

**Figure S1: Detection of viral RNA of the CsCMV-CM and CsCMV-NC
in infected cassava leaves using RT-PCR**

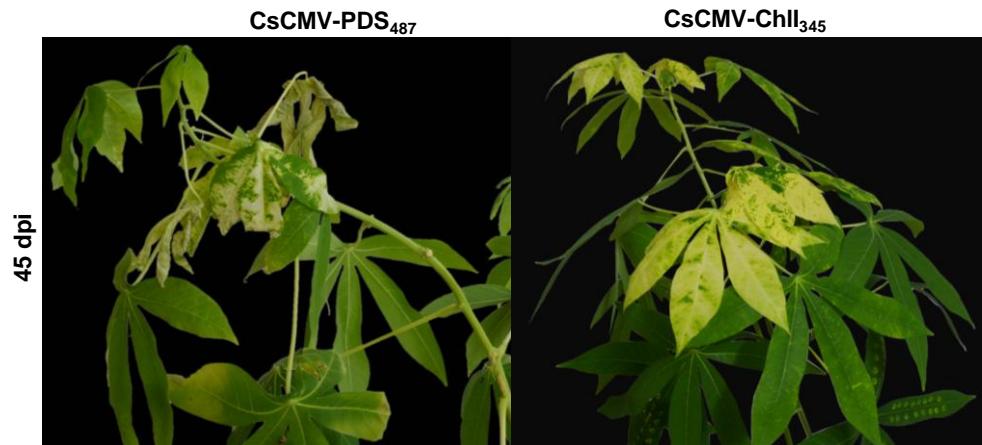


Figure S2:Silencing phenotypes in 5-month-old cassava plants induced by infection
with pCsCMV-PDS₄₈₇ or pCsCMV-ChlI₃₄₅ at 45 dpi.

a

Cassava <i>PDS</i>	206	CTTTGCAGGTAGTTGTTGGACTATCCTAGACCTGACATTGATAAACACGGTGAAATTCT	265
<i>N.Benthamiana PDS</i>	760	CTTAAAGGTAGTCGATTGTTTCCAAGACAGAGCTAGACAATACAGTTAATT	819
Cassava <i>PDS</i>	266	TGGAGCTGCATACTTACGACATCTCCGCAATTCTCCCGCCAGCTAAACCATTGA	325
<i>N.Benthamiana PDS</i>	820	TGGAGCGGCGTTATTATCATCAGCTTCTGACTCCACGCCAACTAAACCTGG	879
Cassava <i>PDS</i>	326	AAGTTGTGATTGCTGGGGCAGGGTTGGCTGGTTTATCAACTGCGAAATTTGGCAGATG	385
<i>N.Benthamiana PDS</i>	880	AGATTGTTATTGCTGGTCAGGTTGGTGGTTTGCTCACGAAATATCTGCGAGATG	939
Cassava <i>PDS</i>	386	CAGGGCACAGCCCGTACTACTTGAGGCAAGAGAAGTCCTGGGTGAAAGGTGGCTGGT	445
<i>N.Benthamiana PDS</i>	940	CTGGTCACAAACCGATATTGCTGGAGGCAAGAGATGCTTAGGTGGAA---GCTGCAT	995
Cassava <i>PDS</i>	446	GGAAAGATGATGATGGGACTGGTATGAAACAGGCTTCA	485
<i>N.Benthamiana PDS</i>	996	GGAAAGATGATGATGGAGATTGGTACGAGACTGGTTCA	1035

Identity% = 75.71

b

Cassava <i>ChlI</i>	1	GCATCTTAACAGTCCACTTGTGCATGCAATTCAAATCTATCAAGTAGCTGTGGCTG	60
<i>N.Benthamiana ChlI</i>	1908	GCATCTCTCACGGTCCCCACTTGGGCATGCAATTCAAATCGATCAAAGTTGTGGCTA	1849
Cassava <i>ChlI</i>	61	AGCTCCCTCTTCAAGGGTGGCCAGGCCAACATCAAATGAACCGTGCAGGATGTGAAATA	120
<i>N.Benthamiana ChlI</i>	1848	AGTTCTCTTCTCAGGATTACCCGAACCAATAAGGATAATCGGGCAGGGTGTGATATT	1789
Cassava <i>ChlI</i>	121	GAAATACCCCTCTCTCCACAGTGTCCATCCTGAGGCGCAGAACATCAAAGAACATCC	180
<i>N.Benthamiana ChlI</i>	1788	GATATCCCTCTCTTCACAGTGTCCATCCCAGTCTGCAAGAACATCAAAGAACATCT	1729
Cassava <i>ChlI</i>	181	ACTAAGTGGTCATCTAAAGGTTAACCTCATCCACATAAGAACATCCCTATTAGCTTA	240
<i>N.Benthamiana ChlI</i>	1728	ACTAAATGGTCGTCCAAAGGATAACCTCATCGACATAAGAACATTCTCTGTTAGCTTA	1669
Cassava <i>ChlI</i>	241	GCAAGAAGGCCAGGCTCAAATGCCCTGACACCTCCGTGAGAGCCTTCAATCAATT	300
<i>N.Benthamiana ChlI</i>	1668	GCAAGAAGACCAGGCTCGAAAGCCTTACACCCCTCAGTAAGAGCTTCTCAATGTCGATT	1609
Cassava <i>ChlI</i>	301	GTACCAACACCCCTATCCTCTGTAGCACCTAACGGCAAATCAACC	345
<i>N.Benthamiana ChlI</i>	1608	GTGCCACACACCCCTGTCTCAGTAGCACCTAGCGGAAATCAACC	1564

Identity% = 82.61

Figure S3: Alignment of the cassava 487-bp *PDS* (GenBank accession: XM_021757403) and 345-bp *ChlI* gene fragments (GenBank accession: XM_021743433) in pCsCMV-PDS₄₈₇ and pCsCMV-ChlI₃₄₅ with the *N. benthamiana* *PDS* (GenBank accession: DQ469932) and *ChlI* (Sequence ID:Niben101Scf16898g00001.1) homologues by the Sol Genomics Network (SGN). (https://solgenomics.net/organism/Nicotiana_benthamiana/genome).

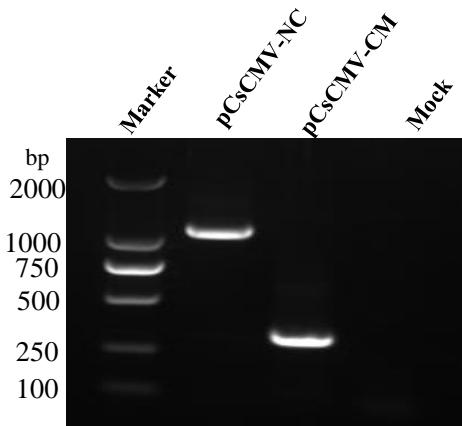


Figure S4 :Detection of viral RNA of the CsCMV-CM and CsCMV-NC in cassava storage roots using RT-PCR.