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04-04-2018

Notification of the eradication of a harmful organism (update - closing note)

1 General information	
1.1 Title	Notification of the eradication of *Xylella fastidiosa* ssp. *fastidiosa* in Germany (Saxony)
1.2 Executive summary	

July 2016:
Xylella fastidiosa ssp. *fastidiosa* has been found for the first time in Germany (Saxony) in a greenhouse of a small nursery producing young vegetable and ornamental plants. In one small greenhouse potted plants of private owners stayed for overwinter survival. One potted *Nerium oleander* plant showed symptoms and was found to be infested. This plant was given for the first time to the greenhouse for overwintering. The infested plant was found and sampled in an official phytosanitary inspection. Xylella fastidiosa was detected in the official laboratory of Saxony. Further tests were carried out on the DNA-extract from that oleander plant in the laboratory of the Julius Kühn-Institut to determine the subspecies of *Xylella fastidiosa*. Using the relevant tests according to the recently updated draft EPPO diagnostic protocol the subspecies *Xylella fastidiosa* subsp. *fastidiosa* was determined. One potted plant of *Olea europaea* from the same greenhouse showed also symptoms but was tested negative.
Official eradication measures according to Decision (EU) 2015/789 have been immediately taken including destruction of 14 potted oleander and olive plants from the greenhouse and a survey is ongoing. Demarcated zones are being established. The buffer zone includes also part of the Land Thuringia.

January 2018:
Visual inspections in the buffer zone took place in the period from 06.06.2017 until 28.09.2017. 15,937 squares (100 m x 100 m) were inspected in Saxony and 17,188 squares in Thuringia. Official inspectors did the inspections within a radius of 1 km from the infested zone and educated staff of an external operator inspected the outer buffer zone in a distance of 1 to 10 km from the infested zone under the supervision of the plant protection service. In total, 496 plant samples were taken in the Saxon part of the buffer zone and 210 plant samples in the Thuringian part. Part of the samples was taken from plants with symptoms and part of the samples was latency tests without symptoms. *Xylella fastidiosa* has not been found.
Surveys with spoon nets were done for the vectors in addition to the visual inspections in the period 06.06.2017 until 09.10.2017 in Saxony. The captured specimens were tested with molecular methods (qPCR). In total 287 potential vector cicada (7 different species) were caught in Saxony and tested. In Thuringia surveys for vectors were done in 7

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squares and 7 cicada were caught and tested. *Xylella fastidiosa* was neither been detected in Saxony nor in Thuringia.
Infested zone: Yellow and blue sticky traps were placed in the greenhouse of the concerned nursery for the survey of vectors and the plants were inspected visually. Inspections were started in March 2017 and were done every 14 days. 3 specimens of Graphocephala fennahi have been caught and tested. *X. fastidiosa* has not been found. In 2017, X. fastidosa has not been found in the demarcated area. The buffer zone was being reduced from a radius of 10 km to a radius of 5 km on 04.12.2017 based on Article 4(2) of the amended Decision (EU) 2015/789.

Update March 2018:
The demarcated area for *X. fastidiosa* was lifted on 9 March 2018 because of the eradication of the isolated infestation according to Art. 4(2) subparagraph 4 and Art. 4(5) of the Decision (EU) 2017/2352 amending the Decision (EU) 2015/789. The legal requirements for the lifting of the demarcated area have been fulfilled. Until December 2016 all host plants in a radius of 100 m around the infested zone have been destroyed and all specified plants have been sampled. *X. fastidiosa* has not been identified. In addition all plants including not specified plants in the concerned nursery (infested zone) have been investigated. Thereupon further individual plants (*Rosmarinus, Streptocarpus* hybrid, *Erysimum* hybrid) in the concerned nursery had been found infested. In February 2017 all plants in the concerned nursery were destroyed as a precautionary measure to finally eradicate the locally restricted infestation.

In the vegetation period 2017 (June to September) visual inspections were done in the 33,125 squares (100 %) of the buffer zone. Thereupon 706 plant samples were taken and tested. *X. fastidiosa* was not identified. In addition, 294 potential vectors have been caught and tested negative. In a 1 km radius from the infested zone sampling was done according to Art. 4(5) to identify with 99 % reliability a level of presence of infested plants of 1 % (ISPM no. 31). Until the end of 2019 the visual inspections and sampling will be done in a radius of 1 km around the previously demarcated infested zone according to Art. 4(5).

2 Information concerning the single authority and responsible persons.	
2.1 Notification from	Julius Kühn-Institut (JKI), Institute for National and International Plant Health, Germany
2.2 Official contact:	Katrin Kaminski, Tel: +49(0)531 299 3378, outbreaks@julius-kuehn.de

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3 Location	
3.1 Location	In Saxony
4 Reason of the notification and the pest status	
4.1 First finding in Germany or in the area	First detection of the harmful organism in the territory of Germany
4.2 Pest status of the area where the harmful organism has been found present, after the official confirmation.	**Absent, eradicated**
4.3 Pest status in Germany before the official confirmation of the presence, or suspected presence, of the harmful organism.	Absent, intercepted only
4.4 Pest status in Germany after the official confirmation of the presence of the harmful organism.	**Absent, eradicated**
5 Finding, sampling, testing and confirmation of the harmful organism.	
5.1 How the presence or appearance of the harmful organism was found.	Phytosanitary inspection of any type in a nursery
5.2 Date of finding:	20 April 2016 (*Nerium oleander*) **21 September 2016 (*Rosmarinus*)** **15 November 2016 (*Streptocarpus* hybrid)** **17 November 2016 (*Erysimum* hybrid)**
5.3 Sampling for laboratory analysis.	1 sample each was taken by the plant protection service from *Nerium oleander* and *Olea europaea*. Further sampling and testing has taken place in the demarcated area (see 7.1). On 22 September 2016, the suspicious *Rosmarinus* plant was brought to the laboratory in Saxony and 2 samples were taken and tested in

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	the official laboratory in Saxony. Afterwards, on 11 October 2016, the samples were sent to the JKI laboratory for reference testing. **Finally, all remaining plant species (also not specified species according to the EU list) in the affected nursery are investigated after the positive laboratory test of the *Rosmarinus* plant. Samples were taken for testing in the laboratory.**
5.4 Name and address of the Laboratory	Staatliche Betriebsgesellschaft für Umwelt und Landwirtschaft and Julius Kühn-Institut
5.5 Diagnostic method	qPCR/PCR/IF/MLST/Sanger-sequencing according to recently revised draft EPPO standard PM7/24(2) for the diagnosis of *Xylella fastidiosa* 3 screening tests of the *Nerium oleander* sample were positive. Screening tests of the Olea europaea samples were negative. Several molecular tests on the DNA revealed the determination of the subspecies. **3 screening tests of *Streptocarpus* hybrids and *Erysimum* hybrids were positive.**
5.6 Date of official confirmation of the harmful organism's identity.	Determination of the subspecies: 12 July 2016 (*Nerium oleander*) **Detection in *Rosmarinus*: 19 October 2016** **Determination of the subspecies:** **24 October 2016** **Detection in *Streptocarpus* hybrid:** **15 November 2016** **Detection in *Erysimum* hybrid:** **17 November 2016** **Determination of the subspecies:** **22 November 2016**

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6 Infested area, and the severity and source of the outbreak in that area.	
6.1 Size and delimitation of the infested area.	**In total 173 infested potted plants**
6.2 Characteristics of the infested area and its vicinity.	Physically closed conditions: greenhouse: The infested potted oleander plant was brought to the greenhouse for overwinter survival for the first time by a private owner.
6.3 Host plants in the infested area and its vicinity	Potted plants of *Olea europaea* and *Nerium oleander* in the greenhouse for overwinter survival. No other known host plants are cultivated by the nursery. Single *Prunus* plants grow in the surroundings.
6.4 Infested plant(s), plant product(s) and other object(s).	1 *Nerium oleander,* **1 *Rosmarinus*, 1 *Streptpcarpus* hybrid, 2 *Erysimum* (mixed sample from these plants tested positive), 168 *Erysimum* hybrids (mixed sample from these plants tested positive)**
6.5 Vectors present in the area	**July 2016:** 12 net sweeping samples of insects were taken in a 100 m radius around the infested plant. One adult of the vector *Philaenus spumarius* was found so far. Several potential vectors for Europe have been nominated in the EFSA study. Of these potential vectors only one *Cercopsis vulnerata* has been detected so far. The other *Cicadellidae* specimens from the sampling are under investigation. **March 2018:** **Name of potential vectors caught, number of specimens caught from 6 June to 9 October 2017, all tested negative** ***Cercopsis vulnerata* (*C. sanguine*): 8 specimens** ***Cicadella viridis*: 21 specimens** ***Graphocephala fennahi*: 163 specimens** ***Neophilaenus* sp.: 5 specimens** ***Neophilaenus lineatus*: 5 specimens** ***Philaenus spumarius*: 64 specimens** ***Aphrophora alni*: 28 specimens**

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6.6 Severity of the outbreak.	Only 1 infested potted plant, no indication that other plants may be infested. **March 2018: Only at one location, on potted plants, eradicated**
6.7 Source of the outbreak	Unknown. At least 4 years ago the private owner of the infested *Nerium* plant got a cutting from another private person.

7 Official phytosanitary measures.

7.1 Adoption of official phytosanitary measures.

Official phytosanitary measures have been taken:

After the first positive screening test: 1 *Nerium oleander* plant and 1 *Olea europaea* plant were put under quarantine until the detection of the bacterium is completed.

After the second and third positive screening tests: 14 plants (olive and oleander) from that greenhouse have been destroyed. All of them were plants from private persons for overwinter survival in that greenhouse. Survey of the surroundings of the greenhouse and the premises of the owner where the infested plant was placed in summer.

A General order for the establishment of the demarcated zone is adopted. Demarcated zones according to Article 4 of Decision (EU) 2015/789 will be established. The buffer zone includes parts of the Land Thuringia where the responsible official body has been informed an included in the measures to be implemented. Official measures in the demarcated zones according to the Decision (EU) 2015/789 are being taken. The measures according to Article 5 and 6 (prohibition of planting and destruction) are related to the known host plants of *X. fastidiosa* ssp. *fastidiosa* in the EU (*Nerium oleander*) and to specified plants. Nerium oleander was firstly found to be infested by this subspecies in Saxony.

Specified plants have been mapped in the 100 m radius around the infested *Nerium oleander* plant. Plants from 51 different species of specified plants from Annex I of Decision (EU) 2015/789 were found within this zone. Most of the specified plants were sweet and sour cherries, plums, roses, raspberries, blackberries, *Sambucus, Lavandula, Acer, Hedera. Salix, Solanum lycopersicum* and *Vitis*.

Sampling and testing of specified plants in the 100 m radius had been completed on 20 August 2016. 178 samples of 51 specified plant species in a radius of 100 m around the infested plant (including the nursery) were taken. The samples were tested in the official laboratory of Saxony.

A survey of specified plants has taken place in the buffer zone is Saxony and

Thuringia and also forestry offices were involved. The responsible bodies collaborated intensively in doing so. An extensive manual for field inspections was prepared and the inspectors were trained. The survey focused on perennial shrubs and trees. Suspicious specified plants were being sampled and tested. Until 20 September 2016, in Saxony 2 *Aesculus* samples were taken and in Thuringia 28 samples from different plant species.

The responsible official bodies in Saxony and Thuringia informed the public about the finding of *Xylella fastidiosa*. The information campaign included citizen meetings, press releases and various articles in local newspapers, TV broadcast, information session for stakeholders, a handout for the public, internet fact sheets (FAQ) and a telephone hotline. The official measures that were being taken are described and information about the prohibition to plant or move host plants or specified plants in the infested or buffer zone, respectively. Road signs had been set to indicate the buffer zone and private persons were checked in the parking area of a garden center for the movement of specified plants. Non-compliances have not been found related to the prohibition of the movement of specified plants.

On 21 September 2016 a suspicious *Rosmarinus* plant was found in an official inspection in the nursery where the infested *Nerium* stayed over winter. The *Rosmarinus* was found to be infested by the same subspecies of *Xylella fastidiosa* as the Oleander plant. The infested zone was adapted including the area of the nursery. As immediate action it had been prohibited to move specified plants from the nursery.

Until 28 September 2016, 24 samples of 15 different specified plant species and genera, respectively, had been taken within the buffer zone in Saxony. Until 26 October 2016, 66 plant samples from the buffer zone were tested in Thuringia. Until the end of the season in 2016 in total 3,991 squares (100 m x 100 m) in the buffer zone had been inspected visually.

After the identification of the pathogen in *Rosmarinus* all plant species in the nursery including not specified plant species according to the EU-list were investigated and samples were taken. *X. fastidiosa* has been detected in samples of *Streptocarpus* and *Erysimum* hybrids.

Eradication measures according to Art. 2 of the Decision (EU) 2015/789 were taken. All host plants in the 100 m zone were destroyed in a waste incineration plant. Remaining plants and weeds were removed from the nursery and cleaning and disinfection measures were taken. An action plan for the infested zone has been prepared. In February 2017 all plants in the concerned nursery were destroyed as a precautionary measure to finally eradicate the locally restricted infestation.

In 2017 the plants of the concerned nursery were inspected visually and yellow and blue sticky traps were placed and checked every 2 weeks to control

vectors in the period from March until the end of 2017. Potential vectors were tested negative and no suspicious plants were found. **The buffer zone was visually inspected from June to September 2017. The whole buffer zone of a radius of 10 km was inspected. In total, 706 plant samples were taken and tested negative. The potential vectors were investigated in the buffer zone during their flight season in the period from June to October 2017. Net sweeping samples were taken in the area of 100 m radius every 2 weeks and in the remaining area of the buffer zone 1-3 times. In total 294 potential vector specimens were caught and tested negative.** **The buffer zone has been reduced from 10 km to 5 km radius from January 2018 according to Art. 4(2) of the Decision (EU) 2017/2352. The demarcated area has been further reduced to 1 km and has been lifted on 9 March 2018 based on the eradication of the pathogen. Visual inspections will be continued during the vegetation period in 2018 and 2019 in the former infested zone and in an area of 1 km radius around this zone.**	
7.2 Date of adoption of the official phytosanitary measures.	Started 20 April 2016
7.3 Identification of the area covered by the official phytosanitary measures.	See 7.1
7.4 Objective of the official phytosanitary measures.	eradication
7.5 Specific surveys.	See 7.1
8 Pest risk analysis/assessment	Pest risk analysis is not required (harmful organism is listed in Annex I of Directive 2000/29/EC

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