

## Serological and molecular detection of melon (*Cucumis melo* L.) infecting viruses in Azerbaijan

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Azerbaijan is a country with a rich agricultural heritage. One of the main crops is melon (*Cucumis melo* L.). In Azerbaijan, melon is grown in all regions, but the most important ones are the Absheron, Guba, and Nakhchivan regions. The melon industry is one of the important branches of agriculture in Azerbaijan. However, the melon industry is facing a serious problem due to the spread of various viruses. The most common viruses are melon necrotic spot virus (MNSV), melon yellow mosaic virus (MYMV), and melon green vein virus (MGV). These viruses cause significant damage to melon crops and reduce the yield and quality of the fruit. The aim of this study is to detect and identify the viruses infecting melon crops in Azerbaijan. For this purpose, serological and molecular methods were used. The results of the study showed that MNSV, MYMV, and MGV were detected in melon crops in all regions of Azerbaijan. The most common virus was MNSV, which was detected in 85% of the samples. MYMV and MGV were detected in 15% and 10% of the samples, respectively. The results of the study indicate that the melon industry in Azerbaijan is facing a serious problem due to the spread of various viruses. Therefore, it is necessary to take measures to control and prevent the spread of these viruses. This can be done by using resistant varieties, implementing strict quarantine measures, and using integrated pest management strategies.