Analysis of genetic diversity in coat protein gene of grapevine fanleaf virus in north east of Iran

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Grapevine fanleaf virus (GFLV) is a one of devastative viruses of grapevine cause severe crop loss in vineyards. To study genetic variation of GFLV in Khorasan-Razavi, 280 leaf samples were randomly collected during the growing season of 2011-2012. Using specific antibodies raised against Iranian isolate of GFLV, 187 samples were found to be infected with GFLV in indirect ELISA. In RT-PCR using a specific primer pair 1515 bp of coat protein and 230 nucleotides of 3'ter UTR were amplified from 187 samples. RFLP analysis using TaqI endonuclease were divided isolates into eighteen genotypic groups which supported by sequence analysis. Sequence identities at the nucleotide level were 90-92% between the coat protein gene of isolates of this study and those deposited in the GenBank.