



## September 2013 PEST Report - THE NETHERLANDS

National Plant Protection Organization  
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### First finding of Potato Spindle Tuber Viroid (PSTVd) in *Dahlia* sp. corm production in the Netherlands

#### Introduction

Further investigations have revealed that only one grower of *Dahlia* sp. corm production is affected by infections of *Potato spindle tuber viroid* (PSTVd). Phytosanitary measures have been taken aiming at full eradication.

This report concerns an update report of the first official finding in the Netherlands of *Potato spindle tuber viroid* (PSTVd) at the end of August 2013. Investigations of all lots at the grower and associated growers have been completed.

The organism is listed as a harmful organism in annex IAI of EU directive 2000/29/EC and is listed on the EPPO A2 list.

Reason for reporting First report of PSTVd in *Dahlia* sp. in The Netherlands

Identity of the pest *Potato spindle tuber viroid* (PSTVd)

Categorization of the pest Quarantine pest EU Annex IAI

Location: PSTVd was found in a dahlia corm production field in the province of South Holland. The presence of PSTVd is confirmed in 17 lots out of all 80 tested lots of the grower under consideration.

#### Pest status

Transient in ornamentals. No records in 2012.

One outbreak in *Dahlia* sp. 2013, under eradication.

Absent from the entire potato production chain (*Solanum tuberosum*) based on specific surveillance.

Incidental finding in tomato (*Solanum lycopersicum*) fruit production in 2013, under eradication.

Not known to occur in pepper (*Capsicum* L.).

#### Pest significance

Date of initial finding 22 August 2013

#### Detection and identification

Because of obligatory tests for export of dahlia tubers to a 3<sup>rd</sup> country on PSTVd, leaf samples were taken of several varieties at a production site. The pest was detected and identified in RNA extract from dahlia leaves, using RT-PCR and subsequent sequencing (National Reference Center, Wageningen).

#### Impact

Severity / extent of damage:

No visual symptoms or damage caused by PSTVd were observed in the crop. Dahlia is not known as an important host plant for PSTVd. Thus far it was only identified in two germ lines in Japan (Tsushima et al., 2011). The scientific opinion of EFSA on the risk of solanaceous pospiviroids, published in 2011, is not mentioning *Dahlia* spp as a natural host nor as an

experimental host of PSTVd. EFSA did, however, mention another solanaceous pospiviroid, Chrysanthemum stunt viroid (CSVd), as a natural host of *Dahlia* sp.

The infection is limited to 17 out of 80 lots of the grower under consideration. The grower is located in a larger area where cultivation of potatoes is prohibited.

In all lots of three other associated growers (119 lots) PSTVd could not be confirmed by testing. It appears that the outbreak is limited to one grower. This is further supported by broader survey and export certification testing records of 2012 whereby 130 samples tested negative.

Type of plant or mode of cultivation: corm propagation, outdoors. Corms are destined for the final end consumer, or for further propagation next season at the same place of production.

#### Origin of the pest

The origin of the infection is unknown. Next to obligatory testing for PSTVd as part of export certification to a third country, the NPPO carried out a specific survey in dahlia plants in 2012 in 100 random fields from different production places whereby no PSTVd was detected (Verhoeven et al., 2013).

#### **Phytosanitary measures**

All contaminated lots of the grower will be destroyed. Other remaining lots at the same grower are put under official control and can be used for sale to the final consumer or for flower production.

#### **References:**

NPPO The Netherlands

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