

Journal name:

World Journal of Microbiology and Biotechnology

Changes in soil fungal communities after onset of wheat yellow mosaic virus disease

Qi-sen Lu^{1,2}, Lin-na Cai^{1,2}, Chuan-fa Wu², Hao-qing Zhang², Liang Wei², Tian-ye Zhang², Hai-chao Hu², Shuang Liu², Jia-jia Lei², Ti-da Ge², Liang-ying Dai¹, Jian Yang^{2*}, and Jian-ping Chen^{1,2,*}

¹ College of Plant Protection, Hunan Agricultural University, Changsha410125, China;

² State Key Laboratory for Quality and Safety of Agro-products, Institute of Plant Virology, Ningbo University, Ningbo 315211, China

* Authors for correspondence: jpchen2001@126.com (J.C.); nather2008@163.com (J. Y.); Tel.: +86 571 86404003 (J.C.); Tel.: +86 57187605539 (D.L.).

SUPPLEMENTARY FILES

Fig.S1 Discriminations of major genus among BSD, BSH, RSD and RSH, this difference analysis was detected by welch's t-test in STEMP. a: Differences in major genera of fungi between RSD and RSH; b: Differences in major genera of fungi between BSH and BSD. BSD, the bulk soil of the diseased plant; BSH, the bulk soil of healthy plants; RSD, the rhizosphere soil of disease plants; RSH, the rhizosphere soil of healthy plants

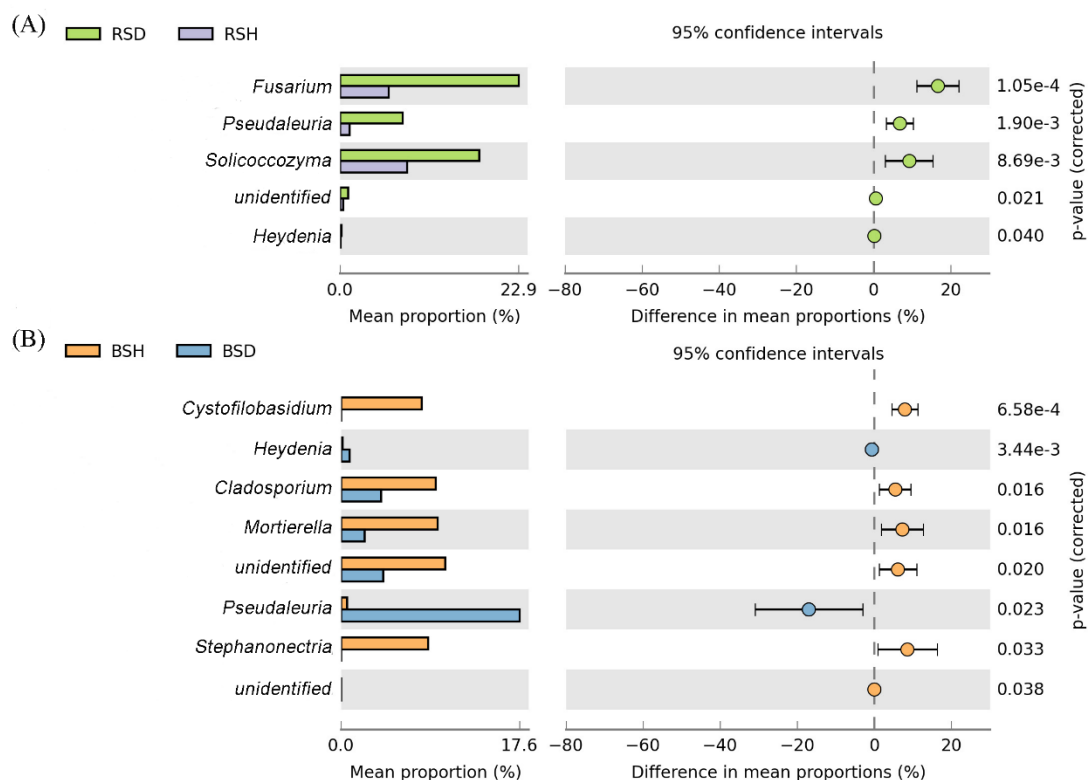


Table S1 The relative abundance of dominant funge class among different treatment. BSH, the bulk soil of healthy plants. RSH, the rhizosphere soil of healthy plants. BSD, the bulk soil of the diseased plants. RSD, the rhizosphere soil of the diseased plants. Values are means $\pm$ SEs (Tukey test, $p < 0.05$, $n = 5$). Different letters show significant difference among treatments (a, b, c).

Class	BSH	RSH	BSD	RSD
<i>Mortierellomycetes</i>	11.285 $\pm$ 1.767bc	47.395 $\pm$ 20.848a	4.949 $\pm$ 2.450c	27.435 $\pm$ 5.223ab
<i>Tremellomycetes</i>	17.219 $\pm$ 3.984a	21.914 $\pm$ 12.161a	21.427 $\pm$ 6.595a	24.95 $\pm$ 3.344a
<i>Sordariomycetes</i>	30.378 $\pm$ 4.385a	7.483 $\pm$ 1.678c	18.710 $\pm$ 1.355b	23.543 $\pm$ 2.806b
Fungi_unidentified	15.912 $\pm$ 2.219a	8.984 $\pm$ 3.462b	8.131 $\pm$ 1.746b	7.2739 $\pm$ 1.770b
<i>Dothideomycetes</i>	9.101 $\pm$ 2.666a	7.119 $\pm$ 3.619ab	3.591 $\pm$ 0.042b	2.754 $\pm$ 1.243b
<i>Pezizomycetes</i>	0.449 $\pm$ 0.084b	1.049 $\pm$ 0.236b	13.652 $\pm$ 9.796a	6.589 $\pm$ 2.383ab
<i>Eurotiomycetes</i>	5.010 $\pm$ 1.398ab	0.934 $\pm$ 0.282c	6.990 $\pm$ 2.442a	3.269 $\pm$ 1.980bc
<i>Agaricomycetes</i>	1.734 $\pm$ 1.312b	1.302 $\pm$ 0.901b	10.994 $\pm$ 8.348a	1.211 $\pm$ 0.938b
<i>Ascomycota_unidentified</i>	2.217 $\pm$ 1.688b	0.321 $\pm$ 0.044b	9.609 $\pm$ 5.920a	2.217 $\pm$ 0.302b
<i>Rhizophlyctidomycetes</i>	3.676 $\pm$ 4.757a	0.327 $\pm$ 0.236a	0.178 $\pm$ 0.081 a	0.440 $\pm$ 0.440a
Others	2.929 $\pm$ 1.390a	3.176 $\pm$ 1.835a	1.766 $\pm$ 1.852a	1.737 $\pm$ 1.135a