



Food and Agriculture
Organization of the
United Nations



International
Plant Protection
Convention

Beware&Note

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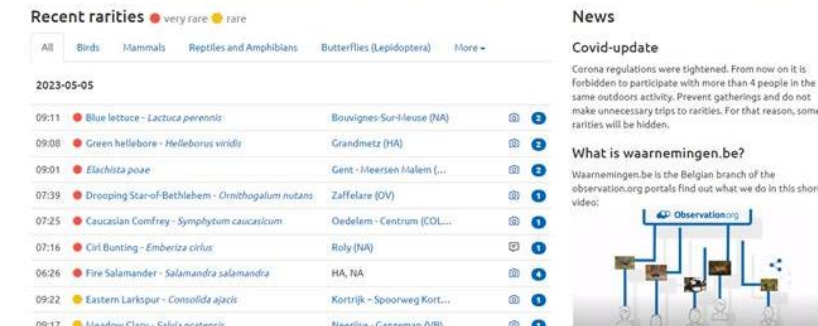
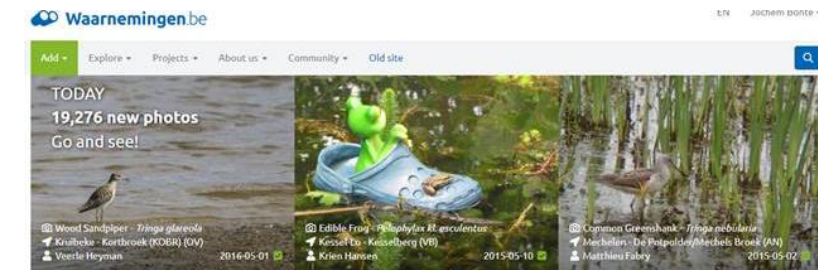
Beware&Note

Scope

Beware&Note is a **notification system** for **quarantine organisms** harmful to plants in Belgium, enabling their early detection.

- developed by the Flanders Research institute for Agriculture, Fisheries and Food (ILVO), Natuurpunt Studie and PCS Ornamental Plant Research, on behalf of the Belgian Federal Public Service Health, Food Chain Safety and Environment.
- uses the same database as Observation.org, the largest nature platform in the Netherlands powered by nature observations of volunteers from all over the world.

Provides the possibility to **every citizens** to submit **notifications** of these quarantine pests through the <https://observations.be/> / <https://waarnemingen.be> platform → high level of surveillance of the territory.



Beware&Note

How it works – sequence of steps

1. Notification via the alert system by a citizen + ID suggestion via automatic identification tool (ObsIdentify app)

Identification sheets for the most important and easily recognisable species are available on the platform.

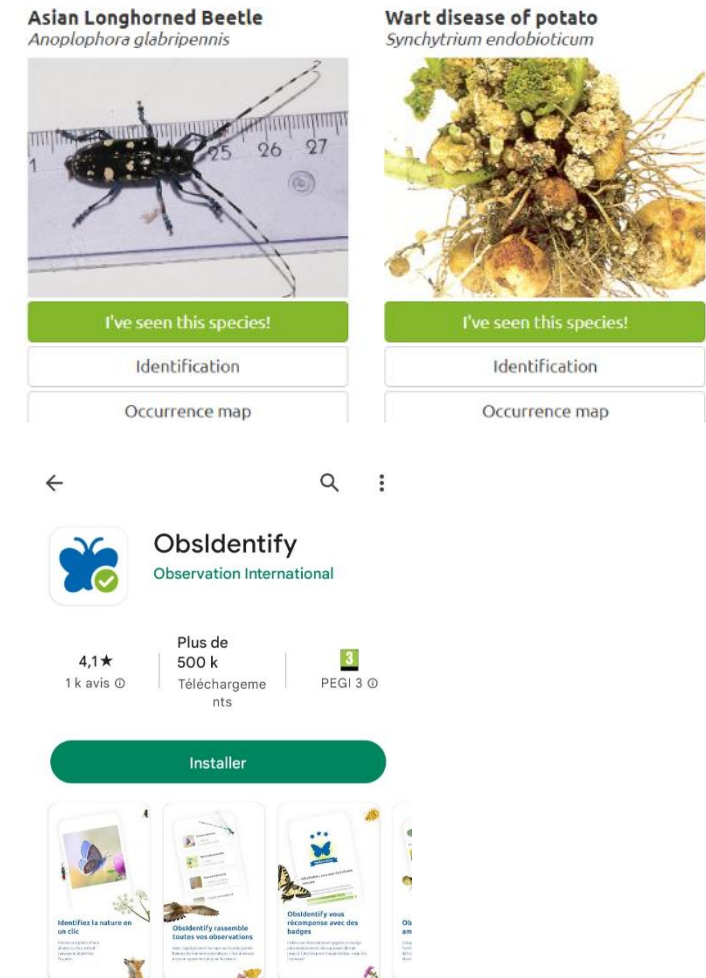
2. Verification by experts (ILVO as National Reference Lab)

Network of validators.

Suspect observations can be marked 'pending', making them invisible to the general public; additional sampling by NPPO if necessary (contact details of observer needed).

3. If the notification is found to be positive, and after approval by the competent authorities, an alert is sent out.

- (4. Establishment of emergency measures) → NPPO level





Beware&Note

Relevance to the IPPC

Beware&Note is an innovative online tool supporting early detection and notification of plant pests.

It contributes to ensuring preparedness and responsiveness to any incursion of plant pests, thus contributing to food security.

It participates to public awareness thanks to its connection with a well-known existing platform.

10 MOST WANTED

INTERNATIONAL PLANT HEALTH QUARTERLY

Quarantaine-organismen Organismes de quarantaine

Oost-Aziatische boktor / Capricorne Asiatique des agrumes

Anoplophora chinensis

- Edoort en andere bultwormen / Diable et autres bestes
- 23-37 mm
- Lange rechte kleine groene antennes / Longues antennes caudex rond et fins

Asiatische loofhoutboktor / Capricorne asiatique

Anoplophora glabripennis

- Edoort en andere bultwormen / Diable et autres bestes
- 25-33 mm
- Lange rechte kleine groene antennes / Longues antennes caudex rond et fins

Monochome boktor / Capricorne monochrome

Dendroctonus valens

- Boktorkever als overdrager van een dodelijk uitje / Le capricorne en tant que vecteur d'un nématode mortel
- Dennen / Pins
- 15-30 mm
- Lange antennes / Longues antennes

Japanse kever / Scarabée japonaise

Popillia japonica

- Kever die schade aanricht op verschillende plantensoorten / Les scarabées qui nuisent aux végétaux
- 11 mm lang, bronzene groene kop en roodbruine antennes / 11 mm de longueur, tête de couleur vert métallique et antennes de couleur brune
- 12 plukjes witte uitjes op de kop / 12 touffes de poils blancs sur la tête

Aromia bungii boktor / Le longicorne à col rouge

- Prunus soorten zoals kerselaar en pruimelaar / Espèces de Prunus comme le cerisier et le prunier
- 22-28 mm
- Lichaam volledig zwart met blauwe glans, op het rode halsschild (neck) na / Corps entièrement noir à reflets bleus, à l'exception du col rouge

Dutse knikstekker / Chancé du noyer

Geomastix modica

- Schimmel / Champignon
- Verspreid door minuscule schorskever Phryphorus juglandis (1,5-2 mm) / Transmis par le scolyte Phryphorus juglandis (1,5-2 mm)
- Waardplant: walnoot / Plante hôte: noyer

Olijfbomenpest / Maladie de Pierce

Xylella fastidiosa

- Verwelking van bladeren tot volledig afsterven van de boom / Dillards foliaires jusqu'à la mort de l'arbre
- Verspreid door de schuimcicade / Diffusé par la phtère spongieuse
- Olijfbomen, oleander, Prunus soorten, Polygala myrtilloïde, kalfplant, lavendel, v.a. / Oliver, laurier-rose, espèces de Prunus, polygala à feuilles de myrte, caféier, lavande, v.a.

Rose Rosette Virus - RRV / Virus de la Rosette du rosier - VRR

- Roodverkleuring, uitbundige vertakking en doornigheid, misvormde bloemen... / Décoloration rouge, branches et épines excessives, fleurs déformées
- Alle Rosa soorten / Toutes espèces de Rosa
- Verspreid door een minuscule mijt (0,1 mm) / Transmis par un acarien minuscule (0,1 mm)

Tomato Brown Rugose Fruit Virus / Virus du fruit Rugueux Brun de la tomate - TBRV

- Tomaten en paprika / Tomates et poivrons
- Verwelken, verliezen en misvormen van de bladeren / Flétrissement, décoloration et déformation des feuilles
- Mosaic van groen en geel op de vruchten en een ongelijke afrijping / Taches jaunes et brunes et un mûrissement inégal

Platanensterfte / Chancé coloré du platane

Ceratocystis platani

- Schimmel / Champignon
- Oranje worden en paarse verkleuring onder de schors / Plats oranges et veines bleues sous l'écorce
- Sterfte 3-7 jaar na infectie / Mort 3-7 ans après infection
- Waardplant: platane / Plante hôte: platane

Deze Q-organismen gezien? / Avez-vous vu ces organismes?
waarnemingen.be
observations.be

PCS ILVO INVS-ARLUNT

Klein de meekleeflijst
PROCEDEMENT
VERVOLGD VAN DE VERORDENING
DE SEPTEMBER

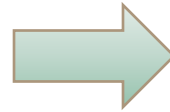
This poster has been prepared in collaboration with PCS ILVO, Natuurpunt and the support of FOD VVV, and EFPO (www.efpo.int)



Main outputs, success and challenges

1 January 2022 - 31 December 2022

- ❖ 1445 visits on the quarantine pages
- ❖ 6 reports of quarantine organisms sent by citizens



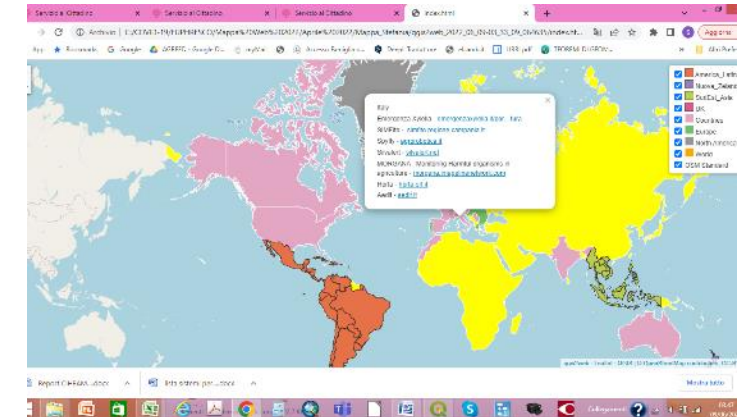
After verification by experts (ILVO), these notifications were all found to be negative → no alert had yet to be sent.

- Relying on citizen scientists → data validation needed + focus on easily identifiable pests and disease symptoms → reduced likelihood of false positive notifications combined with automatic ID tool ↔ more training data for Q organisms needed.
- Annual publicity needed to expand regular users (= nature lovers) with other citizen scientists and professionals (growers, foresters, traders, ...) ↔ notification obligation.
- Updating and expanding of the quarantine organisms list

'Systems for awareness, early detection and notification of organisms harmful to plants' (01/06/2020 – 31/05/2023)

Some key objectives:

- Analysis of existing systems for monitoring organisms harmful to plants → based on a questionnaire
- Provide general guidelines for developing systems for awareness, early detection and notification of organisms harmful to plants → focus on citizen science
- How should example facts sheets for the main Q-organisms look like? (3 examples were prepared) → distinguish between 2 target groups: non experienced audience vs. experienced audience.





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Thank you

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