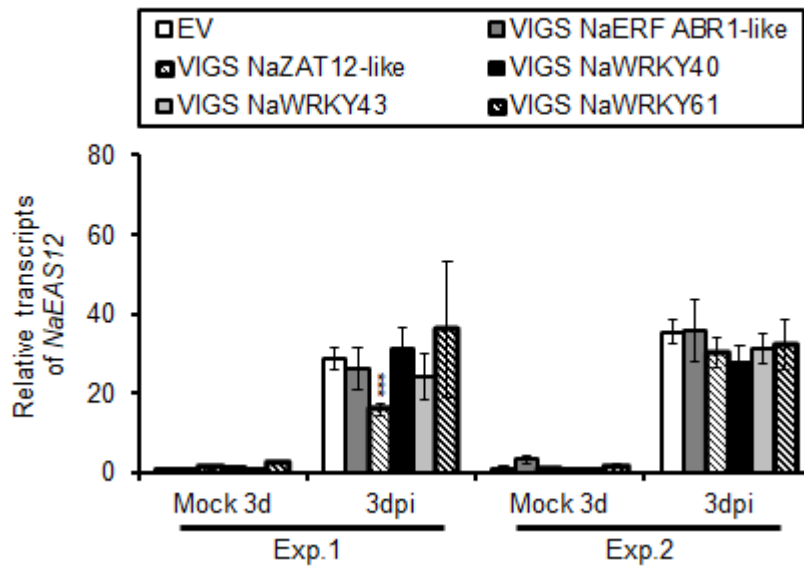


Supplementary Figure S1



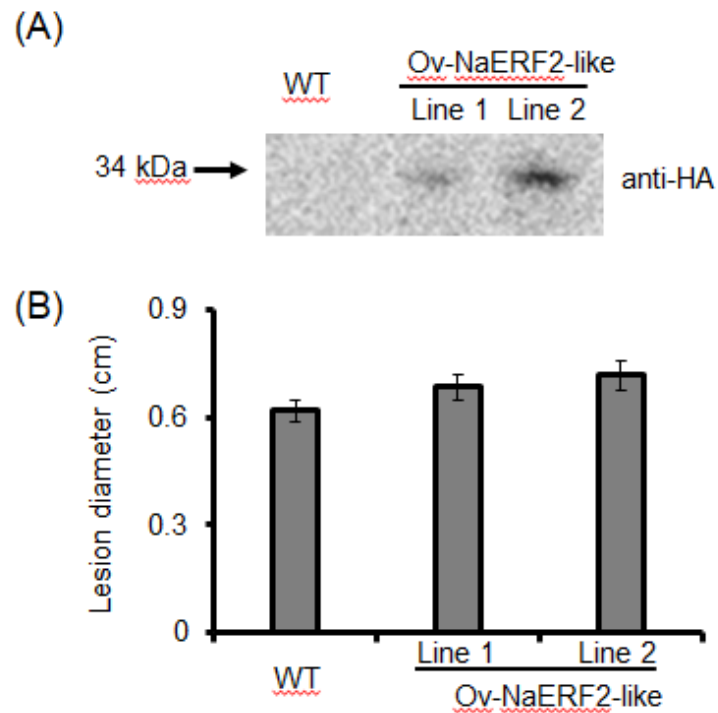
**Fig. S1. *Alternaria alternata*-elicited *NaEAS12* transcripts in EV and plants individually silenced with the top 5 up-regulated transcription factors.**

Mean ( $\pm$ SE) relative *A. alternata*-induced *NaEAS12* transcripts as measured by real-time PCR in 5 replicated young leaves of EV, VIGS NaERF ABR1-like, VIGS NaZAT12-like, VIGS NaWRKY40, VIGS NaWRKY43 and VIGS NaWRKY61 plants at 3 dpi. Two independent VIGS experiments presented similar results.

Asterisks indicate levels of significant differences between EV and VIGS plants

(Student's *t*-test: \*,  $p < 0.05$ ; \*\*,  $p < 0.01$ ; \*\*\*,  $p < 0.005$ )

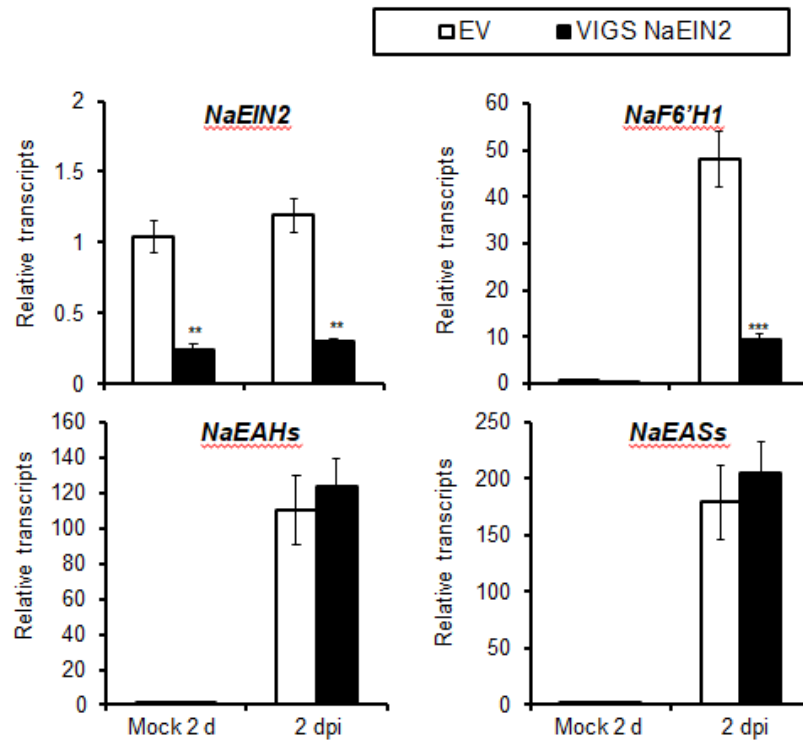
Supplementary Figure S2



**Fig. S2. Overexpression of NaERF2-like does not affect plant resistance.**

NaERF2-like proteins were detected in 0 leaves of Ov-NaERF2-like line 1 and 2 at 1 dpi by HA antibody via western blot (A). Mean ( $\pm$ SE) diameter of necrotic lesions (B) was recorded in 8-replicated 0 leaves of WT, Ov-NaERF2-like line 1 and 2 plants inoculated with *A. alternata* for 5 d.

Supplementary Figure S3



**Fig. S3. Silencing *NaEIN2* has a great impact on *A. alternata*-induced transcripts of *NaF6'H1* but does not affect transcripts of *NaEAHs* and *NaEASs*.**

Mean ( $\pm$ SE) relative *A. alternata*-induced *NaEIN2*, *NaF6'H1*, *NaEASs*, *NaEAHs* transcripts as measured by real-time PCR in 5 replicated young leaves of EV and VIGS *NaEIN2* plants at 3 dpi. Asterisks indicate levels of significant differences between EV and VIGS plants with the same treatments (Student's *t*-test: \*,  $p < 0.05$ ; \*\*,  $p < 0.01$ ; \*\*\*,  $p < 0.005$ )

**Supplementary Table S1.**

Transcriptome analysis revealed the regulation of genes involved in sesquiterpene biosynthesis in 3 biological replicates of *N. attenuata* leaves after *A. alternata* inoculation at 1 dpi.

Gene accession number	Gene description	Average fold change (1 dpi/Mock 1 d)	up_down
XM_019385128.1	Thiolase	5.61	Up
XM_019385127.1	Thiolase	4.43	Up
XM_019385247.1	Thiolase	2.00	Up
XM_019370121.1	HMG-CoA synthase	124.89	Up
XM_019404851.1	HMG-CoA synthase	22.45	Up
XM_019375732.1	HMG-CoA reductase	76.08	Up
XM_019378728.1	HMG-CoA reductase	54.16	Up
XM_019372610.1	MVA Kinase	22.25	Up
XM_019392275.1	MVAP Kinase	35.90	Up
XM_019392276.1	MVAP Kinase	4.04	Up
XM_019375278.1	MVAPP decarboxylase	88.79	Up
XM_019384289.1	MVAPP decarboxylase	5.41	Up
XM_019390141.1	IPP isomerase	18.03	Up
XM_019375688.1	IPP isomerase	2.84	Up
XM_019403732.1	FPPS	4.06	Up
XM_019409657.1	squalene synthase	0.34	Down
XR_002070699.1	squalene synthase	0.41	Down
XM_019371823.1	5- <i>epi</i> -aristolochene synthase	>5000	Up
XM_019386476.1	5- <i>epi</i> -aristolochene synthase	>5000	Up
XM_019402760.1	5- <i>epi</i> -aristolochene synthase	>5000	Up
XM_019386675.1	5- <i>epi</i> -aristolochene synthase	4354.91	Up
XM_019383164.1	5- <i>epi</i> -aristolochene synthase	1087.71	Up

XM_019400021.1	5- <i>epi</i> -aristolochene synthase	713.62	Up
XM_019382311.1	5- <i>epi</i> -aristolochene synthase	669.48	Up
XM_019397599.1	5- <i>epi</i> -aristolochene synthase	605.02	Up
XM_019389745.1	5- <i>epi</i> -aristolochene synthase	498.49	Up
XM_019412258.1	5- <i>epi</i> -aristolochene synthase	408.49	Up
XM_019386201.1	5- <i>epi</i> -aristolochene synthase	393.23	Up
XM_019408556.1	5- <i>epi</i> -aristolochene synthase (EAS12)	366.65	Up
XM_019371825.1	5- <i>epi</i> -aristolochene synthase	320.59	Up
XM_019378757.1	5- <i>epi</i> -aristolochene synthase (EAS34)	278.39	Up
XM_019400020.1	5- <i>epi</i> -aristolochene synthase	268.90	Up
XR_002064871.1	5- <i>epi</i> -aristolochene synthase	99.54	Up
XM_019397600.1	5- <i>epi</i> -aristolochene 1,3-dihydroxylase	428.49	Up
XM_019403951.1	5- <i>epi</i> -aristolochene 1,3-dihydroxylase	145.45	Up
XR_002067901.1	5- <i>epi</i> -aristolochene 1,3-dihydroxylase	122.32	Up
XM_019393182.1	premnaspirodiene oxygenase	>1000	Up
XM_019383694.1	premnaspirodiene oxygenase	955.54	Up
XM_019389023.1	premnaspirodiene oxygenase	559.87	Up
XM_019403950.1	premnaspirodiene oxygenase	483.72	Up
XM_019391568.1	premnaspirodiene oxygenase	433.32	Up
XM_019397224.1	premnaspirodiene oxygenase	330.17	Up
XM_019380244.1	premnaspirodiene oxygenase	154.39	Up
XM_019397199.1	premnaspirodiene oxygenase	74.53	Up
XM_019390272.1	premnaspirodiene oxygenase	67.50	Up
XM_019408391.1	premnaspirodiene synthase	>1000	Up
XM_019393266.1	premnaspirodiene synthase	771.10	Up
XM_019380703.1	premnaspirodiene synthase	111.70	Up

**Supplementary Table S2.**

Transcriptome analysis revealed the top 6 highly elicited transcriptional factor genes in 3 biological replicates of *A. alternata*-inoculated *N. attenuata* leaves at 1 dpi.

Gene accession number	Gene description	Average fold change (1 dpi/Mock 1 d)	up_down
XM_019374371.1	ethylene-responsive transcription factor ABR1-like (NaABR1-like)	1532.64	Up
XM_019368773.1	zinc finger protein ZAT12-like (NaZAT12-like)	997.90	Up
XM_019402562.1	WRKY transcription factor 40 (NaWRKY40)	850.77	Up
XM_019375046.1	WRKY transcription factor 43 (NaWRKY43)	680.57	Up
XM_019371308.1	WRKY transcription factor 61 (NaWRKY61)	533.77	Up
XM_019399671.1	ethylene-responsive transcription factor 2-like (NaERF2-like)	479.39	Up

1 **Supplementary Table S3.**

2 Primers used in this study.

<b>Primer</b>	<b>Primer sequence (5'-3')</b>	<b>Aim</b>	<b>Designed from</b>	
Z001_F	TGCTGAAGTATCAA GGTGGTGG	real time PCR for all NaEASs gene expression (EAS12, 34, and 37)	NaEAS (AF484123, AF484124, F484125)	in this study
Z002_R	GAGAGTATTGAGGC TCAAATAAACTC			
Z003_F	AACGAAATTGATCG GCTTCCT	VIGS construct for silencing all NaEASs genes (EAS12,34,and 37)	NaEAS (AF484123, AF484124, F484125)	in this study
Z004_R	TAACCTCAACAATA CGAGCAAGAT			
Z043_F	CGTGTAGATCAGCA TTTGGGC	real time PCR for all NaEAHs gene expression	NaEAH (XM_019397600.1; M_019403951.1; XR_002067901.1)	in this study
Z044_R	TGTGCTCGTTGATG ACATCCT			
Z047_F	CATAAGCTTGGAGC ATTAGGAGGTGAAG A	VIGS construct for silencing all NaEAH genes	NaEAH (XM_019397600.1, XR_002067901.1)	in this study
Z048_R	CATGGATCCTGGATC TCTTCCAATGCCC			
Z051_F	ATGCTTAAATGGTCC GGGCT	real time PCR for FPPS	FPPS (XM_019403732.1)	in this study
Z052_R	AGTCGAGGAGACAA ACCAGC			
Z055_F	CGCATGTGGCTCAA TGAAA	real time PCR for MVAPP decarboxylase	MVAPP decarboxylase (XM_019375278.1)	in this study
Z056_R	ACTGGCACGAGCTC GAATT			
Z059_F	ACAGGGGTTGCAAG GCTATC	real time PCR for HMG-CoA reductase	HMG-CoA reductase (XM_019375732.1)	in this study
Z060_R	TGCCAAACCTGACA CAAGGT			
Z063_F	ATGCATGCTTGGGT GGATCA	real time PCR for squalene synthase	squalene synthase (XM_019409657.1)	in this study
Z064_R	GCTGGACTAGCCAC			

	CAAACCT			
Z035_F	ACTTGAAGACTGGA ACTCCCC	real time PCR for NaERF2-like	NaERF2-like (XM_019399671.1)	in this study
Z036_R	TGGGTCTCAGTGGA ATAAAGAGA			
Z037_F	CATAAGCTTGAGCA TTCAGCTTCTGCTG T	VIGS construct for silencingNaERF2-like	NaERF2-like (XM_019399671.1)	in this study
Z038_R	CATGGATCCACACG GCCTCTGTCTTACT			
Z005_F	GGATACTCATCC AGAAAAGGTC	real time PCR for NaEAS12	NaEAS12 (XM_019378757.1)	in this study
Z006_R	TGCACAACCGCAGA AGCA			
JS142_F	CGAGTTATGGCTAAT GGCAGC	real time PCR for NaF6'H1	NaF6'H1 (KF771989)	Sun et al 2014b
JS143_R	AGCACTTCAGCCAA AGGACC			
Z177_F	ACACCCGAGGGGGA TGATAA	real time PCR for LUC	luciferase gene	in this study
Z178_R	TCTCACACACAGTT CGCCTC			
Z141_F	atagagCTCATGTTTGA AAACAGTGAATTTA TCAC	Nucleus localization of NaERF2	NaERF2-like (XM_019399671.1)	in this study
Z142_R	CATctcgagGCTGTATA GTTGGGCAACCTTC	Nucleus localization of NaERF2		
SN273_F	TCAACTTCAAGGCA CCAGCA	real time PCR for NaERF ABR1-like	NaERF ABR1-like (XM_019374371)	in this study
SN274_R	GGGTGGATAATGGC TGGAACCT			
SN275_F	CATAAGCTTTGCTGC CAACTTCTTCGG	VIGS construct for silencing for NaERF ABR1-like	NaERF ABR1-like (XM_019374371)	in this study
SN276_R	CATGGATCCGTCAC CATTGCCGACATA			
SN277_F	CCGGAGCCGGAGAT TTTCTT	real time PCR for NaZAT12-like	NaZAT12-like (XM_019368773.1)	in this study
SN278_R	ATTTCACCACGGTA ACGCCT			
SN279_F	CATAAGCTTAACCCC TGATGTAGATGTTGA CT	VIGS construct for silencingfor NaZAT12-like	NaZAT12-like (XM_019368773.1)	in this study
SN280_R	CATGGATCCAAAAA			



R	GCATCGCAAAACCG GA			
SN281_ F	TATGAGGGGGAGCA CAACCA	real time PCR for NaWRKY40	NaWRKY40 (XM_019402562.1)	this study
SN282_ R	GGTTCGTGGTCAAG GAATGC			
SN283_ F	CATAAGCTTGCTGC AAAAGCACAACCTCG	VIGS construct for silencing for NaWRKY40	NaWRKY40 (XM_019402562.1)	this study
SN284_ R	CATGGATCCTCCCTT GGCCTCTTAGGTGA			
Z015_F	GAGATCAGCAAAAC GTGTCCA	real time PCR for NaWRKY43	NaWRKY43 (XM_019375046.1)	this study
Z016_R	TGATGAAACCACTC CCACAGC			
SN285_ F	CATAAGCTTGCAAG TACAACGCCTTTCC AA	VIGS construct for silencing for NaWRKY43	NaWRKY43 (XM_019375046.1)	this study
SN286_ R	CATGGATCCAGGAT GAGTGTGCATGCCT TC			
Z011_F	TGAGGGAAGTCTG TCATGG	real time PCR for NaWRKY61	NaWRKY61 (XM_019371308.1)	this study
Z012_R	GAGTTGAGTTCTGG TGGCGA			
SN287_ F	CATAAGCTTGGAAC ACACAACCACCCTC T	VIGS construct for silencing for NaWRKY61	NaWRKY61 (XM_019371308.1)	this study
SN288_ R	CATGGATCCTCCGTT GAGATTGGCTGAGG			

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