

Supplementary Information

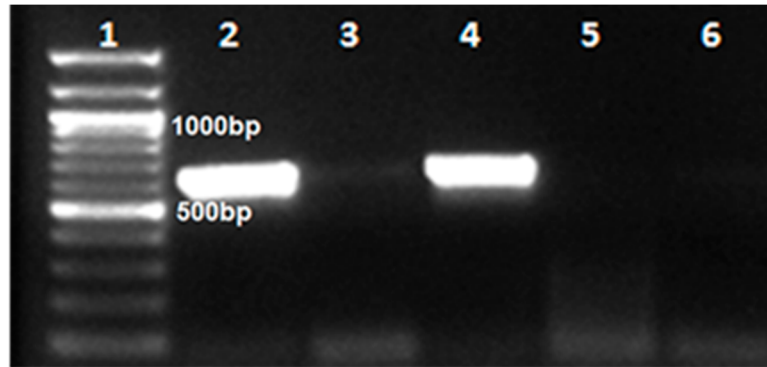


Figure S1. Molecular marker SK14 amplified in “Sierra” and crg genomic samples. This marker does not amplify in “Olathe”, ur3-Δ2 or ur3-Δ3

Table S1. Primer sets and amplicon sizes for q-PCR of genes in delineated region

Sequence Name	Bases	Sequence	Amplicon size
010G024900 FWD Set 4	21	CTG AAG GTG GAA CAG TGA GTT	119 bp
010G024900 REV Set 4	20	CCT TAC CGG GTT GAG TTT GT	
010G025000 FWD Set 2	22	ACA GAA GCC ATT CAG GGA TTA G	127 bp
010G025000 REV Set 2	20	CTC CAG CAA GTT GGA CAT GA	
010G025100 FWD Set 1	23	CAG CAA CAG ATA CCA CTC TAC AT	105 bp
010G025100 REV Set 1	22	GTG ATG CCT GAG GAA GAC TAA A	
010G025200 FWD Set 4	20	CGA CAT CTT CTG CCC GTT TA	113 bp
010G025200 REV Set 4	19	ATG CCA TGC TCC AGT TCT T	
010G025300 FWD Set 1	22	GCT GCC AGC GAT AAC ATA TCT A	133 bp
010G025300 REV Set 1	20	CTG GAG GCA CAC TGA AAG AA	
010G025400 FWD Set 4	21	CCG TGT GGA AGA TGT GAT TCT	118 bp
010G025400 REV Set 4	20	TTG ACG GTA GAT GGC TTT GG	
010G025500 FWD Set 1	21	TTG ATG AGG ATG CGG GAT ATG	102 bp
010G025500 REV Set 1	20	GTC GCA GCA GTC TTG ATT TG	
010G025600 FWD Set 2	20	GTT TGA ACC ACG CAG TTA CC	101 bp
010G025600 REV Set 2	21	CCG TCC ATT CTC AAA CAC AAC	
010G025700 FWD Set 1	21	GGG CAG ATG GAA TCC TTA ACA	126 bp
010G025700 REV Set 1	21	TCG TGC CAA TCC TTC ATA TCC	
010G025800 FWD Set 4	20	AAC AGT CCA CGT GGC ATA AG	131 bp
010G025800 REV Set 4	20	CTC TGC GGT TCC AAC GAA TA	
010G025900 FWD Set 1	20	CCA CGC AGG TCC AAT CTA AA	142 bp
010G025900 REV Set 1	23	GTG AGA TGT CCA ATC CTC TCT TC	
010G026000 FWD Set 3	22	GAG GGA ATG ATG CCG AGA ATA C	106 bp
010G026000 REV Set 3	20	GCT CTT GAA CAC ACC GAG AA	
010G026100 FWD Set 3	20	CGT GGC AAC TGA CTG TCT TA	142 bp
010G026100 REV Set 3	20	CTT GTC TCC AGC TCC CAA AT	
010G026200 FWD Set 3	20	GCG TCA TCA GAA GGG TGA TT	141 bp
010G026200 REV Set 3	22	CTG ACA TCC CAA CCA CTG ATA C	
010G026300 FWD Set 3	20	TCC GTC GCA TGT TCG TAA TC	

010G026300 REV Set 3	20	CAG CCT CCC AGA GTG AAT TT	128 bp
010G026400 FWD Set 2	20	GAA ATC ACG GCA ACC GAA AG	
010G026400 REV Set 2	20	TTG TCT CCA CCT CCC AAA TG	146 bp
010G026500 FWD Set 5	21	GGA CTC ATT TGC GTT CAT TGG	
010G026500 REV Set 5	22	TGG TCT TGA CGA TGT GAA AGA G	136 bp

Table S2. All genotypes used in this study with genotype, molecular marker and phenotype information. Molecular marker SK14 primer set amplifies in ‘Sierra’ and *crg* genomic DNA. SB1 amplifies in all genomic DNA except for *crg*.

	Genotype	Markers	Phenotype
‘Sierra’	(<i>Ur-3, Ur-3/Crg, Crg</i>)	SK14/SB1	Resistant to race 53
‘Olathe’	(<i>ur-3, ur-3/Crg, Crg</i>)	SB1	Susceptible to race 53
<i>crg</i>	(<i>Ur-3, Ur-3/crg, crg</i>)	SK14	Susceptible to race 53
<i>ur3-Δ2</i>	(<i>ur-3, ur-3/Crg, Crg</i>)	SB1	Susceptible to race 53
<i>ur3-Δ3</i>	(<i>ur-3, ur-3/Crg, Crg</i>)	SB1	Susceptible to race 53