

1 ATGCGGTTCTCAGCTGCGTTCCTCGCAACCGTCCTCGGTGCCGTTAATATCAATGCGCAA
1 M R F S A A F L A T V L G A V N I N A Q
61 TGCATCGACGGCCATCGAGAGGTTATCAGCCCCGGCTACACCGTTGAGTACAAGTGCAAC
21 C I D G H R E V I S P G Y T V E Y K C N
121 TTCGTCCGACTGGGCGAGACTACAATGGCGTTTCTCTGAAAAGGCCTGCGCTGAGATG
41 F V R L G E T H N G V L S E K A C A E M
181 TGTCGCGATGCTGGTAGCTCTGTCTGTACTTATCATCCGCCACCAAACGCTGTGTCTGTC
61 C R D A G S S V C T Y H P P T K R C V V
241 GGCAAGGATGGTGGCAAGGAAATGGCCAGTAACGGCGCTATATACATGATGAAAGTCGAC
81 G K D G G K E M A S N G A I Y M M K V D
301 GAGCCTGAGATTGAGGACCCTTTTGTCTGAAGATGAAGACCCTTTTTCTGTTGATTGCGAA
101 E P E I E D P F A E D E D P F S V D C E
361 GCTGAGAAGCAGGCTTGTGAGAGTGGTCAAAAAGCCTTGTCTGGAGCGGGAGAAGAAGCTC
121 A E K Q A C E S G Q K A C L E R E K K L
421 AAGGCCTCTCATGCTGGTTTAGAGGCCAAGAACAATAGTCTTGAAGCACGCATCAAGAAT
141 K A S H A G L E A K N N S L E A R I K N
481 ATCATGCAATCAAATTGCCCTAGTCAGCATGGTAAGTTTGGGGTTGTTAACAACCGAGAG
161 I M Q S N C P S Q H G K F G V V N N R E
541 TACCGCTTCTGGTGCGGCCGACACCACAGCCCCGAAGGATTCAAAGAAGAGCTTCCCGAG
181 Y R F W C G R H H S P E G F K E E L P E
601 ATTTACACCATGGCAGACTGCGTCGATCAGTGTAGTCGCAAGGCCTGGTGAATCATGTC
201 I Y T M A D C V D Q C S R K A W C N H V
661 TTACACGGCATTACAAAAACAAGTGCCGTTTGTTCGAGAGTCCCAAGGTTTCCGCAGCC
221 L H G I H K N K C R L F E S P K V S A A
721 ACAATGCCAGGTCTTGCCACTGGTGACTGGAAGTGTGGTGCAAGAAGTAG
241 T M P G L A T G D W N C G V K K *

Figure S1. Nucleotide sequence and deduced amino acid sequence of FSE1. Shading indicates the amino acid sequences of the signal peptide and cysteine residues.

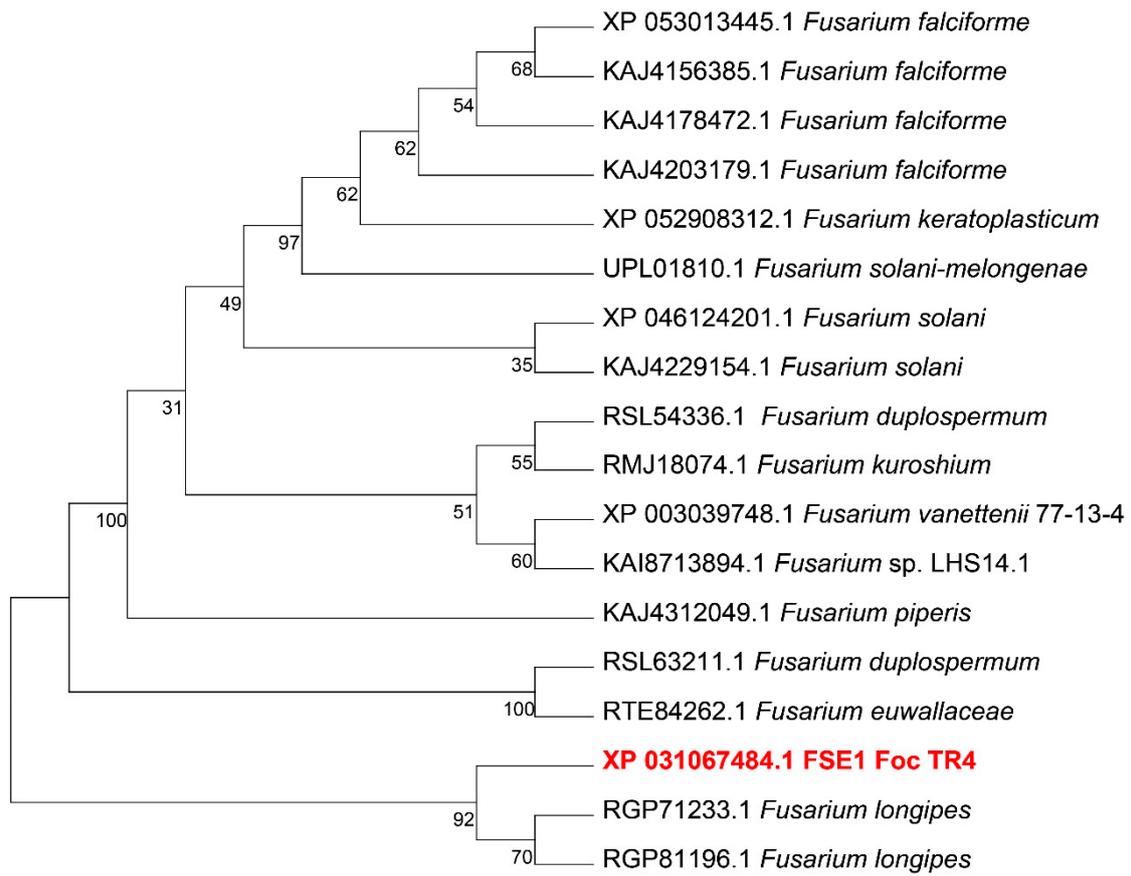


Figure S2. Phylogenetic tree of FSE1 with homologs proteins from several *Fusarium* species.

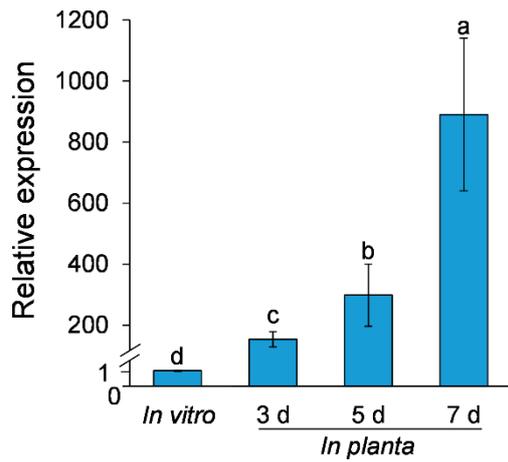


Figure S3. Quantitative real-time PCR analysis of the transcription of *FSE1* after inoculation to banana plantlets for 3, 5, and 7 d. The relative expression level is assessed based on $2^{-\Delta\Delta C_t}$ method through normalization against the transcription level of the *In vitro* sample. *Actin* has been used as the internal control. Bars represent standard deviations (SD). Columns with different letters indicate significant difference ($P < 0.05$).

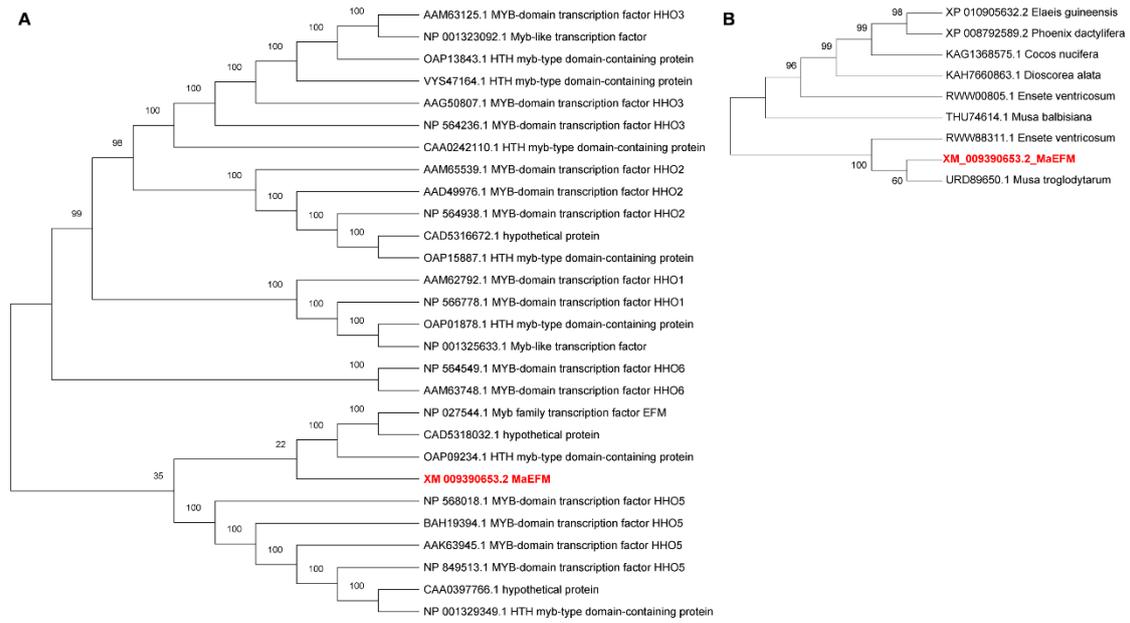


Figure S4. Phylogenetic trees of MaEFM-like with homologs proteins from *Arabidopsis thaliana* and *Musa* species.

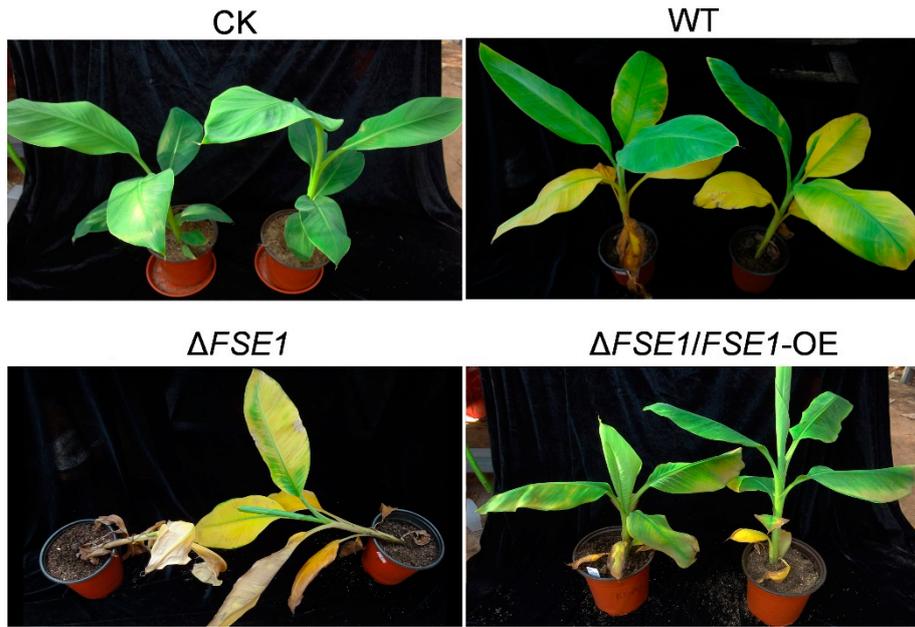


Figure S5. Disease symptoms of banana plantlets after inoculation for 5 weeks.