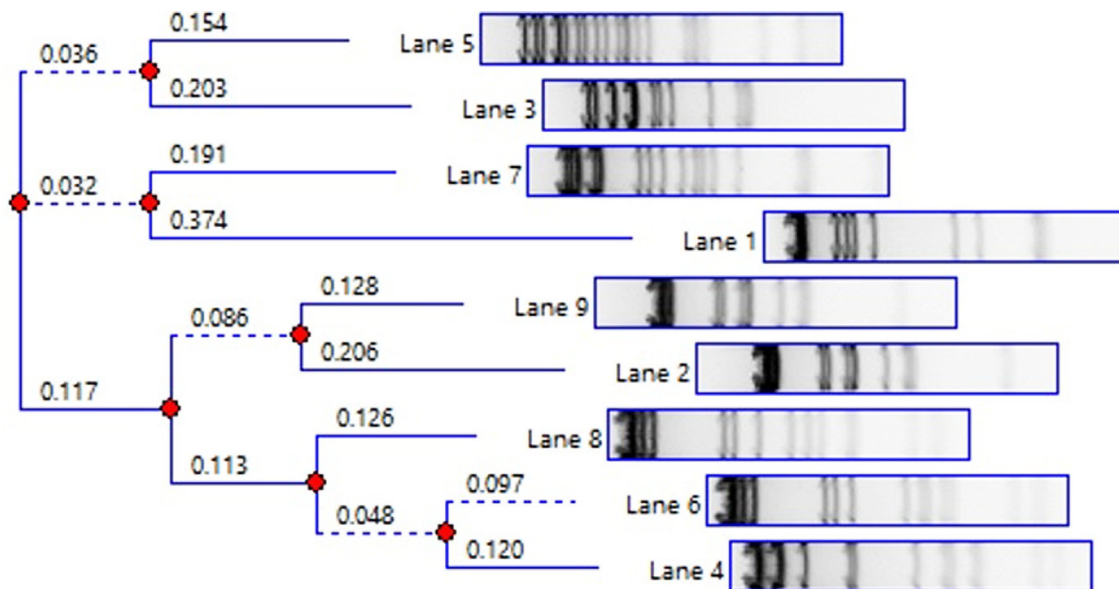


Supplementary Table 1. Bacterial strains in this study

Species	Strain	16S rRNA Similarity	Geographical isolation	Year
<i>Erwinia amylovora</i>	YKB 12316	99.86	Gyeonggi-do, Anseong	2019
<i>Erwinia amylovora</i>	YKB 14748	99.86	Chungcheongbuk-do, Eumseong	2019
<i>Erwinia amylovora</i>	YKB 14750	99.86	Chungcheongbuk-do, Chungju	2019
<i>Erwinia amylovora</i>	YKB 14758	99.93	Chungcheongbuk-do, Jecheon	2019
<i>Erwinia amylovora</i>	YKB 14776	99.93	Chungcheongbuk-do, Chungju	2019
<i>Erwinia amylovora</i>	YKB 14787	99.93	Chungcheongnam-do, Cheonan	2019
<i>Erwinia amylovora</i>	YKB 14808	99.86	Gyeonggi-do, Anseong	2019
<i>Erwinia amylovora</i>	YKB 14814	99.79	Chungcheongbuk-do, Jecheon	2019
<i>Erwinia amylovora</i>	YKB 14818	99.93	Chungcheongbuk-do, Jecheon	2019
<i>Erwinia amylovora</i>	YKB 14820	99.86	Chungcheongbuk-do, Chungju	2019
<i>Erwinia amylovora</i>	YKB 14822	99.93	Chungcheongbuk-do, Chungju	2019
<i>Erwinia amylovora</i>	RA0023	99.93	Gyeonggi-do, Gwangju	2020
<i>Erwinia amylovora</i>	RA0025	99.86	Gyeonggi-do, Anseong	2020
<i>Erwinia amylovora</i>	RA0026	99.79	Gyeonggi-do, Anseong	2020
<i>Erwinia amylovora</i>	RA0027	99.86	Gyeonggi-do, Anseong	2020
<i>Erwinia amylovora</i>	RA0028	99.79	Gyeonggi-do, Anseong	2020
<i>Erwinia amylovora</i>	RA0030	99.86	Gyeonggi-do, Anseong	2020
<i>Erwinia amylovora</i>	RA0033	99.86	Gyeonggi-do, Anseong	2020
<i>Erwinia amylovora</i>	RA0034	99.93	Gyeonggi-do, Yeoncheon	2020
<i>Erwinia amylovora</i>	RA0035	99.93	Gyeonggi-do, Icheon	2020
<i>Erwinia amylovora</i>	RA0037	99.86	Gyeonggi-do, Paju	2020
<i>Erwinia amylovora</i>	RA0038	99.86	Jeollabuk-do, Iksan	2020
<i>Erwinia amylovora</i>	RA0039	99.73	Chungcheongnam-doAsan	2020
<i>Erwinia amylovora</i>	RA0040	99.93	Chungcheongnam-doCheonan	2019
<i>Erwinia amylovora</i>	RA0041	99.86	Chungcheongnam-doCheonan	2019
<i>Erwinia amylovora</i>	RA0044	99.86	Chungcheongnam-doCheonan	2020
<i>Erwinia amylovora</i>	RA0047	99.93	Chungcheongbuk-do, Eumseong	2020
<i>Erwinia amylovora</i>	RA0053	99.93	Chungcheongbuk-do, Jecheon	2020
<i>Erwinia amylovora</i>	RA0055	99.73	Chungcheongbuk-do, Jecheon	2020
<i>Erwinia amylovora</i>	RA0057	99.86	Chungcheongbuk-do, Jecheon	2020
<i>Erwinia amylovora</i>	RA0059	99.93	Chungcheongbuk-do, Jecheon	2020
<i>Erwinia amylovora</i>	RA0060	99.93	Chungcheongbuk-do, Jecheon	2020
<i>Erwinia amylovora</i>	RA0063	99.86	Chungcheongbuk-do, Chungju	2020
<i>Erwinia amylovora</i>	RA0070	99.93	Chungcheongbuk-do, Chungju	2020
<i>Erwinia amylovora</i>	RA0071	99.93	Chungcheongbuk-do, Chungju	2020
<i>Erwinia amylovora</i>	RA0076	99.93	Chungcheongbuk-do, Chungju	2020
<i>Erwinia amylovora</i>	RA0077	99.79	Chungcheongbuk-do, Chungju	2020
<i>Erwinia amylovora</i>	RA0079	99.93	Chungcheongbuk-do, Chungju	2020
<i>Erwinia amylovora</i>	RA0080	99.73	Chungcheongbuk-do, Chungju	2020
<i>Erwinia amylovora</i>	RA0082	99.79	Chungcheongbuk-do, Chungju	2020
<i>Erwinia amylovora</i>	RA0083	99.93	Chungcheongbuk-do, Chungju	2020
<i>Erwinia amylovora</i>	RA0086	99.66	Chungcheongbuk-do, Chungju	2020
<i>Erwinia amylovora</i>	RA0088	99.93	Chungcheongbuk-do, Chungju	2020
<i>Erwinia amylovora</i>	RA0091	99.86	Chungcheongbuk-do, Chungju	2020
<i>Erwinia amylovora</i>	RA0093	99.93	Chungcheongbuk-do, Chungju	2020
<i>Erwinia pyrifoliae</i>	YKB 12327	100	Gyeonggi-do, Pocheon	2015

<i>Erwinia pyrifoliae</i>	RP0098	100	Gangwon-do, Cheorwon	2020
<i>Erwinia pyrifoliae</i>	RP0099	99.93	Gangwon-do, Goseong	2020
<i>Erwinia pyrifoliae</i>	RP0100	99.93	Gangwon-do, Yanggu	2020
<i>Erwinia pyrifoliae</i>	RP0105	99.93	Gangwon-do, Chuncheon	2020
<i>Erwinia pyrifoliae</i>	RP0107	99.93	Gangwon-do, Hongcheon	2020
<i>Erwinia pyrifoliae</i>	RP0108	99.93	Gangwon-do, Hwacheon	2020
<i>Erwinia pyrifoliae</i>	RP0109	100	Gangwon-do, Hoengseong	2020
<i>Erwinia pyrifoliae</i>	RP0112	98.96	Gyeonggi-do, Yeoncheon	2020
<i>Erwinia pyrifoliae</i>	RP0113	100	Gyeonggi-do, Pocheon	2020
<i>Erwinia pyrifoliae</i>	RP0115	100	Gyeongsangbuk-do, Yeongju	2020
<i>Erwinia pyrifoliae</i>	RP0116	99.86	Chungcheongbuk-do, Eumseong	2020
<i>Erwinia pyrifoliae</i>	RP0117	99.73	Chungcheongbuk-do, Chungju	2020
<i>Dickeya zeae</i>	A3			
<i>Pectobacterium carotovorum</i>	Pcc3			
<i>Pantoea agglomerans</i>	SH58			
<i>Pseudomonas fluorescens</i>	SH55			
<i>Escherichia coli</i>	ATCC 43895			
<i>Xanthomonas campestris</i>	ATCC 33913			
<i>Bacillus thuringiensis</i>	ATCC 29730			
<i>Enterococcus faecalis</i>	ATCC 35038			
<i>Staphylococcus xylosum</i>	ATCC 29971			



Supplementary Fig. 1. Dendrogram depicting clustering in restriction fragment length polymorphism of nine bacteriophages based on neighbor joining generated in TotalLab Quant v.13.2 algorithm.