

Supplementary Materials

Peroxisome Proliferator FpPEX11 Is Involved in the Development and Pathogenicity in *Fusarium pseudograminearum*

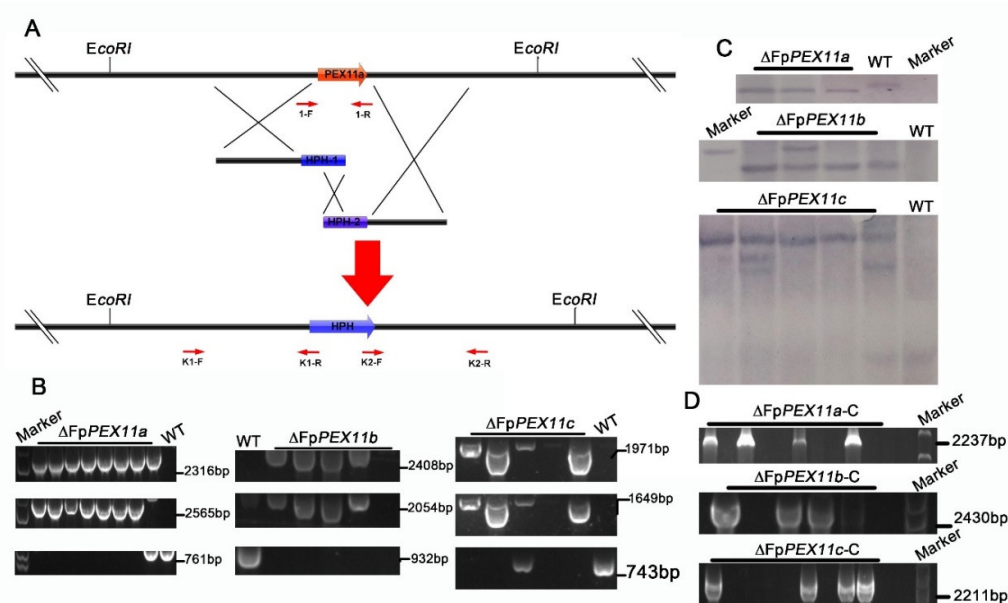


Figure S1. Construction of $\Delta FpPEX11$ and complementary strains in *F. pseudograminearum*. (A) Gene deletion strategies; (B) PCR confirmation; (C) Southern Blot; (D) Complemented strains of PCR confirmation.

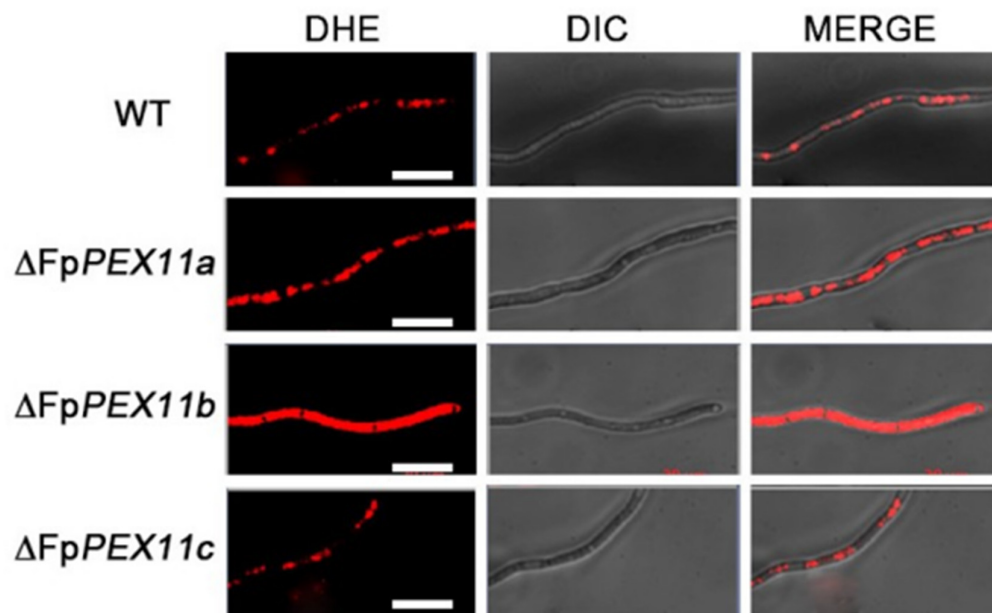


Figure S2. $\Delta FpPEX11$ promotes ROS accumulation. Fungal hyphae were stained with dihydroethidium (DHE) to visualize ROS in cells. Scale bar = 20 μ m.

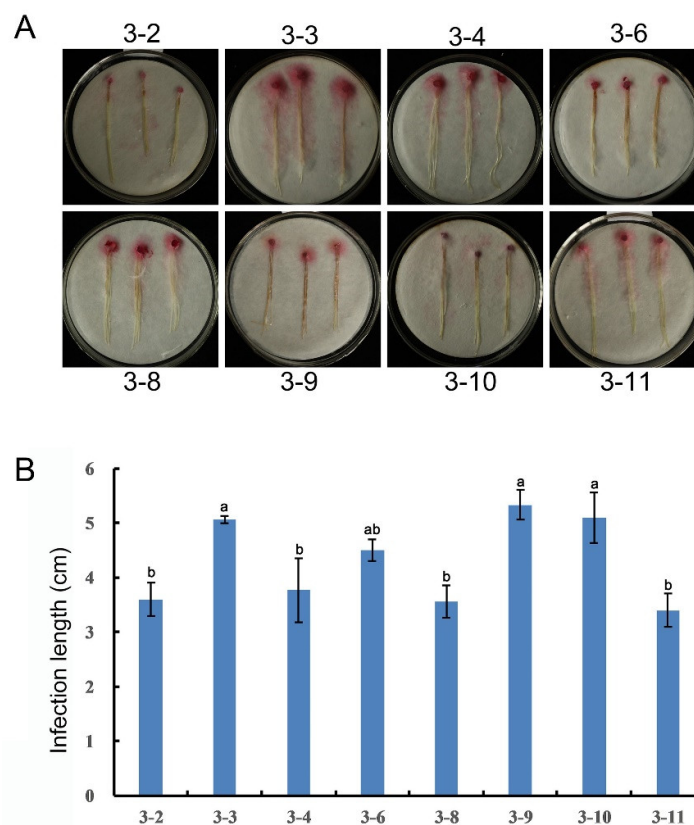


Figure S3. Pathogenicity of candidate strains in *F. pseudograminearum*. (A) Infestation of corn whiskers 5 d after inoculation; (B) Determination of the length of infestation of corn whiskers.

Table S1. Primers used in this study.

引物 Primer	引物序列 Sequence(5'-3')	片段描述 Relevant characteristics
a-AF	GAATGTCTTTGCCTCGTATC	5'-flanking of <i>FpPEX11a</i> gene(1033bp)
a-AR	TTGACCTCCACTAGCTCCAGCCAAGATGGCGATGAAA-TAGAGC	
a-BF	GAAATGAGTAGATGCCGACGCCTGATACCACATATTTTACCTGT	3'-flanking of <i>FpPEX11a</i> gene (1123bp)
a-BR	GAATTGACTCGACGCTGCAGACTC	
2-AF	gaattcggatcttcagagaCGTTATGGATAAGAGCACCGATATT	5'-flanking of <i>FpPEX11b</i> gene (1007bp)
2-AR	attcaactgccgttcgacgaGTATTGACCGATTCTTGGGTCCGAA	
2-BF	gaattcggatcttcagagaGATGTAGGAGGGCGTGGATATGTCCT	3'-flanking of <i>FpPEX11b</i> gene (1047bp)
2-BR	attcaactgccgttcgacgaCCGATATCGTCTTCATGTGCAG	
3-AF	gaattcggatcttcagagaGACAGGATCACTACTTAATTACCCGA	5'-flanking of <i>FpPEX11c</i> gene(1010bp)
3-AR	attcaactgccgttcgacgaGTATTGACCGATTCTTGGGTCCGAA	
3-BF	gaattcggatcttcagagaGATGTAGGAGGGCGTGGATATGTCCT	3'-flanking of <i>FpPEX11c</i> gene (1089bp)
3-BR	attcaactgccgttcgacgaCAGTGACAAGGACAATGCAGGTA	
aK1F	CGAGGAGCATACATATCGTGAATC	Identification of <i>FpPEX11a</i> deletion transformant 2316(bp)
K1R	ATGTTGGCGACCTCGTATTGG	
K2F	ATTAGCAGACAGGAACGAGGAC	Identification of <i>FpPEX11a</i> deletion transformant 2565(bp)
aK2R	GACGTGGTTTACTCCGAGAC	
bk1F	TCTTCTGTATCTCTGGCCACGT	Identification of <i>FpPEX11b</i> deletion transformant 2156(bp)
K1R	ATGTTGGCGACCTCGTATTGG	
K2F	ATTAGCAGACAGGAACGAGGAC	Identification of <i>FpPEX11b</i> deletion transformant 2408(bp)
bk2R	TGCTTCAACTCGCTTGGACCAG	
ck1F	TGATGAATGGTTGCCAAGTGTTTG	Identification of <i>FpPEX11c</i> deletion transformant 2054(bp)
K1R	ATGTTGGCGACCTCGTATTGG	
K2F	ATTAGCAGACAGGAACGAGGAC	Identification of <i>FpPEX11c</i> deletion transformant 2343(bp)
ck2R	CAATCGCTCTGTTCTTTGGACTG	
1-F	ATGGTCGCCGACGCAGTCAT	<i>FpPEX11a</i> fragment (761 bp)
1-R	CTAGGCGGTCTTCTTCCAC	
2-F	ATGGCTGGTACATTTCGAGC	<i>FpPEX11b</i> fragment (932 bp)
2-R	CTACTGCTTCTTCATCTGAAGATCC	
3-F	CGATGTCCTCATACGCTTCCTC	<i>FpPEX11c</i> fragment (613 bp)
3-R	CGCAAACGACACCTTCATCCC	
HYG-F	GGCTTGGCTGGAGCTAGTGGAGGTCAA	The front of <i>hph</i> fragment (764 bp) H1
HY-R	GTATTGACCGATTCTTGGGTCCGAA	
YG-F	GATGTAGGAGGGCGTGGATATGTCCT	The later of <i>hph</i> fragment (930 bp) H2
HYG-R	AACCCGCGGTCGGCATCTACTCTATTC	
TZ-F	TCCCTATGATTGTTGTTGAACCC	<i>FpPEX11a</i> probe in Southern blot analysis (353 bp)
TZ-R	GAGACGGAGACTTGACCGAGAT	
2TZ-F	AGTCGTCTCAGCCACTTCTACCG	<i>FpPEX11b</i> probe in Southern blot analysis (373 bp)
2TZ-R	CTTGCCTTGAGATTTGGCGTTGTG	
3TZ-F	TGTGCTTGTATCAGAGGTGCCAT	<i>FpPEX11c</i> probe in Southern blot analysis(310 bp)
3TZ-R	CCGTTAGAGGTTTGTGTTGAGCC	
TUB-F	CTTACGGCGACCTGAACTACCTTG	qRT-PCR analysis

<i>TUB</i> -R	AGCGAATCCGACCATGAAGAAGTG
<i>Tri5</i> -F	GAGTGTTTCATGCATGGCTACGTC
<i>Tri5</i> -R	CTGAGCCTCCTTCACATCGTCC
<i>Tri6</i> -F	CTGAGGGCATTCTGAGTAGCGACA
<i>Tri6</i> -R	CGTTATGTTTATCGGCACTTTG
<i>Tri10</i> -F	GCGACAGGAGCAAGAACATAA
<i>Tri10</i> -R	GGCGGCGTAAATCTGAGTG
<i>PTH2</i> -F	AGAACCACTCAAAGGGACCAATGC
<i>PTH2</i> -R	TAGATAACGGCTGGCTGTCTCCTC
<i>DNM1</i> -F	GATGTCGTCCAGAACCGTCTTGTC
<i>DNM1</i> -R	CTCGCACTTCTCACGCTCCTTC
<i>PEX3</i> -F	GAGCAGTGATCGTATCGCCAAGG
<i>PEX3</i> -R	CGAGTGTGATCCGTTCCGTGTTC
<i>PEX19</i> -F	GCTCCTACGCATTACCAAGTCTCG
<i>PEX19</i> -R	CATCCATCAGCTCGCTCTCACTTC
<i>PEX11a</i> -F	GAGGGAGAGGGCGTCGTTGAG
<i>PEX11a</i> -R	ATATCGCAGACATCGCAGAGAAGC
<i>PEX11b</i> -F	CCTCTTGGATCTCTGCGGCATTG
<i>PEX11b</i> -R	ACAGCCCAGCAAACCAGAACAG
<i>PEX11c</i> -F	TTGCCGCACGGAGCTTAACG
<i>PEX11c</i> -R	GGGGACGAAACCGATGCTATTGAG
<i>FIS1</i> -F	CGGCGTCCAGACCAAGTTCAAC
<i>FIS1</i> -R	AGGGCGAGGTAGTAGAGGCATTC
<i>PIP2</i> -F	TGACAAGCGGTTGAAGCGTATGG
<i>PIP2</i> -R	AGTGACGGACGATGCGACCTC
