

# Interactive Effect of Biological Agents Chitosan, Lentinan and Ningnanmycin on Papaya Ringspot Virus Resistance in Papaya (*Carica papaya* L.)

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**Table S1.** Primers for quantitative real-time PCR.

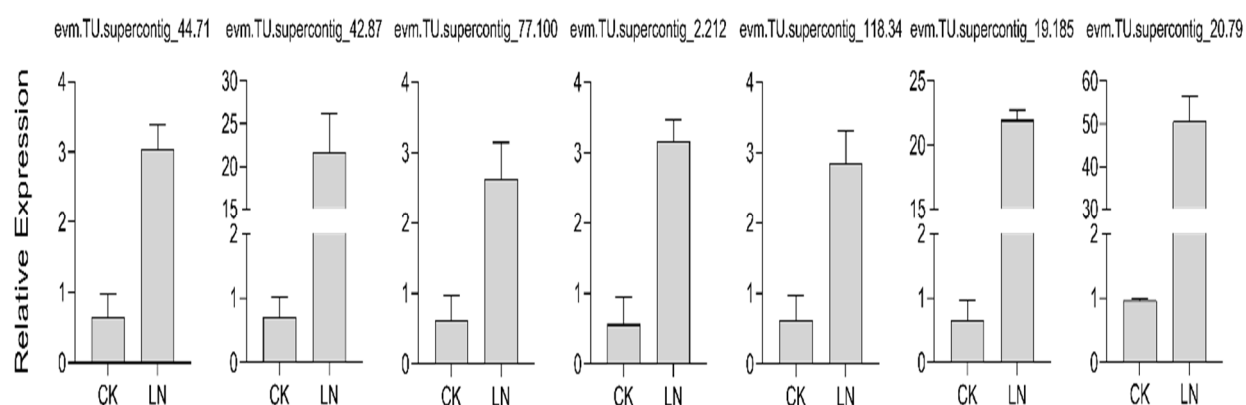
Gene ID	Sequence information
CpActin-QF	5'-AGGCAGGCAAGAGAAGAT-3'
CpActin-QR	5'-TTCATACCGAGTAGCGATTC-3'
evm.TU.supercontig_20.79-QF	5'-TCCCCCAAGATTTCCTGA-3'
evm.TU.supercontig_20.79-QR	5'-GTTGGTTGGCGTAGTTCTGC-3'
evm.TU.supercontig_44.71-QF	5'-CTAATCGCAGAAGCCAATCAT-3'
evm.TU.supercontig_44.71QR	5'-CCTCACCCCTCTGTACGACC-3'
evm.TU.supercontig_42.87-QF	5'-ACCCGTGTCGGCTTCTACTC-3'
evm.TU.supercontig_42.87-QR	5'-CCATCACAACCACGAACAAAAC-3'
evm.TU.supercontig_77.100-QF	5'-GGTTCAAAGCTATTGCTCTTACAGT-3'
evm.TU.supercontig_77.100-QR	5'-AACCCTCAAAGTTCTTCAATGTC-3'
evm.TU.supercontig_2.212-QF	5'-GAGACCTTTGATGGATTTCGTG-3'
evm.TU.supercontig_2.212-QR	5'-GTTTTCCCACTAAGTCCACAT-3'
evm.TU.supercontig_118.34-QF	5'-AGCATTGGACAGGCTCTTTTC-3'
evm.TU.supercontig_118.34-QR	5'-CGCTTGTTCCATCTGGTGTAAT-3'
evm.TU.supercontig_19.185-QF	5'-AGAACCTTGCGAAGAATGTAGC-3'
evm.TU.supercontig_19.185-QR	5'-CAACTCACACTCTCTGAACCTCTG-3'

**Table S2.** qPCR reaction system.

2 ×qPCR Master Mix	10 μL
Forward primer (10 μM)	0.3 μL
Reverse primer (10 μM)	0.3 μL
cDNA template	1.0 μL
ddH <sub>2</sub> O	8.4 μL

**Table S3.** Table of RNA detection results.

Sample name	Concentration (ng $\mu\text{L}^{-1}$ )	Volume ( $\mu\text{L}$ )	Overall amount ( $\mu\text{g}$ )	OD260/280	OD260/230	28S/18S	RIN	Detection results
CK1	1346.84	50	67.34	2.024	1.948	1.2	7.1	A
CK2	1332.24	50	66.61	2.036	1.709	1.4	8,0	A
CK3	1270.48	50	63.52	2.027	2.393	1.3	7.9	A
T2_1	2155.20	50	107.76	2.019	2.436	1.1	7.1	A
T2_2	759.00	50	37.95	2.014	2.348	1.3	7.6	A
T2_3	368.28	50	18.41	1.979	1.677	0.4	7.3	A



**Figure S4.** Verification assay of 7 differentially expressed genes (DEGs). The statistical significance of the differences was confirmed by analysis of variance (ANOVA).