

Table S1. A list of 12 *Fusarium verticillioides* isolates derived from Vietnamese central highlands' maize fields between 2017 and 2019.

Isolate	Host	Location	Accession number		
			<i>TEF-1α</i>	<i>RBP1</i>	<i>RBP2</i>
F01-12	Maize kernel	Dak Lak	MZ559332	MZ615354	MZ559290
F02-11	Maize kernel	Dak Lak	MZ559333	MZ615355	MZ559291
F11-12	Maize kernel	Dak Lak	MZ359353	NA	MZ559311
F12-2	Maize kernel	Dak Lak	MZ559355	MZ615375	MZ559313
F17-1	Maize kernel	Dak Lak	MZ559361	MZ615381	MZ559319
F22-11	Maize kernel	Dak Lak	MZ559367	MZ615387	MZ559325
F04-11	Maize kernel	Dak Nong	MZ559341	MZ615362	MZ559299
F06-12	Maize kernel	Dak Nong	MZ559345	MZ615366	MZ559303
F14-1	Maize kernel	Dak Nong	MZ559357	MZ615377	MZ559315
F14-22	Maize kernel	Dak Nong	MZ559359	MZ615379	MZ559317
F26-2	Maize kernel	Dak Nong	MZ559370	MZ615390	MZ559328
F26-31	Maize kernel	Dak Nong	MZ559371	MZ615391	MZ559329

Translation elongation factor 1 alpha gene (*TEF-1 α*), *RBP1* (RNA polymerase largest subunit), *RBP2* (RNA polymerase second largest subunit). NA: not applicable.

Table S2. Primers used for DNA sequencing. Adapted from O'Donnell et al. 2010 [37].

Locus	Primers	Sequence (5'-3')
<i>EF1-α</i> (Translation elongation factor 1 α)	EF1	ATGGGTAAGGARGACAAGAC
	EF2	GGARGTACCAGTSATCATG
<i>RBP1</i> (RNA polymerase largest subunit)	F7	CRACACAGAAGAGTTTGAAGG
	R9	TCARGCCCATGCGAGAGTTGTC
<i>RBP2</i> (RNA polymerase second largest subunit)	5f2	GGGGWGAYCAGAAGAAGGC
	7cr	CCCATRGCTTGYTTRCCCAT

Table S3. Primers of target genes and reference genes used in this study.

Gene	Forward primer	Reverse primer	Reference
<i>PAL</i>	AAGAAGGTGAACGAGCTGGA	GTTGTCGTTACGGAGTTGA	Tzin et al. 2017 [38]
<i>LOX3</i>	CGTGTAACGGGAAGAGAGC	CCAATGATTGCAACAAGCAC	
<i>LOX10</i>	GACATCCTCTCGTCGCACTC	ATGAACCCCTCGATCTCCTT	Ding et al. 2015 [32]
<i>BX6</i>	GAGTGCATGCAGAACCTGAA	GCAGGAGGATGGTGAAGAAG	
<i>PR10</i>	GTCATGCCGTTTCAGCTTCAT	TGTTCTTGCACTCGACTTG	
<i>AOS</i>	ACCTGTTACGGGCACCTAC	CGAGGAGCGAGGAGAAGTTG	
<i>BX8</i>	GATACCTGCCGGTGAGAGAG	GGGAACGTGTGGAAGATGAG	
<i>BX9</i>	GCAACATGAGGTACGTGTGC	GCAGCGATCTGAATTCCTT	
<i>PR2</i>	GCGCAGACCTACAACCAGA	GGAGAAATTGATGGGGTACG	Lanubile et al. 2010 [39]
<i>PR3</i>	GGCTCTACGCCTACGTCAAC	GATGGAGAGGAGCACCTTGA	
<i>ABI</i>	GCGAGATCCTCGACTCCAAG	GGGCTTGTTAACGGTGATG	Ding et al. 2015 [32]
<i>EF-1α</i>	TGGGCCTACTGGTCTTACTACTGA	ACATACCCACGCTTCAGATCCT	
<i>β-TUB</i>	CTACCTCACGGCATCTGCTATGT	GTCACACACACTCGACTTCACG	Lin et al. 2014 [40]

Phenylalanine ammonia-lyase (putative) (*PAL*); Pathogenesis-related protein 10 (*PR10*); Lipoxigenase 3 (*LOX3*); Lipoxigenase 10 (*LOX10*); 2-oxoglutarate-dependent oxygenase (*BX6*); UDP-glucosyltransferase (*BX8/BX9*); Allene oxide synthase (*AOS*); 1,3- β -glucanase (*PR2*); Chitinase (*PR3*); Homology to glycin-rich protein (*ABI*); Elongation factor 1 alpha (*EF-1 α*); Beta tubulin (*β -TUB*).

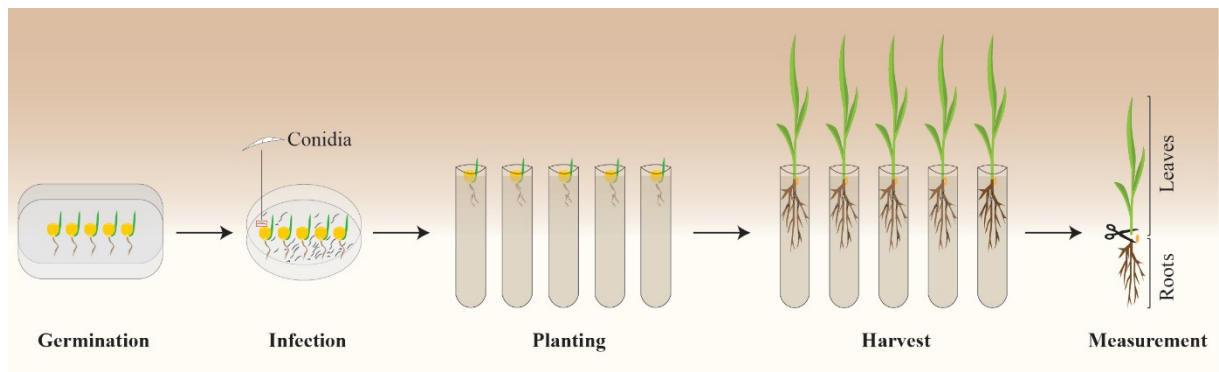


Figure S1. Working flow of the *in planta* assay