

4th International Conference on Agriculture & Horticulture

July 13-15, 2015 Beijing, China

Isolation of Alfalfa mosaic virus from four pepper cultivar in Riyadh K.S.A using RAPD-PCR technique

Jehan Saud Al –Abrahaim

Princess Nora Bent Abdul-Rahman University, Saudi Arabia

Random Amplification of Polymorphic DNA (RAPD-PCR) technique was used for isolation and identification of alfalfa mosaic virus (AMV) in homogenates of four common Saudi varieties of pepper *Capsicum annum*. Two sweet pepper (Sirtaki and S.P.KING) and two hot pepper (Cruise and E48.192). Ten virus specific primers were used to amplify DNA fragments. Specific bands of PCR products were observed at the position were corresponding to the expected size of DNA amplification product. The results indicated that primers could permit the specific detection of AMV and RAPD-PCR technique is efficient to distinguish between pepper varieties in their infection by alfalfa mosaic virus. Identifying the primary sources of the inoculum may help to reduce AMV spread and the severity of effects on pepper production. The observed symptoms showed that, two sweet varieties were very sensitive to virus infection. Meanwhile the hot varieties were tolerant or resistant to virus infection. In E48.192 and S.P.king varieties, virus was transferred by seeds.

Biography

Jehan Saud Al –Abrahaim is currently working at Microbiology Section, Department of Biology, Faculty of Science, Princess Nora Bent Abdul-Rahman University, Saudi Arabia.

jsaa242@hotmail.com

Notes: