

Table S1 Expected progeny phenotypes and segregation ratios for disomic and tetrasomic inheritance in a selfed population of a tetraploid switchgrass plant

| Inheritance mode | Marker scoring types | Genotypes of two bands observed ^a | Theoretical genotypes of selfed progeny ^b | Expected selfed progeny band pattern | Expected progeny ratio |
|------------------|----------------------|--|--|--------------------------------------|------------------------|
| Disomic | | <i>AB</i> | <i>1AA, 2AB, 1BB</i> | a:ab:b | 1:2:1 |
| Tetrasomic | co-dominant | <i>ABBB</i> | <i>(1AABB,2ABBB),1BBBB</i> | ab:b | 3:1 |
| | | <i>AABB</i> | <i>1AAAA,(8AAAAB,18AABB,8ABBB),1BBBB</i> | a:ab:b | 1:34:1 |
| | | <i>AAAB</i> | <i>1AAAA,(2AAAAB,1AABB)</i> | a:ab | 1:3 |
| Disomic | | <i>A_</i> | <i>(1AA, 2A_), 1_ _</i> | presence:absence | 3:1 |
| Tetrasomic | dominant | <i>A_ _ _</i> | <i>(1AA_ _ ,2A_ _ _),1_ _ _ _</i> | presence:absence | 3:1 |
| | | <i>AA_ _</i> | <i>(1AAAA,8AAA_ ,18AA_ _ ,8A_ _ _),1_ _ _ _</i> | presence:absence | 35:1 |
| | | <i>AAA_</i> | <i>(1AAAA,2AAA_ ,1AA_ _)</i> | presence:absence | all presence |

^a Italicized capital letters represent genotypes.

^b The genotypes in parenthesis produce the same gel banding phenotypes.