## Figure S1

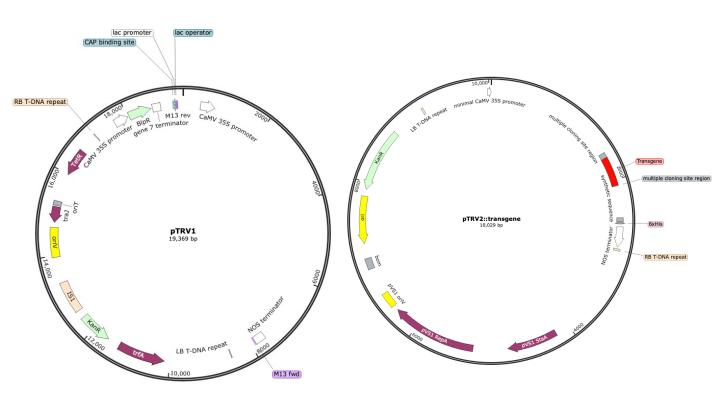
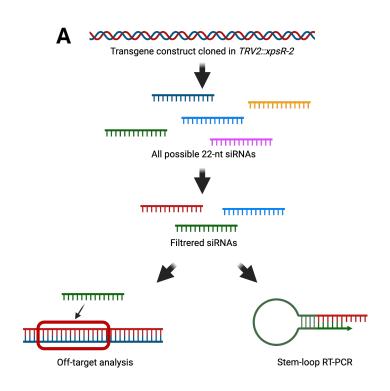


Figure S1. Plasmid maps of pTRV1 and pTRV2 containing the transgene construct.

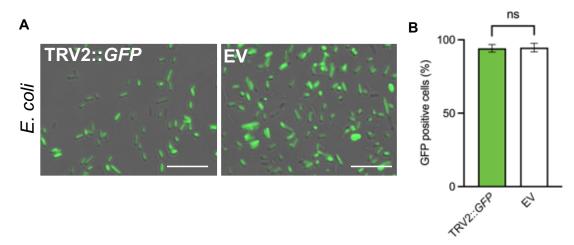
Plasmid maps of pTRV1 and pTRV2 utilized in this study. The transgene construct is cloned into pTRV2. The red-colored segment in pTRV2 indicates transgene constructed inserted into the plasmid.



В		siRNA1				siRNA2				siRNA4			
R. pseudosolanacearum	Secondary Target target (xpsR)	Score 44.1 bits(22)	Expect 6e-05	Identities 22/22(100%)	Gaps 0/22(0%)	Score 44.1 bits(22)	Expect 6e-05	Identities 22/22(100%)	Gaps 0/22(0%)	Score 44.1 bits(22)	Expect 6e-05	Identities 22/22(100%)	Gaps 0/22(0%)
		Query 1 Sbjct 763980	CTGAAGAATGA           CTGAAGAATGA		22 763959	Query 1 Sbjct 763868		TGAAGCGGAACC          TGAAGCGGAACC	22 763847	Query 1 Sbjct 763739		TGAGCTTGAACT           TGAGCTTGAACT	22 763718
		Score 22.3 bits(11)	Expect 205	Identities 11/11(100%)	Gaps 0/11(0%)	Score 26.3 bits(13)	Expect 13	Identities 13/13(100%)	Gaps 0/13(0%	Score 24.3 bits(12)	Expect 52	Identities 15/16(94%)	Gaps 0/16(0%)
		Query 9 Sbjct 67346	TGAACTGGCGG           TGAACTGGCGG	19 67336		Query 1 Sbjct 23729	ATCTTCGAGAT ATCTTCGAGAT	11		Query 3 Sbjct 76454	AAACAGGCTGA          AAACAGGCTGG	IIIII -	
Cupriavidus basilensis		Score 30.2 bits(15)	Expect 0.11	Identities 15/15(100%)	Gaps 0/15(0%)	Score 28.2 bits(14)	Expect 0.44	Identities 14/14(100%)	Gaps 0/14(0%)	Score 26.3 bits(13)		Identities 13/13(100%)	Gaps 0/13(0%)
		Query 7 Sbjct 2455629	AATGAACTGG             AATGAACTGG	11111	13	Query 6 Sbjct 341958	CGAGATGAA         88 CGAGATGAA	HHH	5	Query 4 Sbjct 1406096	TTCGAGATGAA           5 TTCGAGATGAA	1.1	
	olderia miensis	Score 32.2 bits(16)		Identities 16/16(100%)	Gaps 0/16(0%)	Score 26.3 bits(13)	Expect 8.0	Identities 13/13(100%)	Gaps 0/13(0%)	Score 20.3 bits(10)	Expect 493	Identities 13/14(93%)	Gaps 0/14(0%)
Burkho vietnan		Query 1 Sbjct 251735	CTGAAGAATGAA                       CTGAAGAATGAA	1111		Query 8 Sbjct 104631	AGATGAAGCG           9 AGATGAAGCG	111		Query 9 Sbjct 307841	GCTGAGCTTGA 	AACT 22      AACT 3078432	

Figure S2. Detection of siRNAs by stem-loop RT-PCR

(A) Overview of the experimental scheme for siRNA sequence prediction, off-target analysis, and stem-loop RT-PCR. (B) Analysis of potential off-targets by siRNAs in *R. pseudosolanacearum*, *Cupriavidus basilensis*, and *Burkholderia vietnamiensis*. None of the siRNAs showed potential off-target effects



**Figure S3. GFP signal observation in** *Escherichia coli* **post-siRNA treatment** (**A**) Fluorescence signals were observed in the clinical pathogens *E.coli* following treatment with siRNA derived from leaves infiltrated by *A. tumefaciens* carrying either the pTRV2::GFP vector or an empty pTRV2 vector (EV). (**B**) Relative abundance of GFP-positive bacterial cells.

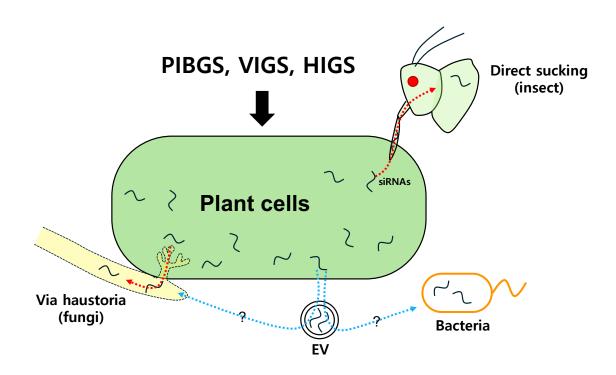


Figure S4. Description of siRNA delivery mechanism

siRNAs produced in plant cells via PIBGS, VIGS, or HIGS can be taken up by insects through feeding on the phloem and by fungi through specialized structures called haustoria. In bacteria, siRNAs can be taken up through extracellular vesicles (EVs). These EV-encapsulated siRNAs can also be delivered to fungi and other organisms.