



First report of raspberry latent virus in Europe

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Raspberry latent virus (RpLV) is an aphid-borne virus, a member of the family *Reoviridae* confirmed only in the USA and Canada (Quito-Avila et al. 2012). It is symptomless when present in single infections in commercial raspberry cultivars. In mixed infection with other viruses it can induce fruit crumbliness. Several viruses infecting raspberries as raspberry bushy dwarf virus, raspberry mottle virus, raspberry leaf blotch virus, Rubus yellow net virus were reported in Serbia, but little information exists on the occurrence of other viruses.

The presence of the RpLV was investigated in 182 samples collected during 2014–2020 from 32 locations across Serbia. Total nucleic acids were extracted from fresh and frozen leaves with CTAB method (Li et al. 2008). RT-PCR reactions were carried out using RpLV specific primers that amplify a 465 fragment of the putative B spike protein gene located on the core capsid (Quito-Avila et al. 2011). Expected PCR fragment was obtained in 13 samples from south-west Serbia, 12 of cultivar ‘Willamette’ and one ‘Tulameen’. RpLV was detected in 2 asymptomatic samples, and in 11 samples with symptoms of leaf blotch, leaf yellows and fruit crumbliness in mixed infections with other viruses. To confirm RpLV presence, another specific RT-PCR was performed using primer set S8 that amplifies a 547 bp fragment of the putative non-structural P8 gene (Quito-Avila et al. 2011). Amplified DNA fragments with S8 primer set of 13 isolates were purified and directly sequenced (Macrogen, Netherlands). Obtained nucleotide sequences were identical and deposited in the GenBank under accession Nos. MW187837–MW187849. BLAST analyses of these PCR products revealed 100% nucleotide identity with the only RpLV sequence available in the GenBank (HQ012660). To

the best of our knowledge, this is the first report of raspberry latent virus outside North America.

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Declarations

Human and animal rights and informed consent This article does not contain any studies with human participants / animals performed by any of the authors. All authors were informed about the study and agreed for publication. Informed consent was obtained from all individual participants included in the study.

Conflict of interest The authors declare that there is no conflict of interest.

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