

TABLE S1 Primers used in this study.

Primer name	Sequences (5'-3')	Remark
Ch10150_U_F	CCGCTCGAGCCCTTCCTTCTCTTTCTACC	<i>ChSAT4</i> deletion vector construction
Ch10150_U_R	CCCAAGCTTCTTGTGCGGTGCCATTAAAG	<i>ChSAT4</i> deletion vector construction
Ch10150_D_F	GGGTCTAGATCATCTACTCTGTCCTGGAT	<i>ChSAT4</i> deletion vector construction
Ch10150_D_R	TCCCCGCGGAGTTGTGTCTGGCGAATG	<i>ChSAT4</i> deletion vector construction
		<i>ChSAT4</i> mutant PCR screening assay and amplification of <i>ChSAT4</i> probe for
Ch10150_IN_F	TCATCGGCAAGAAGCAGGAG	southern blotting
		$\Delta Chsat4$ mutant PCR screening assay and amplification of <i>ChSAT4</i> probe for
Ch10150_IN_R	CGCAGAGACCAGACACCATAT	southern blotting
Ch10150_OU_F	ACAGACCGCTGAACGCTAC	$\Delta Chsat4$ mutant PCR screening assay
FGSG_06939_1F	TACTAACCTACCTGCCTCA	Knockout of <i>FgSAT4</i>
	TTGACCTCCACTAGCTCCAGCCAAGCCGCCGCTAATAA	
FGSG_06939_2R	GAACAAGAT	Knockout of <i>FgSAT4</i>
	GAATAGAGTAGATGCCGACCGGGTTAGCGATGAGT	
FGSG_06939_3F	TGGATACAG	Knockout of <i>FgSAT4</i>
FGSG_06939_4R	CCGTGCCGAATATGAAGA	Knockout of <i>FgSAT4</i>
HYG/F	TTGACCTCCACTAGCTCCAGCCAAGCC	Knockout of <i>FgSAT4</i>
HYG/R	GAATAGAGTAGATGCCGACCGCGGGTT	Knockout of <i>FgSAT4</i>
FGSG_06939_InF	TGGCAAGAAGCACGAGGAA	$\Delta Fgsat4$ mutant PCR screening assay
FGSG_06939_InR	ATACTCAACACCACGCATCATC	$\Delta Fgsat4$ mutant PCR screening assay
FGSG_06939_OuF	GGCATATAGAGCGGCATGATTA	$\Delta Fgsat4$ mutant PCR screening assay
HPHCON_R2	TCAGGTCGGAGAGCTGTC	$\Delta Fgsat4$ mutant PCR screening assay
	TTTCGTAGGAACCCAATCTTCAAAGTTATTGTCTTCCC	complemented vector construction of
Ch10150_COM_F	GTTG	<i>ChSAT4</i>
	CACCACCCCGGTGAACAGCTCCTCGCCCTTGCTCACAA	complemented vector construction of
Ch10150_COM_R	GACCCTCTTCACCTGCCT	<i>ChSAT4</i>
		complemented vector construction of
GFP_R	GACACGCTGAACTTGTGGCCGTT	<i>ChSAT4</i>
		amplification of <i>HPH</i> probe for
FL111	GGAGGTCAACACATCAATG	southern blotting
		amplification of <i>HPH</i> probe for
FL112	CTCTATTCTTTGCCCTG	southern blotting
		semi-quantitative RT-PCR and
Ch01222F	CTATCCTTACTACCCACACG	qRT-PCR primer of <i>ChACTIN</i>
		semi-quantitative RT-PCR and
Ch01222R	AGGTTCCTCGTAGTTAGGGC	qRT-PCR primer of <i>ChACTIN</i>
		semi-quantitative RT-PCR primer of
Ch10150_Q_F	ACGACCTGTCCCTTGTTTC	<i>ChSAT4</i>
		semi-quantitative RT-PCR primer of
Ch10150_Q_R	GCAGATTCTCGGGTTTC	<i>ChSAT4</i>

Ch11688_Q_F	CTGGTACCTACCGGTTTCAT	quantitative RT-PCR primer of <i>CAT</i>
Ch11688_Q_R	GAAACCAGCAGTCTGGAAGC	quantitative RT-PCR primer of <i>CAT</i>
CH063_05165_Q_F	GTTGCCAGGACGGAGTATGT	quantitative RT-PCR primer of <i>POX</i>
CH063_05165_Q_F	GGTCCAGCTCGAAGAAGATG	quantitative RT-PCR primer of <i>POX</i>
CH063_05042_Q_F	ACGGTCGTGCCAAGATTAAC	quantitative RT-PCR primer of <i>CHS1</i>
CH063_05042_Q_R	CTTAGGGACCAAGGTGACCA	quantitative RT-PCR primer of <i>CHS1</i>
CH063_04156_Q_F	CGAGCTCTCCTTTGGACAAC	quantitative RT-PCR primer of <i>CHS2</i>
CH063_04156_Q_R	CATCGAAAGTCGGGGATAGA	quantitative RT-PCR primer of <i>CHS2</i>
CH063_11805_Q_F	AGGCATCGAGACATGGATTC	quantitative RT-PCR primer of <i>CHS3</i>
CH063_11805_Q_R	GAGATTGTTAACGGCCAGGA	quantitative RT-PCR primer of <i>CHS3</i>
CH063_05355_Q_F	GAGAAGAGCCTGGAGGAGGT	quantitative RT-PCR primer of <i>CHS4</i>
CH063_05355_Q_R	GTTGATGGCCAGCTTCTCTC	quantitative RT-PCR primer of <i>CHS4</i>
CH063_01328_Q_F	TTCCAAGTGCTGTCGTAAG	quantitative RT-PCR primer of <i>CHS5</i>
CH063_01328_Q_R	TCGAGAACCTGCTTGATCCT	quantitative RT-PCR primer of <i>CHS5</i>
CH063_12829_Q_F	ATCCTCCTCACCTCCTCCAT	quantitative RT-PCR primer of <i>CHS6</i>
CH063_12829_Q_R	CCACGAGTTCTCGTCGTACA	quantitative RT-PCR primer of <i>CHS6</i>
CH063_06688_Q_F	CTCCAAGGGTTCCAAGTACG	quantitative RT-PCR primer of <i>CHS7</i>
CH063_06688_Q_R	GCTGTGGCGTAGTTCACAA	quantitative RT-PCR primer of <i>CHS7</i>
CH063_06991_Q_F	ACGCCAGAAGAGTTCAAGGA	quantitative RT-PCR primer of <i>CON7</i>
CH063_06991_Q_R	GTACTGCGAAGGCTGGTAGC	quantitative RT-PCR primer of <i>CON7</i>
CH063_15513_Q_F	TCCGACAGTTCGACAAGATG	quantitative RT-PCR primer of <i>COM1</i>
CH063_15513_Q_R	CGGGTATCCCTGACCTTGTA	quantitative RT-PCR primer of <i>COM1</i>
CH063_00810_Q_F	ACATCACGAGGAAGGTGTCC	quantitative RT-PCR primer of <i>ACR1</i>
CH063_00810_Q_R	GCACGAGAGTAGTGCTGCTG	quantitative RT-PCR primer of <i>ACR1</i>
CH063_12486_Q_F	GATCAACGCAACACACATCC	quantitative RT-PCR primer of <i>APS2</i>
CH063_12486_Q_R	GCCTGGGGTGTATTCAAAGA	quantitative RT-PCR primer of <i>APS2</i>
BcActin_Q_F	GTCCT GTTCC AGCCT TCGTT C	qPCR primer of <i>actin</i> in <i>B. chinensis</i>
BcActin_Q_R	CAAGT CCTTC CTGAT ATCCA CGTC	qPCR primer of <i>actin</i> in <i>B. chinensis</i>
LeActin_Q_F	CGATGTGTGATCTCCTATGGTC	qPCR primer of <i>actin</i> in <i>L. esculentum</i>
LeActin_Q_R	AGCTGATGGGCTCTAGAAATC	qPCR primer of <i>actin</i> in <i>L. esculentum</i>
FgActin_Q_F	ATGGTGTCACCTACGTTGTCC	qPCR primer of <i>actin</i> in <i>F. graminearum</i>
FgActin_Q_R	CAGTGGTGGAGAAGGTGTAACC	qPCR primer of <i>actin</i> in <i>F. graminearum</i>