

Supplementary Table S1: Genbank Accession Numbers of Bacterial strains isolated from shiitake mushroom (*Lentinula edodes*) in this work and best BLAST hit sequences used for identifications.

	Accession Number	Best BLAST hits	
		Species	Accession number
1	MT335639	<i>Ewingella americana</i>	MH235964.1
2	MT335640	<i>Pseudomonas sp.</i>	MN094858.1
3	MT335641	<i>Ewingella americana</i>	HE585220.1
4	MT335642	<i>Ewingella americana</i>	HE576409.1
5	MT335643	<i>Micrococcus luteus</i>	MN911377.1
6	MT335644	<i>Ewingella americana</i>	MH235964.1
7	MT335645	<i>Pseudomonas palleroniana</i>	MH671843.1
8	MT335646	<i>Pseudomonas sp.</i>	EU652104.1
9	MT335647	<i>Pseudomonas yamanorum</i>	CP012400.2
10	MT335648	<i>Ewingella americana</i>	KY126991.1
11	MT335649	<i>Burkholderia sp.</i>	HG799085.1
12	MT335650	<i>Pseudomonas brenneri</i>	KU750791.1
13	MT335651	<i>Pseudomonas yamanorum</i>	MG461475.1
14	MT335652	<i>Pseudomonas sp.</i>	CP038001.1
15	MT335653	<i>Pseudomonas sp.</i>	KU745692.1
16	MT335654	<i>Pseudomonas tolaasii</i>	EF111117.1
17	MT335655	<i>Rahnella sp.</i>	MG385700.1
18	MT335656	<i>Ewingella americana</i>	KX260641.1
19	MT335657	<i>Paenibacillus sp.</i>	JF508413.1
20	MT335658	<i>Ewingella americana</i>	KY400216.1
21	MT335659	<i>Microbacterium sp.</i>	MG754432.1
22	MT335660	<i>Ewingella americana</i>	KT983990.1
23	MT335661	<i>Serratia sp.</i>	KF999717.1
24	MT335662	<i>Ewingella americana</i>	HE585220.1
25	MT335663	<i>Ewingella americana</i>	MK460249.1
26	MT335664	<i>Pseudomonas jessenii</i>	MN220616.1
27	MT335665	<i>Ewingella americana</i>	EU678359.1
28	MT335666	<i>Ewingella americana</i>	KY126991.1
29	MT335667	<i>Pseudomonas fluorescens</i>	MH620728.1
30	MT335668	<i>Ewingella americana</i>	KY126991.1
31	MT335669	<i>Serratia sp.</i>	KF999717.1
32	MT335670	<i>Pseudomonas psychrophila</i>	KT767853.1
33	MT335671	<i>Ewingella americana</i>	KY126991.1
34	MT335672	<i>Ewingella americana</i>	KY126991.1
35	MT335673	<i>Pseudomonas sp.</i>	KX456413.1
36	MT335674	<i>Ewingella americana</i>	MF522251.1
37	MT335675	<i>Pseudomonas sp.</i>	MH935771.1
38	MT335676	<i>Pseudomonas yamanorum</i>	CP012400.2
39	MT335677	<i>Pseudomonas reinekei</i>	MK883137.1
40	MT335678	<i>Pseudomonas sp.</i>	EU652104.1
41	MT335679	<i>Pseudomonas brenneri</i>	JX417436.1
42	MT335680	<i>Ewingella americana</i>	EU678359.1
43	MT335681	<i>Pseudomonas yamanorum</i>	MN542757.1
44	MT335682	<i>Paenarthrobacter aureescens</i>	EU729736.1
45	MT335683	<i>Pseudomonas fluorescens</i>	KM527837.1
46	MT335684	<i>Pseudomonas fluorescens</i>	JQ045345.1
47	MT335685	<i>Ewingella americana</i>	KY126991.1
48	MT335686	<i>Ewingella americana</i>	MH669149.1

Supplementary Figure S1: Supplementary Figure S1: Levels of damage severity on *L. edodes* tissues by the microbial strains inoculated in the pathogenicity test analysed on experimental day seven: 0 - no damage (Control); 1 – slight damage in the inoculation area (*Pseudomonas* sp.); 2 – extended damage in the inoculation area (*Ewingella americana*); 3 - severe damage throughout the carpophore (*Rahnella* sp.).

