

Table S1. Primers used in this study

Primer name	Sequence (5'-3')	Remark
MoMaf1 F1:	TAAGTCGACCGAACACTCAGTGCAGCTCATG	amplify <i>MoMAF1</i> 5' flank sequence
MoMaf1 F2:	TAAGATATC CTGCACTGCAGGCGAGCCTG	amplify <i>MoMAF1</i> 5' flank sequence
MoMaf1 F3:	TAAACTAGT CATCCTTAGTGTGCGCTTCTGC	amplify <i>MoMAF1</i> 3' flank sequence
MoMaf1 F4:	TAAGAGCTC GGAGAACTTGTGAAGCGCAC	amplify <i>MoMAF1</i> 3' flank sequence
MoMaf1 BY:	CGAATCGATGAAGATGTAC	amplify <i>MoMAF1</i> probe sequence
MoMaf1 ConF:	CCACAGGGCAGGACAAGAACGTTG	amplify <i>MoMAF1</i> probe sequence
MoMaf1 ConR:	CTGGTAGCTGAATACGTTGCAG	validation of <i>MoMAF1</i> deletion (HPH)
HPH R	GCTGATCTGACCAGTTGCCTA	validation of <i>MoMAF1</i> deletion (HPH)
Maf1 Rp27GFP:	TTTCGTAGGAACCCAATCTCAAAATGGTGAGC AAGGGCGAGGA	<i>MoMAF1</i> complementation
Maf1 GFPR:	CTTGTACAGCTCGTCCATGC	<i>MoMAF1</i> complementation
qRTCHS1F	TCAACGACGAGGAGAACGCC	qRT-PCR Primer
qRTCHS1R	GTAATCGCAACAGCCAAGA	qRT-PCR Primer
qRTCHS2F	TCCACGACCTTGCCATCA	qRT-PCR Primer
qRTCHS2R	CGCTTTGCTCCGCGACT	qRT-PCR Primer
qRTCHS3F	CGGAAACCAAGGAACAGCG	qRT-PCR Primer
qRTCHS3R	CAGGGAAACAACCAAGAACACCAC	qRT-PCR Primer
qRTCHS4F	TCGAGGGAAAATGTAACGG	qRT-PCR Primer
qRTCHS4R	TACTGCTGCTGGTGATGGT	qRT-PCR Primer
qRTCHS5F	CCGTGTTGATGGAGGTTGA	qRT-PCR Primer
qRTCHS5R	GATCTGGCGGTGAGGAAT	qRT-PCR Primer
qRTCHS6F	GAACGGCAGATTGATGAC	qRT-PCR Primer
qRTCHS6R	ACAAGAGTGCTCGGTGGC	qRT-PCR Primer
qRTCHS7F	GACATTGAGCTGGAGATTGG	qRT-PCR Primer
qRTCHS7R	CGCCGCTGTTGCTGTTGTT	qRT-PCR Primer
COS1-QRT-F1:	CCCTCAGCCCACATACAAC	qRT-PCR Primer
COS1-QRT-F2:	AGCCTTCGCTCGATACTGAA	qRT-PCR Primer
COM1-QRT-F1:	ACCGATTCTGACGAATCCAG	qRT-PCR Primer
COM1-QRT-F2:	CTGGAACTGCTGTCCTCCTC	qRT-PCR Primer
CON7-QRT-F1:	GCAAGAAGTGCAGTTCAAACA	qRT-PCR Primer
CON7-QRT-F2:	TCTCCACTGCTGCCACTATG	qRT-PCR Primer
CON2-QRT-F1:	GGAGCCGAAAACATCAACAT	qRT-PCR Primer
CON2-QRT-F2:	GTTGGTTGGTCCATGCTCTT	qRT-PCR Primer
Hox2-QRT-F1:	CGATAATTGCTCCCACACCT	qRT-PCR Primer
Hox2-QRT-F2:	GAAGGAGTCGGTGGTGACAT	qRT-PCR Primer
StuA-QRT-F1:	CAACATGGGCAGCTCTGATA	qRT-PCR Primer
StuA-QRT-F2:	CCTGCATGCTTGTAGCGTA	qRT-PCR Primer

MoMaf1 GeneF1:	GCATGGACGAGCTGTACAAGATGAAGGTGC GCATACTTCCCCAG	<i>MoMAF1</i> complementation
MoMaf1 GeneR1:	CACCACCCGGTGAACAGCTCCTGCCCTG CTCACTCACTCAATCTCCATCTGCGCC	<i>MoMAF1</i> complementation

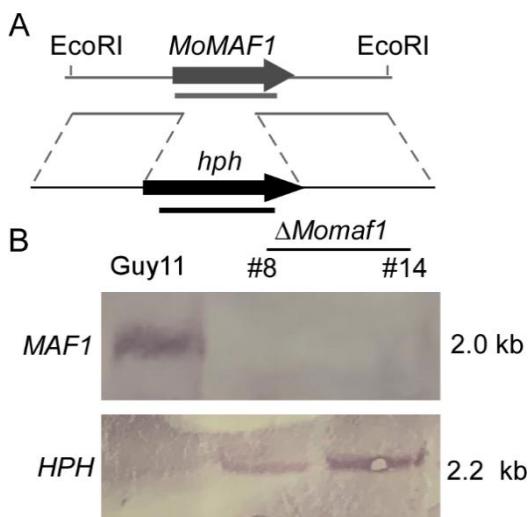


Figure S1. Gene knockout strategy and southern blot analyses in *M. oryzae*. (A) *MoMAF1* gene knock out strategy in *M. oryzae* genome. (B) Southern blot analysis of the *MoMAF1* deletion mutants. The genomic DNA of Guy11 and Δ *Momaf1* mutants were digested with EcoRI and hybridized with *MoMAF1* and *HPH* probe respectively.

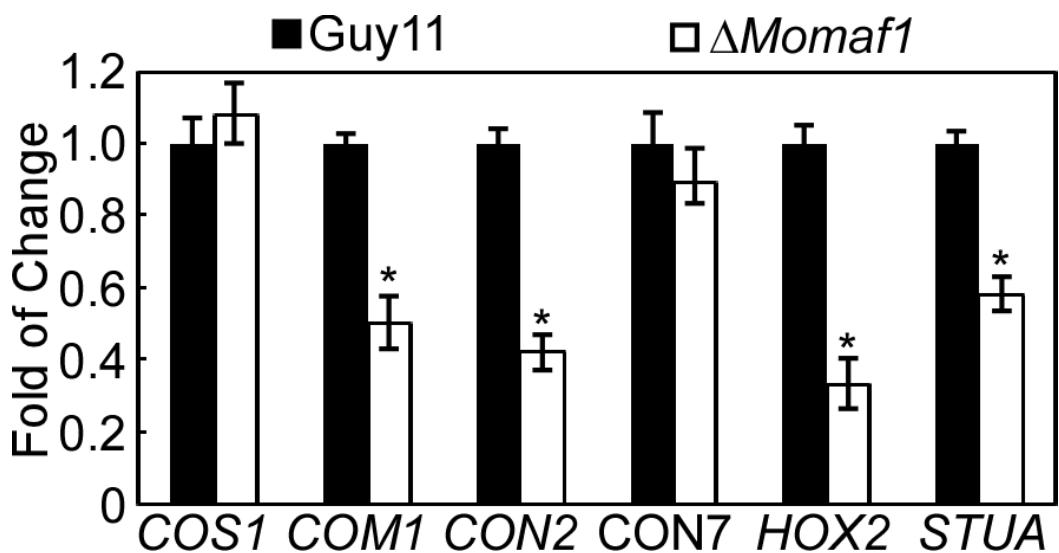


Figure S2. Transcriptional analysis of six conidiation related genes. The expression level of six conidiation related genes in Guy11 and Δ *Momaf1* mutant. Error bars represent \pm SD and asterisks represent significant differences ($p < 0.01$).

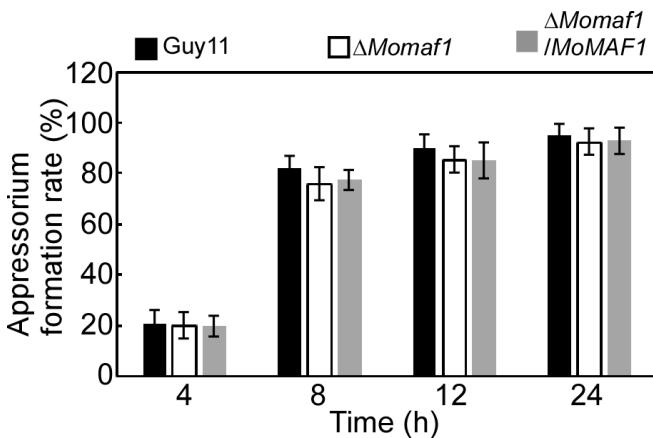


Figure S3. Statistical analysis of the appressorium formation observed at 4, 8, 12 and 24 h time point. Error bars represent the standard deviations. Asterisks represent significant differences ($p<0.01$).

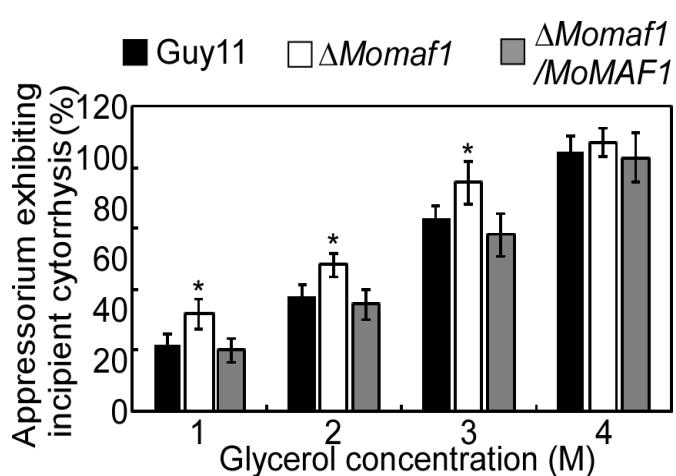


Figure S4. MoMaf1 is involved in appressorium turgor generation. Statistical analysis of the collapsed appressoria on hydrophobic surfaces after 24 h incubation. Error bars represent $\pm SD$ and asterisks represent significant differences ($p < 0.01$).

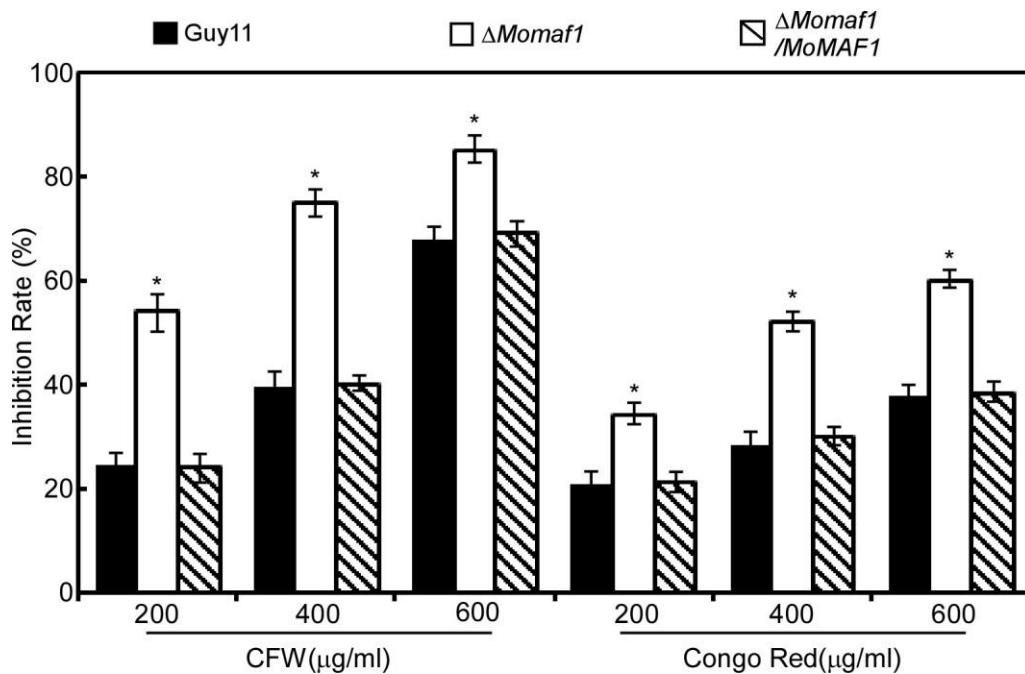


Figure S5. MoMaf1 is involved in cell wall stress response. Guy11, $\Delta Momafl$ mutant, and $\Delta Momafl/MoMAF1$ were incubated on CM plates containing different concentrations of Congo Red (CR) and CFW at 28°C for 7 days. The inhibition rate was determined by plotting the percentage of colonies in the presence of various concentrations of CR and CFW against regular CM. Error bars represent $\pm\text{SD}$ and asterisks represent significant differences ($p < 0.01$).