

Detection method	PCR Primers	Polymorphism
1% agarose gel	Ac132R+bz-Y6	<i>Ds2(D1)</i> in <i>bz</i> exon2 @ 336
1% agarose gel	bz-3'-2F+stc1-H1	MITEs in <i>bz-stc1</i> IGR @ 1146-2297
1% agarose gel	stc1-H1F+stc1-H1R	<i>Ins5</i> in <i>stc1</i> 3'UTR @ 2297
1% agarose gel	stc1-H6F1+stc1-H6R1	<i>Ins6</i> in <i>stc1</i> intr. 3 @ 5270
sequenced by stc1-PF3 and stc1-PR1	stc1-PF3+stc1-PR1	30-bp indel in <i>stc1</i> -5'UTR @ 7261
3.5% Metophar agarose gel or 0.8% PAGE gel	1st: stc1-PF3+stc1-PR2; 2nd: stc1PF4+stc1-PR1	9-bp indel in <i>stc1-rpl</i> IGR @ 7436
Sequenced by stc1-PF3 and LHrplR4	stc-PF3+LHrpl4	SNPs in <i>stc1-rpl</i> IGR. I @ 7500-7575 ; II @ 7640-8032
0.8% PAGE gel	1st: LHrplF1+LHrplR3; 2nd: LHrplF2+LHrplR4	7-bp indel @ 8117 in <i>stc1-rpl</i> IGR
Sequenced by Lhtac6058	Lhtac6058+Lh1hpR4	SNPs in <i>tac6058-hyp1</i> IGR @ 12257-12721
Sequenced by Lh1hpR1	Lh1hpF1+Lh1hpR1	SNP upstream of <i>hypro1</i> @ 14311-12
1% agarose gel	3hp7+HelA-5'-R2	676-bp indel in <i>HelA's hypro2</i> @ 22714
Sequenced by rlk6	HelB-3'-rlk6+HelB-3'-rlk4	SNP in <i>HelB's rlk</i> @ 27069
Sequenced	znfF9+znfR9	SNP upstream of <i>znf</i> @ 80095
PvuII digestion of PCR product	znfF2+znfR2	CAP in <i>znf</i> 5' UTR @ 81180
0.8% PAGE gel	znfgF3+znfR3	6-bp indel in <i>znf</i> CDS @ 81609
0.8% PAGE gel	1st: znf-5-F1+znf-5-R1; 2nd: znf-5-F2+znf-5-R2	6-bp indel in <i>znf</i> CDS (next to stop codon) @ 82236
0.8% PAGE gel	1st: znf-hATF3+znfhATR2; 2nd: znf-hATF1+znf-hATR1	5-bp Indel downstream of <i>znf</i> polyA+ site @ 82753
0.8% PAGE gel	1st: znf-hATF3+znfhATR2; 2nd: znf-hATF2+znf-hATR2	Indel downstream of <i>znf</i> polyA+ site @ 83166
1% agarose gel	znfF5+znfR5	hAT TE in W22 <i>znf-tac7077</i> IGR @ 84000
1% agarose gel	Ac4372+tac7077F1	Ac7077 in <i>tac7077</i> promoter @ 99240

Supplemental Table 1. *bz-tac7077* recombination in *bz-m2(D1)* Ac7077/Bz-W22 + heterozygotes

Polymorphism	Total	4	0	31	15	0	0	12	6	0	0	0	0	0	2	1	1	6	3	0	0	81	
<i>Ds2(D1)</i> in <i>bz</i> exon2 @ 336																							
MITEs in <i>bz-stc1</i> IGR @1146-2297																							
<i>Ins5</i> in <i>stc1</i> 3'UTR @ 2297																							
<i>Ins6</i> in <i>stc1</i> intr. 3 @ 5270																							
30-bp indel in <i>stc1</i> -5'UTR @ 7261																							
9-bp indel in <i>stc1-rpl</i> IGR @ 7436																							
SNPs in <i>stc1-rpl</i> IGR. I @ 7500-7575; II @ 7640-8032																							
7-bp indel @ 8117 in <i>stc1-rpl</i> IGR																							
SNPs in <i>tac6058-hyp1</i> IGR @ 12257-12721																							
SNP upstream of <i>hypro1</i> @ 14311-12																							
676-bp indel in <i>HelA</i> 's <i>hypro2</i> @ 22714																							
SNP in <i>HelB</i> 's <i>rlk</i> @ 27069																							
SNP upstream of <i>znf</i> @ 80095																							
CAP in <i>znf</i> 5' UTR @ 81180																							
6-bp indel in <i>znf</i> CDS @ 81609																							
6-bp indel in <i>znf</i> CDS (next to stop codon) @ 82236																							
5-bp Indel downstream of <i>znf</i> polyA+ site @ 82753																							
Indel downstream of <i>znf</i> polyA+ site @ 83166																							
hAT <i>TE</i> in W22 <i>znf-tac7077</i> IGR @ 84000																							
Ac7077 in <i>tac7077</i> promoter @ 99240																							
subtotal	4	4	0	31	15	0	0	12	6	0	0	0	0	2	1	1	6	3	0	0	81		
<i>D4272-15-1</i> A	W	W	W	W	W																W	-	
<i>D4274-12</i> A	W	W	W	W	W																	W	-
<i>D4276-7</i> A	W	W	W	W	W																	W	-
<i>D4274-4-3</i> A	W	W	W	W	W																	W	-
subtotal	4	4	0	31	15	0	0	12	6	0	0	0	0	2	1	1	6	3	0	0	81		
<i>D4276-13-5</i> A	A	A	A	W	W					W												W	
<i>D4272-1-2</i> A	A	A	A	W	W																	W	
<i>D4272-2-1</i> A	A	A	A	W	W																	W	
<i>D4272-4-1</i> A	A	A	A	W	W																	W	
<i>D4272-4-2</i> A	A	A	A	W	W																	W	
<i>D4272-5-5</i> A	A	A	A	W	W																	W	
<i>D4272-6-2</i> A	A	A	A	W	W																	W	
<i>D4272-7</i> A	A	A	A	W	W																	W	
<i>D4272-9-1</i> A	A	A	A	W	W																	W	
<i>D4272-13-3</i> A	A	A	A	W	W																	W	
<i>D4272-15-6</i> A	A	A	A	W	W																	W	
<i>D4272-20-1</i> A	A	A	A	W	W																	W	
<i>D4272-20-4</i> A	A	A	A	W	W																	W	
<i>D4274-7-1</i> A	A	A	A	W	W																	W	
<i>D4274-8-3</i> A	A	A	A	W	W																	W	
<i>D4274-8-5</i> A	A	A	A	W	W																	W	
<i>D4274-9</i> A	A	A	A	W	W																	W	
<i>D4276-1-2</i> A	A	A	A	W	W																	W	
<i>D4276-2-2</i> A	A	A	A	W	W																	W	
<i>D4276-3-3</i> A	A	A	A	W	W																	W	
<i>D4276-3-4</i> A	A	A	A	W	W																	W	
<i>D4276-4-3</i> A	A	A	A	W	W																	W	
<i>D4276-5</i> A	A	A	A	W	W																	W	
<i>D4276-8</i> A	A	A	A	W	W																	W	
<i>D4276-12</i> A	A	A	A	W	W																	W	
<i>D4274-1-5</i> A	A	A	A	W	W																	W	
<i>D4274-2-4</i> A	A	A	A	W	W																	W	
<i>D4276-11-2</i> A	A	A	A	W	W																	W	
<i>D4276-13-6</i> A	A	A	A	W	W																	W	
<i>D4276-14</i> A	A	A	A	W	W																	W	
<i>D4274-2-6</i> A	A	A	A	W	W																	W	
subtotal	31	31	0	31	15	0	0	12	6	0	0	0	0	2	1	1	6	3	0	0	81		
<i>D4272-3-4</i> A	W	W	W	W	W																	W	
<i>D4272-4-3</i> A	W	W	W	W	W																	W	
<i>D4272-9-4</i> A	W	W	W	W	W																	W	
<i>D4272-20-2</i> A	W	W	W	W	W																	W	
<i>D4274-8-4</i> A	W	W	W	W	W																	W	
<i>D4276-1-1</i> A	W	W	W	W	W																	W	
<i>D4276-2-1</i> A	W	W	W	W	W																	W	
<i>D4276-4-1</i> A	W	W	W	W	W																	W	
<i>D4276-6-3</i> A	W	W	W	W	W																	W	
<i>D4276-9-1</i> A	W	W	W	W	W																	W	
<i>D4276-9-2</i> A	W	W	W	W	W																	W	
<i>D4274-1-1</i> A	W	W	W	W	W																	W	

A = Ac7077 marker; W = W22 marker

