

**Leafhoppers in the vineyard, preliminary data about their possible implication in grapevine leaf mottling and deformation epidemiology**

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Grapevine Pinot gris virus (GPGV), a pathogen causing grapevine leaf mottling and deformation (GLMD), has a worldwide distribution on different grapevine cultivars. GPGV can be spread by the mite *Colomerus vitis*, which was demonstrated to be able to acquire and transmit this virus. Since 2017, this virus was described also on many other host plants. As *C. vitis* is monophagous on grapevine, the presence of other vectors of GPGV was hypothesized. The aim of this study was to investigate whether other arthropods can transmit GPGV from host to host. Therefore, hemipteran populations were sampled in infected vineyards in Trentino and Veneto regions from April to November 2017. The collected leafhoppers were classified based on morphological characters and then RNA and DNA were isolated by the TRIzol reagent. Each specimen was tested by RT and qRT-PCR for GPGV detection. Moreover, the morphological species identification was confirmed by sequencing the mitochondrial DNA barcode region. In Trentino region, GPGV was detected from June in *Psammotettix* sp., *Macrosteles* sp., *Agallia* sp., *Jassargus* sp., *Laodelphax striatellus* and in other leafhopper species. On the other hand, preliminary results obtained in Veneto region revealed the occurrence of GPGV in rare individuals of *Aphrodes makarovi* and *Empoasca decipiens*. The comparative analysis with GPGV isolates deposited in the GenBank showed high identity with GPGV. These results revealed that different hemipteran species present in infected vineyards can acquire GPGV, thus opening new possibilities for epidemiological studies as well as for developing control strategies for the disease.

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