGAGGACTGCCCCAAATGTAGG |  |  |  |  |  |
| 2 | Sb6-84 | F: FAM-TAACGGACCACTAACAAATGATT | (G)14  | F | 170-222 | 176-210 | 58 |
|  |  | R: TAACGGACCACTAACAAATGATT |  |  |  |  |  |
|  | Sb4-121 | F: NED-FAM-GAAAAATCTCCGTCAATCCCAAAAATAA | (C)14 | D | 200-229  | 212-226  | 60 |
|  |  | R: CGCTGAACAACGAAAGGAATAAGTG |  |  |  |  |  |
|  | Sb6-342a | F: HEX-6TGCTTGTGAGAGTGCCTCCCT | (C)25  | A | 250-320 | NA | 56 |
|  |  | R: GTGAACCTGCTGCTTTAGTCGATG |  |  |  |  |  |
| 3 | Sb4-15 a   | F: HEX-GCTGCTAAGCCGTGCTGA | (G)16 | E | 119-135 | NA | 57 |
|  |  | R: TTATTTGGGTGAAGTAGAGGTGAACA |  |  |  |  |  |
|  | Sb5-236 a | F: NED-6GCCAAGAGAAACACAAACAA | (G)20 | G | 158-222 | NA | 57 |
|  |  | R: AGCAATGTATTTAGGCAACACA |  |  |  |  |  |
|  | Sb6-57 | F: HEX-FAM-ACAGGGCTTTAGGGAAATCG | (G)18  | C | 283-320 | 296-308 | 60 |
|  |  | R: CCATCACCGTCGGCATCT |  |  |  |  |  |
| 4 | SbKFGK1 | F: FAM-6GCTTTCGGCGAGCATCTTACAA | (C)9 | J | 140-320 | 227-266 | 60 |
|  |   | R: GCGGTTGGATTCGCCATG |   |   |   |   |   |

a Primer pairs excluded from final analysis; b(F= Forward primer, R= Reverse primer); cLG = Linkage Group; dTopt= optimum temperature