

Supplementary Table 1. Sample information

Province	City	No. of surveyed fields	No. of surveyed area (ha)	No. of diseased fields
Gangwon	Ganneung	20	12.9	
	Hongcheon	20	46.2	-
	Pyeongchang	20	11.1	-
Chungbuk	Yeongdong	20	5.5	-
Gyeongbuk	Gimcheon	20	1.5	-
	Gumi	24	6.5	-
Gyeongnam	Yangsan	5	1.2	-
Jeju	Kujawa	30	14.7	6
Total	8	159	99.3	6 (1.6 ha)

Supplementary Table 2. Primer sequences for bacterial identification studies

Primer name	Sequence
XdnaK1F	5'-GGTGGGAAGACCTGGTCAAGA-3'
XdnaK1R	5'-TCCTTGACYTCGGTGAAGTC-3'
XgyrB1F	5'-ACGAGTACAACCCGGACAA-3'
XgyrB1R	5'-CCAGCATCARTG-3'
XfyuA1F	5'-AGCTACGAYGTGCGYTACGA-3'
XfyuA1R	5'-GTTACGCCRRAACTGGTAG-3'
XrpoD1F	5'-TGGAACAGGTGGCTT-TGACC-3'
XrpoD1R	5'-CATTCTYAG-3'

Supplementary Table 3. Statistics by species of genome annotated in NR *Xanthomonas* DB

Accession no.	Scientific name	Strain	Mash-distance	P-value	Matching-hashes
GCF_903978255.1	<i>Xanthomonas hortorum</i> pv. <i>carotae</i>	CFBP7900	0.00892796	0	708/1,000
GCF_000505565.1	<i>X. hortorum</i> pv. <i>carotae</i>	M081	0.0090861	0	704/1,000
GCF_003353025.1	<i>X. arboricola</i>	MEU_M1	0.0295179	0	368/1,000
GCF_012922215.1	<i>X. hortorum</i> pv. <i>pelargonii</i>	CFBP2533	0.0333664	0	330/1,000
GCF_012922335.1	<i>X. hortorum</i> pv. <i>vitians</i>	CFBP499	0.338037	0	326/1,000
GCF_012922195.1	<i>X. hortorum</i> pv. <i>vitians</i>	CFBP3978	0.0341361	0	323/1,000
GCF_002940005.1	<i>X. hortorum</i> pv. <i>hederae</i>	CFBP4925	0.0349268	0	316/1,000
GCF_002285515.1	<i>X. hortorum</i>	B07-007	0.0351567	0	314/1,000
GCF_014338485.1	<i>X. hortorum</i> pv. <i>vitians</i>	LM16734	0.0352724	0	313/1,000
GCF_012922135.1	<i>X. hortorum</i> pv. <i>vitians</i>	LMG938	0.035622	0	310/1,000