Netherlands Food and Consumer
Product Safety Authority
Ministry of Economic Affairs

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National Plant Protection Organization
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Finding of Potato spindle tuber viroid (PSTVd) in breeding material of *Solanum tuberosum* (potato) – no links with commercial cultivars of potato.

Introduction
This report concerns an official finding in the Netherlands of *Potato spindle tuber viroid* (PSTVd) in breeding material of *Solanum tuberosum* (potato) at a breeding company as confirmed on March 7 2014. The finding resulted from systematic official controls at an *in-vitro* propagation company handling potato. *In-vitro* plantlets of one potato accession line of a breeding company were found positive for PSTVd. Investigations are on-going in relation to the possible origin of the infection. All potato breeding material of the breeding company has been put on hold.
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. Thus far no direct links have been identified with any commercially available potato cultivars.

Reason for reporting finding of PSTVd in *Solanum tuberosum* (potato) in breeding material of *Solanum tuberosum* (potato).
Identity of the pest *Potato spindle tuber viroid* (PSTVd)
Categorization of the pest Quarantine pest EU Annex IAI
Location**:** Not relevant.

Pest status
Incidental finding in potato (*Solanum tuberosum*) at a breeding company. Under eradication.

Pest significance
Date of finding: The identity of PSTVd was officially confirmed on March 7 2014 by the National Reference Centre of the NPPO.
Detection and identification (how the pest was found)
The finding resulted from systematic official controls at an *in-vitro* propagation company handling potato. *In-vitro* plantlets of one potato accession line of a breeding company were found positive for PSTVd. This testing is part of the official surveillance system of the Netherlands for safeguarding the entire potato production column against PSTVd.

Impact
No specific impact has been observed on the plants itself. *In-vitro* propagation of the potato plant material was intended for renewing two accessions of the breeding collection of the company. Thus far no direct links have been identified with any commercially available potato cultivars.

Origin of the pest
The possible origin of the finding is unclear at present. It is the first time in over 30 years that PSTVd has been detected in potato in the Netherlands. In the 1970s and 1980s several accession lines were found positive in potato collections throughout the world (see for instance

EPPO record 381 of 1974). Following these findings, measures were taken to eradicate PSTVd, which has been successful. Since the beginning of the 1980s an official annual PSTVd testing scheme has been put in place of all candidate potato material in the Netherlands, as well as testing of all third year pre-basic nuclear stock. More than 3,000 tests are completed for this purpose each year. In addition each parent plant of *in-vitro* propagated potato material is tested for PSTVd. The latter safeguard system has ensured this finding of PSTVd.

Phytosanitary measures
Investigations are on-going in relation to the possible origin of the infection. All potato breeding material of the breeding company has been put on hold.

References:
NPPO The Netherlands