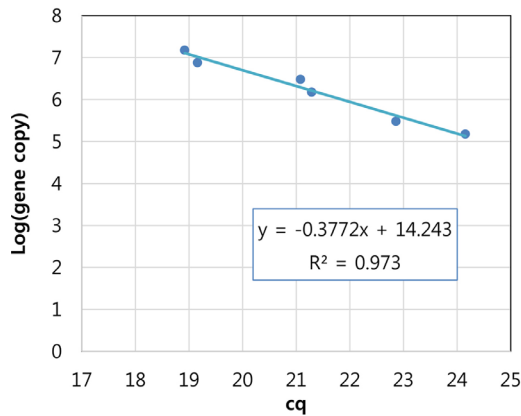


**Supplementary Table 1.** List of primer pairs used in this study

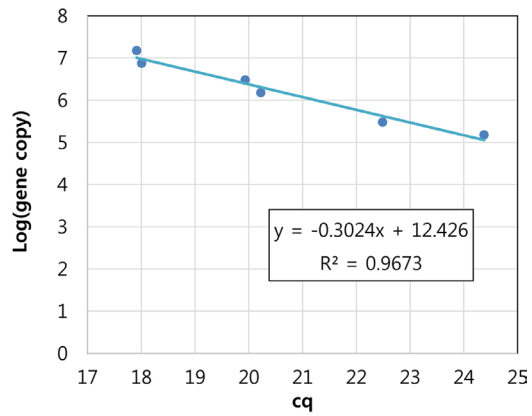
Primer pair	Target pathogen <sup>a</sup>	Target protein (Locus id)	Forward primer (5'-3')	Reverse primer (5'-3')	T <sub>a</sub> (°C) <sup>b</sup>	Expected product (bp)
Cmn-1	Cmn	Hypothetical protein (CMN_01176)	CTTAAGGGTGTGTGGCAGCAG	ACTTCGCGAGTAGACCCTCAAC	55	682
Cmn-2	Cmn	Hypothetical protein (CMN_02187)	CTTGGGTACGCAACGAATCCAC	AACCATCGCTCATCGTCTGTCA	53.4	537
Cmn-3	Cmn	Hypothetical protein (CMN_00235)	GTGATCATCAACATCGCGGTCG	GCAGCGGATGCGTTCTATGG	54.5	567
Cmn-4	Cmn	Hypothetical protein (CMN_02866)	GCCCGCCGCTTCTATTTACATC	TGACGACAATACGCTTCCCCTT	53.4	864
Cmn-5	Cmn	Hypothetical protein (CMN_01921)	CACCTTTGGAGCAGCGTCAAGAG	GAACCCGCGACTTCCTCTTTTG	55	720
Pss2-1	Pss	Hypothetical protein (CKS_5651)	TGCTGTCGTTACTTCACACGGA	AATGTGCCAGCTGCCAGTAGTA	53.4	307
Pss2-2	Pss	Hypothetical protein (CKS_1982)	ACAACATGTACGCGAACC GGA	TATCAACGGCATTTCGAGCCTG	53.4	483
Pss2-3	Pss	Relaxase (CKS_5544)	CGGTGATTCAGGGTCATTGGC	CAGCAGCCCGGTATGGATATCA	55	424
Pss2-4	Pss	Antiterminator Q (CKS_5565)	GCGGTAAATAAGCTGCCCGATC	CCACATGCGCAATTACCTCGTT	53.4	364
Pss2-5	Pss	Hypothetical protein (CKS_1899)	GGGATGATGATGGCGATCAGGA	CCATCCACACCATGAGTCTGGT	55	332
Pss2-7	Pss	Hypothetical protein (CKS_5607)	TTCGTTGATAATTCGGCCCGC	AGTTCGGCGTAGTAGGCTTTGA	53.4	359
Pss2-9	Pss	Hypothetical protein (CKS_2975)	TGGTCGCTATGGGCCAGTTTAA	TTACCGTGTGACATATCCC GGG	53.4	337
Pss2-10	Pss	Hypothetical protein (CKS_5633)	GGTGTCTTCTGAACCGCACAAA	ATTTTTAGCCAGTTCAGCCCGC	53.4	448
Rt-1	Rt	Hypothetical protein (A6122_2884)	TTGACCATCTGGAAGTCGACCC	ACCGACCCGACAAAAGGACATC	60	578
Rt-2	Rt	CAAX protease (A6122_2873)	ATCAGTTCTACCCTGGCACCAC	TGAGAGATCGGAACAAGCTGCA	60	673
Rt-3	Rt	Hypothetical protein (A6122_2866)	GTGGGCTGATAGGTGGTGTGT	GCGCCCTTCTCTACTGGGTAT	60	520
Rt-4	Rt	Hypothetical protein (A6122_2803)	AAGCGGAGACCTCATTGTCGAA	GCTTCGATTGTCACCTTCGCCA	60	580
Rt-5	Rt	Hypothetical protein (A6122_2790)	GAGCCACTCTCCATGACACCT	GCTTGTCGCAGAAAAAGGCTCT	60	613

<sup>a</sup>Cmn, *Clavibacter michiganensis* subsp. *nebraskensis*; Pss, *Pantoea stewartii* subsp. *stewartii*; Rt, *Rathayibacter tritici*, <sup>b</sup>annealing temperature

**(A) Cmn-3 primer**

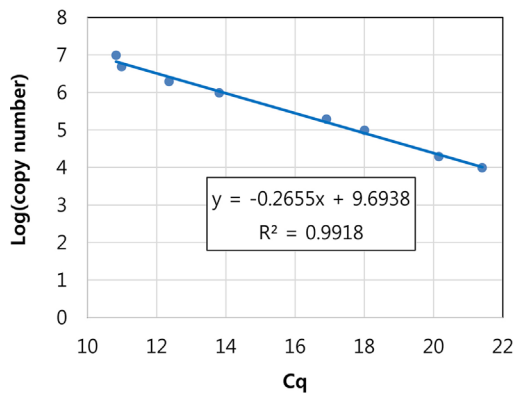


**(B) Cmn-4 primer**

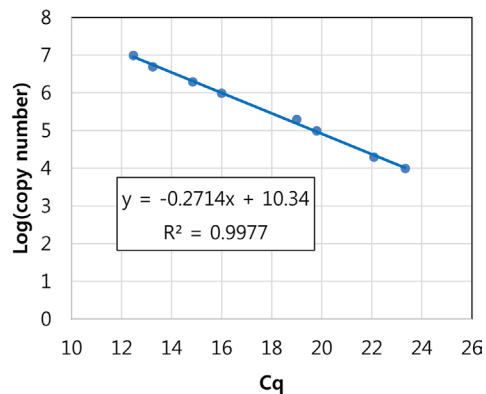


**Supplementary Fig. 1.** Sensitivity of *Cmn* primers estimated by real-time PCR with primer pairs Cmn-3 (A) and Cmn-4 (B). The linear regression generated by ten-fold dilution of DNA of *Clavibacter michiganensis* subsp. *nebrskensis* NCPPB 2581 and converted into copy number of the target gene corresponding the number of bacterial cells.

**(A) Pss2-4 primer**

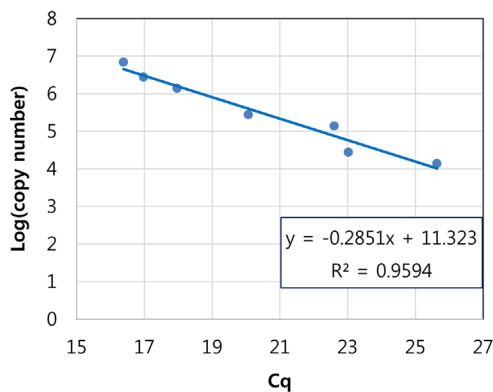


**(B) Pss2-9 primer**

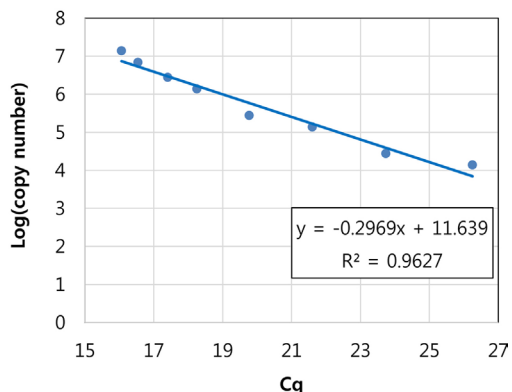


**Supplementary Fig. 2.** Sensitivity of *Pss* primers estimated by real-time PCR with primer pairs Pss2-4 (A) and Pss2-9 (B). The linear regression generated by ten-fold dilution of DNA of *Pantoea stewartii* subsp. *stewartii* NCPPB 2295 and converted into copy number of the target gene corresponding the number of bacterial cells.

**(A) Rt-4 primer**



**(B) Rt-5 primer**



**Supplementary Fig. 3.** Sensitivity of *Rt* primers estimated by real-time PCR with primer pairs Rt-4 (A) and Rt-5 (B). The linear regression generated by ten-fold dilution of DNA of *Rathayibacter tritici* NCPPB 1857 and converted into copy number of the target gene corresponding the number of bacterial cells.