Netherlands Food and Consumer
Product Safety Authority
Ministry of Economic Affairs

National Plant Protection Organization
POBox 9102
6700 HC Wageningen

Update October 2015 PEST Report - THE NETHERLANDS

1.1 *Ralstonia solanacearum*, (race 1): Findings in ornamental *Rosa* plants for planting for cut flower production

1.2 Executive summary

This report concerns an update of the official finding of *Ralstonia solanacearum* in the Netherlands at a glasshouse company producing *Rosa* cut flowers, variety 'Armando', reported in September 2015. The finding was triggered following symptoms observed by the grower. The identity of *R. solanacearum* was confirmed on 11 September 2015, whereby race 1 of *R. solanacearum* was identified on 23 September 2015. At a second glasshouse company producing *Rosa* cut flowers, in lots of the varieties Savita, Talea/Avantique (mixed sample) , *R. solanacearum* was detected and confirmed on 9 October 2015. In two lots of Red Naomi cut flowers at a third glasshouse company producing *Rosa* cut flowers, *R. solanacearum* was detected and confirmed on 13 October 2015.
At each of the three *Rosa* cut flower producers, water samples taken from recirculation water used for irrigation were tested positive for *R. solanacearum*. Trace-back and trace-forward investigations have revealed suspicions (based on preliminary test results on water samples and/or plant samples) at five other companies, including three propagation companies. Investigations are on-going.

At the three cut flower production companies, many plants at various locations in the greenhouses showed symptoms. Measures have been taken aimed at prevention of spread and eradication. The possible source of the outbreak is yet unknown and under investigation.

To investigate a possible link with an earlier finding of *Ralstonia solanacearum* (race 1) on *Anthurium* (see NL pest report August 2015) and an earlier finding on Curcuma plants for planting in 2014 (see NL pest report August 2014), a comparative DNA analysis is performed on isolates from *Rosa*, *Curcuma* and *Anthurium*.
The first results shows no differences among the *Rosa* isolates but *Rosa* isolates were different from the isolates from *Curcuma* and *Anthurium.* More isolates *R. solanacearum* will be included in the future.

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

Identity of the pest**:** *Ralstonia solanacearum* (race 1)
Categorization of the pest EU Annex IAII, EPPO A2
Location**:** municipalities of Westland, Waddinxveen and Almere
Reason of the notification: Update of report on *Rosa* plants for planting
How the pest was found (6) information submitted by grower.
Information on the infested area, severity and source of the outbreak
One greenhouse with *Rosa* cut flower production of 1.6 ha, of which 0.3 ha is affected (variety Armando).
One greenhouse with *Rosa* cut flower production of 4 ha, of which in total 2 ha cut flower production is affected (0.5 ha variety Savita and 1.5 Talea/Avantique (complementary investigations on the mixed sample need to be performed to find out if both varieties are

affected)
One greenhouse with *Rosa* cut flower production of 20 ha, whereby 5 ha variety Red Naomi cut flower production is affected.

Official phytosanitary measures
Affected lots of the three growers have been destroyed. Lots of cut flowers which tested negative for R. solanacearum can be traded.
Trace back and trace forward investigations are on-going, including testing of water and plants at several companies that produce *Rosa* cut flowers and/or propagation material of *Rosa*.

4. Reason of the notification and pest status
4.1 (2) appearance of the harmful organism on a new host plant
Updated report

4.4 Current Pest status (11) Transient: actionable, found on *Rosa* and *Anthurium* plants for planting for cut flower production, under eradication;

4.3 Previous Pest status
(16) Transient: actionable, found on *Anthurium* and *Curcuma* plants for planting, under eradication;

1.3 Legal provisions
(3) updated notification

3. Location of presence of harmful organism
3.1 Municipality of Westland
3.2 Map of the location.

Municipality of Westland: First Company with *Rosa* cut flower production

Municipality of Almere: Second Company with *Rosa* cut flower production

Municipality of Waddinxveen: Third Company with *Rosa* cut flower production

5. Information relating to the finding.

5.1 How the harmful organism was found.

(6) information submitted by a producer of cut flowers on 18 August 2015.

5.2 Samples were taken on August 24, 2015 and the identity of the bacterium was confirmed on September 11, 2015.

(5.3) submission of information concerning the sampling procedure for laboratory analysis, including date, method, and sample size.

Several *Rosa* stems showing black discoloration and necrosis, together with some chlorotic leaves. Additionally, wilting of several leaves was observed.

At the companies, water samples are taken of the recirculation water in the company.

(5.4) the name and the address of the laboratory:

NPPO – The Netherlands

National Reference Centre

Contact person:

Mr. Dr. J. (Hans) de Gruyter (j.degruyter@nvwa.nl) Tel: +31 88 223 0976

P.O.Box 9102

6700 HC Wageningen

The Netherlands

5.5 Diagnostic method.

(1) According to peer reviewed protocol

EU (1998) Council Directive 98/57/EC of 20 July 1998 on the control of *Ralstonia solanacearum.* Annex II-test scheme for the diagnosis, detection and identification of *Ralstonia solanacearum*. *Official Journal of the European Communities,* no. L235, 8–39.

5.6 Date of official confirmation of the harmful organism's identity

The identity of the bacterium at the first company was confirmed on September 11, 2015. Race identification was confirmed on September 23, 2015.

6. Information related to the area, severity of the finding and source of the finding

6.1.

Producer of cut flowers:

(1) infested surface : 0.3 hectare out of 1.6 hectare (variety Armando) at one producer.

(2) infested surface : 2 hectare out of 4 hectare (0.5 ha variety Savita and 1.5 Talea/Avantique) at one producer

(3) infested surface : 5 hectare out of 20 hectare (variety Red Naomi) at one producer.

Figure 1: wilting symptoms on young shoots of *Rosa* plants in the affected greenhouse

Figure 2: necrotic stems and brown discoloration of stems

6.2. Characteristics of the infested area and its vicinity. (3) Physically closed conditions (3.1) greenhouses;

6.3. Host plants in the infested area and its vicinity.
Other lots at the same locations did not show any symptoms.

6.4. Infested plant(s), plant product(s) and other object(s). Indication of the scientific name of the infested host plant(s).
See 6.3

6.5. Vectors present in the area.
Not relevant

6.6. Severity of the outbreak.
Many plants of the entire lots showed symptoms.

6.7. Source of the outbreak.
The origin of the finding is unknown.

7. Official phytosanitary measures

7.1. Adoption of official phytosanitary measures.
(3) Official phytosanitary measures have been taken

7.2. Date of adoption of the official phytosanitary measures: 18 September 2015.
Official phytosanitary measures are taken. After confirmation of the bacterium, all affected lots are destroyed. During investigations, companies are not allowed to move any other plant material (cut flowers, plants for planting or propagation material) which show symptoms or which is suspected to be infected with *R. solanacearum* after the first diagnostic testing (testing result is Pending).
Also, in case of possible contaminated water (pending), companies are not allowed to move any plants for planting or propagation material.
Specific hygiene measures are imposed on contaminated companies for staff, equipment and storage containers.

7.3. Identification of the area covered by the official phytosanitary measures.
Five companies producing *Rosa* cut flowers and three companies producing propagation material.

7.4. Objective of the official phytosanitary measures.
(1) eradication;

7.5. Measures affecting the movement of goods.
Not relevant. All affected plants will be destroyed.

7.6. Specific surveys.
Not relevant

8. Pest risk analysis/assessment.

(1) Pest risk analysis is not required (harmful organism is listed in Annex II of Directive 2000/29/EC

9. Links to relevant websites, other sources of information.

References:

NPPO The Netherlands

NPPO The Netherlands, pest report, Finding of *Ralstonia solanacearum*, race 1 in *Anthurium* plants for cut flower production, August 2015.
NPPO The Netherlands, pest report, Finding of *Ralstonia solanacearum,* race 1 in ornamental *Curcuma* plants at two growers, August 2014.
https://www.nvwa.nl/onderwerpen/english/dossier/pest-reporting/pest-reports