

Capsid Protein Gene Sequence Analysis and Development of Diagnostic Method Barley Yellow Mosaic Virus (BaYMV) by RT-PCR

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A rapid and sensitive assay for specific detection and identification of barley yellow mosaic virus (BaYMV) was set up using the reverse transcriptase polymerase chain reaction (RT-PCR). Couple of primers were selected to discriminate the viruses. PCR fragments of BaYMV (ca. 0.9 kb) were obtained by using the method designed for BaYMV capsid protein. RT-PCR fragments were cloned with vector pT7 Blue and the resulting clones were sequenced. Capsid protein of BaYMV consisted of 297 amino acids and 891 nucleotides. The capsid protein sequence of BaYMV showed 98% of nucleotides and 99% of amino acids homology.