Prioritizing pest risks and pest surveillance in the Netherlands

Dirk Jan van der Gaag & Roel Potting
Data collection & information sharing

Identification and analysis of new risks
• Quickscan & PRA procedure in NL

Determination of pest status
• Pest surveillance in NL
Identification and analysis of new risks

Identification of new risks

Quickscan

No further action

Emergency measures
PRA
Eradication protocol
Survey
Communication
Otherwise

Quickscan: in English and published online since 2012
Identification of new risks

- Interceptions and findings
- International pest alerts (e.g. EPPO)
- Pest reports
- Literature/internet
- Networks
- New host – pest combination
- Etc.

Who?
- Pest-specialists (NRC)
- PRA-specialists
- Participants in EU & EPPO-panels/WGs
- Others
# Reasons for Quickscans 2007-2013

<table>
<thead>
<tr>
<th>Reason QS</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>Total</th>
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<tr>
<td>Import</td>
<td>7</td>
<td>11</td>
<td>17</td>
<td>8</td>
<td>9</td>
<td>0</td>
<td>4</td>
<td>56</td>
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<tr>
<td>Schiphol hand luggage</td>
<td>1</td>
<td>2</td>
<td>6</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Finding in NL</td>
<td>5</td>
<td>11</td>
<td>12</td>
<td>8</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>45</td>
</tr>
<tr>
<td>WPM</td>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>EPPO alert list</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>95/44</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Others</td>
<td>8</td>
<td>11</td>
<td>8</td>
<td>5</td>
<td>14</td>
<td>2</td>
<td>4</td>
<td>52</td>
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</table>
Identification and analysis of new risks

Identification of new risks

Quickscan

No further action

Emergency measures
PRA
Eradication protocol
Survey
Communication
Otherwise

Quickscan: in English and published online since 2012
Pepper weevil (*Anthonomus eugenii*)

**Eggs**
in very young fruits,
in flower buds or older fruits.

**Beetle**
1.5-4 mm

**Larvae and pupae**
in fruits
Example: pepper weevil

- July 2012: notification by grower
- Quickscan & Pest report: emergency measures
- July – December 2013: monitoring, 5 more sites found infested
- Various meetings with stakeholders
- December 2013: eradication completed
- March 2014: draft PRA discussed with stakeholders
- June 2014: presentation PRA at SCPH
NL Surveillance
- Plant Passport
- Organism surveys
- Locations with high risk import

Import
Exclusion

Export
Safeguards

Plant Health System
Pest surveillance programme in NL

• Plant passport

• Organism surveys
  – EU-mandatory organisms
  – Pest status of regulated organisms and emerging pest risks (Quickscan, EPPO-alert)

• Risk locations/commodities
  – Import of P4P
  – WPM
  – Non-regulated fruit (e.g. *Capsicum*)

<table>
<thead>
<tr>
<th>Organism Type</th>
<th>Count</th>
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<tbody>
<tr>
<td>Bacteria</td>
<td>12</td>
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<tr>
<td>Fungi</td>
<td>13</td>
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<tr>
<td>Insects</td>
<td>29</td>
</tr>
<tr>
<td>Nematodes</td>
<td>6</td>
</tr>
<tr>
<td>Aquatic Plants</td>
<td>5</td>
</tr>
<tr>
<td>Virus</td>
<td>16</td>
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<tr>
<td><strong>Total (2012)</strong></td>
<td><strong>81</strong></td>
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</table>
Reliability of pest surveillance

- Commercial production: number of locations 125 (arbitrarily chosen, 95% - 2.5%, practicable)
- Assumption: detection of pest if present
- Time of inspection: biology
Pest surveillance and public areas

- NPPO focus: risk locations (e.g. WPM)
- Networks of amateurs and professionals
  - Stichting Anemoon: aquatic organisms (Apple snail = Pomacea)

- European Invertebrate Survey
  - Monochamus survey (http://www.eis-nederland.nl/rapporten.html)
Surveillance – new pests: examples of findings(I)

**Targeted surveys (organisms and risk locations)**
- PSTVd in ornamentals, IAI (2006)
- *Tuta absoluta* (2009)
- *Phytophthora lateralis* (2011)

**Export checks**
- *Thaumatotibia leucotreta* (2013)
- PSTVd – Dahlia, IAI (2013)
Surveillance – new pests: examples of findings(II)

Plant passport/quality inspections
• Phytophthora lateralis (2010)
• Spodoptera littoralis, Helicoverpa armigera (various years)

Notification by the public, companies, others
• Tomato yellow leaf curl virus, IIAII (2007)
• Xanthomonas arboricola pv. pruni, IIAII (2009)
• Anoplophora glabripennis, IAI – (2010 & 2012)
• Anthonomus eugenii (2012)
• Various pests by amateurs, arborists, e.g. Aproceros leucopoda (2013), Cryptostroma corticale (2014)
Information sharing changes in pest status: pest reports, annual “Fytosignalering”

<table>
<thead>
<tr>
<th>Fytosignalering 2012</th>
<th>Pest status</th>
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<tbody>
<tr>
<td><strong>Sternidium cardinale</strong></td>
<td>Quicksan 2011</td>
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<tr>
<td><strong>Siroccoccus clavignentii- juglandacearum</strong></td>
<td>EPPO A1</td>
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<tr>
<td><strong>Stegophora ulmea</strong></td>
<td>IIAI</td>
</tr>
<tr>
<td><strong>Synchytrium endobioticum</strong></td>
<td>IIAI c (2)</td>
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<tr>
<td></td>
<td>IIAI c (15.1)</td>
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<td></td>
<td>Export VS</td>
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<td>IIAI c (15)</td>
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<tr>
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<td>IIAI c (11)</td>
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<td>IIAI c (12)</td>
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<tr>
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<td>EPPO A1 Action list</td>
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<td>IIAI a (2)</td>
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<td>IIAI a (2)</td>
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<td>IIAI a (2)</td>
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<tr>
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<td>IIAI a (3)</td>
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January 2014 PEST Report - THE NETHERLANDS

Netherlands Food and Consumer Product Safety Authority
Ministry of Economic Affairs

Findings of *Erwinia* sp. ‘assigned to the *E. pyrifoliae* taxon’ in two production greenhouses of strawberry fruits (*Fragaria*)

Introduction
This report concerns the first official finding of *Erwinia* sp. “assigned to the *E. pyrifoliae* taxon” in two production greenhouses of strawberry fruits in the Netherlands. Symptoms were observed in June and in October 2013. The origin of the finding is unknown. The organism *Erwinia pyrifoliae* is not listed as a harmful organism in the annexes of EU directive 2000/29/EC and is not listed on the EPPO A1 or A2 list. *Erwinia pyrifoliae* is closely related to the main fire blight pathogen *F. amylovora*, *F.*
Summary and conclusions surveillance

• Limited number of inspection hours
  – How to optimize?
• Targeted surveys at risk locations
• Amateur – professional networks
Information sharing

Quickscans (since 2012), PRAs, Pest reports and surveillance results online:

http://www.vwa.nl/