

6th International Conference on

Genomics & Pharmacogenomics

September 12-14, 2016 Berlin, Germany

Molecular characterizing of TYLCV in cucumber plants in Kuwait

Ebtesam Al-Ali, H Al-Hashash, A Ben Hejji and N Al-Shayji
Kuwait Institute for Scientific Research, Kuwait

High scores of vegetable crop losses had been recorded in Kuwait agricultural farms, viral diseases were the main causal agent of these economic losses in many crops, mainly tomato and recently recorded on cucumber. TYLCV was reported as a major pest of tomato and cucumber but it was not characterized at the molecular level. The white-fly was main transmitter of TYLCV. Common symptoms on cucumber plants infected with TYLCV were leaf and fruit deformation, mosaicing, yellowing, upward leaf cupping, stunting. 200 samples of cucumber leaves were collected and the symptoms resulting from viral diseases were recorded and documented. DNA was extracted from 200 infected cucumber leaf samples and PCR detection was performed on 100 samples using two different primer pairs (TY1 and TY2 and TYC1R and TYC1F). PCR tests revealed that 75 samples out of 100 tested samples were positive. Best results were performed by TY1 and TY2 primer pair. Positive samples were stored for further analysis.

Biography

Ebtesam Al-Ali has obtained her BSc in 1993 from Kuwait University and worked for Kuwait University as Research Assistant, then joined KISR in 1993 and led 5 projects. She has published more than 5 papers in reputed journals and international conferences. Her field of experience is in plant virus detection, primer design, cloning and sequencing, ELISA, DNA extraction, PCR amplification, RCA-Rolling Circle Amplification, TYLCV detection on tomatoes, also trained twice in the University of Wisconsin Madison under the supervision of Professor Amy Charkowski as well as University of Washington state under supervision of Professor Hanu Pappu.

ebtisam_alali@hotmail.com

Notes: