

Supplementary data

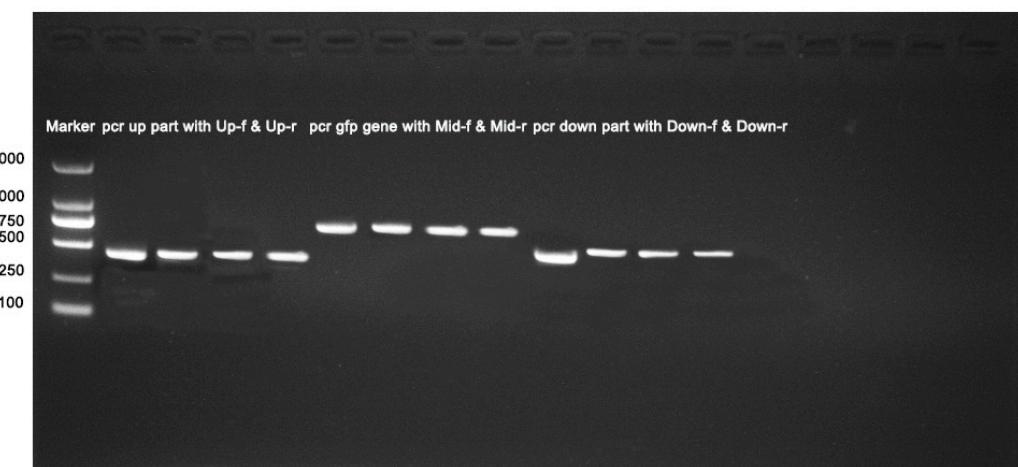


Figure S1. PCR of bacterial colonies with primers of up mid and down gene confirms the mutant formation.

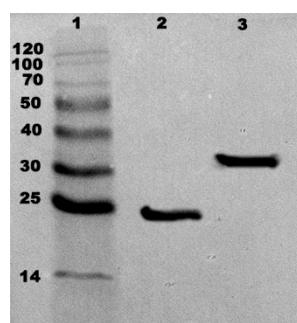


Figure S2. Western blot Analysis of RFP-His (RFP) and HrpE-RFP-His (HrpE) purified protein.

Lane 1 represents the ladder of 120 kDa protein marker.

Lane 2 represents the RFP protein

Lane 3 represents the HrpE protein

A

Species/Abbrev.	Group Name
1. HrpE_protein_Xanthomonas_citri_pv_citri	H
2. type_III_pilin_Xanthomonas_oryzae_pv._oryzae_PXO99A	M
3. Xanthomonas_campesiris_pv._vesicatoria_str_85-10	M
4. HrpE_Xanthomonas_citri_pv_fuscans	M
5. HrpE_Xanthomonas_citri_pv_punicae_str_LMG_859	M
6. HrpE_Xanthomonas_campesiris_pv_armoraciae	M
7. HrpE_Xanthomonas_oryzae_pv_oryzae	M
8. HrpE_protein_type_III_secretion_system_Xanthomonas_citri_pv_fuscans	M
9. HrpE_protein_Xanthomonas Vesicatoria ATCC_35937	I
10. type_III_secretion_pilin_HrpE_Xanthomonas_oryzae_pv_oryzicola_BLS256	M
11. HrpE_protein_Xanthomonas_citri_pv_mangiferaeindiae_LMG_941	M
12. type_III_secretion_system_protein_Xanthomonas_campesiris_pv_campesiris	M
13. HrpE_protein_Xanthomonas_arboricola_pv_fragariae	E

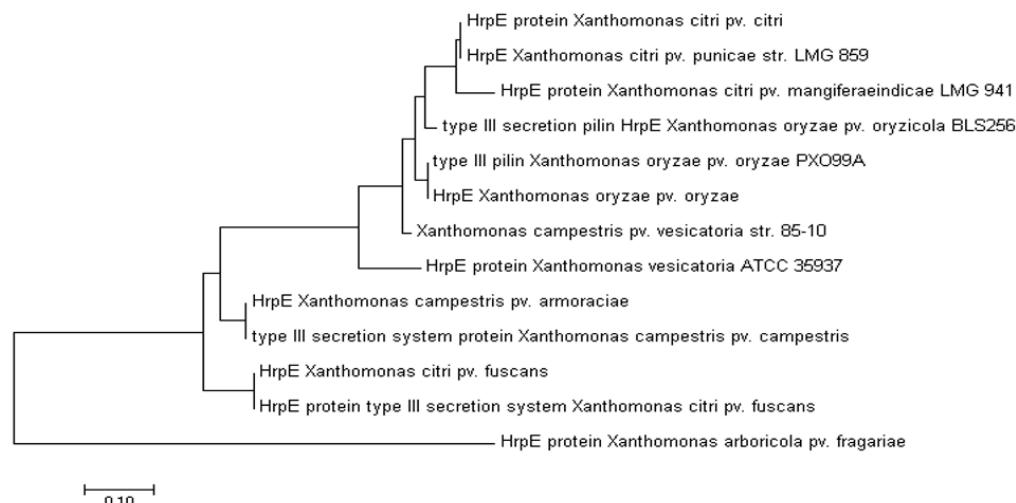
B

Figure S3. Phylogenetic relationship in different species of *Xanthomonas*. The sequence of the *HrpE* protein in different species of *Xanthomonas* was aligned using ClustalW program (A). The phylogenetic relationships of 13 different species and strains of *Xanthomonas* genus obtained using MEGA 7.0 with a maximum likelihood approach (B).

Table S1

Strains and Plasmids	Relevant characteristics	Source/Reference
<i>Escherichia coli</i>	F- 80dlacZ M15(lacZYA-argF)	This lab
DH5 α	U169 endA1 deoR recA1 hsdR17(rK ⁻ mK ⁺) phoA supE44 λ- thi-l gyrA96 relA1	
BL21(DE3)	F- <i>ompT</i> <i>hsdSB</i> (<i>rB</i> ⁻ <i>mB</i> ⁻) <i>gal dcm</i> Novagen (DE3)	
<i>Xanthomonas oryzae</i> pv. <i>oryzae</i> PXO99 ^A	Philippine race 6; azacytidine resistant clone of PXO99 ^A , virulent to rice cultivars Nipponbare and IRBB10	This lab
ΔhrpE	PXO99 ^A <i>HrpE</i> deletion mutant	This study

Δ HrpE/HrpE	PXO99 ^A <i>HrpE</i> mutant complemented with pHM <i>HrpE</i>	This study
HrpE-pthXo1-cya	PXO99 ^A <i>HrpE</i> transformed with pHMpthXo1-cya	This study
Δ HrpE-pthXo1-cya	PXO99 ^A <i>HrpE</i> mutant transformed with pHMpthXo1-cya	This study
Δ HrpE/HrpE/pthXo1-cya	PXO99 ^A <i>HrpE</i> mutant complemented with pHM <i>HrpE</i> -pthXo1-cya	This study
pMD-19	Vector	Takara
pMD-18	Vector	Takara
pK18sacB	Suicide vector derivative from pK18mobGII, <i>sacB</i> ⁺ , Km ^R	This lab
pHM1	Broad-host range vector with pUC19 polylinker, Sp ^R	This lab
pZWpthXo1	PthXo1 fused to <i>lacZ</i> promoter of pBluescript II KS(+)	Yang et al., 2006
pZWpthXo1-cya	Cya tag inserted in the <i>Sac I</i> site of pZWpthXo1	This lab
pMD18-T simple	pUC <i>ori</i> , cloning vector, Amp ^R	Takara
pET30a (+)	pBR322 origin, T7 promoter His-tag, Km ^R	Novogen

Table S 2

Oligonucleotides	Sequence	Use
HrpE-f	CCCAAGCTTATGGAAATACTCCGCAA	Full <i>HrpE</i> cloning from genomic DNA
HrpE-r	CCGGAATTCTGTATGGTGATGGTGATGGCTGGCAAC GAGCT	Full <i>HrpE</i> cloning from genomic DNA
Up-f	CGCGGATCCTGCACATGTCGAAACGCCG	Cloning of upstream part for mutant
Up-r	TCCTCGCCCTTGCTCACCATACAAAGACTCCTACGTAG TG	Cloning of upstream part for mutant

Mid-f	CACTACGTAGGAGTCTTGTATGGTGAGCAAGGGCGA GGA	Cloning of mid part for mutant
Mid-r	CCTGCCATGTCTAACGCCATTACTGTACAGCTCGTC CA	Cloning of mid part for mutant
Down-f	TGGACGAGCTGTACAAGTAATGGGCTTAGACATGCGC AGG	Cloning of downstream part for mutant
Down-r	TGCTCTAGAACCGGCCATCCACGTCTCG	Cloning of downstream part for mutant
egfp-f	ATGGTGAGCAAGGGCGAGGAGC	Cloning of <i>egfp</i> fragment
egfp-r	CTTGTACAGCTCGTCCATGCCGAG	Cloning of <i>egfp</i> fragment
pHrpE-f	CGCGGATCCATGAAATACTTCCGCAAAT	Full <i>HrpE</i> cloning in PET30
pHrpE-r	CCCAAGCTTCACTGGCCAACGAGCT	Full <i>HrpE</i> cloning in PET30
OsSOD-f	GCTTCCACATCCACTCCTTG	RT-qPCR
OsSOD-r	CCCCATCAATTCAACAACCTAAG	RT-qPCR
OsMKK4-f	TCCAAAAGCGATGAGACCG	RT-qPCR
OsMKK4-r	AAGTAGGTGGAGAGGAAGAG	RT-qPCR
OsPAL-f	AACTAAGCCAAGATCCCATCG	RT-qPCR
OsPAL-r	TGTCTGAAGATAACCGAACG	RT-qPCR
OsGST-f	ATGTAATGGTGTAGCCTCACG	RT-qPCR
OsGST-r	CCTCGACTCTGCTCATTAACTC	RT-qPCR
OsHMGR-f	ACACCCAAGAGCTTCACATG	RT-qPCR
OsHMGR-r	CCTCCGCCTGGTAAATATGG	RT-qPCR
OsPR4-f	GGTGTCCGAGAACAGTAC	RT-qPCR
OsPR4-r	CACCTGCGTGTAGTGGC	RT-qPCR
OsPR1-f	GTGCAATGGAGTTGTGGTC	RT-qPCR
OsPR1-r	GCTTCTCGTTCACATAATTCCC	RT-qPCR