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Citrus leaf blotch virus in Cuba: First report and partial molecular characterization

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Citrus leaf blotch virus (CLBV) infection has been detected in citrus cultivars from several countries including the USA, Spain, Italy, Japan, and New Zealand. To investigate whether CLBV is present in Cuba, a survey was conducted in seven commercial citrus fields of the country during 2007–2013. In all, 1940 trees were inspected and samples of two symptomatic and 18 asymptomatic sources were tested by biological indexing and molecular techniques for virus detection. Bark patches from the two symptomatic Nagami and Round kumquat sources induced chlorotic blotching and vein clearing in Dweet tangor, and only for the Round kumquat inoculums, stem pitting in Etrog citron. RT-PCR assays using specific primers to amplify fragments of polymerase (RdRp), movement (MP) and coat protein (CP) genes of CLBV yielded amplicons with the expected sizes using RNA from both sources as a template. Viral RNA was further detected by a non-radioactive dot-blot hybridization assay using a mixture of specific probes derived from a Spanish isolate of CLBV. Sequences from RdRp, MP, and CP amplicons showed identical nucleotide identities for the two Cuban isolates, and higher than 95.9 % with isolates from Spain, New Zealand, and the USA.

Biography

Lester Hernández-Rodríguez was graduated of Microbiologist in July 2000, Master in Science in Vegetal Biology in 2012, and has completed his PhD degree at the age of 41 years, all of these degrees obtained in Havana University, Cuba (Universidad de La Habana, Cuba). He is specialized in Plant Virology, mainly in viruses affecting fruit crops. His current job is Technical Secretary of Research Program on Citrus Production of Uruguay, where he is living since November 2017. He has published more than 32 papers in reputed journals and has participated in several International Congress and symposiums. He acted as the Executive secretary of the Fifth International Symposium on Tropical and Subtropical Fruit Growing/IX International Pineapple Symposium & quot; FRUTICULTURA 2017 & quot;, Havana City, Cuba, 2017 and the IV International Symposium on Citrus Biotechnology (ISCB), Uruguay, 2018.

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