

OIV-VITI 653-2021 OIV definition of grapevine decline and recommendations for its mitigation

THE GENERAL ASSEMBLY

ON THE PROPOSAL of the Commission I Viticulture and the Expert group “Vine Protection and Viticultural Techniques”, after examining the serious problems linked to vine decline produced by several biotic factors, such as fungi, bacteria, phytoplasma, viruses, by abiotic factors such as weather extremes, and by factors attributable to grapevine growing practices,

IN VIEW OF the Article 2, paragraph 2 b) i and c) iii of the Agreement of 3rd April 2001 establishing the International Organisation of Vine and Wine, and under points 1.a.iii, 1.c.iii, and 1.f. of the OIV Strategic Plan 2020-2024 which relates the promotion of environmentally friendly vitiviculture and the consideration and responses to the challenge of climate change,

CONSIDERING the resolutions VITI 2/2006 and VITI 3/2006 respectively related to measures used to prevent or limit the proliferation of grapevine trunk diseases and phytoplasmas,

CONSIDERING the OIV collective expertise document « Grapevine Trunk Diseases. A review » published by the OIV in 2016,

CONSIDERING that vine decline is an increasingly widespread problem in many vineyards across the world and that among its main consequences are the reduction in production and increased mortality, related to multiple interrelated factors:

- Environmental factors, such as the impacts of climate change and other environmental stresses and constraints, and insufficient knowledge of adaptation techniques
- The progressive loss of genetic diversity of grapevines currently in use in planted vineyards, which can limit the resilience and adaptability of the vines to both biotic and abiotic stresses, which may act together to further exacerbate impact of the stresses
- Biological factors, such as latent, emerging or overtly expressed diseases
- Inappropriate viticultural practices resulting from economic constraints, the non-inclusion of sustainability objectives and the lack of continuous training on best practices and their current knowledge.

CONSIDERING that grapevine decline may cause a significant and continued decrease

in the production and/or a premature, sudden or progressive death resulting in a serious loss of productivity and a reduction in the economic viability of the vitivinicultural sector,

CONSIDERING the insufficient knowledge of the players in the vitivinicultural sector regarding the symptomatology and consequences induced by grapevine decline,

CONSIDERING that the preventive and remedial measures are not always sufficiently effective,

CONSIDERING it is necessary to ensure better communication and technical training on the subject in order to develop sufficiently effective and sustainable viticultural practices,

DECIDE to adopt following definition of grapevine decline:

“Grapevine decline refers to a progressive and persistent syndrome, even if it is subject to temporary latency phases, of decreased plant vitality, with negative impacts on the vine’s productivity which may be followed by gradual or sudden mortality.

This syndrome or condition involves various factors, which lead to the progressive weakening of the vine and constitutes a set of symptoms that can be produced by three main groups of factors:

- a) Biotic: various fungi, bacteria, phytoplasmas and viruses involved with the infectious degeneration of grapevines;
- b) Abiotic: environmental stress reinforced by climate (water stress, heat stress, frost, hail, among others) and soil related factors;
- c) Viticultural practices and human/social: factors related to the production strategies and practices conditioned by regulatory and economic constraints.”

In the absence of prophylaxis and control measures, which can limit and delay the virulence of grapevine decline, there is a risk of triggering an irreversible process with a significant economic impact on the vitivinicultural sector.

RECOMMENDS

- a) To the OIV members states:
 - Establish a national inventory of the factors responsible for the grapevine decline in relation to the grapevine varieties and rootstocks.
 - Develop a (harmonized) monitoring procedure and regular updates on the situation of grapevine decline: its distribution, extent and severity of occurrence and impact on productivity.
 - Establish a digital network at each Member State, with the participation of all players in the vitivinicultural sector, in order to monitor the current state and

evolution of grapevine decline in vitivinicultural regions, and thus be able to generate early alerts by sending technical information to the sector on the subject.

- Assess the economic impact of grapevine decline on vineyard estates, through the development of appropriate economic indicators.
- Promote at international level the implementation of collective and individual actions to fight the grapevine decline and its mortality, thereby enabling these actions to be scaled and effective at all levels.
- Encourage research works to improve the understanding of grapevine decline and vine mortality in order to strengthen and optimise mitigation and control methods.
- Encourage the establishment of an international scientific network, considering that one of the main shortcomings in this issue is the lack of coordination between players of the vitivinicultural sector.

b) To all vitivinicultural countries:

- Encourage the exchange and implementation of technical and scientific skills in a common collaborative work programme with all concerned national agencies and professions, starting from plant production up to the trading of vitivinicultural products.
- Ensure a comprehensive and a global approach for the promotion of multidisciplinary projects for the study of abiotic and biotic factors, which are the main cause of the onset and spread of grapevine decline. These research works must provide results that allow for an adaptation strategy based on programs of training support and adoption of best management practices by all stakeholders.
- Act on all levels, including territorial administrative, in order to support the players of the vitivinicultural sector and offer them the necessary training and technical tools to avoid or mitigate the undesirable effects of grapevine decline.