

Supplementary materials for the article:

Yg H.-T. et al. Latent Pathogenic Fungi in the Medicinal Plant *Houttuynia cordata* Thunb. Are Modulated by Secondary Metabolites and Colonizing Microbiota Originating from Soil
Pol J Microbiol. 2021, Vol. 70, No 3, 359–372.

Table SI

The strains identified using a marker gene (ITS1-5.8S-ITS2).

Strain numbers	Species	Identify (%)	BLAST hit (accession)
NSF-1	<i>Ilyonectria liriodendri</i>	100	MK602788
NSF-2	Fungal sp.	100	KU837570
NSF-3	<i>Penicillium citrinum</i>	100	MK583600

Table SII

Genomic sequence of LPFs isolated from *H. cordata* rhizomes.

Number	Genome size	Genomic sequence
NSF-1	522bp	CTGCGGAGGGATCATTACCGAGTTTACAACCTCCCAAACCCCTGTG AACATAACCATTATCGTTGCCTCGGCGGTGCCCGCTTCGGCGGCC GCCAGAGGACCCAAACCCTTGATTTTTATAACAGTATCTTCTGAG TAAATGATTAAATCAATCAAACTTTCAACAACGGATCTCTTGGC TCTGGCATCGATGAAGAACGCAGCGAAATGCGATAAGTAATGTGA ATTGCAGAATTCAGTGAATCATCGAATCTTTGAACGCACATTGCG CCCGCCAGTATTCTGGCGGGCATGCCTGTTGAGCGTCATTTCAA CCCTCAAGCCCCCGGGCTTGGTGTGGAGATCGGCGAGCCCTCC GGGGCGCGCCGGCTCCCAAATATAGTGGCGGTCCCGCTGTAGCTT CCTCTGCGTAGTAGCACACCTCGCACTGGAAAACAGCGCGGCCA CGCCGTAAACCCCCCACTTCTGAAAGGTTGACCTCGGATCAGGT AGGAATACCCGCTGAACTTAAGCATATCA
NSF-2	535bp	TGCGGAAGGATCATTACAAGAAACGAGGCCGCGTGCCTGCGCTC GCCCCGCCGCCCCGCTCCTTACCTTGCTACTGCACCGTTTGT GCTTCTGGCGGCGGACTGCCCGCCAGGGACGTTGATACAA CCCTGTATAGAAGCATTGAAGCTCTGAGAAAACGCGAAATCGTAC AACTTTCAACAATGGATCTCTTGGTTCTGGCATCGATGAAGAACG CAGCGAAATGCGATAAGTAGTGTGAATTGCAGAATTCAGTGAATC ATCGAATCTTTGAACGCACATTGCGCCCCTTGGCATTCCATGGGG CATGCCTGTTGAGCGTCATCTAAACCCTCAAGCCCCCGGCTTGG TGTTGGGTGCCTGTCCCCGCTCCCCGCGCGGACTCACCCAAATG CATTGGCAGCCGCTCTCGGCTTCTTGCGCAGCACAGTGCGCAG CGAGGCGAGGTGAGGCGTGCCTCCAGCAAGCAACCACCAAGT TTGACCTCGGATCAGGTAGGGATACCCGCTGAACTTAAGCATATC
NSF-3	527bp	TGCGGAAGGATCATTACCGAGTGCGGGCCCTCGGGGCCCAACC TCCCACCCGTGTTGCCCGAACCTATGTTGCCTCGGCGGGCCCCGC GCCCCGCCGACGGCCCCCTGAACGCTGTCTGAAGTTGCAGTCTG AGACCTATAACGAAATTAGTTAAACTTTCAACAACGGATCTCTT GGTTCGGCATCGATGAAGAACGCAGCGAAATGCGATAACTAATG TGAATTGCAGAATTCAGTGAATCATCGAGTCTTTGAACGCACATT GCGCCCTCTGGTATTCCGGAGGGCATGCCTGTCCGAGCGTCATTG CTGCCCTCAAGCCCGGCTTGTGTGTTGGGCCCCGTCACCCCGCC GGGGGGACGGGCCCGAAAGGCAGCGGCGGCACCGGTCCGGTC CTCGAGCGTATGGGGCTTCGTCACCCGCTCTAGTAGGCCCGGCCG GCGCCAGCCGACCCCAACCTTTAATTATCTCAGGTTGACCTCGG ATCAGGTAGGGATACCCGCTGAACTTAAGCATATCA

Table SIII

The phenolics concentrations of the rhizomes of *H. cordata* infected with different LPFs.

Name	CK	IL	UFS	PC
Chlorogenic acid (mg/kg)	7.67 ± 2.15	19.12 ± 2.40	24.62 ± 5.14	20.60 ± 1.79
Rutin (mg/kg)	2.16 ± 0.35	2.18 ± 0.60	2.13 ± 0.63	3.94 ± 0.62
Afzelin (mg/kg)	85.64 ± 12.95	70.02 ± 18.79	115.77 ± 32.62	188.78 ± 42.57
Isoquercitrin (mg/kg)	4.69 ± 0.52	4.52 ± 0.81	4.41 ± 0.25	9.58 ± 1.58
Quercitrin (mg/kg)	2.65 ± 0.69	1.10 ± 0.38	4.89 ± 0.78	3.30 ± 0.28

IL – *I. liriiodendri*, UFS – Unidentified Fungal sp., PC – *P. citrinum*



Fig. S1. *H. cordata* rhizomes were seriously infected by LPFs when the healthy rhizomes, which were sterile at their surface, were cultured at 1/2 MS medium.

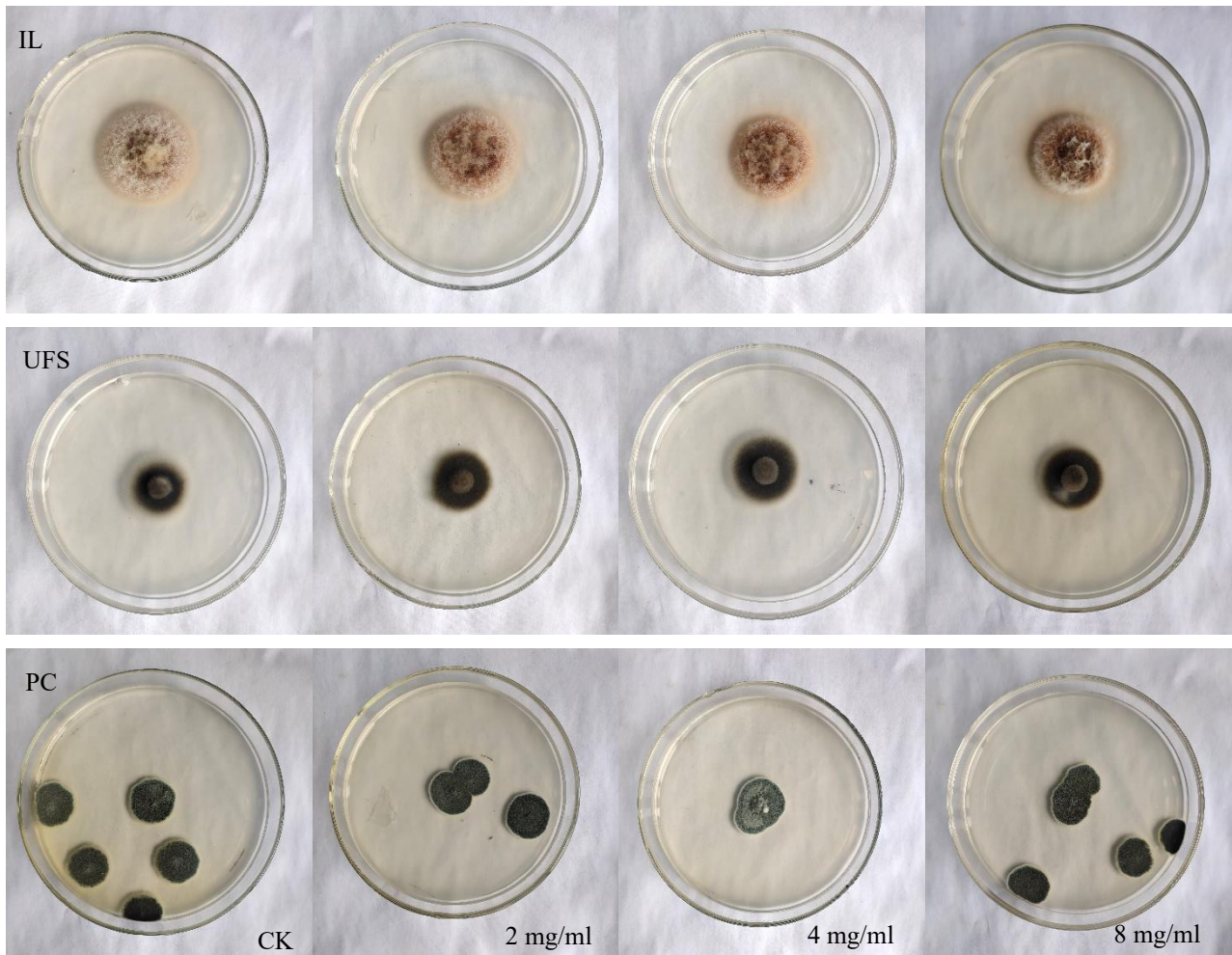


Fig. S2. Antifungal activities of *H. cordata* rhizomes extract on the LPFs. The final concentrations of the crude extract in 30 μ g/ml streptomycin sulfate sterilization PDA medium was 0 (CK), 2, 4 and 8 mg/ml, respectively. IL – *I. liriodendri*, UFS – Unidentified Fungal sp., PC – *P. citrinum*.

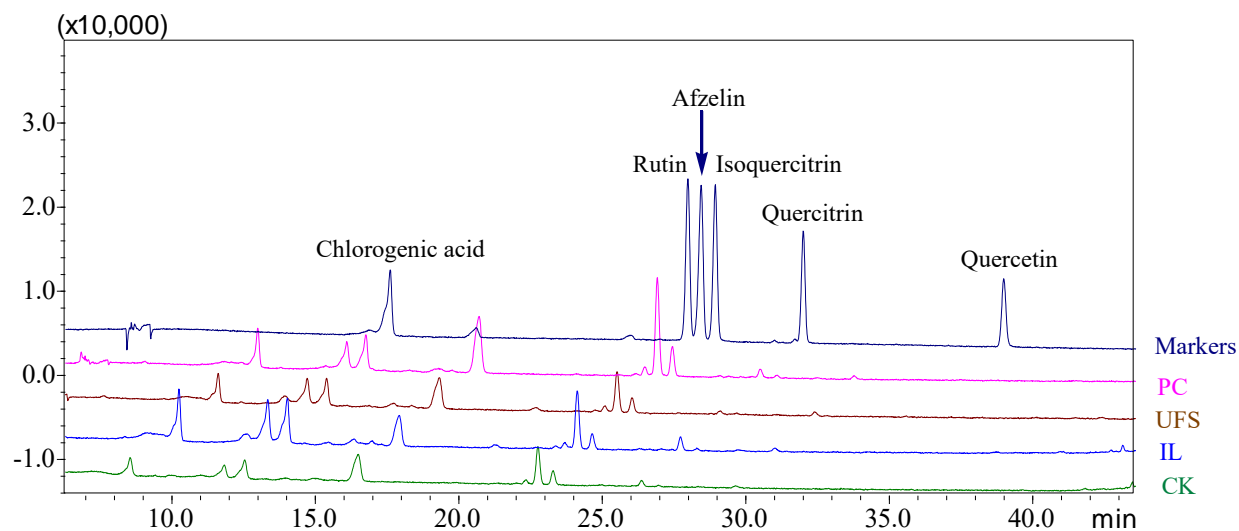


Fig. S3. HPLC-DAD chromatographic profiles of a mixed standard solution containing the markers (chlorogenic acid, rutin, afzelin, isoquercitrin, quercitrin, and quercetin), the treatments (IL, UFS, and PC) and CK at 345 nm. Quercetin was not found in the *H. cordata* rhizome samples. IL – *I. liriodendri*, UFS – Unidentified Fungal sp., PC – *P. citrinum*.