



April 2016 PEST Report - THE NETHERLANDS

1.1 First outbreak of Potato spindle tuber viroid on seedless *Capsicum annuum* plants for planting, without specific symptoms, in four professional greenhouses.

1.2 Executive summary

This report concerns the first official finding of PSTVd in the Netherlands on plants for planting of seedless *Capsicum annuum* in four professional greenhouses, officially confirmed on 30 March 2016. PSTVd has only been demonstrated in vegetatively propagated seedless *Capsicum* plants, which is not produced from seed.

All findings are linked to the same propagation material. The suspicion was first reported by the breeding company of these selections to the NPPO of the Netherlands.

The propagation (stock) material of *C. annuum* plants for making own mother plants was imported by a Dutch nursery from Israel in 2014 and 2015. Plants for planting of these selections were distributed to the affected companies in the Netherlands and some other EU Member States, who have been duly informed.

In the Netherlands the same PSTVd sequence was found in all samples (15) taken at the four greenhouses. This sequence is very similar to earlier interceptions of PSTVd on *Solanum jasminoides*.

PSTVd 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: one greenhouse in municipality 'Peel en Maas' and three greenhouses in municipality Westland

Reason of the notification: First report

How the pest was found (6) information submitted by a professional operator

Information on the infested area, severity and source of the outbreak

No specific symptoms were observed on the plants. PSTVd infections were confirmed at four locations (respectively 8 plants, 590 plants, 100 plants and 1,616 plants). The infections concern young *C. annuum* plants for planting at four locations of three companies (one propagation company, one fruit production company and one demonstration greenhouse).

Official phytosanitary measures

All infected lots will be destroyed by burning. Neighbouring lots of plants will be tested and inspected. Back- and forward tracing are on-going. A specific survey will be targeted at other locations of fruit production of *C. annuum*.

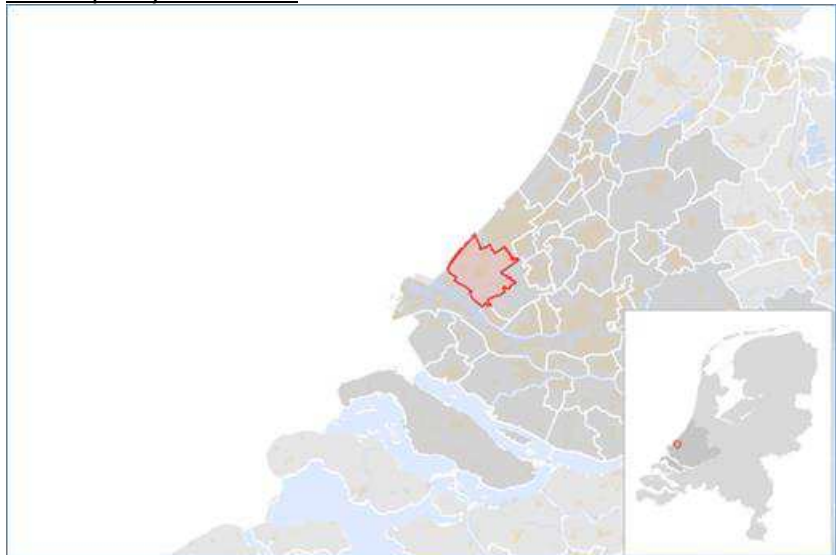
1.3 Type of notification	(2) full notification (second notification within 30 days)
2.1 Single Authority	Notification from the National Plant Protection Organization of the Netherlands – Netherlands Consumer and Product Safety Authority POBox 9102 6700 HC Wageningen - The Netherlands
2.2 Official contact	M.B. de Hoop. +31651584878 Email: m.b.dehoop@nvwa.nl
3. Location of presence of harmful organism	One greenhouse in municipality 'Peel en Maas' and three greenhouses in municipality Westland

3.2 Map of the location.

Municipality 'Peel en Maas'



Municipality Westland




4. Reason of the notification and pest status

4.1 Reason of the notification

(2) appearance of the harmful organism in part of the territory, in which its presence was previously unknown. This concerns the first report of PSTVd on *C. annuum* plants for planting in the Netherlands. Earlier records of PSTVd in the Netherlands concern findings on *Dahlia*, *S. jasminoides*, *Brugmansia*, *S. lycopersicum* and *S. tuberosum*. See <https://english.nvwa.nl/documents/document/pest-reporting/pest-reports>

4.3 Previous Pest status

(17) Other.
 Transient in ornamentals (*S. jasminoides*)
 One outbreak in *Dahlia* sp. 2013, eradicated.
 Two findings in potato breeding material (*S. tuberosum*) in 2014, eradicated.
 Incidental finding in tomato (*S. lycopersicum*) fruit

	production in 2013, eradicated. Not known to occur in pepper (<i>Capsicum L.</i>).
4.4 Current Pest status	(16) Other. Outbreak in <i>C. annuum</i> , under eradication. Transient in ornamentals (<i>S. jasminoides</i>). One outbreak in <i>Dahlia</i> sp. 2013, eradicated. Two findings in potato breeding material (<i>S. tuberosum</i>) in 2014, eradicated. Incidental finding in tomato (<i>S. lycopersicum</i>) fruit production in 2013, eradicated.
5. Information relating to the finding.	
5.1 How the harmful organism was found.	(6) information submitted by a professional operator as based on non-official testing results.  Row of seedless <i>Capsicum annuum</i> (100 plants in a greenhouse for demonstration purposes) which tested positive for PSTVd.
5.2 Date of finding.	The finding was first reported by the operator on 23 March 2016, as based on non-official testing results carried out by the operator. Official testing confirmed PSTVd on 30 March 2016.
5.3 Sampling for laboratory analysis	One sample consists of up to 25 leaves for each lot of selections of plants for planting of <i>C. annuum</i> . Samples have been taken at all four affected locations of each lot (normally selection).
5.4 Laboratory	Mr Dr Hans de Gruyter. Tel: +31 65 370 0550 Email: j.degruyter@nvw.nl National Reference Centre - NPPO of the Netherlands
5.5 Diagnostic method.	(1) According to international standard protocol IPPC DP 07

	<p>(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).</p> <p>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.</p>
5.6 Date of official confirmation of the harmful organism's identity	Official testing confirmed PSTVd on 30 March 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.	<p>Indication of one or more of the following options: (2) number of infested plants (pieces)</p> <p>The infections concern young <i>C. annuum</i> plants for planting at four locations (respectively 8 plants - nursery, mother plants), 590 plants (nursery, production), 100 (demonstration), 1616 (production).</p>
6.2. Characteristics of the infested area and its vicinity.	(3) Physically closed conditions (3.1) greenhouse; plants for planting of <i>C. annuum</i> .
6.3. Host plants in the infested area and its vicinity.	In addition to plants for planting of <i>C. annuum</i> , at one location, also plants for planting of <i>S. lycopersicum</i> are grown at one location (1ha).
6.4. Infested plant(s), plant product(s) and other object(s).	Four selections of seedless plants for planting of <i>C. annuum</i>
6.5. Vectors present in the area.	Not relevant.
6.6. Severity of the outbreak.	No specific symptoms have been observed on the plants. However, it should be noted that non-infected control plants for comparison were absent and due to the plant age hardly any fruits were present.
6.7. Source of the outbreak.	The propagation (stock) material of <i>C. annuum</i> plants was imported by a nursery in the Netherlands from Israel both in 2014 and 2015. In the Netherlands a similar PSTVd sequence was found in all samples (15) taken at the four places. This sequence is very similar to earlier interceptions of PSTVd on <i>S. jasminoides</i> .
7. Official phytosanitary measures	
7.1. Adoption of official phytosanitary measures.	(1) Official phytosanitary measures in the form of destruction of all infected material have been taken. All affected greenhouses have been demarcated.
7.2. Date of adoption of the official phytosanitary measures.	Measures have been imposed at each location following official suspicion or confirmation of PSTVd (from 30 March 2016 onwards). The measures will be lifted following clearing and disinfection of the greenhouses.

7.3. Identification of the area covered by the official phytosanitary measures.	All greenhouses where affected plants are located.
7.4. Objective of the official phytosanitary measures.	(1) Eradication
7.5. Measures affecting the movement of goods.	(2) Measures do not affect import into or movement within the Union of goods.
7.6. Specific surveys.	A specific survey will be targeted at fruit production of <i>C. annuum</i> .
8. Pest risk analysis/assessment.	<p>(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).</p> <p>A scientific opinion of EFSA is available on the assessment of the risk of solanaceous pospiviroids for the EU territory and the identification and evaluation of risk management options. http://www.efsa.europa.eu/en/efsajournal/pub/2330</p>
9. Links to relevant websites, other sources of information.	Earlier records of PSTVd in the Netherlands concern findings on <i>Dahlia</i> , <i>S. jasminoides</i> , <i>Brugmansia</i> , <i>S. lycopersicum</i> and <i>S. tuberosum</i> . See relevant website for detailed pest reports. https://english.nvwa.nl/documents/document/pest-reporting/pest-reports