

# Supplementary Information

## Supplementary Data S1: Analysis of *JAZ7* sequence homology:

VqJAZ7	ATGGAGTTACCCCAATCTAAGAAAGCAAAAACACTTCCCCTCTGCCCTTCAGAACATCAAGATGGAGAGTAACAAGCCATGAAT	90
VvJAZ7	ATGGAGTTACCCCAATCTAAGAAAGCAAAAACACTTCCCCTCTGCCCTTCAGAACATCAAGATGGAGAGTAACAAGCCATGAAT	90
Consensusatggagttaccccaatctaagaaaagcaaaaacttcccctctgccctcaagaatcaatcaagatggagagtaacaagccatgaat		
VqJAZ7	CTGGAACCTCCACTGTTCCCTCCTGCT.....TCTTCAATTCCCACTATGAGAGGAGGAGGAGGA.....AGCCCCCAAGAG	165
VvJAZ7	CTGGAACCTCCACTGTTCCCTCCTGCTC <ins>CAACT</ins> TCTTCAATTCCCACTATGAGAGGAGGAGGA <ins>GGAGGAGGA</ins> AGCCCCCAAGAG	180
Consensusctggaacttccactgtttccctccactgctcacactttcaattccactatgagaggaggaggaggaggaggagaagcccccaagag		
VqJAZ7	CAACAGCAACGGCAGCAGCTTACCATCTTCTAACACGGAAAGGATTGCGTTTC <ins>G</ins> ATGTTACAGAGCTTCGGGCTAGAGCAATTATACTG	255
VvJAZ7	CAACAGCAACGGCAGCAGCTTACCATCTTCTAACACGGAAAGGATTGCGTTTC <ins>G</ins> ATGTTACAGAGCTTCGGGCTAGAGCAATTATACTG	270
Consensuscaacagcaacggcagcagcttaccatcttctacaacggaaaggattgcgtttccatgttacagagcttcgggctagagcaattatactg		
VqJAZ7	GCTGCAAGTAGAGAAATGGAGGAAAGGAAGAGAGGCCCCGCTGTGCCATCTATGCAATCTCAGCTCTGTGGCCCTTCGGGTGTTCAATG	345
VvJAZ7	GCTGCAAGTAGAGAAATGGAGGAAAGGAAGAGAGGCCCCGCTGTGCCATCT <ins>C</ins> ATGCAATCTCAGCTCTGTGGCCCTTCGGGTGTTCAATG	360
Consensusgctcaagttagagaaatggagggaaaggagagccccgctgtcgccatccatcaatctcagctctgtggcccttcgggttcaatg		
VqJAZ7	AAGAGATCGCTCC <ins>A</ins> CGGTTCTTCAGAAGCGAAAAGAAATAGGAGGGAAAGCTATGCCCCATACAATCATTAA	417
VvJAZ7	AAGAGATCGCTCC <ins>A</ins> CGGTTCTTCAGAAGCGAAAAGAAATAGGAGGGAAAGCTATGCCCCATACAATCATTAA	432
Consensusaagagatcgctccaccgggttccttcagaagcgaagaataggagggaaagctatgtccccatacaatcattaa		

Supplementary Data S1: Multiple alignment of the Open Reading Frame sequences of *JAZ7* genes from *V. quinquangularis* and *V. vinifera*. The *VqJAZ7* cDNA was predicted to be 417 bp in length, which is 15 bp shorter than *VvJAZ7*.

## Supplementary Data S2: Analysis of *JAZ7* protein sequence alignment

VqJAZ7	MEFTPNLRKQNNFPSALQESIKMESNKPMNLELPLFPSTA...SSIPTMRGGGG...	85
VvJAZ7	MEFTPNLRKQNNFPSALQESIKMESNKPMNLELPLFPSTA <b>HT</b> SSIPTMRGGGGGGGSPQEQQQRQLTIFYNGRICVSDVTELRARAIIL	90
Consensus	meftpnlrkqnnfpsalqesikmesnkpmnlelplfpstahtssiptmrggggggspqeqqqrqltifyngricvsdvtelraraiil	
VqJAZ7	AASREMEERKRAPLSPSMQSQLCGPSGVSMKRSLHRLFQKRKNRREAMSPYNH	138
VvJAZ7	<b>AASREMEERKRAPLSPSMQSQLCGPSGVSMKRSLHRLFQKRKNRREAMSPYNH</b>	143
Consensus	aasrememeerkraplspsmqsqlcgpsgvsmkrslhrlfqkrknreamspynh	

Supplementary Data S2: Multiple alignment of amino acid sequences of *JAZ7* genes from *V. quinangularis* and *V. vinifera*.

**Supplementary Data S3:** Analysis of The ORF sequence of *VqJAZ7* gene

1	<u>ATGGAGTTACCCCCAATCTAAGAAAGCAAAACAAC</u>	TTCCCTCTGCCCTCAAGAATCA
1	M E F T P N L R K Q N N F P S A L Q E S	
61	ATCAAGATGGAGAGTAACAAGCCCATGAATCTGGAACTCCACTGTTCCCTCCACTGCT	
21	I K M E S N K P M N L E L P L F P S T A	
121	TCTTCAATTCCCACATGAGAGGAGGAGGAAGGCCCAAGAGCAACAGCAACGGCAG	
41	S S I P T M R G G G S P Q [E Q Q Q R Q]	
181	CAGCTTACCATCTTCTACAAACGGAAGGGATTGCGTTCCGATGTTACAGAGCTTCGGGCT	
61	Q L T I F Y N G R I C V S D V T E L R A	
241	AGAGCAATTATACTGGCTGCAAGTAGAGAAATGGAGGAAAGGAAGAGAGGCCCGCTGTCG	
81	R A I I L A A S R E M E E R K R A P L S	
301	CCATCTATGCAATCTCAGCTCTGTGGCCCTTCGGGTGTTCAATGAAGAGATCGCTCCAC	
101	P S M Q S Q L C G P S [G V S M K R S L H]	
361	CGGTTCCCTCAGAACGAAAGAATAGGAGGGAAAGCTATGTCCCCATACAATCATTAA	
121	R F L Q K R K N R R E A M S P Y N H *	

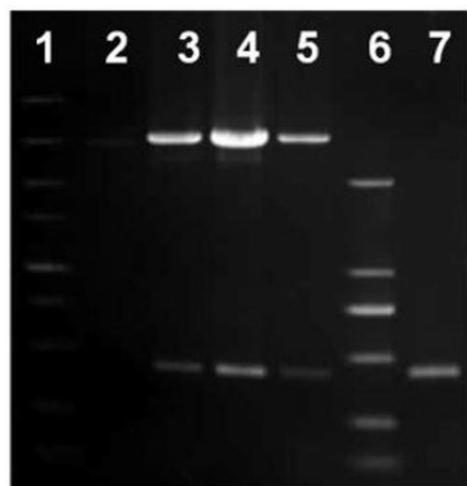
Supplementary Data S3: The ORF sequence of *VqJAZ7* gene in *V. quinquangularis* and its coded amino acid sequence:

Black letters for the nucleotide sequence of ORF, blue letters for the deduced amino acid sequence, red letters for the conserved domain of *VqJAZ7*, the underlined letters for the start and stop codons of ORF.

**Supplementary Table S1:** Primers used for disease resistance analysis in *A. thaliana*

Genes	Gene Locus ID	Forwards primers	Reverse primers
<i>AtPRI</i>	AT2G14610	AACTACGCTGCGAACACGTG	TCACTTGGCACATCCGAGTC
<i>AtICS1</i>	AT1G74710	CTTCCGTGACCTTGATCCTTCT	CAGCGATCTGCCATTAGGATC
<i>AtPDF1.2</i>	AT5G44420	GAAGCACAGAAGTTGTGCGA	TGTAACACAACGGGAAAATAACA
<i>AtLOX3</i>	AT2G35980	TCTCCGTACAACAAGCGTTGG	GCGTCCGTCTAGCGCATTAAT
<i>AtActin</i>	AT2G37620	AGTGTCTGGATCGGTGGTTC	CCCCAGCTTTAAGCCTTT

**Supplementary Figure S1:** Characterization of the *VqJAZ7* over-expression in Arabidopsis



Supplementary Figure S1: Characterization of the *VqJAZ7* over-expression in *A. thaliana* lines:

Double digestion of recombinant pGEM-T/*VqJAZ7* vector, Lane 1: DNA Marker DL5000, Lane 2: recombinant pGEM-T/*VqJAZ7* vector, Lane 3-5: recombinant vector pGEM-T/*VqJAZ7* was digested by XbaI and KpnI, Lane 6: DNA Marker DL2000, Lane 7: ORF of *VqJAZ7* gene.