DISEASE NOTE



First report of grapevine Pinot gris virus in grapevine in Moldavia

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During the past 40 years, the grapevine varietal collection of the Republic of Moldova was diversified as a result of intensive breeding using genetic resources from various viticulture centers of the world. Grapevine Pinot gris virus (GPGV) from the genus Trichovirus, family Betaflexiviridae, has been reported from several grape-growing regions of the world (Giampetruzzi et al. 2012; Saldarelli et al. 2017). In autumn 2016, GPGV was found in five symptomless out of 12 grapevine samples collected from Moldavia. Margaritar, Muscat timpuriu, Leana, Muskat dnjestrovski and Ruskij ranij were the five cultivars found infected with GPGV. RNA was extracted from cortical scrapings of dormant canes and used in RT-PCR to amplify a fragment targeting the end of the movement protein gene and the beginning of the coat protein genes using specific primer pair DeF/R (Morelli et al. 2014). The expected 588 bp amplicon was obtained from two vines. The DNA fragments were cloned into pSC-A-amp/kan (Agilent Technologies, United Kingdom) and sequenced (Macrogen Europe, The Netherlands). BLAST analysis revealed a 98% nucleotide sequence homology with the SK53 isolate from Slovakia (KF134127). Bioinformatics analysis of the

Moldavian sequence (LT719093) is consistent with the sequence of GPGV from symptomless vines, as it has the described C/T polymorphism (Giampetruzzi et al. 2012) in the stop codon of the movement protein. The existence of GPGV latent infections and/or presence of asymptomatic strains of GPGV underline the importance of sensitive diagnostic assays to detect genetic variants of GPGV in natural populations. To our knowledge, this is the first report of GPGV from Moldavia.

References

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