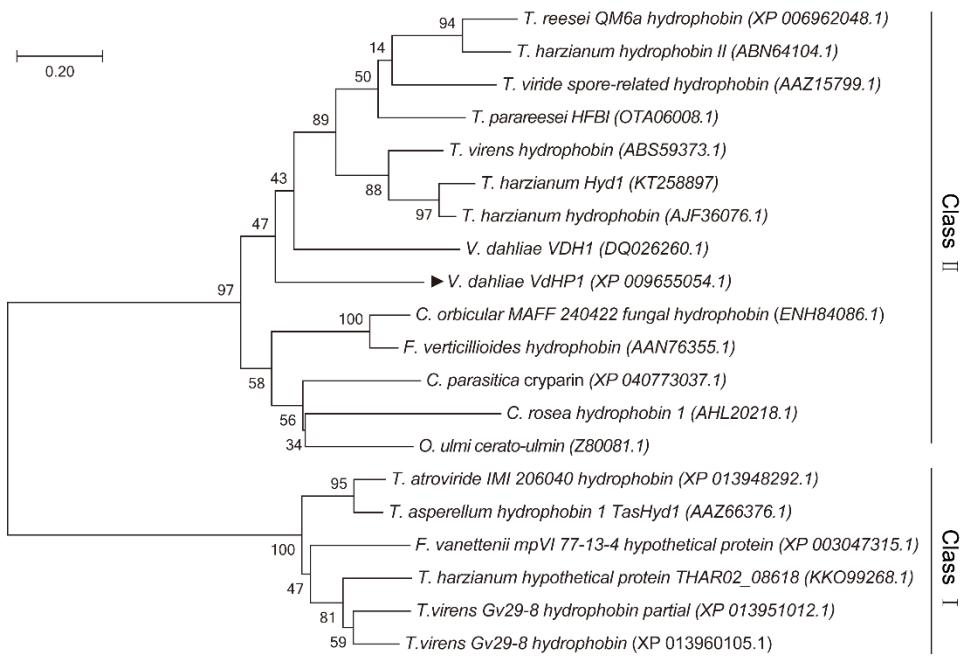
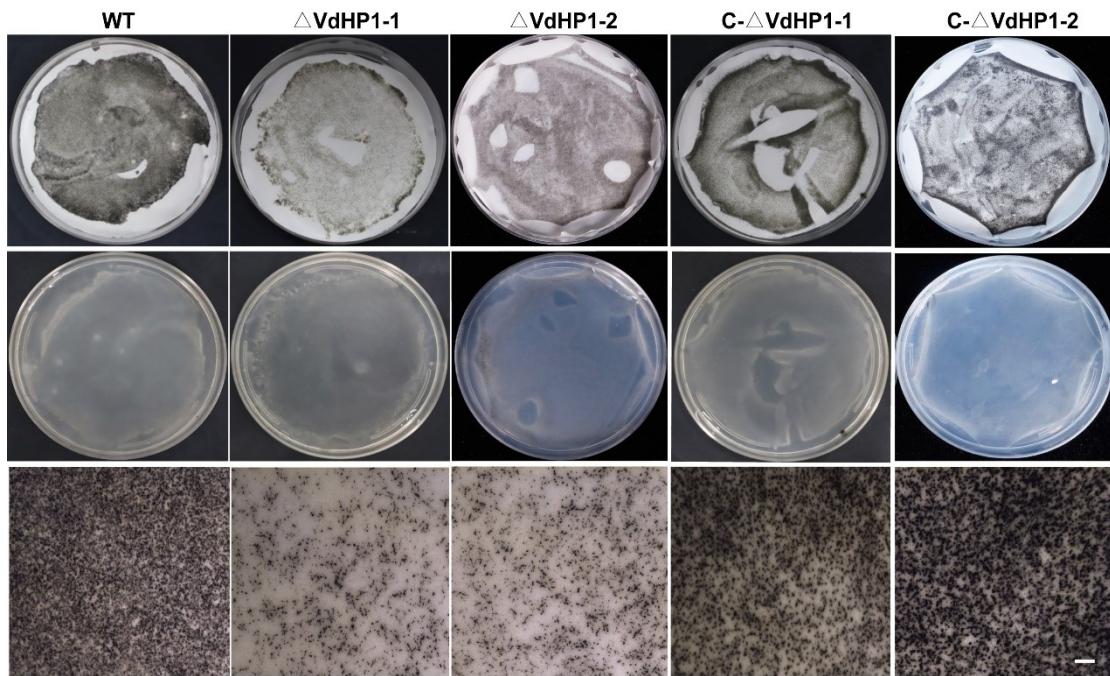


**FIG S1:** Bioinformatics analysis of VdHP1. (A) The conserved domain of VdHP1. (B) Transmembrane domain analysis of VdHP1. (C) The signal peptide sites of VdHP1 protein.



**FIG S2:** Phylogenetic analysis. MEGA 7 software used to construct phylogenetic neighbor-joining tree of the VdHP1 protein sequences and some hydrophobins sequences. The VdHP1 protein was marked with a black triangle and the hydrophobins sequences are from the GenBank database.



**FIG S3:** Deletion of VdHP1 inhibited microsclerotial formation. The conidia were spread over the cellulose membrane ( $\varphi = 0.45 \mu\text{m}$ ) after 6 dpi of growth. The image of the microsclerotia was taken under a stereomicroscope. Bar = 5 mm

**Supplementary Table 1: Primers used in this study.**

Primer name	Sequence (5'-3')	Enzyme loci	In this study
VdHP1-F	ATGCAGTTCACCATCGTCG		PCR,qPCR,sqRT -PCR
VdHP1-R	TTAACCAACGACGGGAGTGC		PCR,qPCR,sqRT -PCR
Hyg-F	GACGTTAACTGATATTGAAG		PCR,qPCR
Hyg-R	CGTCCGAGGGCAAAGGAATAG		PCR,qPCR
B303-VdHP1-UP-F	GGACCGGACGGGGCGGTACCG CGCTGACGACATGCCTT	KpnI	deletion of VdHP1
B303-VdHP1-UP-R	TTTGAAAGGTGGTTGGTTGGT TGGTGGTAGAGGTTG		deletion of VdHP1
B303-VdHP1-Hyg-F	CAAACCAAACACCTTCAAAG ACGTTAACTGATATTGAAG		deletion of VdHP1
B303-VdHP1-Hyg-R	ACACGATTGAGTCAGAACTTC GTCCGAGGGCAAAGGAATAG		deletion of VdHP1
B303-VdHP1-DOWN-F	CTATTCCCTTGCCCTCGGACAA G TTCTGACTCAATCGTGTGAT		deletion of VdHP1
B303-VdHP1-DOWN-R	TTAATTAAGACCCGGGACTAAA GCACATCTCTCCAGCAGC	PacI	deletion of VdHP1
1302 - VdHP1-UP-F	GACAGCCCGCAAACCTCTAGA GCGCTGACGACATGCCTT	XbaI	complementation of VdHP1
1302 - VdHP1-UP-R	GCGACGATGGTGAAC TGCA TGAAGGTGGTTGGTTGG		complementation of VdHP1
1302-VdHP1-F	CCAAACCAAACACCTTCAA A TGCAGTTCACCATCGTCGC		complementation of VdHP1
1302-VdHP1-R	ACACGATTGAGTCAGAACTTT A ACCAACGACGGGAGTGC		complementation of VdHP1
1302-VdHP1-DOWN -F	AAGTTCTGACTCAATCGTGT GAT TTGTATGCCGCAATTCT		complementation of VdHP1
1302-VdHP1-DOWN -R	ATTATTATGGAGAAACTCGAG AAGCACATCTCCAGCAGC	XhoI	complementation of VdHP1

Vd $\beta$ t-F	AACAAACAGTCCGATGGATAATT C		qRT-PCR
Vd $\beta$ t-R	GTACCGGGCTCGAGATCG		qRT-PCR
Act-F	CCTATGTTGCCCTGGACTATGA GC		qRT-PCR
Act-R	GGACAAACGGAATCTCTCAGCTC C		qRT-PCR
Hyg probe-F	atttgtgtacccccgacagt		for Southern blotting
Hyg probe-R	gtgcattgacattggggatt		for Southern blotting
pSUC2- VdHP1-F	CGGAATTCATGCAGTTCACCAT CGTCGC	EcoR1	Yeast signal sequence trap system
pSUC2- VdHP1-R	CCGCTCGAGGGGCAGACGGTG GCA	Xho1	Yeast signal sequence trap system
<i>NbActin</i> -F	TGGTCGTACCACCGGTATTGTG TT		sqRT
<i>NbActin</i> -R	TCACTTGCCCATCAGGAAGCTC AT		sqRT