First record of *Grapevine Pinot gris virus* infecting *Vitis vinifera* in the United Kingdom

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Grapevine Pinot gris virus (GPGV) is a member of the genus *Trichovirus*, and was first identified in grapevine (*Vitis vinifera*) cv. Pinot Gris in Italy in 2012 (Giampetruzzi *et al*., 2012). Since then GPGV has been reported in several European countries as well as Australia, Canada, China, Korea and the USA (Bertazzon *et al*., 2016). In April 2017, a survey of four geographically separated vineyards in the UK was done to investigate the presence of GPGV. A dormant cane was sampled at random from each of the four locations (Pinot Noir clones 119, 336, 792 and 924, reciprocally grafted upon Gravesac, SO4 or 3309 Couderc rootstocks).

RNA was extracted from cambial scrapings using a modified CTAB method (Abarshi *et al*., 2010) and tested by RT-PCR using the specific primer pair Pg-Mer-F1 and Pg-Mer-R1 (Beuve *et al*., 2015) targeting the movement protein (MP) gene. One sample, clone 336 grafted upon Gravesac, tested positive for GPGV yielding the expected 770 bp fragment. To confirm the detection of GPGV in the UK, a second RT-PCR was performed using GPGV-specific primers spanning the end of the MP and the beginning of the coat protein gene sequences (Morelli *et al*., 2014). An amplicon of the expected size (588 bp) was obtained.

PCR amplicons from both GPGV primer sets were sequenced in both directions and the resulting sequences assembled using Geneious v10.2.6 (Biomatters Ltd., New Zealand). Sequences overlapped by 441 bp and generated a single contig of 917 bp representing a partial sequence of the GPGV isolate from the UK (GenBank Accession No. MG983746). Similarity searches using BLAST showed that this GPGV isolate shares the highest sequence identity at the nucleotide level (99%) with isolate GPGV Mer from France (KM491305).

To our knowledge, this is the first report of GPGV in the UK. GPGV has been associated with symptoms of leaf mottling and deformation in grapevine and is transmitted by the eriophyid mite *Colomerus vitis* (Malagnini *et al*., 2016) which is present in the UK. Further large-scale studies should be done to determine the prevalence and spread of GPGV in the UK and evaluate the impact of the virus on yield and wine quality. The UK wine industry is a fast-growing sector with production projected to increase from the current 6 million bottles of wine per annum to c. 40 million bottles by 2040. Extensive knowledge is needed about the presence and incidence of viruses in UK vineyards to develop efficient control strategies critical to enable the continued development of the industry.

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