



RESOLUTION OIV-VITI 704-2023

OIV GENERAL PRINCIPLES AND RECOMMENDATIONS FACING TO PIERCE'S DISEASE OF GRAPEVINE

WARNING: This resolution withdraws the following resolutions:
- VITI 1/92

OIV GENERAL PRINCIPLES AND RECOMMENDATIONS FACING TO PIERCE'S DISEASE OF GRAPEVINE

THE GENERAL ASSEMBLY,

ON THE PROPOSAL of Commission I Viticulture and the group of experts "Vine Protection and Viticultural Techniques", after examining the numerous scientific studies at international level on the role and the risks associated with the presence and potential spreading of Pierce's disease in grapevine

IN VIEW OF Article 2, paragraph 2 b) i and c) iii of the Agreement of 3 April 2001 establishing the International Organization 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 vitiviniculture" and the consideration and responses to the challenge of climate change,

CONSIDERING that the genus *Vitis* is susceptible to infections by the bacterium *X. fastidiosa* ssp. *fastidiosa*, the causal agent of Grapevine Pierce's disease (GPD) and that for the purposes of this document any reference to the species *Xylella fastidiosa*, specifically refers to said sub species,

CONSIDERING that Pierce's disease of grapevine is an increasingly widespread problem in many vineyards across the world,

CONSIDERING that Pierce's disease of grapevine 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 Pierce's disease of grapevine,

CONSIDERING the need to make the political, economic and technical community aware of the risks of spreading of *Xylella fastidiosa* in viticulture,
CONSIDERING that a better international, national and territorial organization is necessary and urgent, involving scientific and technical structures and including official initiatives to intervene in a harmonized manner in the event of an epidemic of *X. fastidiosa* subsp. *fastidiosa* and avoid its spreading to GDP-free areas,
DECIDE to withdraw the OIV Resolution VITI 1/92,

RECOGNIZES:

- The spreading of *Xylella fastidiosa* in viticulture mainly by insect vectors of the bacterium commonly found in vitivinicultural regions.
- *Xylella fastidiosa* is transmissible by insect vectors, normally present in many vitivinicultural regions of the world, that feed on the xylem sap of grapevine.
- Mainly leafhoppers and aphrophorids, such as leafhoppers of the order Hemiptera (Cicadellidae, Cicadellinae) and grasshoppers such as *Philaenus spumarius* and *Neophilaenus campestris* (Hemiptera: Cercopoidea).
- The bacterium *Xylella fastidiosa* (including the subspecies *fastidiosa* responsible for Pierce's disease on vines) is classified as a quarantine organism in many wine-growing countries.
- Many plant species can be hosts of the bacterium *Xylella fastidiosa* subsp. *fastidiosa*. Some of these species do not show symptoms of the disease; however, they can act as reservoirs of the bacteria and are host plants of the vectors mentioned above. These hosts of the bacteria or vectors are often wild herbaceous plants and/or weeds.
- The epidemic risks associated with *X. fastidiosa* subsp. *fastidiosa* infections may also increase depending on the vector species, the climatic conditions favouring the epidemic development of the pathogen and its potential vectors.
- When the bacterium and the vectors are present that can transmit the disease from vine to vine or by intermediate host plants, there are serious epidemic risks linked to the presence of uncultivated and/or abandoned vineyards, which might be potentially infected. These often escape surveillance.
- To fight against the spread of *X. fastidiosa* subsp. *fastidiosa* in areas considered

not yet infected, it is urgent to activate and intensify all preventive measures to limit the spread of *X. fastidiosa* subsp. *fastidiosa* and the role of its associated vectors and host plants.

- There is the need to have harmonized systems of disease monitoring, control and eradication adapted to the regional epidemiological conditions in all wine-growing sites.
- It is essential to train all professionals to recognize the symptoms so as not to confuse Pierce's disease with any other diseases, abiotic stresses and avoid delays in reporting.

RECOMMENDS:

1. Ensure compliance with all international, national, regional or territorial, phytosanitary services, phytosanitary prophylaxis rules envisaged for the detection, prevention and eradication or containment of organisms and diseases classified as quarantine.
2. Member States must take measures aimed to control the introduction of host plants of *X. fastidiosa* coming from areas where the bacteria have been identified.
3. Implement and facilitate better collaboration between the various plant sectors likely to be affected by Pierce's disease for preparation and technical training adapted to the epidemic risks associated with the disease.
4. Implement immediate and effective phytosanitary control measures, designed to prevent and slow down, where appropriate, the spread of *X. fastidiosa* subsp. *fastidiosa* particularly in the exchange and movement of grapevine propagation material from grapevines and other plants hosting the bacterium in question outside the zone that is considered to be infested by the disease and/or the first establishment, in order to avoid its subsequent extension to free zones.
5. For those areas where the disease is still not present, the contamination risk assessment has to be performed, to implement and intensify all the preventive measures of protection, surveillance, monitoring and inspection with:
 - a. compliance with the commitments and indications provided by scientific and technical international organizations (like IPPC and EPPO, FAO, EFSA) and in accordance with the current rules and legislation of each country;

- b. disclosure and technical training to the different players in the vitivincultural sector, especially grapevine growers and nurserymen on the symptoms, vectors and risks associated with GPD;
 - c. agronomic, cultural, biological and chemical control actions against insect vectors, including trials of different active substances to recommend the most effective ones;
 - d. large-scale monitoring of grapevine-growing areas, depending on the situation and the specificities of each country, to identify the presence of grapevines showing symptoms associated to GPD and the presence of related insect vectors of *X. fastidiosa* subsp. *fastidiosa*;
 - e. inspection by qualified personnel in mother vine blocks, in nurseries and in young vineyards planted with propagating material developed in areas suspected of being contaminated with Pierce's disease;
 - f. sampling and analysis of plants showing proven or suspected symptoms of GPD and of vectors entrusted detected in the prospicient grapevine-growing area;
 - g. systematic and periodic sampling and analysis of asymptomatic vineyards in areas at risk of contamination;
 - h. create and certify laboratories to GPD diagnosis according to the methods and protocols established by the control and diagnostic organizations, and in accordance with the current legislation of the countries;
6. Eradication measures. If outbreaks of *X. fastidiosa* subsp. *fastidiosa* are confirmed in grapevine growing regions where the disease is not endemic, identification, marking, delimitation, control and eradication measures should be defined by including:
- a. identification, marking and official declaration of the delimited zone which consists of an- outbreak zone (infested zone) and of an appropriate buffer zone in which the following measures has to be taken;
 - b. in accordance with national or local quarantine and legislation for the delimited zone:
 - i. prohibition to move any plant material in and out from nursery and plantations of mother plants, unless this material has been treated with hot-water treatment, in accordance with the protocol envisaged by IPPC and EPPO on the propagating material produced in the defined areas and

- regions at epidemic risk or introduced by them;
- ii. elimination of all the grapevines including wild grapevines, and all the plants which are host of *X. fastidiosa* subsp. *fastidiosa*, including weeds that can be reservoirs of the vector, following quarantine recommendation of scientific and technical international organizations (like IPPC and EPPO, FAO, EFSA) within a radius of 50 m at least of infected plants;
 - iii. mandatory control programs against *X. fastidiosa* subsp. *fastidiosa* vectors integrating primarily agronomic or biological control measures;
 - iv. trapping and determination of potential insect vectors (Cicadellidae and Cicadellinae) present in the delimited area;
 - v. during at least four years, annual surveillance in the demarcated and analysis on asymptomatic vines, all plants and vectors which are host *X. fastidiosa* subsp. *fastidiosa* according to an adapted sampling plan, and analysis;
- c. for the buffer zones: agronomic measures for vector control where Pierce's disease is considered a risk and/or a problem for the sector.
7. Lead, encourage and support international interdisciplinary research to investigate and facilitate access to,
- a. in the short term: control options for both bacteria (e.g. bacteriophages) and insect vectors (e.g. with parasitoids or entomopathogens);
 - b. in the long term: breeding or engineering of genus *Vitis* varieties that are immune to *X. fastidiosa* subsp. *fastidiosa*, and resistant/tolerant to GPD.