

MOLECULAR AND SEROLOGICAL DETECTION OF *CUCUMBER MOSAIC VIRUS* IN PEPPER GROWING AREAS IN ISPARTA PROVINCE, TURKEY

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Abstract

The aim of the study was to investigate serological and molecular detection of *Cucumber mosaic virus* (CMV) in pepper growing areas in Isparta province, Turkey. During surveys conducted in 2013- 2014 growing season, field-grown pepper plants with symptoms of mosaic, chlorotic mottling, vein banding, blistering and leaf and fruit deformation were observed. A total of 239 leaf samples were collected from various locations in this region. The Leaf samples were tested by DAS-ELISA (Double antibody Sandwich Enzyme Linked Immunosorbent Assay) using specific kits to detect CMV. ELISA tests showed that among 239 samples, 10 were infected with CMV. To confirm the results of ELISA positive leaf samples were tested by RT-PCR method and the respected size of band with 678 bp was observed on agarose gel electrophoresis for CMV. As a result of the studies, ELISA test results and RT-PCR test results were confirmed each other.

Key words: pepper, *Cucumber mosaic virus*, ELISA, RT-PCR
