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PROGRESS ON *Citrus tristeza virus* RESEARCH IN URUGUAY: UNRAVELLING THE ENEMY FROM THE INSIDE

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Since its appearance two centuries ago, the disease known as tristeza, is considered the most devastating virus-related illness of the citrus industry worldwide. *Citrus tristeza virus* (CTV), the causing agent of the disease, is transmitted by graft or by aphids. The existence of genetic variants of the virus leading to different outcomes in the infected plant has been reported in all affected citrus regions. Molecular and biological characterization of circulating isolates is especially important since it brings epidemiological information to control the disease. In the past few years, we have been focused on the study of CTV biological and genetic diversity in Uruguay. Biological indexing on five citrus indicator species showed the prevalence of severe CTV isolates. Based on a complete surveillance of Uruguayan citrus orchards harbouring 1200 field samples, we described to co-circulation and co-infection of citrus trees with CTV genotypes VT, T3, T36, RB, as well as a fifth new lineage named NC, with high prevalence in the fields. With the aim of developing a long-term cross-protection program, to be included in the ongoing National Citrus Sanitation schedule, we are trying to obtain an in-depth knowledge about the CTV genotypes prone to cause severe damages to the Uruguayan citrus industry. Here, we report the results of the biological, molecular and evolutionary full-genome characterization of the most relevant genotypes in the country.

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