Netherlands Food and Consumer
Product Safety Authority
Ministry of Agriculture,
Nature and Food Quality

National Plant Protection Organization
POBox 9102
6700 HC Wageningen
The Netherlands

December 2023 PEST Report - THE NETHERLANDS

20231124_Begomovirus

1.1 First finding of a Begomovirus in *Rhododendron indicum* in a greenhouse in the province of Zuid Holland

1.2 Executive summary

This report concerns the official finding of a Begomovirus in the Netherlands in a company with bonsai plants located in the province Zuid-Holland.
On 28 June 2023 an official post import inspection of *Rhododendron indicum* bonsai plants has taken place in the greenhouse. Two plants have been sampled and submitted because chlorotic spots and necrotic regions were observed on the leaves. On 24 November 2023 our National Reference Laboratory NIVIP confirmed the presence of a not yet described Begomovirus. Since the plant was co-infected with a not yet described species from the genus Crinivirus species and the fungus Pestalotia spp, it is unknown if these symptoms were caused by one or a combination of the virus/fungi or have a physiological cause. In total 47 plants have been destroyed.
Tracing back investigations showed that the bonsai plants of *Rhododendron indicum* were imported by the company on 17 February 2022 from Ningbo Jiang Bei Rui Sheng Gardening Centre in China. Trace forward investigations at this company are still ongoing
The organism is listed as Annex IIA organism (Begomovirus) in the EU Regulation (EU) 2019/2072 and is not listed on an EPPO list

Identity of the pest Begomovirus
Categorization of the pest(Quarantine pest, EU Annex II of implementing Regulation (EU) 2019/2072)
Location**:** Province of Zuid Holland
Reason of the notification: First report
How the pest was found (e.g. (3) phytosanitary inspections of any type (post import inspection)

1.3 Type of notification	(2) full notification within 30 days
2.1 Single Authority	Notification from the National Plant Protection Organization of the Netherlands – Netherlands Food and Consumer Product Safety Authority
2.2 Official contact	M.S.W Gerrits-Verdel
3. Location of presence of harmful organism	3.1 Province of Zuid Holland

4. Reason of the notification and pest status	4.1 Select: (1) First presence of the harmful organism
4.3 Previous Pest status	Select: (8) Absent: no pest records;
4.4 Current Pest status	Select: (15) Transient: actionable, under eradication;
5. Information relating to the finding.	5.1 How the harmful organism was found. (3) phytosanitary inspections of any type. On 28 June 2023 an official post import inspection took place at the company.
5.2 Date of finding.	24 November 2023
5.3 Sampling for laboratory analysis	Two bonsai plants of *Rhododendron indicum* have been send to the laboratory. From each plant symptomatic leaf samples were taken.
5.4 Laboratory	National Reference laboratory Netherlands Institute for Vectors Invasive plants and Plant health (NIVIP) Contactperson: Jos Kesseleer (j.m.a.kesseleer@nvwa.nl, +31 625560150)
5.5 Diagnostic method.	Leaf samples of (symptomatic) plants were analysed by NIVIP, the accredited National Reference Laboratory and tested with the Illumina Sequencing (RNAseq), resulting in the complete genome sequence. Additionally, also with PCR-Sequencing, using newly designed primers, the complete genome sequence was obtained. Primers of various published PCR tests for generic detection of begomoviruses are expected to result in suboptimal or no detection of this sequence.
5.6 Date of official confirmation of the harmful organism's identity	24 November 2023.
6. Information related to the area, severity of	6.1. Size and delimitation of the infested area. (1) infested surface; 3 m2 (2) number of infested plants (2 *Rhododendron indicum* bonsai plants, which were part of a lot of 47 remaining plants

the finding and source of the finding	)
6.2. Characteristics of the infested area and its vicinity.	Indication of one or more of the following options: (3) Physically closed conditions (3.1) greenhouse;
6.3. Host plants in the infested area and its vicinity.	There are many bonsai plants of other plant species at the company
6.4. Infested plant(s), plant product(s) and other object(s).	2 *Rhododendron indicum* bonsai plants, which were part of a lot of 47 remaining plants 
6.5. Vectors present in the area.	At the time of inspection, inspectors did not check whether *Bemisia tabaci,* vector of Begomoviruses was present
6.6. Severity of the outbreak.	2 *Rhododendron indicum* bonsai plants are infected based on official testing. These were part of a lot of 47 remaining plants. It is not known if these plants also had symptoms nor if there is a relation with the observed symptoms and the Begomovirus.
6.7. Source of the outbreak.	The *Rhododendron indicum* bonsai plants were imported on 17 February 2022 from Ningbo Jiang Bei Rui Sheng Gardening Centre in China.
7. Official phytosanitary measures	
7.1. Adoption of official phytosanitary measures.	(3) Official phytosanitary measures have been taken on 8 December 2023

	All 47 plants have been cut into pieces and put into sealed plastic bags on 18 December 2023, waiting for further destruction. Trace forward investigations are taken.
7.2. Date of adoption of the official phytosanitary measures. In case of temporary measures, indication of their expected duration.	8 December 2023
7.3. Identification of the area covered by official phytosanitary measures — indicate the method used to identify the area covered by official phytosanitary measures. Provide the results of the surveys that have been carried out.	3 m2
7.4. Objective of the official phytosanitary measures.	(1) eradication
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.	No specific surveys will be performed.
8.Pest risk analysis/assessment	(1) Pest risk analysis is not required (harmful organism is listed in Annex II of Regulation 2019/2072, or is subject to measures adopted pursuant to Article 30 of Regulation 2016/2031).
9.Links to relevant websites, other sources of information.	https://english.nvwa.nl/topics/pest-reporting/contents/pest-reports