

Screening of alfalfa varieties resistant to *Phytophthora cactorum* and related resistance mechanism

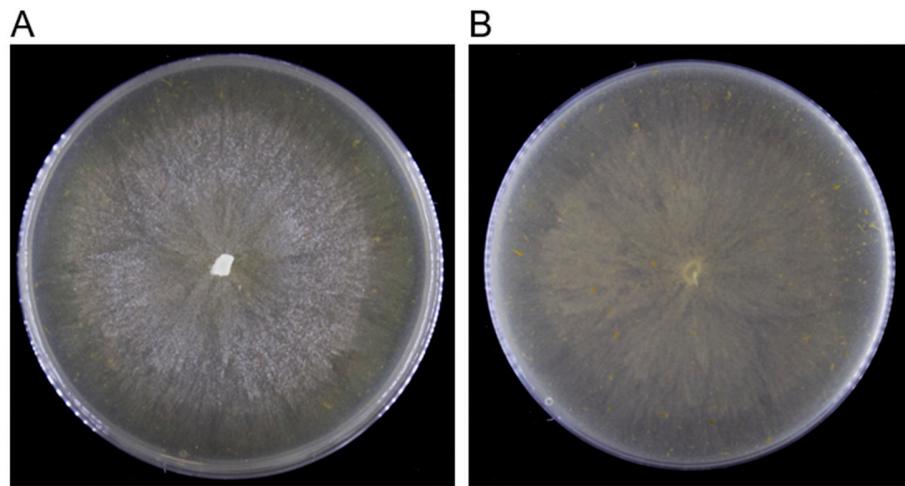


Figure S1. Colony morphology of *P. cactorum* on V8 medium.

(A) The front of the colony. (B) The back of the colony. The newly inoculated colonies were cultured at 25 °C for 5 d and photographed for colony morphology.

Table S1 Primers used in this study

Primer name	Sequence	Usage
ITS1	TCCGTAGGTGAACCTGCGG	For strain identification
ITS4	TCCTCCGCTTATTGATATGC	
CoxI-F	CYTCHGGRTGWCCRAAAAACCAAA	
CoxI-R	TCAWCWMGATGGCTTTTCAAC	
MsPR1-1F	AACGAAGCAAGACGTCAGGT	
MsPR1-1R	CTCACTGCATCTGTGCCACT	
MsPR2-1F	TGGGACACCAATGAGGTCTG	For qRT-PCR
MsPR2-1R	TTCCAATCCATTTCCTTCA	
MsERF-1F	GTCGTCCCTGGGGAAATAC	
MsERF-1R	AAGCTGCAGCAACAGTTCA	
MsLOX-1F	AGGCCGGAACGTATCTATGC	
MsLOX-1R	AGGTTGGTAGAGTGAGGACA	
MsACTIN-1F	ATTCACGAGACCACCTAC	
MsACTIN-1R	GAGCCACAACCTTAATCTTC	

Table S2 Performance of different alfalfa varieties after *P. cactorum* infection

Number	Variety	Relative Survival Rate (RSR)	Relative Fresh Weight (RFW)	Performance index (PPI)
1	Weston	0.96 ^j	0.83 ^{lm}	0.79 ^p
2	Magnum 801	0.45 ^{abc}	0.37 ^{abcd}	0.17 ^{abc}
3	Zhongmu No1	0.69 ^{bcd} ^{efghij}	0.33 ^{abc}	0.22 ^{abcde}
4	Magnum 551	0.77 ^{cdefghij}	0.88 ^m	0.68 ^{mnop}
5	Victorian	0.59 ^{bcd} ^{efg}	0.58 ^{defghijkl}	0.32 ^{abcdefg} ^h
6	WL414HQ	0.48 ^{abcd}	0.65 ^{fghijklm}	0.31 ^{abcdefg} ^h
7	Magnum 601	0.77 ^{cdefghij}	0.83 ^{lm}	0.63 ^{jklnop}
8	Magnum 995	0.72 ^{bcd} ^{efghi}	0.77 ^{klm}	0.56 ^{ghijklmnop}
9	Power5010	0.59 ^{bcd} ^{efg}	0.41 ^{abdef}	0.24 ^{abcdef}
10	Relang	0.64 ^{bcd} ^{efghi}	0.21 ^a	0.13 ^{ab}
11	Gannong No5	0.63 ^{bcd} ^{efghi}	0.75 ^{klm}	0.47 ^{defghijklmn}
12	MF4020	0.60 ^{bcd} ^{efgh}	0.66 ^{ghijklm}	0.39 ^{bcd} ^{efghijklm}
13	Tango	0.68 ^{bcd} ^{efghi}	0.7 ^{hijklm}	0.48 ^{defghijklmno}
14	SK3010	0.70 ^{bcd} ^{efghi}	0.50 ^{cdefghi}	0.35 ^{bcd} ^{efghi}
15	SR4030	0.85 ^{fghij}	0.82 ^{klm}	0.70 ^{nop}
16	Magnum II	0.80 ^{defghij}	0.45 ^{bcd} ^{efg}	0.36 ^{bcd} ^{efghijk}
17	Magnum VII	0.87 ^{fghij}	0.77 ^{klm}	0.68 ^{mnop}
18	Power 4.2	0.81 ^{efghi}	0.76 ^{klm}	0.62 ^{ijklmnop}
19	Spyder	0.74 ^{bcd} ^{efghi}	0.77 ^{klm}	0.57 ^{hijklmnop}
20	Magnum Salt	0.92 ^{ij}	0.83 ^{lm}	0.76 ^{op}

21	Instinct	0.92 ^{ij}	0.75 ^{jklm}	0.70 ^{nop}
22	AC Caribou	0.44 ^{ab}	0.25 ^{ab}	0.11 ^{ab}
23	Blue Moon	0.63 ^{bcdedfghi}	0.58 ^{defghijkl}	0.37 ^{bcdedfghi}
24	Liangmu No2	0.92 ^{hij}	0.29 ^{abc}	0.27 ^{abcdefg}
25	Sanditi	0.56 ^{bcdedf}	0.57 ^{defghijk}	0.32 ^{abcdefgh}
26	6010	0.83 ^{fghij}	0.79 ^{klm}	0.64 ^{klmnop}
27	Adrenalin	0.88 ^{ghij}	0.59 ^{defghijkl}	0.52 ^{fghijklmnop}
28	Gea	0.64 ^{bcdedfghi}	0.47 ^{bcdefgh}	0.30 ^{abcdefgh}
29	Golden Empress	0.50 ^{abcde}	0.38 ^{abcde}	0.19 ^{abcd}
30	Hunter River	0.73 ^{bcdedfghi}	0.63 ^{fghijklm}	0.45 ^{cdefghijklmn}
31	Longdong	0.20 ^a	0.29 ^{abc}	0.06 ^a
32	Alfaqueen	0.83 ^{fghij}	0.51 ^{cdefghij}	0.43 ^{cdefghijklmn}
33	Eureka+	0.82 ^{fghij}	0.79 ^{klm}	0.65 ^{lmnop}
34	Aurora SF2014	0.68 ^{bcdedfghi}	0.49 ^{cdefghi}	0.33 ^{abcdefghi}
35	Vinal	0.85 ^{fghij}	0.74 ^{klm}	0.63 ^{klmnop}
36	Ranger	0.80 ^{defghij}	0.62 ^{eijklm}	0.49 ^{efghijklmo}
37	Vison	0.88 ^{ghij}	0.73 ^{ijklm}	0.64 ^{klmnop}

Different letters at the end of the data indicate statistical significance (one-way ANOVA, P < 0.05).