1 **Appendix A** Primers used in this study

Vector	name	Sequence (5'-3')
pJM23	pJM-1 f	AAGTTCATTTCATTTGGAGAGGGTAAATTTTTCACAATTTAACAACA
	pJM-1 r	GAAAAGTTGCAACTCTGTTGAT
	pJM-2 f	ATCAACAGAGTTGCAACTTTTC
	pJM-2 r	GGAGATGCCATGCCGACCCATAACTTCGTATAATGTATGCTATACGAA GTTATAACAAAAATCAAATCTAAATTTGTGTAATTATGAAAATGAAACCTACCTTAT CAAACAGCTTCCTTT
	Vec-pJM f	GGGTCGGCATGGCATCTCC
	Vec-pJM r	CCTCTCCAAATGAAATGAACTT
pJG1024	V-pJG f	GGGTCGGCATGGCATCTCCA
	V-pJG r	ATAATGTATGCTATACGAAGTTATCCGATATTACCCTTTGTTGA
	pJG-1 f	ATAACTTCGTATAGCATACATTATACGAAGTTATTTTTATTACATGTTT GAACTTCAACAATTTATGACTTTTTGTTCTTATTGTTGCAGGTTAGAATTGGGCAGAA CTCG
	pJG-1 r	AAGCTCATCATGTTTGTATAGTT
	pJG-2 f	AACTATACAAACATGATGAGCTTCAGCTGTTGAATTTTGACCTTCTTAA GCTTGCGGGAGACGTCGAGTCCAACCCTGGGCCCATGGCTTACACAGTTTCCAGT
	pJG-2 r	TGGAGATGCCATGCCGACCCGGGCCGCTACCCGCGGTTCG
pJG1040	pJG1040 f	CCGAGTCTTCTTCGTTTTAACTATGGCTTACACAGTTTCCAGT
	pJG1040 r	CCAACTTATTTACACCATCATGTTTAAGGAGTTGTAGCCCAGGTGAGT

pJGTZSV	Vec-pTZSV f	ACATGATGGTGTAAATAAGTTGG
	Vec-pTZSV r	AGTTAAAACGAAGAAGACTCGG
	pTZSV f	CCGAGTCTTCTTCGTTTTAACTATGTCTAACGTCCGGAGTTTAA
	pTZSV r	CCAACTTATTTACACCATCATGTTTAAAAAGACAGATCATTGCTGC
pCre	Vec-pCV1300 f	GAATTTCCCCGATCGTTCAAA
	Vec-pCV1300 r	TCTAGAGTCCCCCGTGTTCT
	pCre-1 f	AGAACACGGGGGACTCTAGAGGATCC ATGTCCAATTTACTGACCGTAC
	pCre-1 r	GTCGAGTGAGGAGAAGAGCCGATCGCCATCTTCCAGCAGGC
	pCre-2 f	GGCTCTTCTCCTCACTCGACCAGATCTCGTACGCGTCCCGGGGCGGTGGC TCATCTGGCGGAGGTCTCGACGGGTTAATTAACGGTGAACAAA
	pCre-2 r	TTTGAACGATCGGGGAAATTCGAGCTCCTAAGCGCTACCGTTCAAGT
pNCre	pNCre f	AGAACACGGGGGACTCTAGAGGATCCATGCCCAAGAAGAAGAGGAAGGTG TCCAATTTACTGACCGTAC
pLoxP-Cre	pLoxP f	AGAACACGGGGGACTCTAGAGGATCCATAACTTCGTATAGCATACATTATACGAAGT TAT ATGTCCAATTTACTGACCGTAC
	pLoxP r	TTTGAACGATCGGGGAAATTCGAGCTCATAACTTCGTATAATGTATGCTATACGAAG TTAT CTAAGCGCTACCGTTCAAGT
pACre	Vec-pACre r	GGCACTGGCCGTCGTTTTACA
	pACre f	TGTAAAACGACGGCCAGTGCCAAGCTTTCGACAAAATTTAGAACGAACTT
pCB-ACre	pCB-Acre-1 f	CAACAAAGGGTAATATCGGTCGACAAAATTTAGAACGAACTT
	pCB-Acre-1 r	TTCAAAGCGGAGAGGAAAATAT
	pCB-Acre-2 f	ATATTTTCCTCTCCGCTTTGAA ATGTCCAATTTACTGACCGTAC

	pCB-Acre-2 r	TGGAGATGCCATGCCGACCC CTAAGCGCTACCGTTCAAGT
Cre exicision	35S-Forward	GAGAACACGGGGGACGAGCTC
	Cre-Reverse	CATAACCAGTGAAACAGCATTGC

2
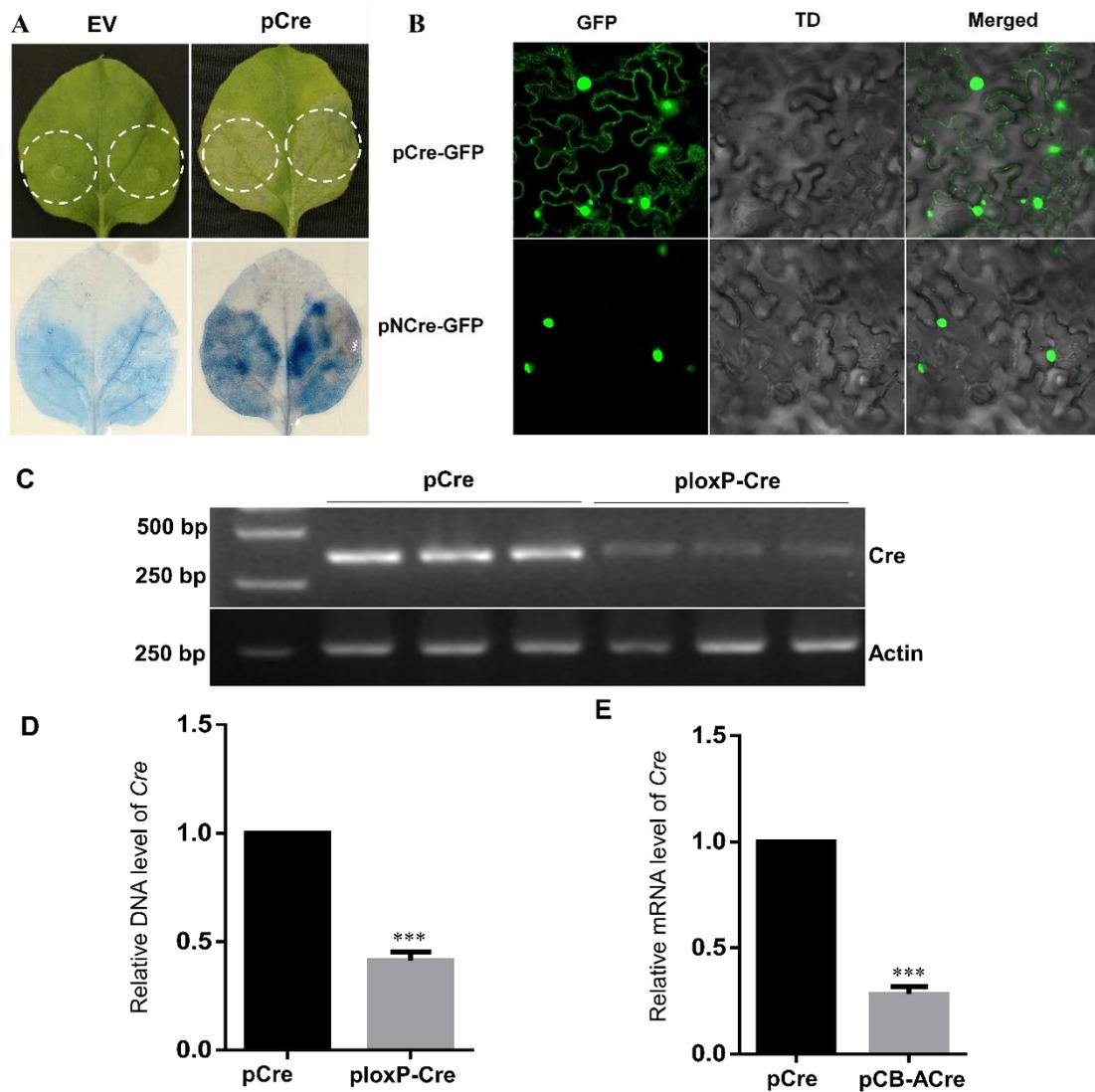
Appendix B   A, Agrobacterium-mediated transient expression of Cre protein induced necrosis in *N. benthamiana* leaves. B, subcellular localization of pCre-GFP and pNCre-GFP. C, D, analysis of the conditional excision and excision efficacy of Cre at 12 h post inoculation. E, analysis of Cre expression levels by RT-qPCR. Bars represent the standard errors of the means. A two-sample unequal variance directional t-test was used to test the significance of the difference (***P<0.001, n=3).
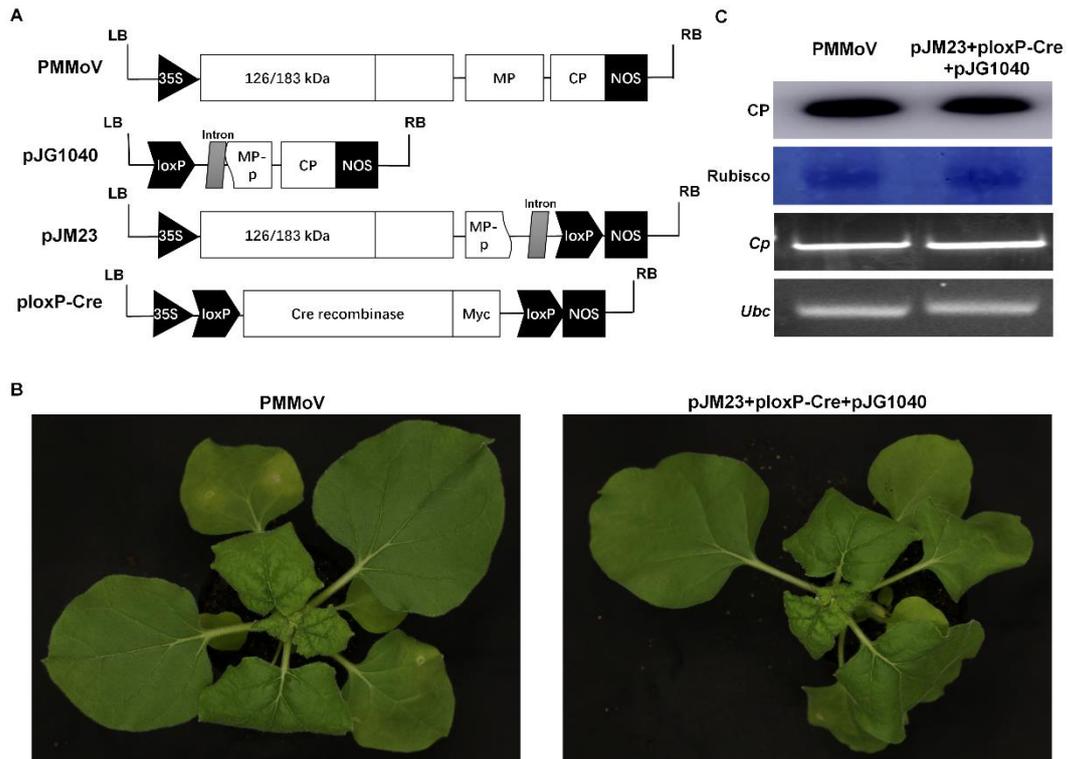
Appendix C A, schematic diagram of the full-length cDNA clone and modified Cre/loxP system (PMMoV, pJG1040, pJM23, pJG1024). B, symptoms on *N. benthamiana* after agroinfiltration with PMMoV clone (left) or the Cre/loxP system components (right). C, Western blot and RT-PCR confirming CP expression in infiltrated leaves of both treatments.