

Detection of Grapevine fan-leaf virus in some grapevine varieties using ELISA test

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Grapevine fanleaf virus (GFLV) is responsible for fanleaf degeneration, which is one of the most severe virus diseases of grapevines worldwide. GFLV causes substantial crop losses, reduces fruit quality and shortens the longevity of grapevines in the vineyard. GFLV is transmitted specifically from grapevine to grapevine by the ectoparasitic nematode Xiphinema index, and belongs to the genus Nepovirus in the family Comoviridae. ELISA (with DAS-, TAS- and DASbiotin variants) is the most used method both for diagnosis and studies regarding the sampling strategy for different viruses (detection of the most reliable source of antigen and period of the year in which the analyze is performed). A survey was made to evaluate the sanitary status of grapevine in the ampelographic collection of USAMV Iasi, with regard to occurence of economically important viruses. Propagation material of 36 grapevine varieties was tested for presence of Grapevine fan-leaf virus. In the first test, from 14 varieties of grapevine analized, 8 were found to be infected with GFLV. The second test was performed on 22 vines varieties, 7 showed extinction values that exceed the blank value.