

FACTORS WHICH MUST BE CONSIDERED WHEN DEALING WITH A SPECIFIC OUTBREAK SITUATION



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**Sarajevo
7-8 December, 2016**

Outbreak situation?

OFFICIAL

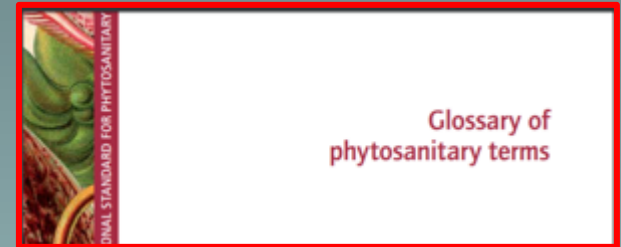
1. Plant Health Service has been found the pest during official survey activities

2. The pest has been reported by a person outside the service

It's necessary to send an inspector/agent to collect an official sample and wait for official analysis report (if the case a more specialized laboratory for exact confirmation should be contacted)

Contest in which the pest was found

ISPM No. 5 (Glossary)



- **Interception**- the detection on a pest during inspection or testing of an imported consignment
- **Incursion**- an isolated population of a pest recently detected in an area not known to established, but expected to survive for immediate future
- **Outbreak**- a recently detection pest population, including an incursion, or a sudden significant increase of an established pest population in an area.

Contest in which the pest was found

1. The pest has been found in the context of a specific survey

Data on the pest and its distribution on national level are already available (perhaps there is yet a contingency plan)

The reaction is more prompt and success is more likely



Contest in which the pest has been found

**2. The pest has
been accidentally
found**

**No data
More difficult to
apply prompt
reaction**



Time of the year in which the pest has been found

1. The new outbreak has been found in a time of year when the pest can not spread

Example: the insect is present only at the stage of larvae inside the wood or into the soil or too high temperature to diffusion of bacteria

2. The new outbreak has been found in a time of year when the pest can spread

Example: presence of flyers stages of insects or temperatures suitable to the spread of fungal spores

1. The new outbreak has been found in a time of year when the pest can not spread

- More time to plan and organize control measures as treatments or destructions
- More time to plan and carry out training of staff, monitoring activities and to acquire data on dimension of the outbreak
- More time for traceback the source of infestation
- More time to carry out activities established by *Action plan* planned in the *Contingency plan*, if it's exists, or activities expressly processed for this situation

However the time available must be effectively used and it's important to draft a **time-table** and respect all the deadlines

2. The new outbreak has been found in a time of year when the pest can spread

- Immediately apply measures to stop the spread of the pest as destruction of infested material, chemical treatments, sales ban
- Immediately start the monitoring activities to verify dimension of the outbreak, at the beginning using a short-radius example 100 m and gradually expanding the radius
- Immediately train staff to recognize symptoms and host plants of the pest
- Immediately inform and involve local administrations, associations and other people useful to facilitate activities

Factors to consider araising from the biology of the pest

1. At least in one stage of its life cycle the pest is able to autonomously spread

2. The pest is addicted to an animal (generally an insect) as a vector, or is conveyed by physical means such as wind or water

3. The pest can spread by movement of host plants or soil with plants or firewood

1. At least in one stage of its life cycle the pest is able to autonomously spread

It's necessary to have information about following aspects:

- months of the year in which it can spread
- distance that pest can cover in a day and in a season
- limiting factors such as max and min temperatures, moistness of air and soil
- food and reproductive habits
- degree of sensitivity of the outbreak area (availability of host plants, vegetation and soils suitable for oviposition and wintering, favorable climate parameters such as rainfall and wind, etc.)
- means of control available and their environmental and economic impact

*Example of planned survey on *Popillia japonica**



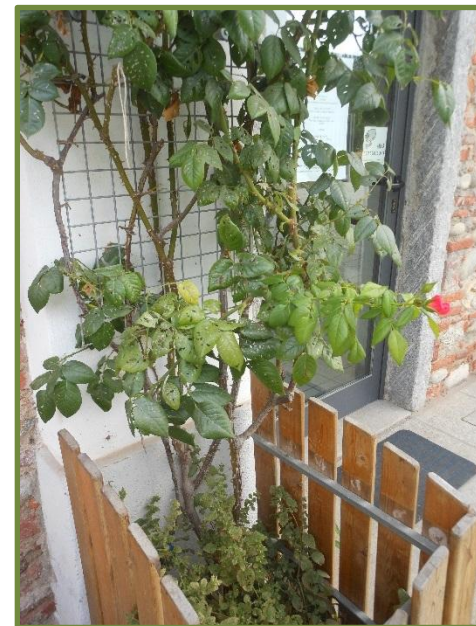
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Most suitable host plants



*Rubus, Hortica, Parthenocissus, Olmaria, Oenothera, Humulus lupulus, **Vitis** spp, Rumex, Salix, Ulmus, Corylus, Prunus avium, **Rosa**, Robinia, Tilia, Hibiscus*



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Procedure

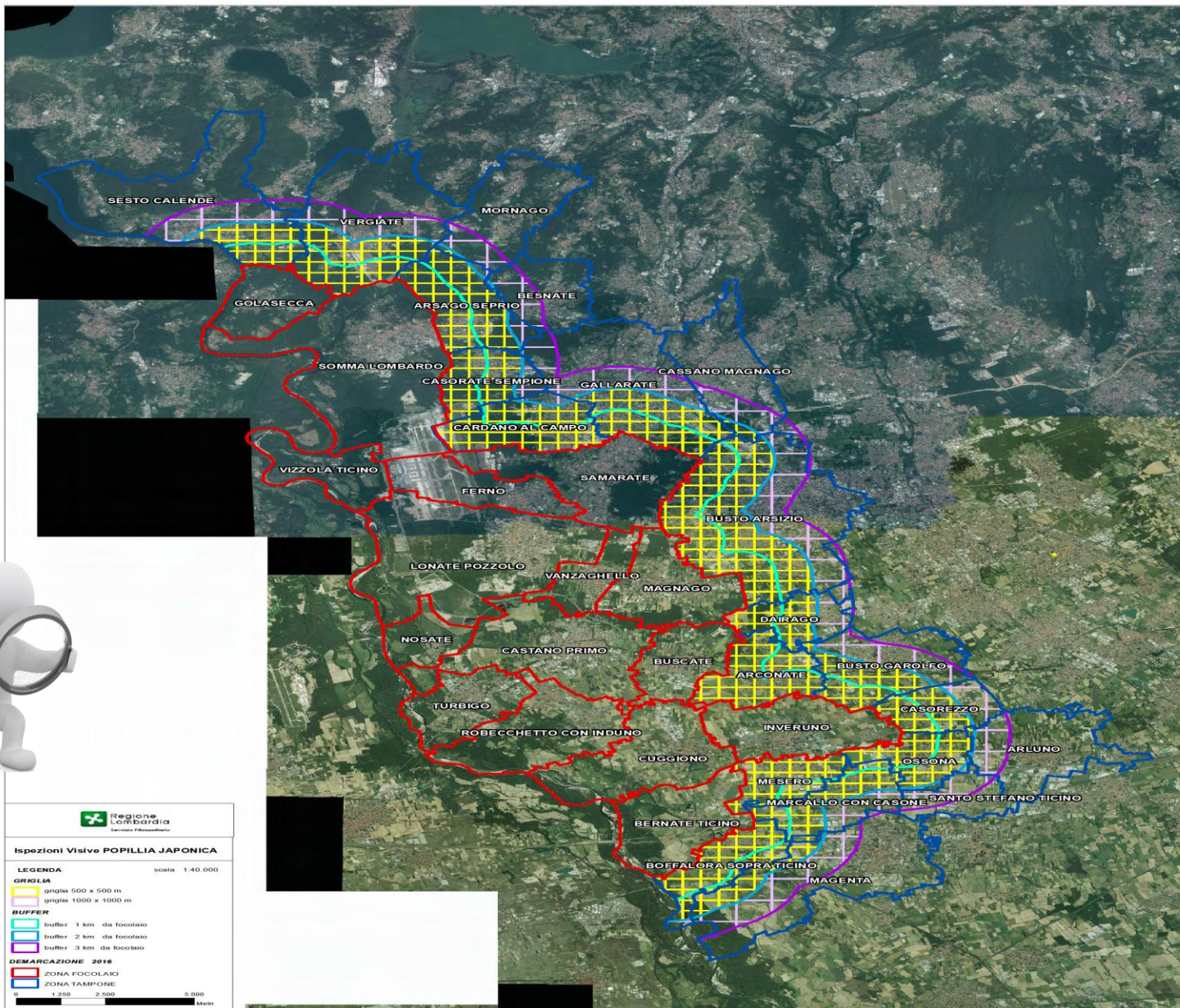
The visual inspections were carried out in the areas still not infested by Pj, meaning the buffer zone, but also in some areas inside infested zone.

The buffer zone is 3 kilometers wide and is subdivided in three concentric bands of 1 kilometer each in width; in addition, a square matrix is superimposed on each of the bands, whose sides are equal to 1,000 meters.

In each square of the matrix, 4 sites will be inspected for each of the two internal bands (those closest to the infested area) and 1 for each square in the external band.

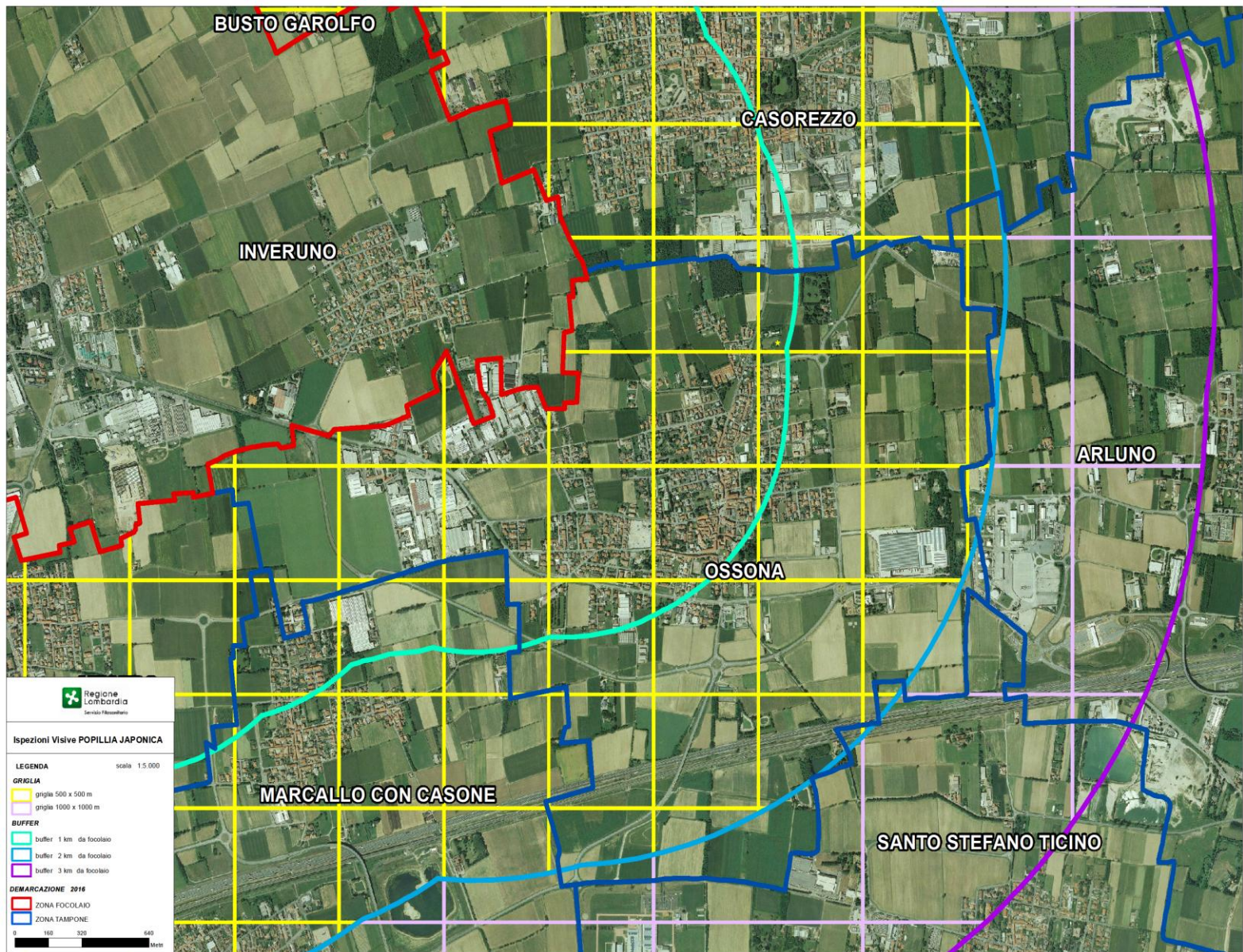
The sites will be as equidistant as possible, and contain host plants that are particularly vulnerable.





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Procedure

In the cells of the first band (the ones from 0 to 1 km from the border of the infested area) 3 checks will be carried out, one in June, one in July and one in August.

In the cells of the second band (the ones from 1 to 2 km from the border of the 'hot spot'), 2 checks will be carried out, one in June and one in July.

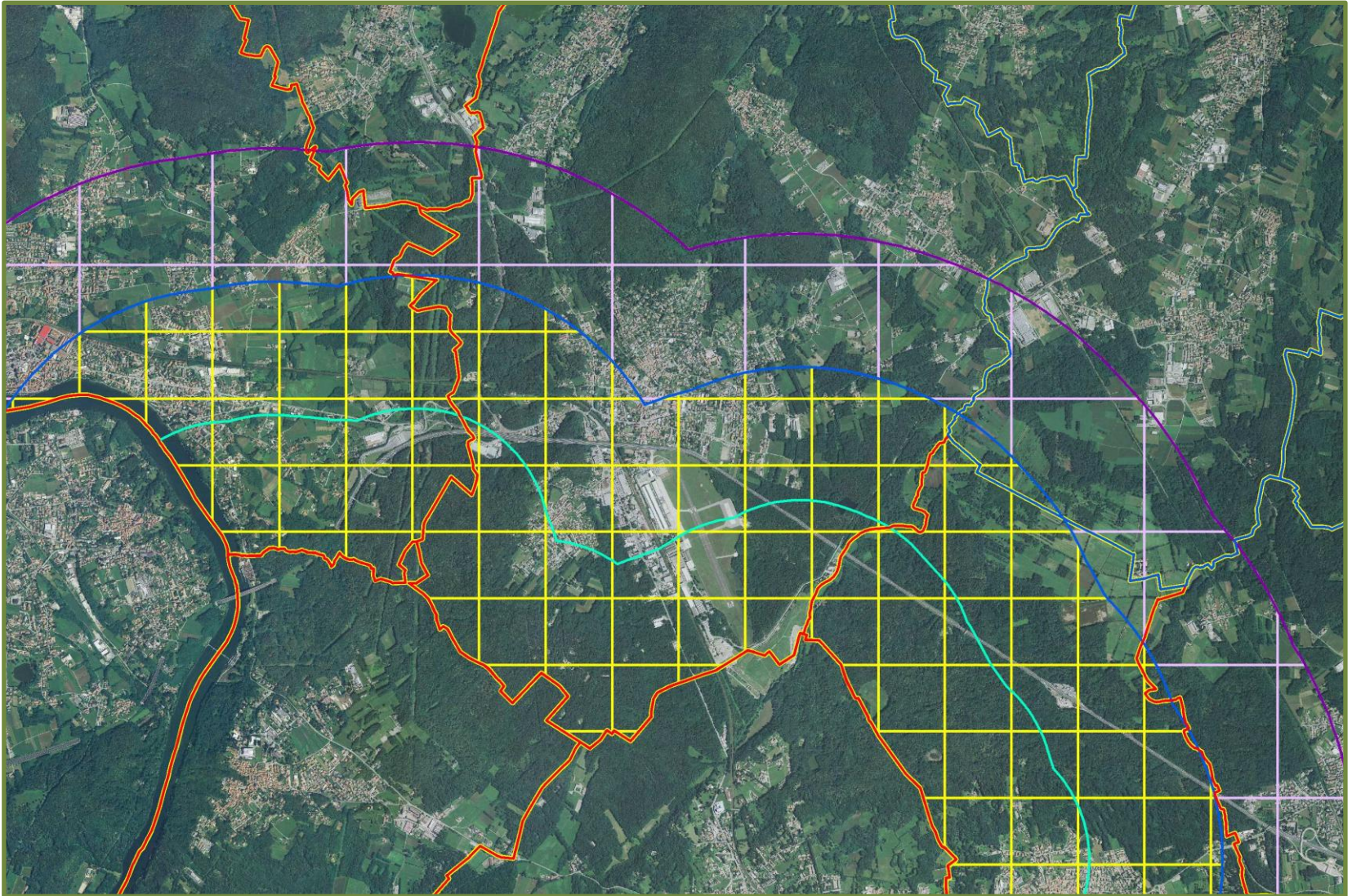
In the cells of the third and most external band (the ones from 2 to 3 km from the border of the 'hot spot'), 2 checks will be carried out, one in July and one in August.

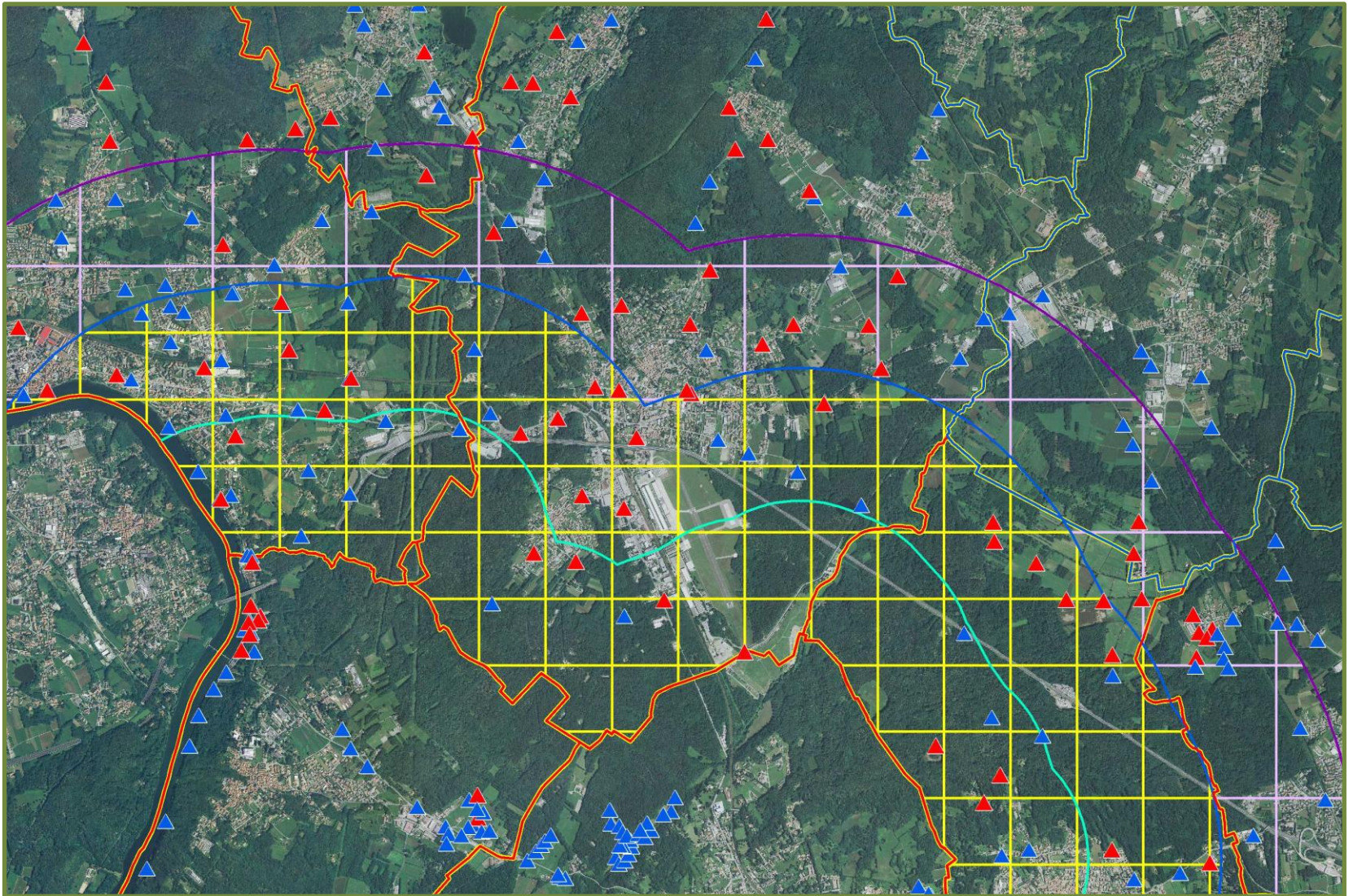
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Control tools: chemical and biological treatments, mass trapping

It's necessary to evaluate:

- availability of products (quantities, authorization, time of delivery, costs)
- efficacy, timing for treatments, number of repeats
- availability of equipment for distribution
- local storages
- permissions and access restrictions to areas
- environmental impacts



Control tools: destruction of plants through cutting or burning

It's necessary to evaluate:

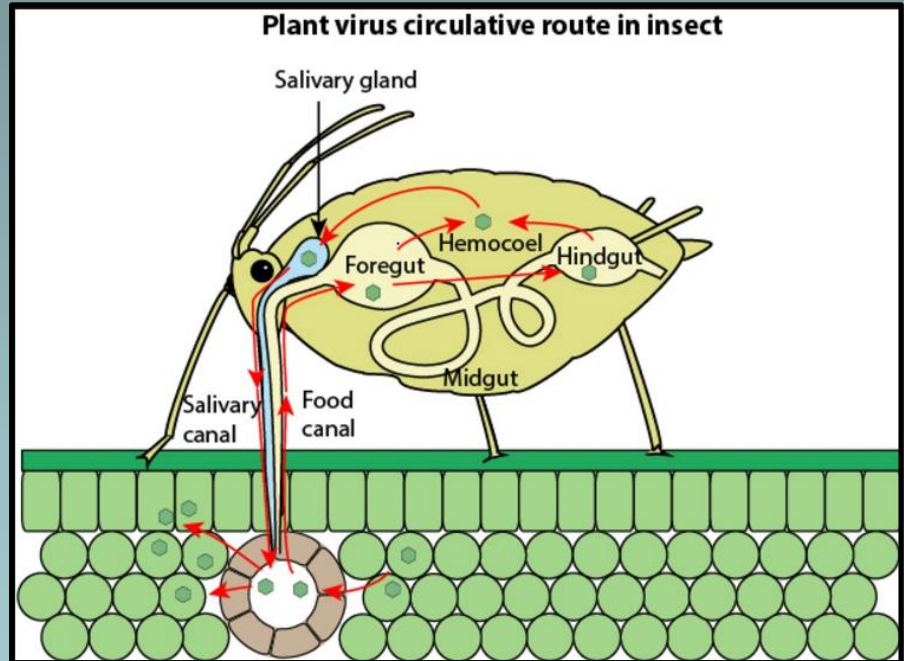
- availability of suitable equipment
- suitable area
- permissions
- incineration facilities
- proper timing
- costs



2. The pest is addicted to an animal (generally an insect) as a vector or is conveyed by physical means such as wind or water

It's necessary to have information about following aspects:

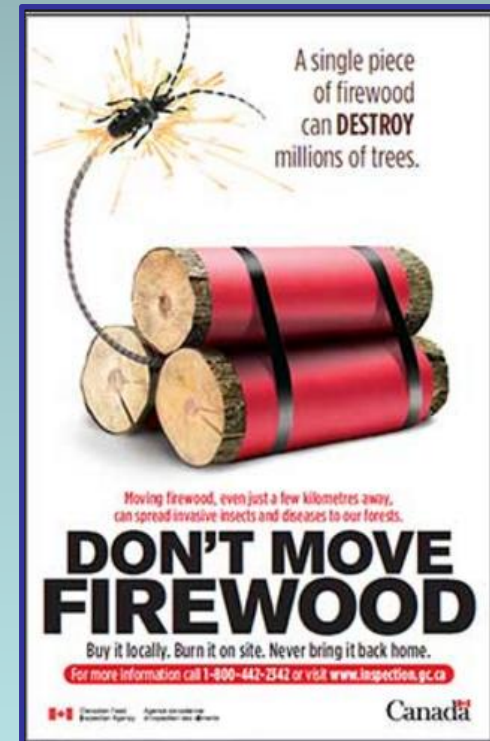
- the presence in the outbreak area of known vectors and / or other possible vectors
- life cycle, limiting factors and effective period of activity of the vector
- possibility of spread of the vector in a natural way and / or through pathways



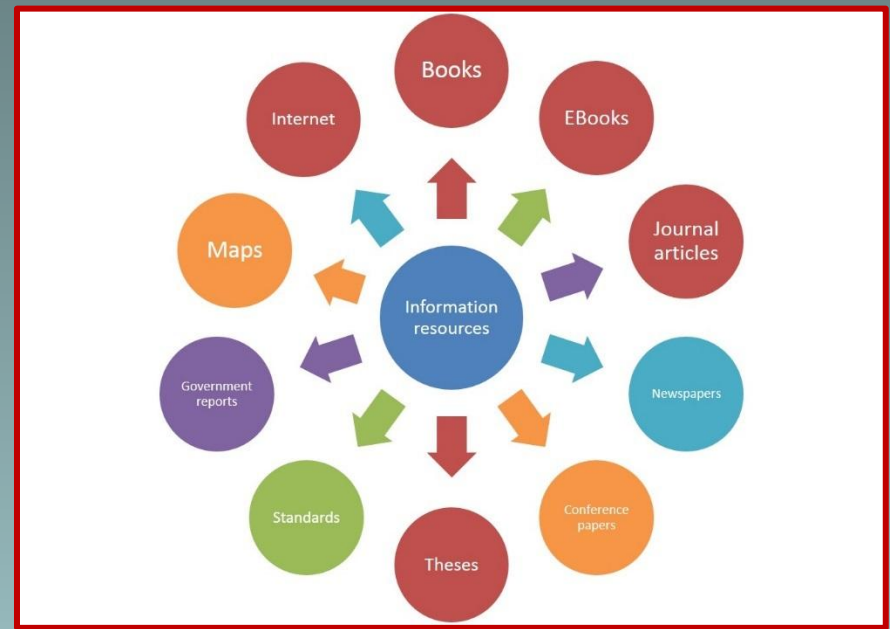
3. The pest can spread by movement of host plants or with soil tied to the roots or with firewood

It's necessary to have information about following aspects:

- list of host species used for productive or ornamental scope and usually sold outside outbreak area
- flow of movement of host plants, plants with soil, firewood



Source of information



European Commission

PLANTS

European Commission > Food Safety > Plants > Plant health and biosecurity > EU Plant Health legislation > Emergency control measures by species

HEALTH FOOD ANIMALS **PLANTS** AMR

PLANT HEALTH & BIOSECURITY

Legislation

New EU plant health rules

Emergency measures

Xylella fastidiosa

Long-term measures

Trade within the EU

Non-EU trade

Protected zones

Plant health interceptions (EUROPHYT)

Harmful organisms outbreaks in the EU

Emergency control measures by species

The EU has taken emergency control measures for the following harmful organisms:

- **Anoplophora chinensis** (Forster): Decision 2012/138/EC
 - Register of places of production in China [\[EN\]](#) set by China's national plant protection organisation as free from *Anoplophora chinensis*
- **Anoplophora glabripennis** (Motschulsky): Decision 2015/893/EU
- **Anoplophora chinensis and Anoplophora glabripennis surveys in the EU - Annual Report 2015/2016** [\[EN\]](#)
- **Diabrotica virgifera** :
 - Deregulation of *Diabrotica virgifera virgifera* (Western Corn Rootworm)
 - The repealing of the emergency measures.
 - The amendment of Directive 2000/29
 - The Commission recommendation
- **Dryocosmus kuriphilus Yasumatsu** - Decision 2006/464/EC (repealed on 1 October 2014 by Commission Implementing Decision 2014/690/EU)
- **Epitrix spp.** - Decision 2012/270/EU

European and Mediterranean Plant Protection Organization
Organisation Européenne et Méditerranéenne pour la Protection des Plantes

Home About EPPO Meetings Plant quarantine Plant Protection Products Invasive alien plants Standards Databases Publications Worldwide activities

EPPO Global Database & EPPO codes

- <https://gd.eppo.int> -

The EPPO Global Database was first released in September 2014. The objective of the database is to gather in a single web-based interface, all pest-specific information that has been produced by EPPO.

This database also provides a new interface to view and download the EPPO codes, and is thus replacing EPPT (no longer maintained).

Although, some parts of EPPO Global Database are still under development, it currently contains:

- Basic information for more than 72 000 species of interest to agriculture, forestry and plant protection: plants (cultivated and wild) and pests (including pathogens). For each species: scientific names, common names in different languages, taxonomic position, and EPPO codes are given.
- Detailed information for more than 1600 pest species that are of regulatory interest (EPPO and EU listed pests, as well as pests regulated in other parts of the world). For each pest: geographical distribution (with a world map), host plants and categorization (quarantine status) are given. The majority of the functionalities of PQR (EPPO database on quarantine pests) has already been transferred to EPPO Global Database.
- EPPO datasheets (for the moment, only those published in 1997 in the book Quarantine Pests for Europe are included).
- EPPO Standards.
- More than 3000 pictures of pests (including invasive alien plants).

What are the EPPO codes?

EPPO codes are computer codes developed for plants, pests (including pathogens) which are important in agriculture and plant protection.



@pestsurvey

A screenshot of a Twitter profile page for Mariangela Ciampitti (@pestsurvey). The profile picture shows a woman with blonde hair and glasses, looking thoughtful, with a microphone and a laptop in the background. The bio reads: "Ci occupiamo di monitoraggio e controllo degli organismi alieni nocivi alle piante". The statistics show 98 tweets, 142 following, 30 followers, and 21 likes. A recent tweet from Xylella_website is visible, mentioning the 2016 Pierce's Disease Research Symposium. A "Nuovo su Twitter?" prompt is also present.

Mariangela Ciampitti
@pestsurvey

Ci occupiamo di monitoraggio e controllo degli organismi alieni nocivi alle piante

Iscritto a ottobre 2016

TWEET 98 FOLLOWING 142 FOLLOWER 30 MI PIACE 21

Segui

Tweet Tweet e risposte Contenuti

Mariangela Ciampitti ha ritwittato

Xylella_website @xylella_website · 3 dic
Proceedings of the 2016 Pierce's Disease Research Symposium now available online

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Nuovo su Twitter?
Iscriviti ora per ottenere la tua cronologia personalizzata!

Iscriviti