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Article

# The Role of Salicylic, Jasmonic Acid and Ethylene in the Development of Resistance/Susceptibility of Wheat to the SnTox1-producing Isolate of the Pathogenic Fungus *Stagonospora nodorum* (Berk.)

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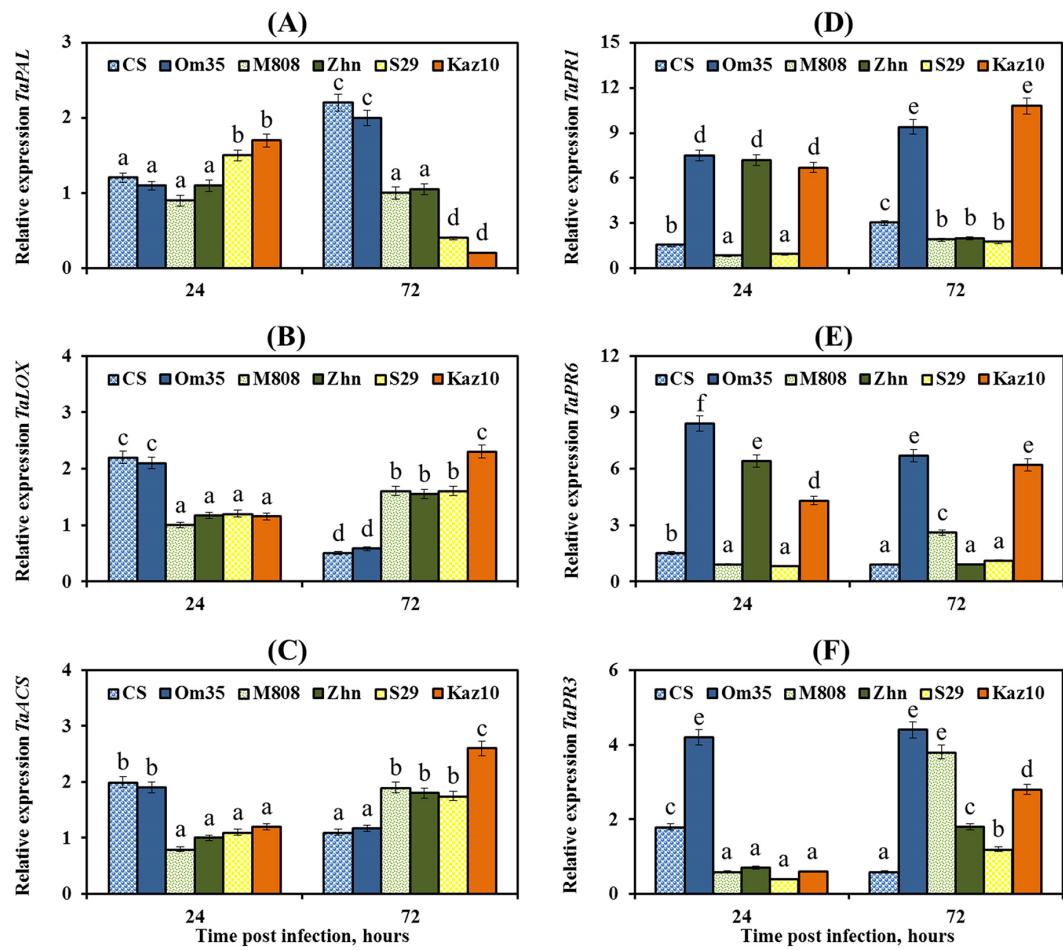
**Supplementary Table S1.** Regression statistics for six wheat cultivars treated with SA, JA and ET, in which the expression of the *SnTox1* gene and damage zones was analyzed during infection with the Sn1SP isolate.

<i>Regression Statistics</i>	
Multiple R	0.885182
R Square	0.78354718
Adjusted R Square	0.77370842
Standard Error	0.94960811
Observations	24

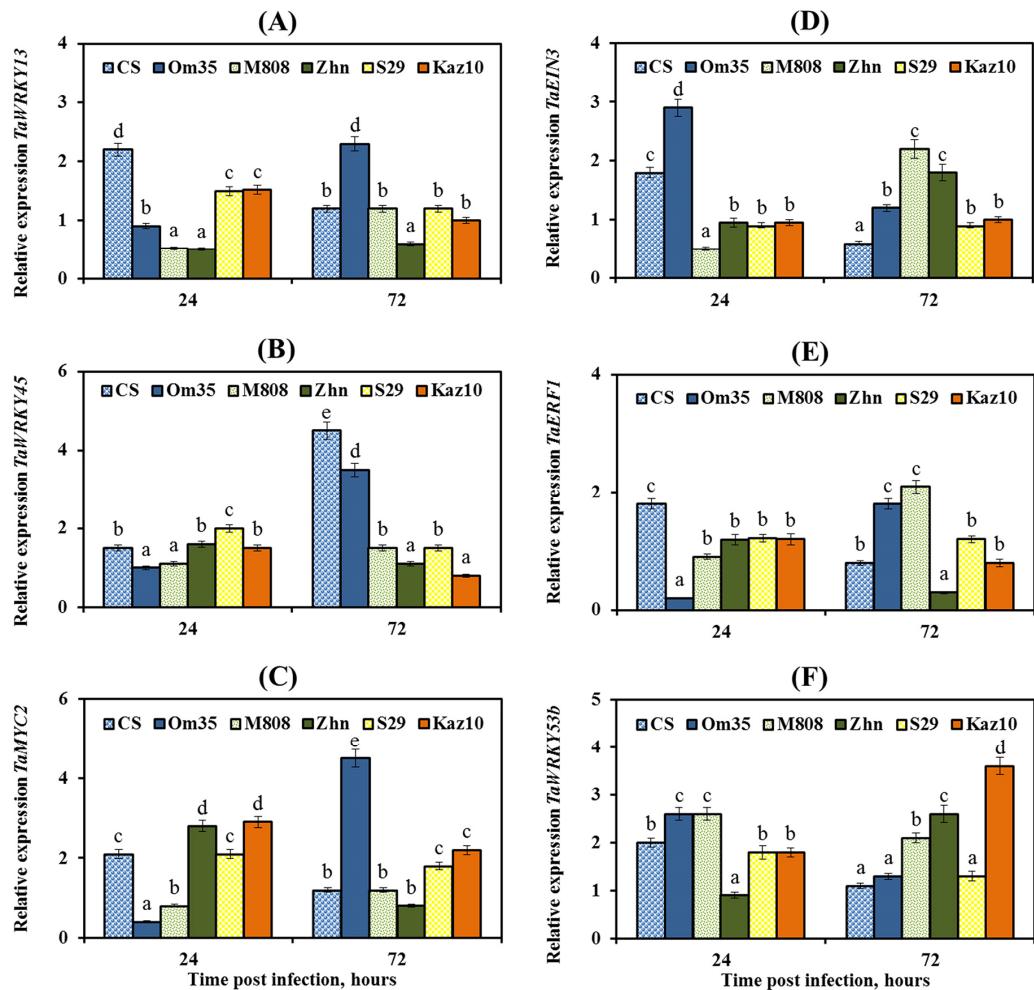
#### ANOVA

	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>Significance F</i>
Regression	1	71.8147109	71.8147109	79.6387778	9.18088E-09
Residual	22	19.8386224	0.90175556		
Total	23	91.6533333			

	Standard							
	<i>Coefficients</i>	<i>Error</i>	<i>t Stat</i>	<i>P-value</i>	<i>Lower 95%</i>	<i>Upper 95%</i>	<i>Lower 95.0%</i>	<i>Upper 95.0%</i>
Intercept	0.41001702	0.3025721	1.3551052	0.18913581	-0.217479103	1.03751315	-0.2174791	1.03751315
X Variable 1	0.09932054	0.01112953	8.92405613	9.1809E-09	0.076239311	0.122401772	0.076239311	0.122401772



**Supplementary Figure S1.** The expression of three genes of enzymes for the biosynthesis of phytohormones – the SA (*TaPAL*) (A), the JA (*TaLOX*) (B), and the ethylene (*TaACS1*) (C), and the expression of the PR-genes – *TaPR1* (D), *TaPR3* (E), and *TaPR6* (F) in six bread wheat cultivars 24 and 72 hpi with the SnTox1-producing isolate *S. nodorum* Sn1SP. Designations of wheat cultivars as in Figure 1. Average gene expression was calculated from nine biological samples in five technical replicates ( $n = 9$ ). Values are expressed as mean SE (ANOVA with Duncan's test; comparisons between genotypes are presented; significant differences are marked with different letters at  $p \leq 0.05$ ).



**Supplementary Figure S2.** The expression of six TFs genes – *TaWRKY13* (A), *TaWRKY45* (B), *TaMYC2* (C), *TaEIN3* (D), *TaERF1* (E) and *TaWRKY53b* (F) in six bread wheat cultivars 24 and 72 hpi with the SnTox1-producing isolate *S. nodorum* Sn1SP. Designations of wheat cultivars as in Figure 1. Average gene expression was calculated from nine biological samples in five technical replicates ( $n = 9$ ). Values are expressed as mean  $\pm$  SE (ANOVA with Duncan's test; comparisons between genotypes are presented; significant differences are marked with different letters at  $p \leq 0.05$ ).

**Supplementary Table S2.** The sequences of primers used for real-time PCR.

Genes	Strand	5' to 3' Primer Sequences	GenBank accession number
<i>TaPR1</i>	Forward	ATAACCTCGCGTCTTCATC	AF384143
	Reverse	GCTTATTACGGCATTCCTTT	
<i>TaPR3</i>	Forward	CCATCCAGATCTCACACAAC	AB029936
	Reverse	ACCACAACGCCGTCTAAA	
<i>TaPR6</i>	Forward	GGGCCCTGCAAGAAGTACTG	EU293132.1
	Reverse	ACACGCATAGGCACGATGAC	
<i>TaWRKY13</i>	Forward	GAGGAGGAACATGAGCAGAAG	EF397614
	Reverse	GAACCACCCGAAGTCGAAG	
<i>TaWRKY45</i>	Forward	ATTGCGCGTCGTAGGTTAG	EF397613
	Reverse	GACGGATGGATGAGTAGCAAAG	
<i>TaWRKY53b</i>	Forward	CTCTCTGGCTCTCCTTCAC	EF368364
	Reverse	CTCCTGCTGCTCCTTGAATAA	
<i>TaERF1</i>	Forward	ACACATGCCGACGAATCTAC	EF583940
	Reverse	CCGAGTTCAAACCCAATTAC	
<i>TaEIN3</i>	Forward	GGCTCAACAAACCTGGATT	KU030837
	Reverse	CCCTGTCCAAAGAAACCC	
<i>TaACS1</i>	Forward	GAGGTTGTGAACGAGCTAGAAG	U35779
	Reverse	CTCGAAACCTGCAAGAGATAG	
<i>TaPAL</i>	Forward	GGCGTCAAAACATGGCGTC	X99725
	Reverse	AGTCCGAGAACGTCCGAGA	
<i>TaLOX</i>	Forward	AGTCCGAGAAAACATGGCGTC	BJ223744
	Reverse	ATAGTCCGAGACTCCAAG	
<i>TaMYC2</i>	Forward	AGTCTGGTGTCCCTGGTTACA	AY625684.1
	Reverse	GGTGTGTCCTCCCTCTTAC	
<i>TaMPK3</i>	Forward	TACATGAGGCACCTGCCGCAGT	AF079318
	Reverse	GGTCAACTCCAGGGCTCGTG	
<i>TaMPK6</i>	Forward	GAAGATATCCGCCAACTCCCCG	AY173962
	Reverse	CCGATGCTGCTGAAGTCAAAGC	
<i>SnTox1</i>	Forward	GTACTCCCGTACGTACTCTTCT	JX997402
	Reverse	CGCTTGTGTCGCCGTTCTTAC	
<i>TaGAPDH</i>	Forward	GTGTTCCCACTGTTGATGTTTC	EU022331.1
	Reverse	CCTCCTTGATAGCAGCCTTAAT	
<i>Snβ-tubulin</i>	Forward	ACACCAGGAACAACTGCTAACAGC	S56922
	Reverse	TATGCGCGCGTGTGCAAATTGCA	
<i>TaRL1</i>	Forward	TTGAGCAACTCATGGACCAG	AY059462
	Reverse	GCTTTCCAAGGCACAAACAT	