Netherlands Food and Consumer
Product Safety Authority
Ministry of Economic Affairs

August 2016 PEST Report - THE NETHERLANDS

National Plant Protection Organization
POBox 9102
6700 HC Wageningen
The Netherlands

1.1. Finding of PSTVd in one genitor of *Solanum tuberosum* breeding material in one small field in the municipality Noordoostpolder

1.2 Executive summary

This report concerns the official finding of PSTVd in the municipality Noordoostpolder in the Netherlands on breeding material of *Solanum tuberosum*. The finding resulted from regular official controls and was officially confirmed on August 15, 2016. One genitor tested positive for PSTVd. A total of four plants of this genitor were grown in two small fields used by a breeding company. This company was recently established and started performing small-scale field selections of breeding material. No seed- or ware potatoes are cultivated by this company. The infected genitor has been imported from Northern Ireland in 2016. The organism is listed as a harmful organism in the EU directive 2000/29/EC and is listed on the EPPO A2 list.

Identity of the pest: Potato spindle tuber viroid (PSTVd).

Categorization of the pest: Quarantine pest, EU Annex IAI, EPPO A2.

Location: Municipality Noordoostpolder.

Reason of the notification: New finding.

How the pest was found: (1) pest related official survey

Information on the infested area, severity and source of the outbreak: Four plants of one genitor in two small fields used for potato breeding. The infected genitor was imported from Northern Ireland.

Official phytosanitary measures: All infected material will be destroyed. Two small fields of the breeder are demarcated. Cultivation of potato will be prohibited for the duration of two years.

1.3 Type of notification	(2) full notification
2.1 Single Authority	Notification from the National Plant Protection Organization of the Netherlands – Netherlands Food and Consumer Product Safety Authority PO Box 9102 6700 HC Wageningen, the Netherlands

2.2 Official contact	M.S.W Gerrits +31651229622; Email: m.s.w.gerrits@nvwa.nl
3. Location of presence of harmful organism	Two small open fields in the municipality Noordoostpolder (province Flevoland).
3.2 Map of the location	
4. Reason of the notification and pest status	(2) Appearance of the harmful organism in part of the territory in which its presence was previously unknown. This concerns a new finding of PSTVd in breeding material of *S. tuberosum* in the Netherlands. Earlier records of PSTVd in the Netherlands concern findings on *Dahlia, S. jasminoides, Brugmansia, S. lycopersicum, C. annuum* and *S. tuberosum.* See also https://english.nvwa.nl/documents/document/pest-reporting/pest-reports
4.3 Previous Pest status	(17) Other; Outbreak in *C. annuum* in 2016, under eradication. Transient in ornamentals (*S. jasminoides*). One outbreak in *Dahlia* sp. in 2013, eradicated. Incidental finding in tomato (*S. lycopersicum*) fruit production in 2013, eradicated. Two findings in potato breeding material (*S. tuberosum*) in 2014, eradicated.
4.4 Current Pest status	(16) Other; Outbreak in potato breeding material (*S. tuberosum)* in

	2016, under eradication. Outbreak in *C. annuum* in 2016, under eradication. Transient in ornamentals (*S. jasminoides*). One outbreak in *Dahlia* sp. in 2013, eradicated. Incidental finding in tomato (*S. lycopersicum*) fruit production in 2013, eradicated.
5. Information relating to the finding	(3) Phytosanitary inspections of any type The finding on August 2, 2016 resulted from regular official controls at a small breeding company that was recently established. Testing is part of the official surveillance system of the Netherlands for safeguarding the entire potato production column against PSTVd.
5.2 Date of finding	A composite sample tested positive for pospiviroids on August 8, 2016. Individual testing of all sub samples confirmed the presence of PSTVd on August 15, 2016.
5.3 Sampling for laboratory analysis	The individual testing of potato genotypes was performed using two leaves from two plants (four leaves in total).
5.4 Laboratory	NPPO of the Netherlands National Reference Centre Geertjesweg 15, 6706 EA Wageningen, the Netherlands Mr Dr Hans de Gruyter. Tel: +31 65 370 0550 Email: j.degruyter@nvwa.nl
5.5 Diagnostic method.	(1) According to international standard protocol IPPC DP 07 (https://www.ippc.int/en/publications/8073/); Validation data published in the EPPO database on Diagnostic expertise – Validation data for diagnostic tests (http://dc.eppo.int/validationlist.php). To confirm the presence of PSTVd, official samples taken by the NPPO were tested by RT-PCR using primers described by Shamloul et al. (1997). The identity was confirmed by sequence analysis of the complete genome obtained by

	sequencing of the PCR product.
5.6 Date of official confirmation of the harmful organism's identity	Official testing confirmed PSTVd on August 15, 2016.
6. Information related to the area, severity of the finding and source of the finding	6.1. Size and delimitation of the infested area. (2) One genitor of the small-scale breeding program was found to be infected with PSTVd Two fields used by the company each contained two plants of the infested genitor (four plants in total).
6.2. Characteristics of the infested area and its vicinity.	Indication of one or more of the following options: (1) Open air – production area (1.1) field (arable, pasture); The fields are used for growing of breeding material.
6.3. Host plants in the infested area and its vicinity.	A small number of genitors and selections of S. *tuberosum* are present in the two demarcated fields. Both fields are positioned at one side of a larger potato field. 
6.4. Infested plant(s), plant product(s) and other object(s).	One genitor of S. *tuberosum* is infected.
6.5. Vectors present in the area.	Not relevant
6.6. Severity of the	Growth cracks were observed on tubers of infected plants.

outbreak.	No direct links exist between the infected genotype and commercially available potato cultivars. 
6.7. Source of the outbreak.	The breeding company imported the infected genitor from Northern Ireland. All plants of the other 90 genitors that were cultivated in the same fields tested negative for PSTVd.
7. Official phytosanitary measures	
7.1. Adoption of official phytosanitary measures.	(1) Official phytosanitary measures in the form of destruction of all infected material will be taken. Both fields of the breeder have been demarcated. Cultivation of potato will be prohibited for the duration of two years. Plants of the other 90 genitors that were cultivated in the same fields tested negative for PSTVd. A second negative test is required before this material can be used for further breeding purposes.
7.2. Date of adoption of the official phytosanitary measures. In case of temporary measures, indication of their expected duration.	Measures have been imposed following official suspicion of PSTVd (from August 3, 2016 onwards). Measures will be lifted following the two-year prohibition period.
7.4. Objective of the	(1) Eradication.

official phytosanitary measures.	
7.5. Measures affecting the movement of goods. Indication of one of the following options	(2) Measures do not affect import into or movement within the Union of goods.
7.6. Specific surveys	The genitor was imported from Northern Ireland by the company in 2016. The company did not distribute the material elsewhere. Further action will depend on information from Northern Ireland.
8. Pest risk analysis/assessment	(1) Pest risk analysis is not required (harmful organism is listed in Annex I or Annex II of Directive 2000/29/EC, or is subject to measures adopted pursuant to Article 16(3) of that Directive.
9. Links to relevant websites, other sources of information.	Earlier records of PSTVd in the Netherlands concern findings on *Dahlia, S. jasminoides, Brugmansia, S. lycopersicum, C. annuum* and *S. tuberosum*. Detailed pest reports are accessible via the following link: https://english.nvwa.nl/documents/document/pest-reporting/pest-reports