

Detection of *Lettuce Viruses* in Ankara (Turkey) ProvinceFiliz Randa ZELYUT^{1*} and Filiz ERTUNC¹¹Ankara University, Faculty of Agriculture, Department of Plant Protection 06110 Ankara, TURKEY

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Aim of the study: Intensive lettuce production is done depending on the weather conditions especially in Nallıhan, Beypazarı, Ayaş, Çubuk and centrum districts of Ankara, because of the soil and climate characteristics suitable for lettuce production. This study investigated the viruses infecting lettuce. As a result lettuce mosaic virus (LMV), *Tomato spotted wilt virus* (TSWV), *Cucumber mosaic virus* (CMV), *Mirafiori lettuce big vein virus* (MiLBVV) and *lettuce big vein virus* (LBVV) were investigated serologically, symptomologically and by molecular assays.

Material and Methods: A total of 324 samples of lettuce were obtained from the region where approximately 23.340 decares of lettuce were produced. A total 324 samples were collected from the field and all samples were tested for CMV, TSWV, LMV and MiLBVV using specific antiserum in a double-antibody sandwich enzyme linked immunosorbent assay (DAS-ELISA) serological test.

Results: CMV and TSWV were not present in the research area and were not detected in the collected lettuce samples. On the other hand 39 MiLBVV, 6 LBVV and 25 LMV infected plant samples tested positive for MiLBVV, LMV and LBVV antisera respectively. Specific primer pairs were used for the detection of LMV, MiLBVV, LBVV in RT-PCR and bands of the coat protein gene amplified by this primer pairs was obtained. A 800 bp, 469 bp and 296 bp fragments of LMV, MiLBVV and LBVV respectively representing the coat protein region were observed under the UV light. The prevalence rates of the factors detected in Ankara lettuce cultivation areas were calculated as 3.01%, the infection rates were calculated as 12.04% for MiLBVV and 7.72% for LMV.

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