National Plant Protection Organization POBox 9102

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## **November 2015 PEST Report - THE NETHERLANDS**

# 1.1 First suspicion of *Rhagoletis completa* on *Juglans regia* in a private garden.

#### 1.2 Executive summary

This report concerns the first suspicion of two findings of *Rhagoletis completa* in the Netherlands on *Juglans regia* in private gardens in the south-eastern part of the Netherlands. The origin of the finding is unknown but probably by natural spread. The organism is listed as a harmful organism in the EU directive 2000/29/EC and is not listed on the EPPO lists. Identity of the pest *Rhagoletis completa* 

Categorization of the pest EU Annex IAI

Location: municipality Helden and municipality Helmond

Reason of the notification: First report

How the pest was found

(6) Private owner provided information to the professional entomology network EIS "Kenniscentrum Insecten en andere ongewervelden". See http://natuurbericht.nl/?id=14420 Information on the infested area, severity and source of the outbreak

Larvae were detected in the husks of walnuts (Juglans regia) by the owner.

Official phytosanitary measures

In view of the wider distribution of this pest within the EU and since the finding is probably due to natural spread, no further phytosanitary measures are considered.

#### 4. Reason of the notification and pest status

4.1 Select: (1) First presence of the harmful organism

#### 4.4 Current Pest status

(6) Present: at low prevalence;

#### 4.3 Previous Pest status

(8) Absent: no pest records; as based on specific surveillance.

## 1.3 Legal provisions - select

(2) full notification

## 3. Location of presence of harmful organism

- 3.1 Municipality Helden, Province Limburg, and Municipality Helmond, Province Noord-Brabant.
- 3.2 Map of the location.



Municipality Helden, Province Limburg.



Municipality Helmond, Province Noord-Brabant.

#### 5. Information relating to the finding.

5.1 How the harmful organism was found.

Private owner provided information to the professional entomology network EIS "Kenniscentrum Insecten en andere ongewervelden". See http://natuurbericht.nl/?id=14420

## 5.2 Date of finding.

The identity of the pest was confirmed by the National Reference Centre of the NPPO on 16 November 2015. The private owner informed the professional entomology network on September 21, 2015. EIS published the information on October 1, 2015.

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

On the fourth of november the NPPO received two *Tephritidae* puparia on alcohol from EIS from Helden and Helmond. Both samples were processed for sequencing of the barcode fragment (= 658 basepairs of the COI gene). The obtained sequences were matched with public DNA databases.

5.4 the name and the address of the laboratory.

NPPO - The Netherlands

National Reference Centre

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#### 5.5 Diagnostic method.

The two generated barcode fragments were almost identical; only one basepair difference. Matching with the public databases showed that the Dutch specimens belong to a species-group consisting of, e.g., R. completa, R. zoqui and R ramosae, species which all attack walnut husks in Mexico and North America. Thus, no species specific identification was possible with the DNA barcode fragment. However, the DNA data indicate that the Dutch specimens do not belong to R. suavis, another walnut husk infesting species, which was reported a few years ago by the NPPO of Germany. Considering that R. completa is the only walnut infesting species known to occur in Europe and DNA data appear to exclude R. suavis, the dutch specimens most likely represent *R. completa*. Final identification can only be done using adults flies, which will emerge next year.

5.6 Date of official confirmation of the harmful organism's identity
The suspicion of the pest was confirmed by the National Reference Centre of the NPPO on 16
November 2015.

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

- 6.1. Size and delimitation of the infested area. Indication of one or more of the following options: (2) several fruits of one tree of *Juglans regia*.
- 6.2. Characteristics of the infested area and its vicinity.
- (2) Open air other
- (2.1) private garden;
- 6.3. Host plants in the infested area and its vicinity.

There are several individual trees of *Juglans regia* in private gardens in the vicinity of the findings.

- 6.4. Infested plant(s), plant product(s) and other object(s). Indication of the scientific name of the infested host plant(s). *Juglans regia*.
- 6.5. Vectors present in the area. Not relevant.
- 6.6. Severity of the outbreak. Several fruits of one tree.
- 6.7. Source of the outbreak. Not known. Probably natural spread.

#### 7. Official phytosanitary measures

- 7.1. Adoption of official phytosanitary measures.
- (5) No official phytosanitary measures due to the wider distribution of the pest in Europe and since the probable source concerns natural spread.

- 7.2. Date of adoption of the official phytosanitary measures. Not relevant.
- 7.3. Identification of the area covered by the official phytosanitary measures. Not relevant.
- 7.4. Objective of the official phytosanitary measures. Not relevant
- 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.

No specific surveys are planned.

## 8. Pest risk analysis/assessment.

- (1) Pest risk analysis is not required
- 9. Links to relevant websites, other sources of information.

#### **References:**

EIS, 1 October 2015, information note on the possible occurrence of *Rhagoletis complete* in the Netherlands, http://natuurbericht.nl/?id=14420

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