

# CHARACTERISTICS OF GENE ENCODING COAT PROTEIN ISOLATED FROM SOYBEAN MOSAIC VIRUS

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## TÓM TẮT:

Leaf mosaic disease of soybean is caused by soybean mosaic virus (SMV) from the family Potyviridae and is one of the main causes of reduced productivity and quality of soybean. To detect and determine the exact cause of mosaic disease on soybean leaves in some areas of Son La province, we used RT-PCR technique with specifically designed primers for Potyviridae; consequently, CP gene (cDNA) encoding the coat protein (CP) has been amplified. Results of cloning and comparison of nucleotide sequences showed the sequences of CP gene of SMV lines SL1 and SL2 had the similarity of 99.3-100% compared to that published in the GenBank with code number X63771. SMV lines SL1 and SL2 (Vietnam) have close relations and the same group of allocation with two Chinese lines, X63771 and U25673 in the GenBank. The nucleotide sequence of the CP gene of SMV line SL-Vietnam will be used as material in constructing RNAi vectors for gene transfer to enhance SMV-antiviral activity of soybean in Vietnam.