## Supplemental Material

An inter-species signaling system mediated by fusaric acid has parallel effects on antifungal metabolite production, gene expression, and antibiosis of Fusarium spp. by Pseudomonas protegens Pf-5

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Table S1. Inhibition of Fusarium spp. by P. protegens Pf-5 and derivative strains on PDA containing $10^{-4}$ M FeCl 3 .

| Strain | Percent inhibition |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | T4-0 | R2-238 | R5 |  |
| Pf-5 | 41 ab | 35 bc | 37 | a |
| $\Delta g a c A$ | 7 fgh | 4 e | 0 | e |
| $\Delta p h I D$ | 25 cde | 24 d | 24 | abc |
| $\Delta p r n C$ | 34 abc | 41 a | 36 | ab |
| $\Delta r z x B$ | 26 cde | 34 bc | 36 | ab |
| $\Delta h c n B$ | 44 a | 36 ab | 37 | a |
| $\Delta p l t A$ | 34 abc | 26 cd | 32 | ab |
| $\Delta p h l D \quad \Delta p r n C$ | 24 cde | 27 cd | 10 | cd |
| SphlD ${ }^{\text {drzx }}$ | 4 h | 5 e | 32 | ab |
| $\Delta p r n C$ drzx $B$ | 16 efg | 40 a | 37 | a |
| $\Delta p h I D ~ \Delta r z x B ~ \triangle p r n C ~$ | 8 fgh | 4 e | 4 | de |
| $\Delta p h I D \quad$ rzx $B$ dprnC $\Delta h c n B \Delta p l t A$ | 5 gh | 0 e | 0 | e |
| $\Delta p h I D \quad \Delta r z x B \quad \triangle p r n C \quad \Delta h e n B \quad \Delta p l t A ~ \triangle o f a A ~ \triangle t o x B ~$ | 3 h | 1 e | 0 | e |

Cultures were grown for 5 days at $27^{\circ} \mathrm{C}$ before radial growth of Fusarium spp. was measured. Means represent four replicate plates. Within each column, means followed by a common letter do not differ significantly as determined by Tukey's range test.


FIG. S1. Inhibition of Fusarium spp. by P. protegens Pf-5 and derivative strains on PDA amended with $10^{-4} \mathrm{M} \mathrm{FeCl}_{3}$. Pf-5 and derivatives having deletions in specified genes are shown on the $X$ axis. Percent inhibition of $F$. verticillioides isolate T4-0 (white bars), F. oxysporum f. sp. pisi race 2 isolate R2-238 (grey bars), and F. oxysporum f. sp. pisi race 5 isolate R5 (black bars) was determined as shown in Fig. 1. Cultures were grown for 5 days at $27^{\circ} \mathrm{C}$ before radial growth of Fusarium spp. was measured. Means represent four replicate plates and error bars represent the standard error of the mean.

