The first detection of raspberry leaf mottle virus in Serbia

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Raspberry leaf mottle virus (RLMV) has been reported as one of components of the raspberry mosaic disease complex, both in North America and Europe (Martin et al. 2013). It has only recently been characterized, along with two other viruses associated with this complex: black raspberry necrosis virus (BRNV) and Rubus yellow net virus (RYNV). Data on the occurrence of these viruses in many raspberry production regions worldwide is still very scarce. A survey on the most important raspberry viruses in Serbia was carried out in the main production localities over four years period (2014–2018). Seventy four samples, collected from 31 localities comprising seven raspberry cultivars, were tested for the presence of RLMV by RT-PCR using virus-specific set of primers: CPF 5'CTAAGGAGATATGGCGGA and CPR 5'CAGTATGGCAGCCTCTTG (Tzanetakis et al. 2007). The expected 514 bp-long fragment was obtained from six samples collected from four different locations, five of which was from cv. Willamette and one from cv. Meeker. RLMV was detected in mixed infections with other raspberry viruses in all positive samples. Three samples from the same plantation were coinfecting with raspberry leaf blotch virus (RLBV), while the other three were also infected with RLBV, BRNV and RYNV. An amplicon originated from Willamette plant

(RS-PLM-M1), was custom sequenced (Macrogen, The Netherlands) and the nucleotide sequence was deposited in GenBank under accession No. MN013053. Nucleotide sequence of the major CP gene fragment of Serbian RLMV isolate shared identity in the range of 96.0–99.0% with the corresponding fragment of four isolates currently available in GenBank. To our knowledge, this is the first report of detection of RLMV in Serbia.

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