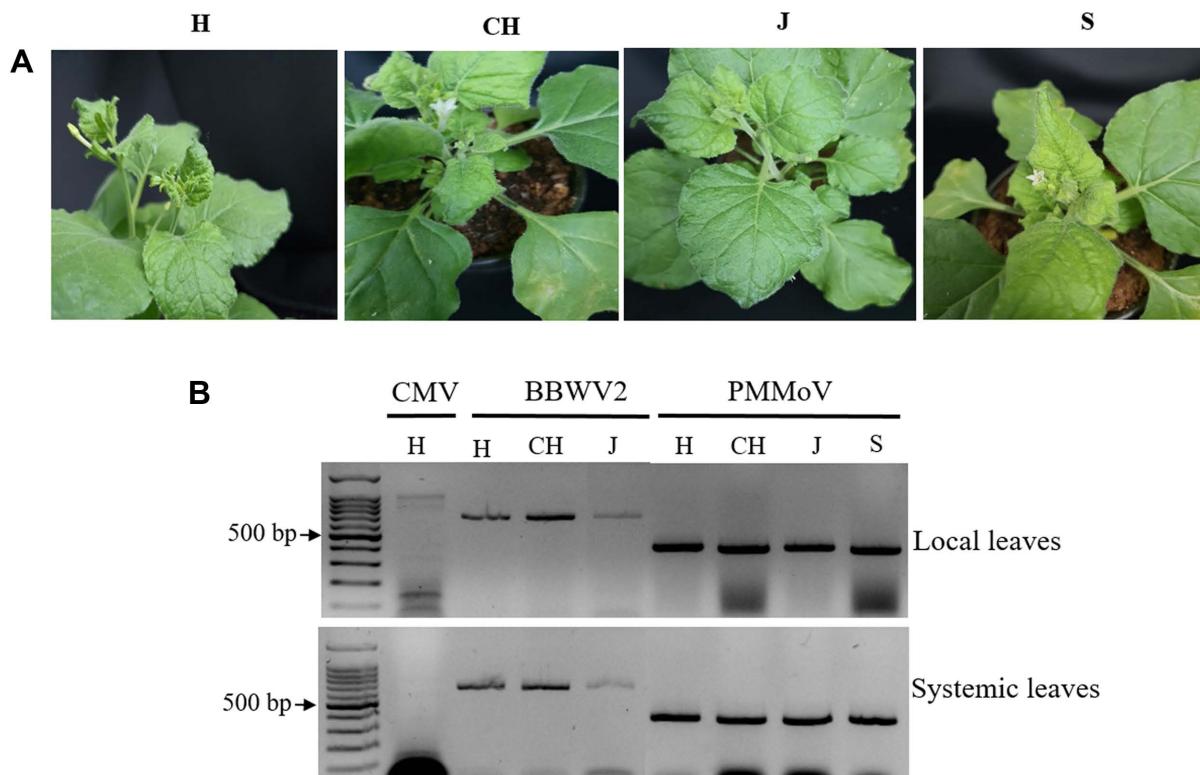


Supplementary Table 1. Primer sequences used in this study

| Viruse | Primer sequence | Primer size (bp) | Purpose | Reference |
|----------------------------------|---|------------------|---------|--------------------|
| Cucumber mosaic virus (CMV) | 5'-YASYTTDRGGTTCAATTCC-3' 5'-GACTGACCATTAGGCCG-3' | 940 | RT-PCR | Cho et al. (2007) |
| Pepper mottle virus (PepMoV) | 5'-TGTTCACTAGGCTCAGGAGT-3' 5'-GACGACCCAACACACTATT-3' | 461 | RT-PCR | Shin et al. (2017) |
| Broad bean wilt virus 2 (BBWV2) | 5'-AATGAAGTGGTGCTCAACTACACA-3' 5'-TTTGGAGCATCAACCATTGGA-3' | 654 | RT-PCR | Cho et al. (2007) |
| Pepper mild mottle virus (PMMoV) | 5'-GTGTACTTCTGCCTTAGG-3' 5'-TTAAGGAGTTGTAGCCCACG-3' | 390 | RT-PCR | Choi et al. (2005) |
| Tomato spotted wilt virus (TSWV) | 5'-GGGACTTTGGAGAACTCTTT-3' 5'-TAAAACACTAGAACTAGTGGTAA-3' | 500 | RT-PCR | Choi et al. (2018) |
| Broad bean wilt virus 2 | 5'-AATTTGCCGTTGAATCTGC-3' 5'-GCACAGCACTATGCTTGGAC-3' | 136 | qRT-PCR | - |
| Pepper mild mottle virus | 5'-TTCCGATATAATGCCGTGCT-3' 5'-CGTCTCGCAGTTGAGGAT-3' | 114 | qRT-PCR | - |

RT-PCR, reverse transcription-polymerase chain reaction.



Supplementary Fig. 1. Symptoms and detection of viruses obtained from the gochujang samples in *Nicotiana benthamiana*. (A) Symptoms induced in *N. benthamiana* by the H, CH, J, and S samples 14 dpi. (B) Detection of the coat protein gene of cucumber mosaic virus (CMV), broad bean wilt virus 2 (BBWV2), and pepper mild mottle virus (PMMoV) in local and systemic leaves of *N. benthamiana* by reverse transcription-polymerase chain reaction.

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