

ALPHA UNIT

Scientific Panel on plant Health
Minutes of the 52nd plenary meeting of the Scientific Panel on Plant Health
Held on 26-27 November 2014, Parma

(Agreed on 29 January 2015)

Participants

• **Panel Members:**

Richard Baker, Claude Bragard, Thierry Candresse, Gianni Gilioli, Jean-Claude Grégoire, Michael John Jeger, Olya Evtimova Karadjova, Christer Sven Magnusson, David Makowski, Charles Manceau, Maria Navajas, Trond Rafoss, Vittorio Rossi, Jan Schans, Gritta Schrader, Gregor Urek, Wopke van der Werf.

• **EFSA:**

Animal and Plant Health Unit: Ewelina Czwienziek, Gabor Hollo, Ilaria Inverardi, Virag Kertesz, Svetla Kozelska, Tomasz Oszako, Marco Pautasso, Giuseppe Stancanelli.

1. Welcome and apologies for absence

The Panel Chair welcomed the participants to the 52nd plenary meeting of the EFSA Plant Health Panel. Apologies were received from Guillermo Cardon – European Commission DG SANCO, from Françoise Petter (observer -European and Mediterranean Plant Protection Organisation) and Imre Holb and Irene Vloutoglou from the EFSA Plant Health Panel.

2. Adoption of agenda

The agenda was adopted with only one change, i.e. also the draft opinion on *Aonidiella citrina* was presented and discussed for possible adoption.

3. Declarations of interest

In accordance with EFSA's Policy on Independence and Scientific Decision-Making Processes regarding Declarations of Interests (DoIs)¹ and the Decision of the Executive Director implementing this Policy², EFSA screened the Annual Declarations of Interest (ADoI) and the Specific Declarations of Interest (SDoI) filled in by the experts invited for the present meeting. No conflicts of interests related to the issues discussed at this meeting have been identified during the screening process or in the Oral Declarations of Interest (ODoI) at the beginning of this meeting.

¹ <http://www.efsa.europa.eu/en/keydocs/docs/independencepolicy.pdf>

² <http://www.efsa.europa.eu/en/keydocs/docs/independencerules.pdf>

4. Agreement of the minutes of the 51st Plenary meeting held on 24-25 September 2014

The minutes were agreed without changes.

5. Scientific outputs submitted for discussion and/or possible adoption/ endorsement

5.1. *Xylella fastidiosa* pest risk assessment and evaluation of risk reduction options ([EFSA-Q-2013-00891](#));

The Chair of the WG presented the draft opinion on pest risk assessment and evaluation of risk reduction options for *Xylella fastidiosa*. *X. fastidiosa* has been detected in olive in the EU with a distribution restricted to the region of Apulia in Italy and is under official control. *X. fastidiosa* has a very broad host range, including many common cultivated and wild plants. All xylem fluid-feeding insects in Europe are considered to be potential vectors. *Philaenus spumarius* (Hemiptera: Aphrophoridae), a polyphagous spittlebug widespread in the whole risk assessment area, has been identified as a vector in Apulia. The probability of entry of *X. fastidiosa* from countries where *X. fastidiosa* is reported is very high with plants for planting and moderate with infectious insect vectors carried with plant commodities or travelling as stowaways. Establishment and spread in the EU is very likely. The consequences are considered to be major because yield losses and other damage would be high and require costly control measures. The systematic use of insecticides for vector control may create environmental impacts. With regard to risk reduction options, strategies for the prevention of introduction and for the containment of outbreaks should focus on the two main pathways (plants for planting and infectious insect vectors) and combine the most effective options in an integrated approach. For plants for planting, these could be pest-free production areas, surveillance, certification, screened greenhouse production, vector control and testing for infection and, for some plant species, treatments (e.g. thermotherapy). To prevent entry of the infectious vectors, insecticide treatments and inspection of consignments and production sites are required. The WG has also reviewed the effectiveness of risk reduction options for *X. fastidiosa* and its vectors listed in Directive 2000/29/EC and in the EU emergency measures. There is a need for intensification of research on the host range, epidemiology and control of the Apulian outbreak.

The draft opinion was discussed by the Panel. It was agreed to further improve it by addressing comments provided by Panel members at and after the plenary meeting and to submit a revised version to the Panel for adoption by written procedure by end 2014.

5.2. Statement on the comments from an international panel of scientists (Hatting et al., 2014) on EFSA PLH Panel recent pest risk assessment for *Phyllosticta citricarpa* (EFSA-Q-2014-00606)

A draft statement to reply to the comments made by an international panel of scientists (Hatting et al., 2014) on EFSA PLH Panel recent pest risk assessment for *Phyllosticta citricarpa* was presented and discussed. These comments, authored by Hattingh et al., were posted online in August 2014 on the website of Citrus Research International (Pty) Ltd, South Africa. The Panel assessed the comments by Hattingh et al. in the light of the content of the EFSA PLH Panel Scientific Opinion on CBS and the EFSA report detailing responses to comments received during the public consultation on the draft opinion. A detailed point by point reply to the comments by Hattingh et al. is provided in an Appendix of the draft Panel statement. Since September 2014, EFSA has written to the lead author of the comments trying to engage in a scientific dialogue concerning the sources of uncertainty related to the risks posed by *P. citricarpa* to plant health in the EU, so as to identify ways to reduce such uncertainties (e.g. with further research and/or data exchange). The EFSA PLH Panel also remains open to such constructive dialogue in the future.

It was decided to further improve the draft statement by addressing comments by the Panel and to submit it to the Panel for adoption by written procedure by end 2014.

5.3. Pest categorization of bacteria listed in Directive 2000/29/EC: *Xylophilus ampelinus* ([EFSA-Q-2014-00259](#))

The Panel performed a pest categorisation for *Xylophilus ampelinus*, which is the causal agent of bacterial necrosis of grapevine. *X. ampelinus* is a single taxonomic entity and grapevine is the only known host. *X. ampelinus* is regulated in the EU; it is listed in Annex II, Part A, Section II of the Directive 2000/29/EC. Reliable detection and identification tests are available. *X. ampelinus* is present on grapevine in 5 out of the 21 grapevine-producing EU countries. Nevertheless, it should be stressed that disease occurrence is sporadic in areas where *X. ampelinus* is present and depends on cultivar susceptibility and environmental conditions. The survival of *X. ampelinus* is unlikely to be affected by ecoclimatic conditions. In areas where *X. ampelinus* is present, the direct and indirect impacts can be high: yield reduction, death of grapevine plants and specific disease management procedures (use of healthy plant for planting, cumbersome management of infected vineyards). *X. ampelinus* is transmitted locally by rain, wind, overhead sprinkler irrigation and human activity within vineyards, and by plants for planting material over long distances, especially as infected planting material is, most of the time, asymptomatic. Control measures include the destruction of the infected plants and the application of copper compounds.

The opinion was adopted by the Panel.

5.4. Pest categorizations of bacteria listed in Directive 2000/29/EC: *Erwinia amylovora* ([EFSA-Q-2014-00252](#))

The Panel performed a pest categorisation for the EU territory of *Erwinia amylovora*, which is the causal agent of fire blight. *E. amylovora* is a plant pathogenic bacterium regulated by the Directive 2000/29/EC (Annexes II-A-II). *E. amylovora* is a single taxonomic entity. This organism can be accurately identified, based on a range of discriminative methods. Detection methods are available for symptomatic and asymptomatic plant material. *E. amylovora* is present in all EU Member States except Estonia, Finland and Malta, where host plants are not widely distributed or are rare. The host plants (mainly pear and apple) are cultivated throughout Europe where environmental conditions are conducive to disease development. Although no recent data are available on losses caused by *E. amylovora* in the EU, fire blight is considered to be the most destructive disease on pear and apple owing to the loss of trees. The analysis of past disease outbreaks previously reported in the EU highlights their considerable potential to have a severe impact on commercial horticulture, especially on apple, pear and quince, as well as on ornamentals and on nursery trade. The disease causes a range of symptoms on the aerial parts of plants, including the fruits, and *E. amylovora* often kills the trees and causes destructive outbreaks. Contaminated rootstocks, cuttings and grafted trees for transplanting, beehive transportation, rain and wind, are responsible for medium- and long-distance dissemination of the pathogen. Existing control is mainly based on prevention and exclusion. The use of chemical or biological products can prevent infection, and sanitation methods applied to infected plants can control the disease to a certain extent. No curative chemical control agents are available that eradicate *E. amylovora* in infected orchards

The opinion was adopted by the Panel.

5.5. Pest categorizations of bacteria listed in Directive 2000/29/EC: *Clavibacter michiganensis* spp. *insidiosus* ([EFSA-Q-2014-00243](#))

The Panel performed a pest categorisation for *Clavibacter michiganensis* subsp. *insidiosus*. The identity of the bacterium responsible for the bacterial wilt of lucerne is clearly defined. *C. michiganensis* subsp. *insidiosus* is present in only a few MSs in the EU and it is listed in the Annex IIAll of the Directive 2000/29/CE. Only sporadic disease outbreaks occur, and not in countries where lucerne production is of importance. The pathogen causes yield and quality loss only if susceptible cultivars are grown and conditions are favourable for disease expression. The pathogen is not reported in the main lucerne-producing MSs. There are no indications that in last decade the pathogen has a high impact on lucerne production in the EU, possibly because of the use of bacterial wilt-resistant varieties. *C. michiganensis* subsp. *insidiosus* is seed-borne and probably seed-transmitted, although with some uncertainty. The main pathway for long-distance dispersal of this pathogen is very likely via seeds, while machines and contaminated hay may also potentially play some role in the dissemination of the pathogen. The pathogen can be easily detected and identified on the basis of various microbiological and molecular tests and disease symptoms, including leaf mottling, reduction in plant height, and “witches’ broom” syndrome. Effective management strategies are available and include the use of resistant cultivars and, probably, the use of pathogen-free seeds. Finally, the Panel concluded that severe consequences, in terms of yield and quality losses, are expected for lucerne only if bacterial wilt-susceptible varieties are grown and if weather conditions are conducive to the disease.

The opinion was adopted by the Panel.

5.6. Pest categorizations of viruses listed in Directive 2000/29/EC: *Citrus tristeza virus* ([EFSA-Q-2014-00283](#))

The Panel performed a pest categorisation of European isolates of *Citrus tristeza virus* (CTV) for the European Union (EU) territory. European CTV isolates are listed in Annexes IIAll and IIB of Directive 2000/29/EC. CTV is a well-defined and easily diagnosed *Closterovirus* species transmitted by the vegetative multiplication of infected hosts and through the activity of aphid vectors. *Toxoptera citricida* is the most efficient vector but *Aphis gossypii* is the most important in Europe. European isolates of CTV have been reported in seven of the eight EU Member States (MSs) with significant citrus production. The natural host range of CTV is restricted to citrus species and to a few, related genera, such as *Fortunella* and *Poncirus*. CTV is unlikely to be affected by ecoclimatic conditions in regions where its host plants are grown and has the potential to establish in southern regions of the EU territory. The majority of European CTV isolates cause severe decline symptoms (tristeza disease) in several citrus species, in particular sweet orange and mandarin grafted on susceptible sour orange or lemon rootstocks, which are commonly used in many EU MSs with the exception of Spain and, to a lesser extent, France. Symptoms of the severe stem pitting disease (SP) have not been reported by any EU MSs, despite the identification of isolates closely related to non-European isolates that cause SP in other regions of the world. The observed impact of CTV is on citrus industries still heavily reliant on susceptible rootstocks. Replacing those with CTV-tolerant rootstocks, as was done in Spain, virtually eliminates the impact of CTV in the absence of SP. Comprehensive certification systems can also reduce CTV spread and impact. The most critical area of uncertainty concerns the potential ability of some European isolates to cause SP in sweet orange

The opinion was adopted by the Panel.

5.7. Pest categorizations of phytoplasma listed in Directive 2000/29/EC: Potato stolbur mycoplasma ([EFSA-Q-2014-00254](#));

The Panel performed a pest categorisation for the EU territory of potato stolbur mycoplasma, recently renamed *Candidatus* Phytoplasma solani (CPs), for the European Union (EU) territory. CPs is a well-defined species of the genus *Candidatus* Phytoplasma, for which molecular detection assays are available. It is a regulated harmful organism in the EU, and is listed as potato stolbur mycoplasma in Annex II, Part A, Section II of Council Directive 2000/29/EC. Although CPs can infect a wide range of host plants, this listing concerns only *Solanaceae* plants for planting. CPs is transmitted by grafting and vegetative propagation of infected hosts, and by several insect vector species including *Hyalesthes obsoletus*, *Reptalus panzeri*, *Pentastiridius leporinus* and possibly others. The geographical distributions and population densities of these vectors govern the spread of CPs. CPs can infect a wide range of host plants and has been reported in 14 EU Member States (MSs). CPs can cause yield losses in potato and other solanaceous crops, in grapevine, strawberry, maize and lavender. Because host plants, wild or cultivated, are widely distributed throughout the EU, the distribution of vector populations is the main determinant of CPs establishment and spread; therefore, CPs has the potential to establish and spread in unaffected parts of the EU with the extension of the distribution range of its vectors. There are high annual fluctuations in the impact of CPs, and this is mostly affected by the prevalence of plant reservoirs for CPs and by the size of local vector populations, which cannot easily be controlled. There are uncertainties regarding the precise distribution of CPs and its vectors, the evolution of vector distribution, the long-term impact of emerging CPs genotypes and the extent of impact on the various susceptible crops grown in the EU.

The opinion was adopted by the Panel.

5.8. Pest categorizations of *Spiroplasma citri* ([EFSA-Q-2014-00256](#))

The Panel undertook a pest categorisation of *Spiroplasma citri*, the causal agent of citrus stubborn disease, horseradish brittle root and carrot purple leaf. *S. citri* is a well-defined species of the genus *Spiroplasma*, a group of helical wall-less bacteria (*Mollicutes*) mainly associated with arthropods. Routine molecular detection methods are available and are appropriate for identification. *S. citri* is not known to occur in most of the EU Member States. Among citrus-growing countries, only Croatia, Greece, Malta and Portugal do not report *S. citri*. The disease seems to be widespread only in Cyprus. *S. citri* is included in Annex II, Part A, Section II of Directive 2000/29/EC. The insect vectors *Circulifer haematoceps* and *C. tenellus* are included in the same Directive, Annex II, Part A, Section II. Citrus, the main host plant (as a symptomatic host crop), is listed (a) in Annex III, Part A, (b) in Annex IV, Part A, Section II, (c) in the same annex, Part B, and (d) in Annex V, Parts A and B, Section I. *S. citri* is disseminated by plants for planting and by seven species of leafhoppers (Cicadellidae), of which only three species, *C. tenellus*, *C. haematoceps* and *C. opacipennis*, are reported in the EU. Besides the rutaceous hosts, more than 33 other plant species from 12 different families can be hosts, even if only some may show symptoms. Ecological conditions in the risk assessment area are suitable for the establishment and spread of *S. citri*, at least where citrus is currently grown. Yield reductions on citrus crops are reported from Cyprus, with reduction in fruit size, weight and quality. Infected planting material could contribute to the dissemination of *S. citri*, as well as the insect vectors. In areas with a hot, dry climate, the impact on the yield and quality may be high.

The opinion was adopted by the Panel.

5.9. Pest categorizations of fungi listed in Directive 2000/29/EC: *Atropellis* spp.
([EFSA-Q-2014-00260](#));

The Panel performed a pest categorisation for *Atropellis* spp., the fungal pathogens responsible for causing cankers in several *Pinus* species. The pathogens are listed in Annex IIAI of Directive 2000/29/EC. The pathogens have been identified as *A. apiculata*, *A. pinicola*, *A. piniphila* and *A. tingens*. Detection, identification and differentiation of *Atropellis* species is based on their morphological and cultural characteristics. *A. apiculata* is present in North Carolina and Virginia (USA), and *A. pinicola*, *A. piniphila* and *A. tingens* are present in Canada and the USA. *Atropellis* spp. are not known to occur in the EU Member States so far. Several *Pinus* species have been reported to be hosts of *Atropellis* spp., with some of them being present in the EU Member States. However, the susceptibility to infection with these pathogens of pine species native to Europe and Eurasia, such as *Pinus brutia*, *P. cembra*, *P. mugo*, *P. peuce*, *P. pinaster* and *P. sibirica* is not yet known. There are no obvious eco-climatic factors limiting the potential establishment and spread of the pathogens in the risk assessment area. The pathogens can spread over short distances by ascospores that are dispersed primarily by wind and secondarily by rain. Spread of *Atropellis* spp. over long distances may occur by means of movement of infected host plants for planting (especially asymptomatic), cut branches, and wood or isolated bark. Control methods used against *Atropellis* spp. include cultural practices and sanitary measures. No chemical control measures, resistant host genotypes or biological control measures exist. Potential consequences of the damage caused by *Atropellis* spp. include malformation of the trees resulting in lower wood quality or tree marketability.

The opinion was adopted by the Panel.

5.10. Pest categorizations of fungi listed in Directive 2000/29/EC: *Verticillium albo-atrum*
([EFSA-Q-2014-00265](#))

The Panel performed a pest categorisation of *Verticillium albo-atrum* Reinke and Berthold, the causal agent of Verticillium wilts. *V. albo-atrum* causes wilt and plant death, impairing the growth and shortening the lifespan of its hosts. *V. albo-atrum* was recently split into three species, *V. albo-atrum sensu stricto*, *V. alfalfae* and *V. nonalfalfae*, for which reliable detection and identification methods exist. *V. albo-atrum sensu lato* is present in most parts of the EU. The new taxonomic status of the pathogen, and the confusion that existed in the past between *V. albo-atrum sensu lato* and *V. dahliae*, cause uncertainty on its distribution worldwide and in the EU. Based on recent studies, the presence of each of the new species (*V. albo-atrum sensu stricto*, *V. alfalfae*, *V. nonalfalfae*) has so far been confirmed in a relatively small part of the EU. The pathogen has a wide host range. In the EU, it affects many cultivated and non-cultivated plant species, including some very important crops (alfalfa, cotton, hop, potato and tomato). However, the so far known host range of each of the above-mentioned new species is more restricted than that of *V. albo-atrum sensu lato*. There are no obvious ecoclimatic factors limiting the potential establishment and spread of the pathogen in the non-infested part of the EU where hosts are present. Once established, the pathogen can spread by natural and human-assisted means. Movement of infected host plants for planting, especially asymptomatic plants, can introduce the pathogen into new areas. Integrated management strategies may reduce impacts of *V. albo-atrum sensu lato* in the EU, but they do not eliminate the pathogen. *V. albo-atrum sensu lato* is listed in Annex IIAI of Directive 2000/29/EC. Despite its wide host range, it is regulated only on *Humulus lupulus*.

The opinion was adopted by the Panel.

5.11. Pest categorizations of fungi listed in Directive 2000/29/EC: *Verticillium dahliae* ([EFSA-Q-2014-00266](#))

The Panel performed a pest categorisation of *Verticillium dahliae* Kleb., the fungal pathogen responsible for many Verticillium wilt diseases. *V. dahliae* is a single taxonomic entity, and sensitive and reliable methods exist for its detection and identification. *V. dahliae* is a highly polyphagous pathogen, affecting, overall, 400 cultivated and non-cultivated plant species. It is a host-adapted rather than a host-specific pathogen and has the ability to continuously widen its host range and develop races/pathotypes that can overcome host resistance or be more virulent on known hosts and host cultivars. *V. dahliae* is a vascular pathogen that causes wilt and plant death, thus impairing the growth and shortening the lifespan of its hosts. The pathogen is currently present in most parts of the risk assessment area, where yield reductions up to 50 % or more have been reported on some high value crops, including cotton, olive, potato, strawberry and ornamentals. There are no obvious eco-climatic factors limiting its potential establishment and spread in the non-infested part of the risk assessment area, where hosts are present. Once established, the pathogen can spread by both natural and human-assisted means. Movement of infected host plants for planting, especially asymptomatic plants, and seeds can introduce the pathogen (and its highly virulent races/pathotypes) into new areas. Application of integrated management strategies combined with disease risk assessment (assessment of the available soil-borne inoculum, determination of races/pathotypes present in the site, field cropping history) may reduce the impacts of Verticillium wilt in the risk assessment area, but it cannot eliminate the pathogen. *V. dahliae* is listed in Annex IIAll of Directive 2000/29/EC and, despite its wide host range, it is regulated only on *Humulus lupulus* (hop), for which the pathogen is considered of minor importance compared to *V. nonalfalae*.

The opinion was adopted by the Panel.

5.12. Pest categorizations of insects listed in Directive 2000/29/EC: *Aonidiella citrina* ([EFSA-Q-2014-00267](#));

The Panel performed a pest categorisation for the scale insect *Aonidiella citrina* for the European Union. *A. citrina* is a distinct species, but examination with a microscope is required to distinguish it from *A. aurantii*, which is also a citrus pest originating from Asia, but is much more widespread in southern Europe and far more damaging than *A. citrina*. *A. citrina* was first found in Europe in 1994 but has been recorded only in Italy, France and Greece. It is primarily a citrus pest, but has been found in association with a variety of other plant genera. Southern areas of the EU, where citrus plants are cultivated, are potentially suitable for outdoor establishment of *A. citrina*. The pest has not been recorded in protected cultivation. No serious impacts of *A. citrina* have been recorded in Europe, and an integrated pest management programme, combining chemical and biological controls, is considered to be effective. *A. citrina* is an insect listed in Annex IIAll of Council Directive 2000/29/EC in relation to its main hosts: *Citrus*, *Fortunella* and *Poncirus* plants. These hosts are also regulated in Annex III and Annex V and are explicitly mentioned in Council Directive 2008/90/EC.

The opinion was adopted by the Panel.

6. Update on written adoptions

An update was provided on the outcomes of the written adoption procedure of the two scientific opinions on pest categorisation of *Scirtothrips dorsalis* (EFSA-Q-2014-00274) and of *Rhagoletis ribicola* (EFSA-Q-2014-00273). Both opinions were adopted on 17 November 2014 by written procedure.

7. New External Mandates / Progress report

7.1. Progress report on pest categorization of plant pests listed in Directive 2000/29/EC: *Circulifer haematoceps* ([EFSA-Q-2014-00268](#)); *Circulifer tenellus* ([EFSA-Q-2014-00269](#)); *Spodoptera littoralis* ([EFSA-Q-2014-00275](#))

The WG chairs presented the current status of the work and the challenges of the assessments. The three draft opinions will be submitted to the Panel for adoption by written procedure by end 2014.

7.2. WG on methodologies for risk assessment of listed pests (WG Dir 2000/29/EC Methods)

The Panel was updated on the working plan however due to high number of pest categorisations delivered in 2014, the activities were still limited to the pest categorisation stage. Next activities will focus on guidance, template and practical explanations on rating of risk components and uncertainties and identification and evaluation of risk reduction options, to be performed in STEP 2 of the mandate on revision of listing of the 38 organisms in the Annexes of 2000/29/EC.

7.3. Risk to plant health posed by *Trichilogaster acaciaelongifoliae* for the EU territory (EFSA-Q-2013-00241)

A report on the progress of the draft scientific opinion on the risk to plant health posed by the biological control agent *Trichilogaster acaciaelongifoliae* was presented.

7.4. Risk to plant health by soil and growing media (EFSA-Q-2013-00405)

A report on the progress of the draft scientific opinion on the risk to plant health by soil and growing media was presented. The related database on harmful organisms associated with soil and growing media was presented and discussed. It was agreed that, in case of further needs of input on specific taxonomical groups, Panel members would be asked to provide further review, particularly on the reported association from literature.

8. Feedback from the Scientific Committee/the Scientific Panel, EFSA, the European Commission

8.1. Scientific Committee (SC) and other Scientific Panels

An update was provided on the activities of the SC WGs on Review of Guidance documents, on Emerging Risks and on Uncertainty.

8.2. Update on publications related to PLH Panel activity

The Panel was informed about the following publication/activities of PLH panel members: presentation at COST action meeting on ERA in Adana, Turkey.

8.3. EFSA

Ongoing outsourcing activities were presented. The EFSA guidelines on observers were presented. The dates of the May 2015 PLH Panel open plenary meeting were agreed:

Brussels, 27-29 May 2015 (from 27 May h 14 to 29 May h 13). Topics for the open session were also discussed including the advantage of opening a standard part of a plenary meeting or have a dedicated session presenting an overview of PLH Panel aims and activities.

9. Next Plenary meeting

The next Panel plenary meetings will be: 28 and 29 January 2015 at EFSA, Parma (IT); 18-19 March 2015 at EFSA, Parma (IT); 27 and 29 May 2015 in Bruxelles (BE).