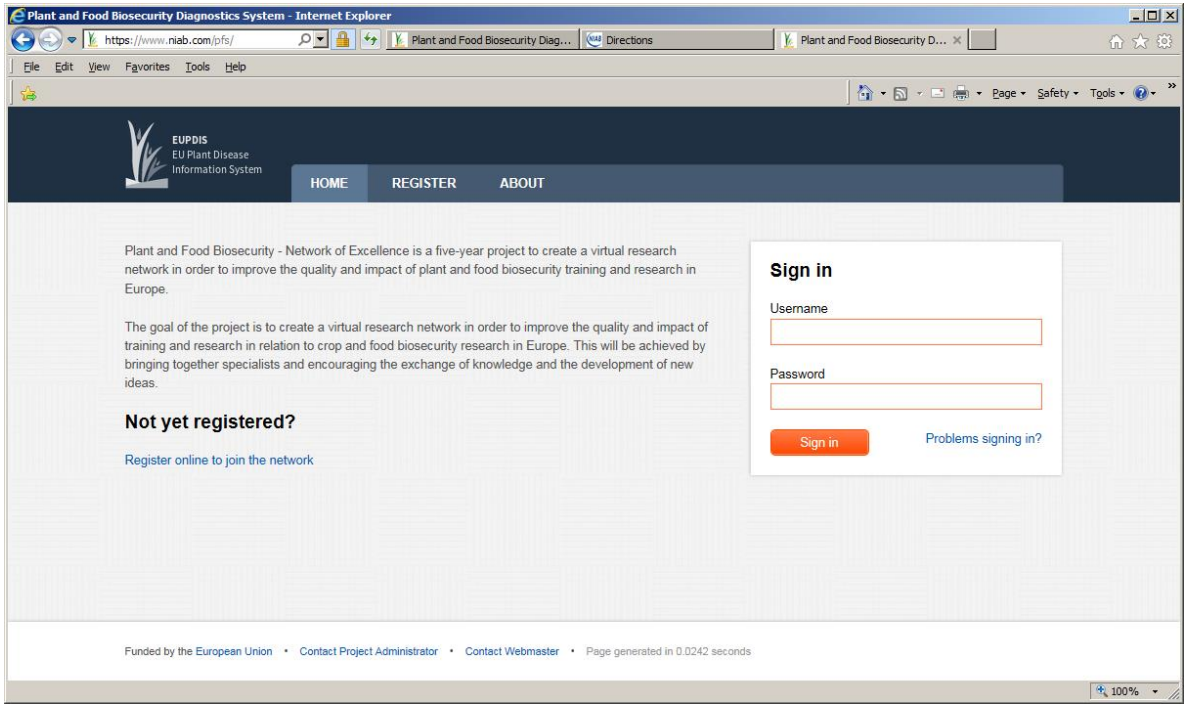
EUPDIS

EU Plant Disease Information System

http://www.niab.com/pfs

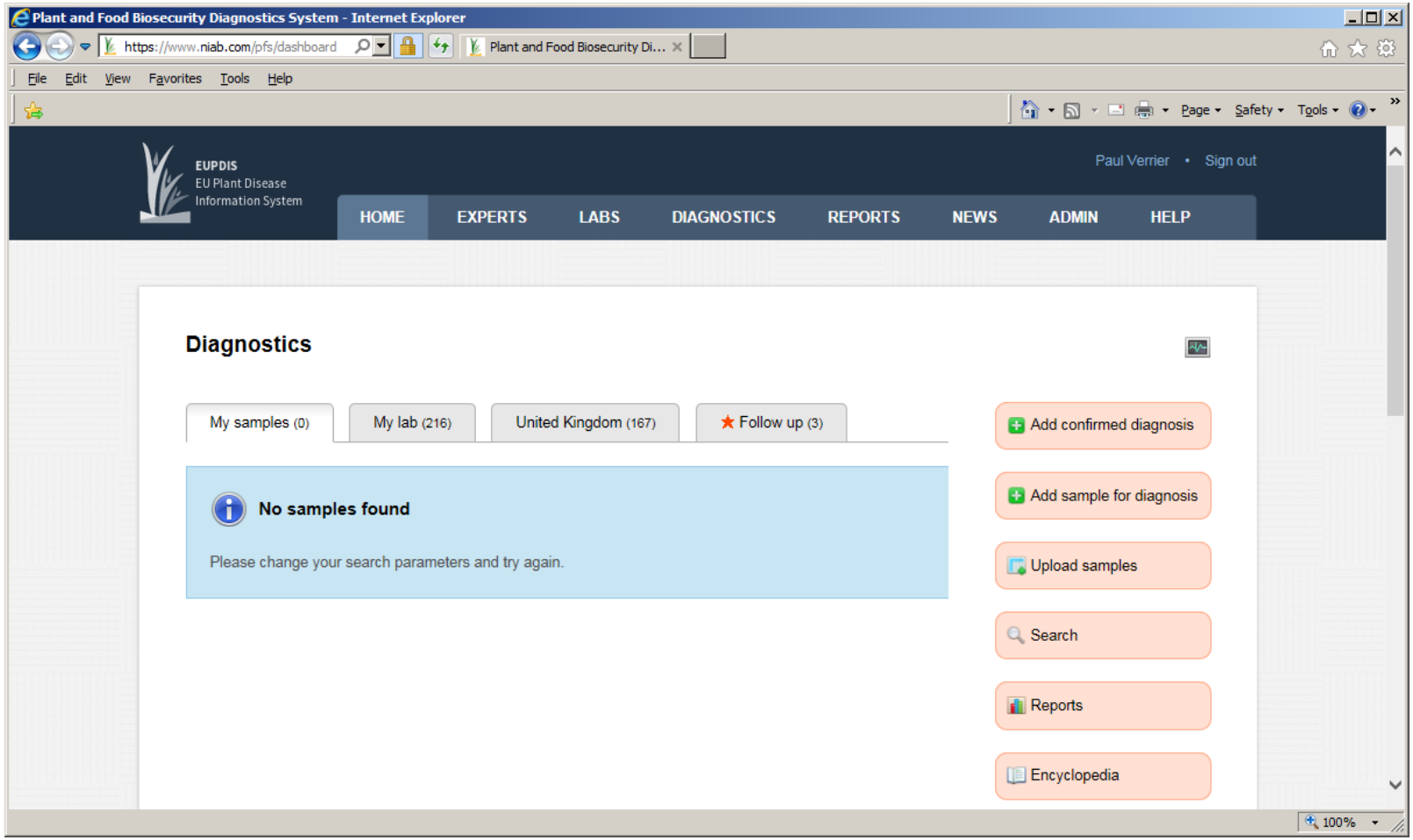


Jane Thomas & Paul J Verrier

BCPC Disease Group Meeting, 7th December

What's this about?

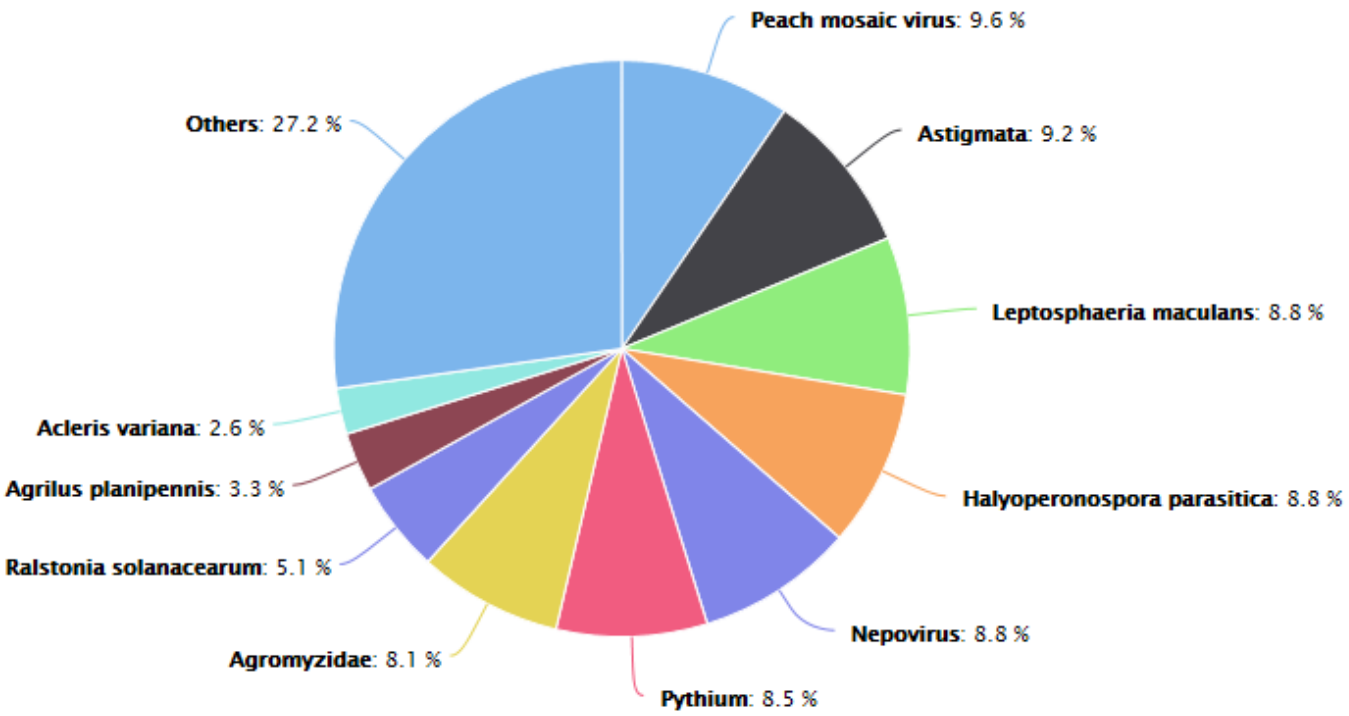
- EU Plant and Food BioSecurity Network of Excellence
  - PLANTFOODSEC
- Defined need to:
  - Capture diagnostic information
  - Track outbreaks of disease
  - Link ALL plant pathology expertise
  - Alert on new issues, training
  - NOT to replace NPPO
  - Enable ALL laboratories to participate
- USA has Plant Disease Information System
  - Feeds Federal monitoring programmes


Plant and Food Biosecurity Diagnostics System - Internet Explorer
https://www.niab.com/pfs/dashboard
Plant and Food Biosecurity Di...
File Edit View Favorites Tools Help
Page Safety Tools
EUPDIS
EU Plant Disease
Information System
Paul Verrier • Sign out
HOME EXPERTS LABS DIAGNOSTICS REPORTS NEWS ADMIN HELP
Diagnostics
My samples (0)
My lab (216)
United Kingdom (167)
Follow up (3)
No samples found
Please change your search parameters and try again.
Add confirmed diagnosis
Add sample for diagnosis
Upload samples
Search
Reports
Encyclopedia
100%

Bar chart | Pie chart | Table

ALL | Jan 2016 | Dec 2015 | Nov 2015 | Oct 2015 | Aug 2015 | Jul 2015

Apr 2015 | Mar 2015 | Feb 2015 | Jan 2015



Pathogen trends

ALL | Afghanistan | France | Saint Pierre and Miquelon | Spain | United Kingdom

PATHOGEN	JAN 2015	FEB 2015	MAR 2015	APR 2015	MAY 2015	JUN 2015	JUL 2015	AUG 2015	SEP 2015	OCT 2015	NOV 2015
Acleris variana	0	1 ▲1	3 ▲2	0 ▼3	0	0	0	0	0	0	2 ▲2
Aculops fuchsiae	0	1 ▲1	0 ▼1	0	0	0	0	0	0	1 ▲1	0 ▼1
Aeolesthes sarta	0	0	1 ▲1	0 ▼1	0	0	0	0	0	0	0
Agrilus anxius	0	0	0	0	0	0	0	0	0	0	4 ▲4
Agrilus planipennis	0	1 ▲1	1	0 ▼1	0	0	1 ▲1	0 ▼1	0	0	2 ▲2
Agrobacterium	0	2 ▲2	0 ▼2	0	0	0	0	0	0	0	0
Agrobacterium tumefaciens	0	1 ▲1	1	0 ▼1	0	0	0	0	0	1 ▲1	0 ▼1
Agromyzidae	4	8 ▲4	4 ▼4	5 ▲1	0 ▼5	0	0	0	0	1 ▲1	0 ▼1
Aleurocanthus	0	0	0	0	0	0	0	0	0	0	0

Diagnosis search

Crop or host: ALL

Pathogen: Halyoperonospora parasitica

Certainty: ALL

Country: United Kingdom

Sampled date: to *Clear dates*

Display as: (•) List ( ) Map ( ) Heatmap

Animated heatmap by: ( ) Day ( ) Week ( ) Month

Search

Export to CSV

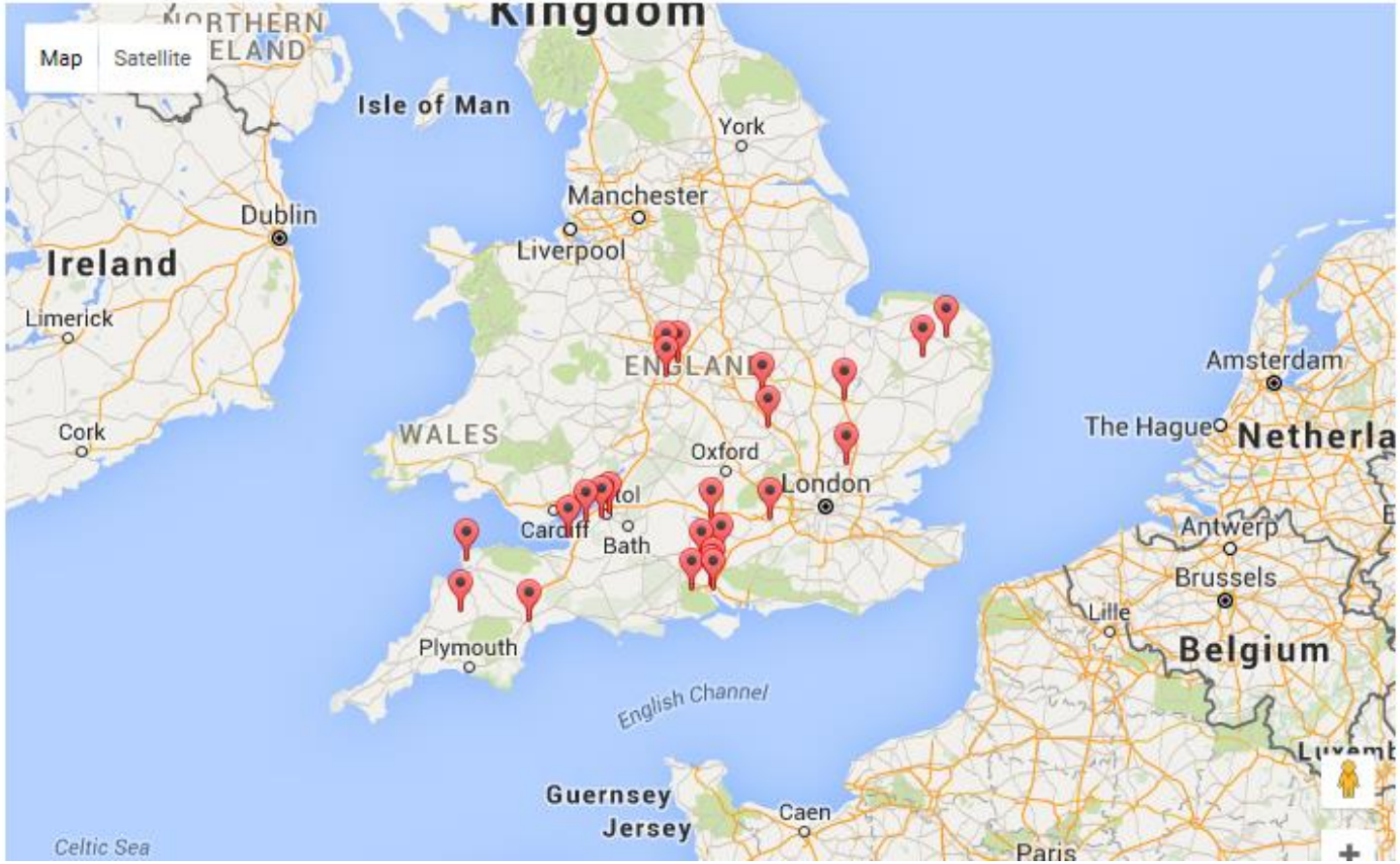
Export to CSV

ID	DATE	CROP OR HOST	PATHOGEN(S)	COUNTRY
178	20 Apr 2015	Brassica napus var oleifera	Halyoperonospora parasitica	United Kingdom
173	17 Apr 2015	Brassica napus var oleifera	Halyoperonospora parasitica	United Kingdom
193	11 Apr 2015	Brassica napus var oleifera	Halyoperonospora parasitica	United Kingdom
171	10 Apr 2015	Brassica napus var oleifera	Halyoperonospora parasitica	United Kingdom
187	09 Apr 2015	Brassica napus var oleifera	Halyoperonospora parasitica	United Kingdom
188	07 Apr 2015	Brassica napus var oleifera	Halyoperonospora parasitica	United Kingdom
158	04 Apr 2015	Brassica napus var oleifera	Halyoperonospora parasitica	United Kingdom
202	01 Apr 2015	Brassica napus var oleifera	Halyoperonospora parasitica	United Kingdom
189	25 Mar 2015	Brassica napus var oleifera	Halyoperonospora parasitica	United Kingdom
201	21 Mar 2015	Brassica napus var oleifera	Halyoperonospora parasitica	United Kingdom
199	05 Mar 2015	Brassica napus var oleifera	Halyoperonospora parasitica	United Kingdom
175	27 Feb 2015	Brassica napus var oleifera	Halyoperonospora parasitica	United Kingdom

Display as ○ List ◉ Map ○ Heatmap

Animated heatmap by: ○ Day ○ Week ○ Month

Search



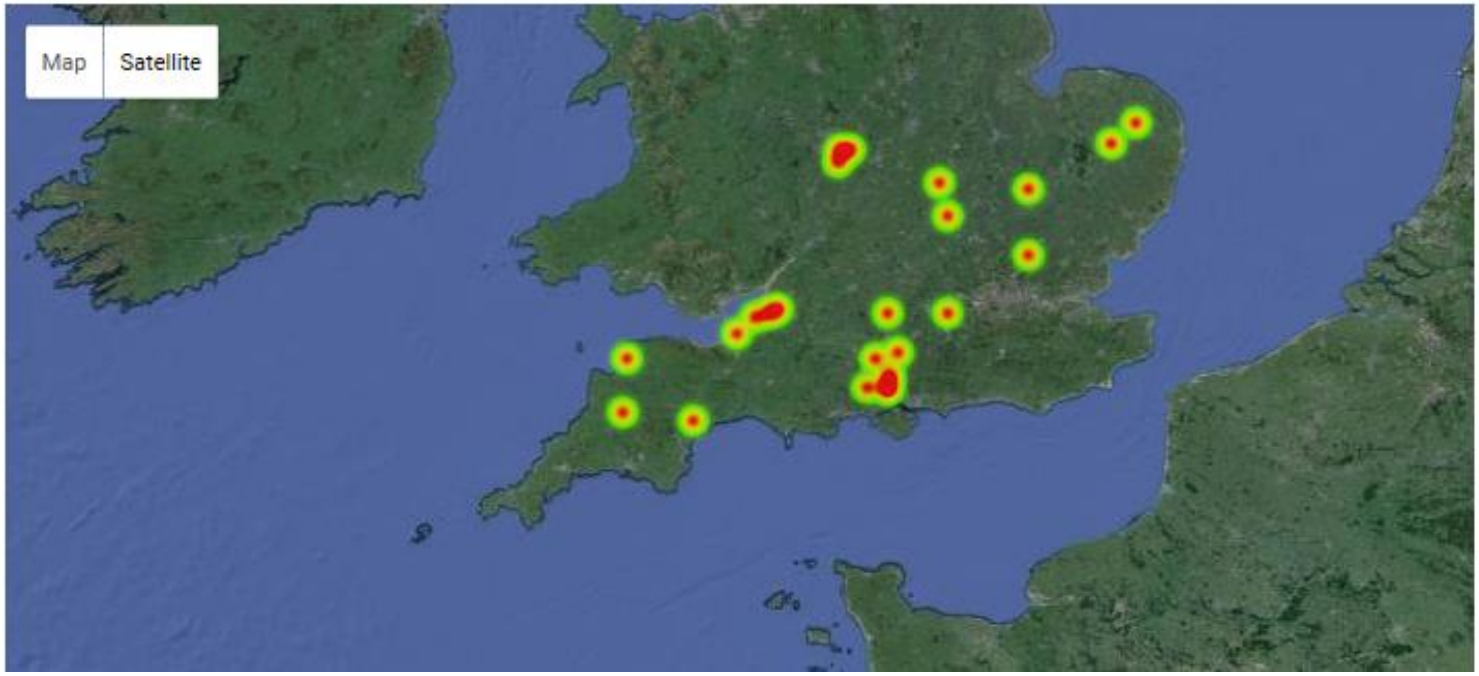
Country United Kingdom

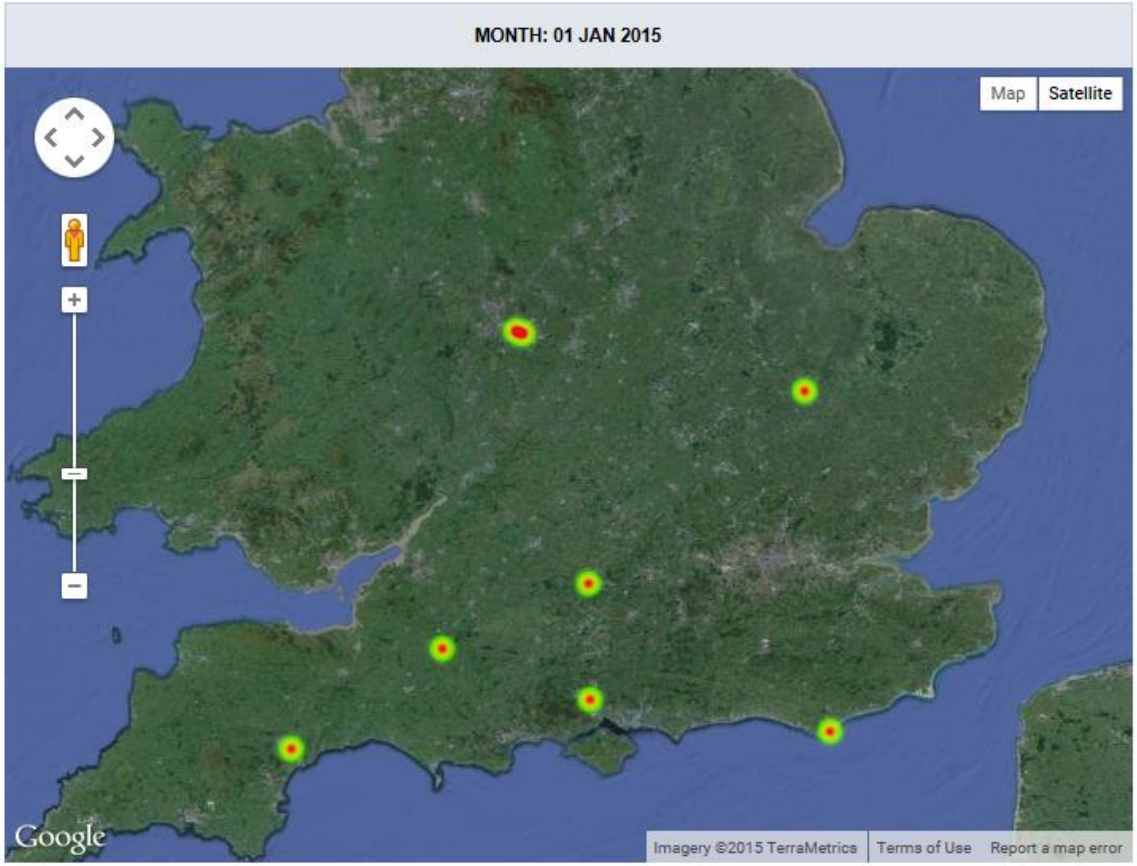
Sampled date to *Clear dates*

Display as ○ List ○ Map ◉ Heatmap

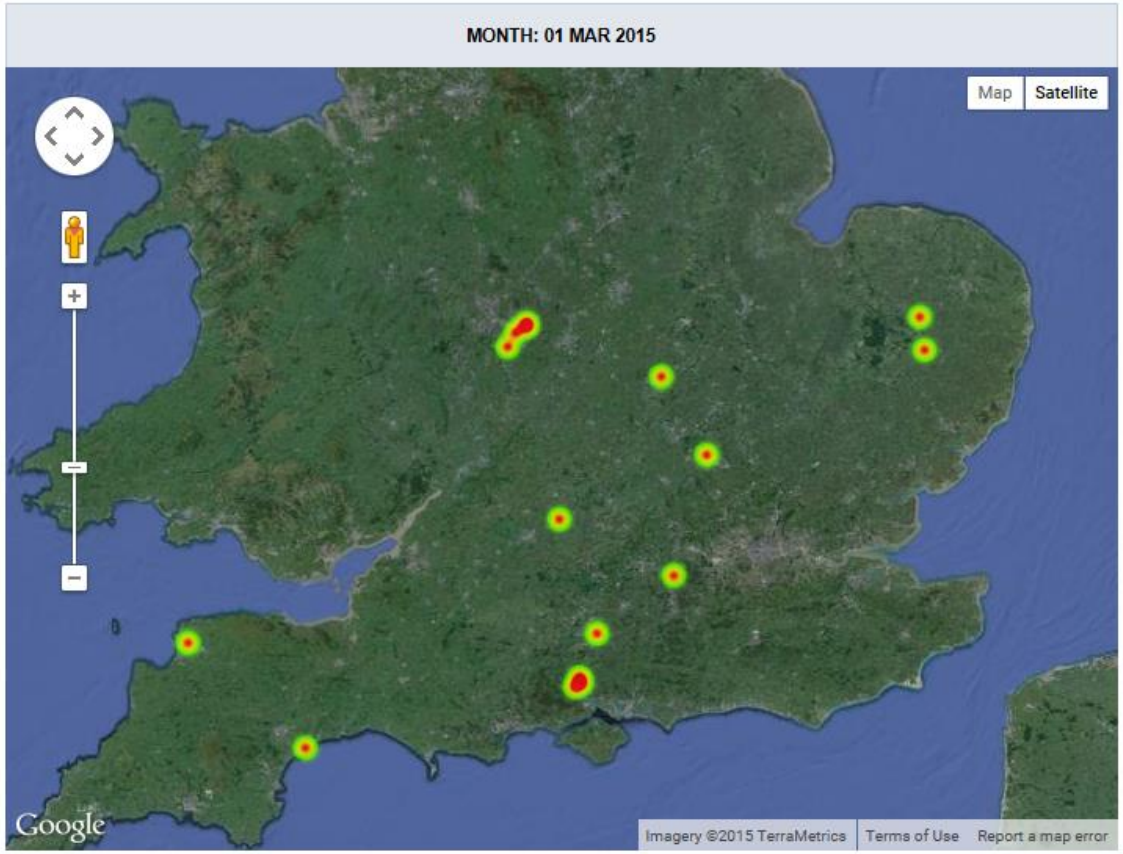
Animated heatmap by: ○ Day ○ Week ○ Month

Search



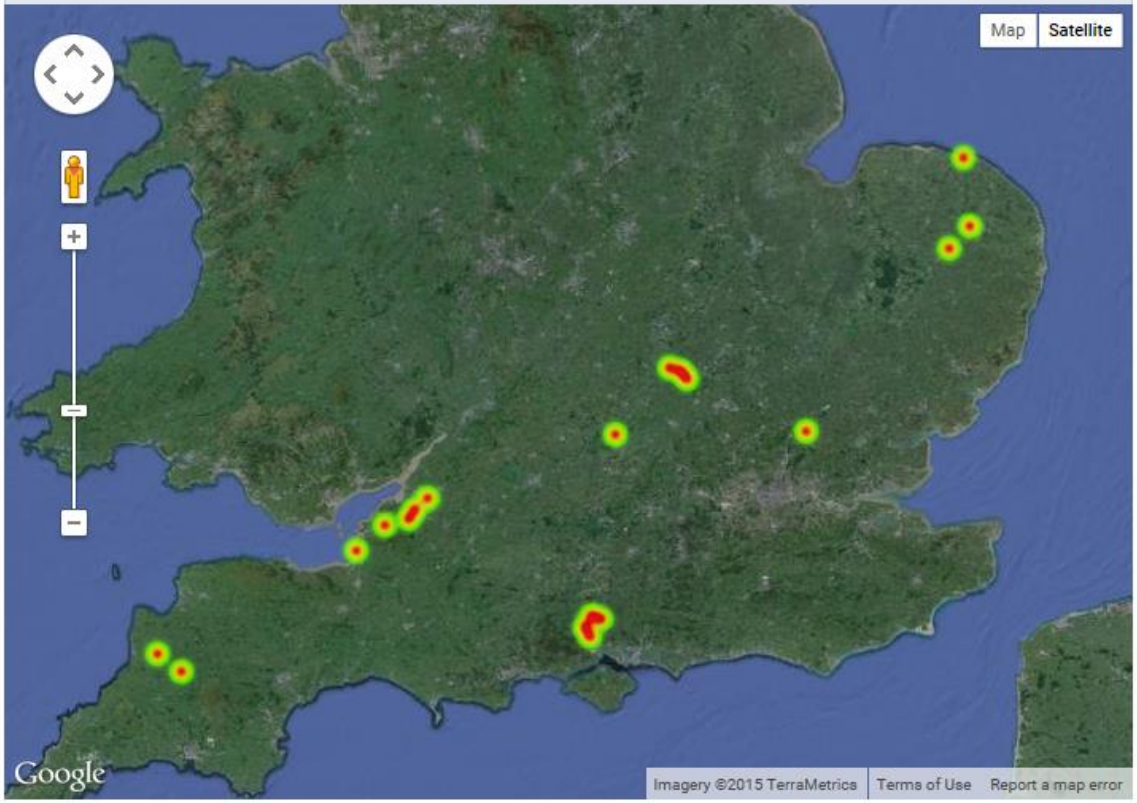


Please note that some samples may be missing from the map if their address has not yet been geocoded.

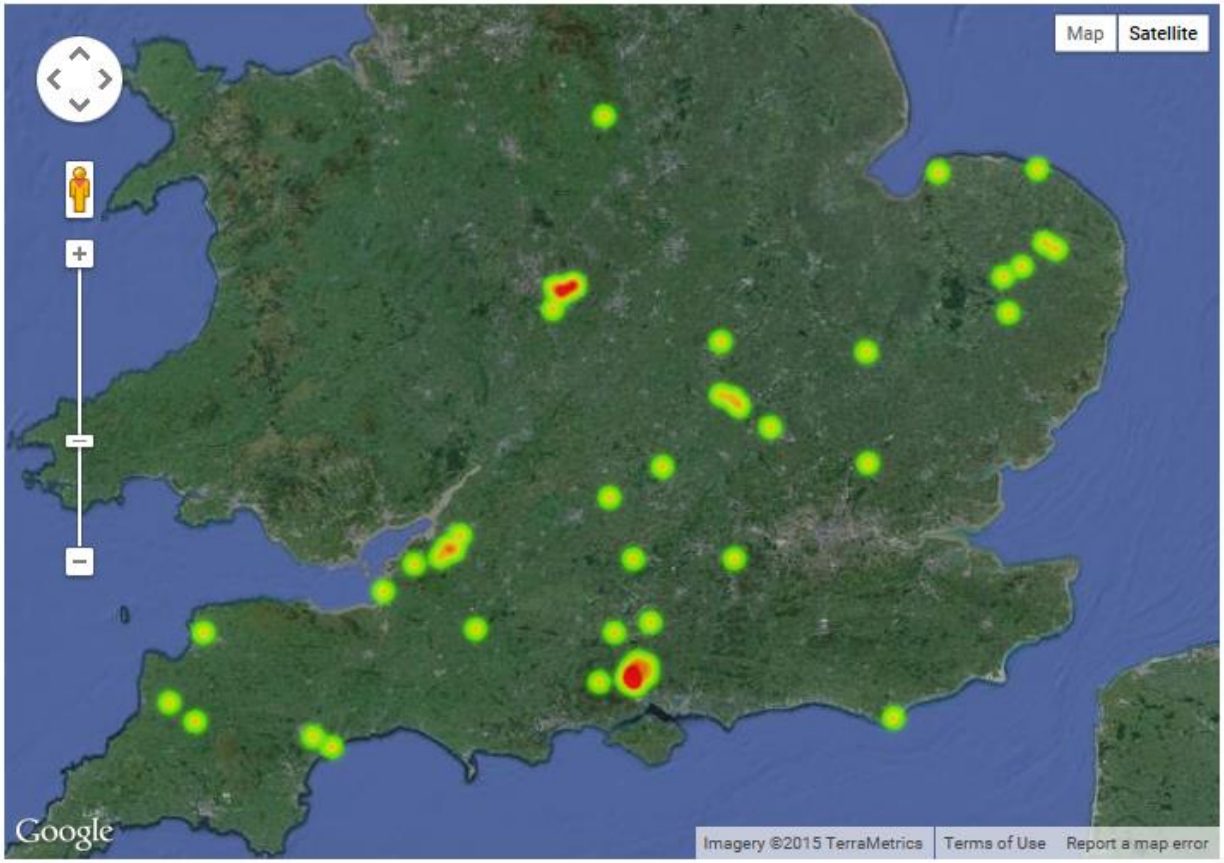


Please note that some samples may be missing from the map if their address has not yet been geocoded.

MONTH: 01 APR 2015

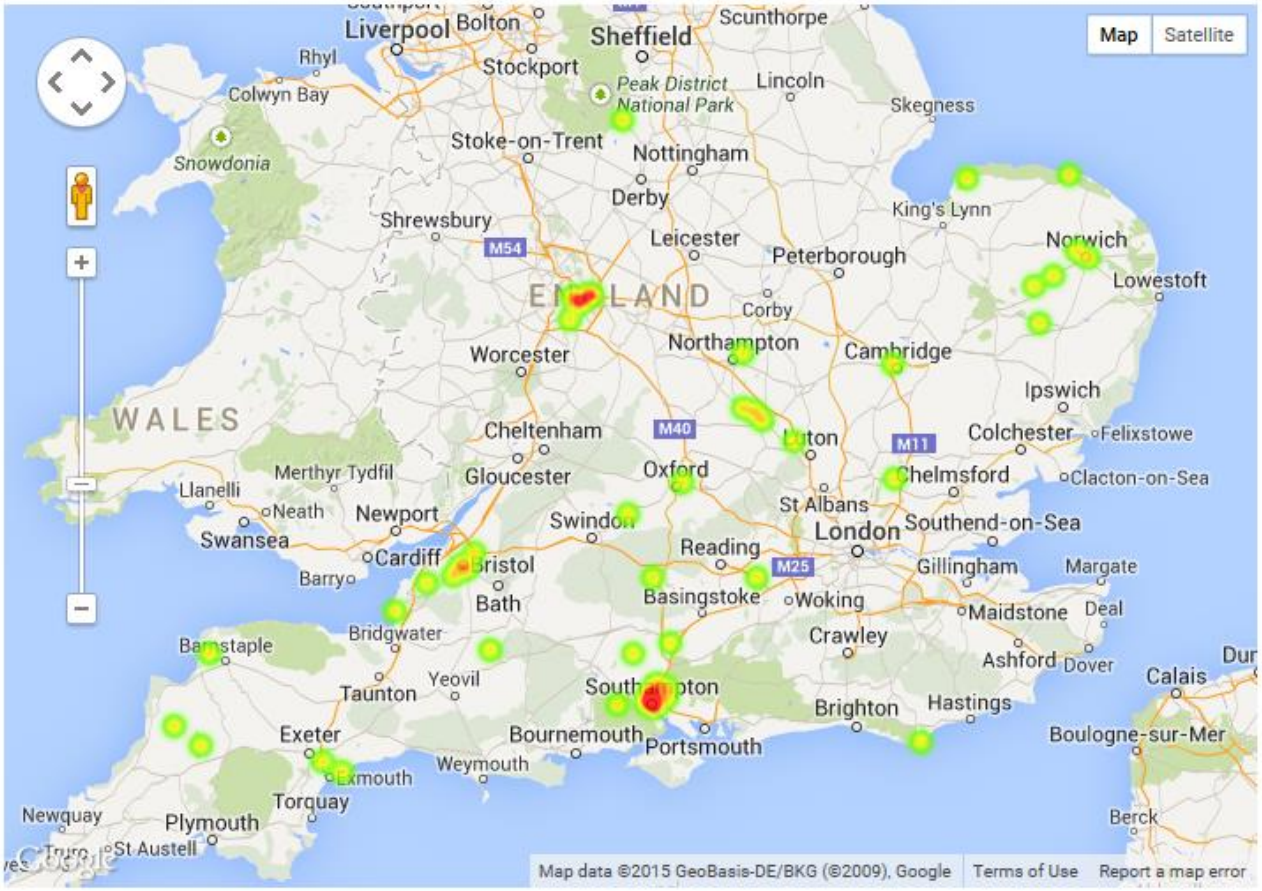


Please note that some samples may be missing from the map if their address has not yet been geocoded.



Please note that some samples may be missing from the map if their address has not yet been geocoded.

Various display options



Please note that some samples may be missing from the map if their address has not yet been geocoded.

Top pathogens

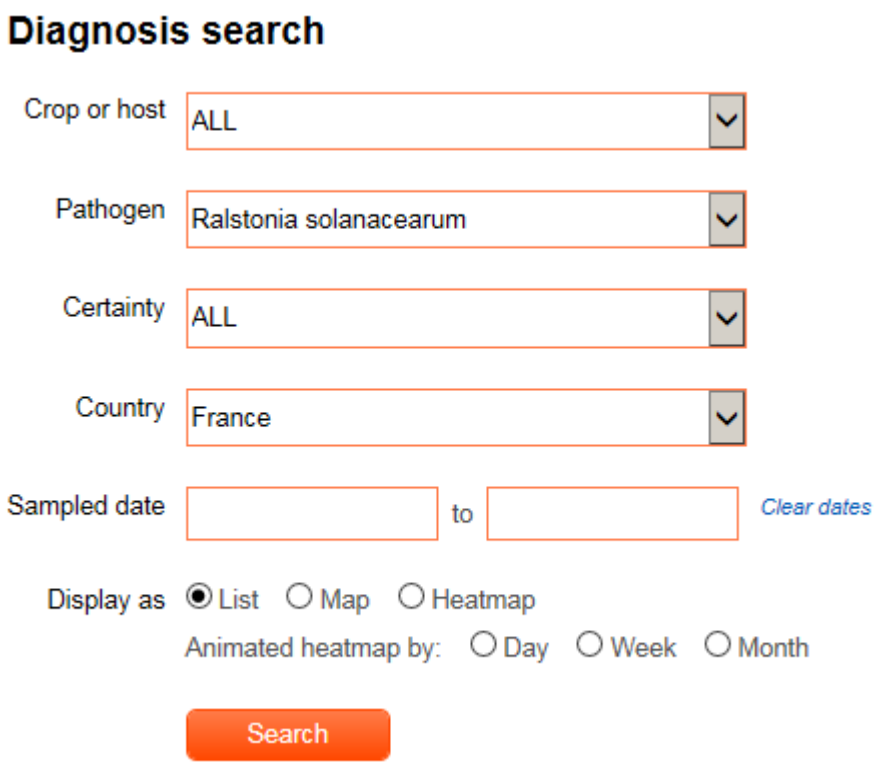
ALL | Afghanistan | France | Saint Pierre and Miquelon | Spain | United Kingdom

Bar chart | Pie chart | Table

ALL | Aug 2015 | Jul 2015 | Apr 2015 | Mar 2015 | Feb 2015

PATHOGEN NAME	OCCURENCES	% OF ALL REPORTED
Ralstonia solanacearum	5	100%

PATHOGEN	FEB 2015	MAR 2015	APR 2015	MAY 2015	JUN 2015	JUL 2015	AUG 2015	GRAPH
Agrobacterium	1	1	0 ▼1	0	0	0	0	
Nepovirus	0	0	24 ▲24	0 ▼24	0	0	0	
Peach mosaic virus	0	0	25 ▲25	0 ▼25	0	0	0	
Ralstonia solanacearum	0	0	0	0	0	5 ▲5	9 ▲4	
Tetropium gracilicorne	1	0 ▼1	0	0	0	0	0	


Diagnosis search
Crop or host
ALL
Pathogen
Ralstonia solanacearum
Certainty
ALL
Country
France
Sampled date
to
Clear dates
Display as
List
Map
Heatmap
Animated heatmap by:
Day
Week
Month
Search

☐	ID	DATE	CROP OR HOST	PATHOGEN(S)	COUNTRY
☐	326	15 Aug 2015	Solanum tuberosum	Ralstonia solanacearum	France
☐	325	14 Aug 2015	Solanum tuberosum	Ralstonia solanacearum	France
☐	324	12 Aug 2015	Solanum tuberosum	Ralstonia solanacearum	France
☐	323	11 Aug 2015	Solanum tuberosum	Ralstonia solanacearum	France
☐	322	06 Aug 2015	Solanum tuberosum	Ralstonia solanacearum	France
☐	321	05 Aug 2015	Solanum tuberosum	Ralstonia solanacearum	France
☐	320	02 Aug 2015	Solanum tuberosum	Ralstonia solanacearum	France
☐	318	01 Aug 2015	Solanum tuberosum	Ralstonia solanacearum	France
☐	319	01 Aug 2015	Solanum tuberosum	Ralstonia solanacearum	France
☐	316	25 Jul 2015	Solanum tuberosum	Ralstonia solanacearum	France
☐	315	23 Jul 2015	Solanum tuberosum	Ralstonia solanacearum	France
☐	314	22 Jul 2015	Solanum tuberosum	Ralstonia solanacearum	France
☐	313	20 Jul 2015	Solanum tuberosum	Ralstonia solanacearum	France

Display as ○ List ○ Map ◉ Heatmap

Animated heatmap by: ○ Day ○ Week ○ Month

Search

Encyclopedia

Organism name ralst

Search

- Ralstonia
- Ralstonia solanacearum
- Ralstonia solanacearum race 3
- Ralstonia solanacearum race 3 biovar 2 (Pseudomonas solanacearum)

Ralstonia solanacearum

Edit organism | Overview of samples

Alternative names
- Bacterial wilt (English / United States)
- Bactériose vasculaire (French / France)
- Bacterium solanacearum
- Braunfäule (Germany)
- Brown rot (potato) (English / United States)
- Burkholderia solanacearum
- Granville wilt (tobacco) (English / United States)
- Moko disease (banana) (English / United States)
- Podredumbre parda de la patata (Spain)
- Pourriture brune (French / France)
- Pseudomonas solanacearum
- Schleimkrankheit der Kartoffel (Germany)
- southern bacterial wilt (tomato) (English / United States)

Organism parents
Bacteria → Ralstonia → Ralstonia solanacearum
Bacteria → Ralstonia solanacearum

Type Pathogen

Pathogens

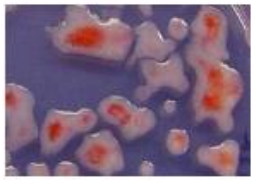
Hosts
- Capsicum spp
- Lycopersicum esculentum
- Musa spp
- Nicotiana tabacum
- Olea europea
- Pelargonium
- Solanum dulcamara
- Solanum melongena
- Solanum tuberosum
- Zingiber officinale

Host specificity

Experts on this organism
- John Elphinstone
- Joseph Sollinger
- Olga Truljova
- Paul Beales
- Sandrine Léonard
- Valentina Gusina

In EU? ✗

Alert if found? ✓

Year introduced	
Found in Countries	
Photos	  
Notes	The ginger strain infects numerous ginger species. Commercial chemicals have generally proven to be ineffective in controlling the pathogen.
Extra information	http://www.eppo.int/QUARANTINE/bacteria/Ralstonia_solanacearum/PSDMSO_ds.pdf [Edit] [Delete] *Ralstonia solanacearum, Data Sheets on Quarantine Pests, EPPO* http://plantpath.ifas.ufl.edu/rsol/RalstoniaPublications_PDF/EPPORalstoniaDiagnostic%20protocols.pdf *Ralstonia solanacearum, Diagnostic protocols for regulated pests, Blackwell Publishing, Ltd.* [Edit] [Delete] *European and Mediterranean Plant Protection Organization, EPPO Bulletin 34, 173 –178, 2004* http://jb.asm.org/content/194/10/2742.full [Edit] [Delete] *Sequencing of K60, Type Strain of the Major Plant Pathogen Ralstonia solanacearum, Benoît Remenanta, Lavanya Babujeea, Aurélie Lajusb, Claudine Médigueb, Philippe Priorc and Caitilyn Allena; Journal of Bacteriology, 2012, 194, 2742-2743*

News

Ralstonia solanacearum

14 Jan 2016

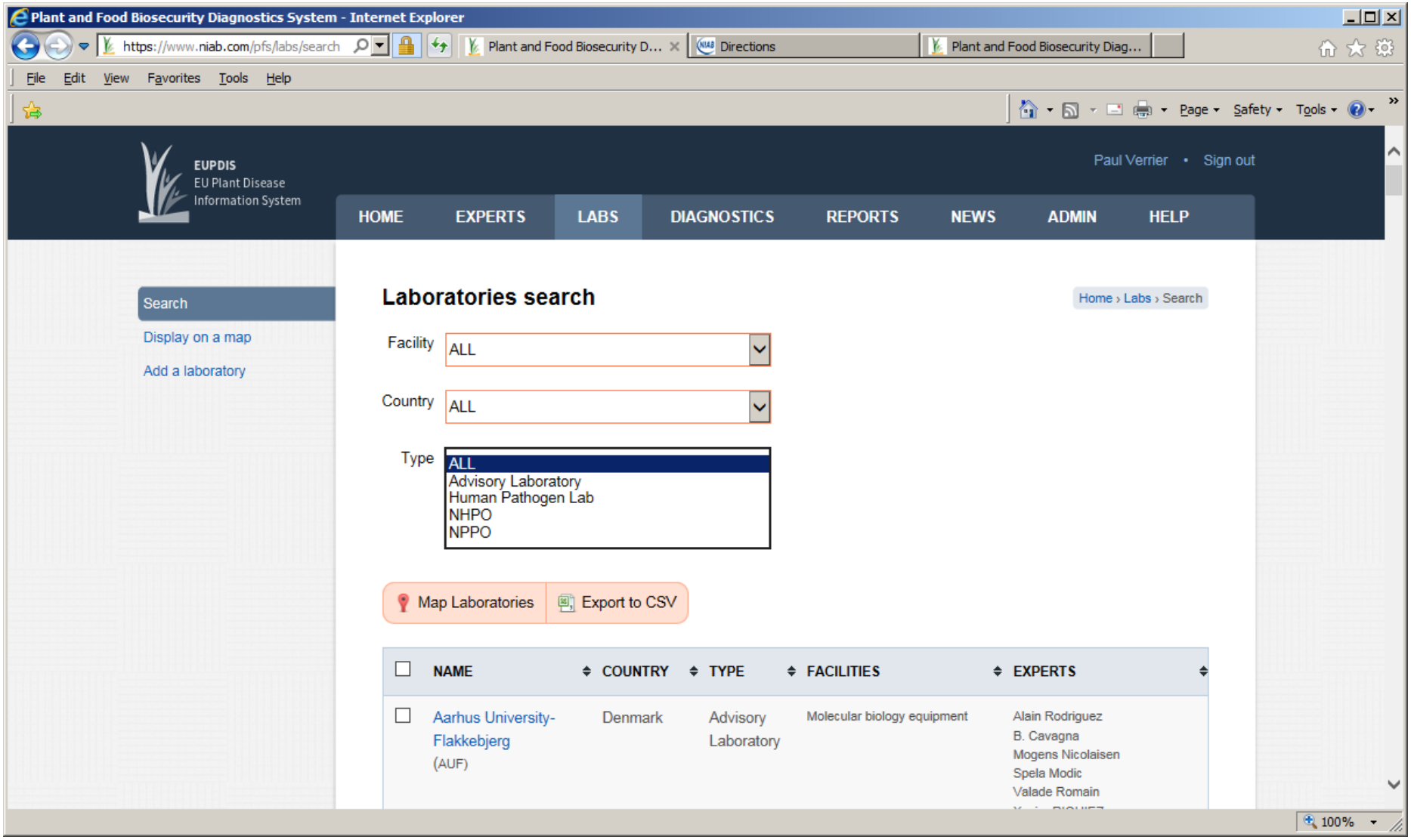
Ralstonia solanacearum, the causal agent of brown rot of potatoes, is a regulated pathogen with serious implications for potato production in the EU. A number of races and biovars of R. *solanacearum* exist. Race 3 Biovar 2 affects potatoes. It also affects a number of solanaceous plants, including weedy species. It is tuber-borne in potatoes and is also water-borne. Symptom development is favoured by warm temperatures and moist soils. Affected plants wilt in the field at the top leaflets and as the disease progresses plants become stunted, yellowed, severely wilted and will eventually die. In tubers, the typical symptom is a brown discolouration of the vascular ring. This eventually rots, and a white slime may appear outside the tuber. The organism can also cause latent infections in tubers, and if these are planted, the disease will transmit to growing plants. The bacteria can spread on machinery and in irrigation water.

Solanum dulcamara, a wild plant that can be infected

Some weedy species, particularly *Solanum dulcamara* (common name of 'woody nightshade' in the UK), are significant for the spread of disease as they can harbour the organism without showing symptoms, and can release it into watercourses,

Organisation	Federal Agency for the Safety of the Food Chain - Gembloux
Job title	
Primary contact	Yes
Phone number	+32 49 87 38747
Mobile	
Fax	+32 81 62 0301
Email	sandrine.leonard@afsca.be
Address	Chaussée de Namur 22 5030 Gembloux Belgium
Website	http://www.favv-afsca.fgov.be/home-en/
Areas of expertise	
Roles	
Crops	
Specialisms	Clavibacter michiganensis subsp. sepedonicus Erwinia amylovora

Map of selected laboratories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Search
Display on a map
Add a laboratory
Laboratories search
Home › Labs › Search
Facility ALL
Country ALL
Type
ALL
Advisory Laboratory
Human Pathogen Lab
NHPO
NPPO
Map Laboratories
Export to CSV
NAME COUNTRY TYPE FACILITIES EXPERTS
Aarhus University-Flakkebjerg (AUF)
Denmark
Advisory Laboratory
Molecular biology equipment
Alain Rodriguez
B. Cavagna
Mogens Nicolaisen
Spela Modic
Valade Romain
100%

Map of selected laboratories

Experts search

Expert area: Pests – Fungi

Crop: ALL

Country: ALL

Search

Map experts | Export to CSV

EXPERT	ORGANISATION	COUNTRY	EXPERTISE	CROPS
Arunas Beniusis	Phytosanitary Research Laboratory	Lithuania	Fungi	
Charles Lane	Food and Environment Research Agency	United Kingdom	Fungi	
Linda Brandt	Estonian Agricultural Research Centre	Estonia	Fungi	
Paul Beales	Food and Environment Research Agency	United Kingdom	Fungi	Solanum tuberosum

Add confirmed diagnosis

Diagnosis

Date crop sampled: 17/01/2016

Crop or host: --- Please select ---

Cultivar: --- Please select a crop or host first ---

Pathogen(s) detected:

Notes:

Internal reference:

Location of crop

Field or reference:

Town:

Postcode:

Country: Afghanistan

Latitude: *If GPS reading was taken*

Longitude: *If GPS reading was taken*

Add diagnosis

Add sample for diagnosis

Suspected diagnosis

Date crop sampled: 17/01/2016

Crop or host: --- Please select ---

Cultivar: --- Please select a crop or host f

Pathogen(s) suspected:

Internal reference:

Details of issue

Date crop sown:

Previous crop in field: --- Please select ---

Part(s) of plants affected:

% of crop infected: *Percentage of the entire crop e.g. 24%*

Size of patch affected: *Estimate the size of the affe*

acre

Chemicals & products used: *e.g. Fertiliser, Sprays, Nutrin*

Description of problem: *e.g. Environmental condition symptoms etc.*

Images of crop and infection

Image (1) Browse... *JPG format only*

Description (1)

Add another image

Location of crop

Field or reference

Town

Postcode

Country Afghanistan

Latitude

Longitude

Samplers details

Samplers name

Samplers email

Samplers telephone

Samplers address

Samplers postcode

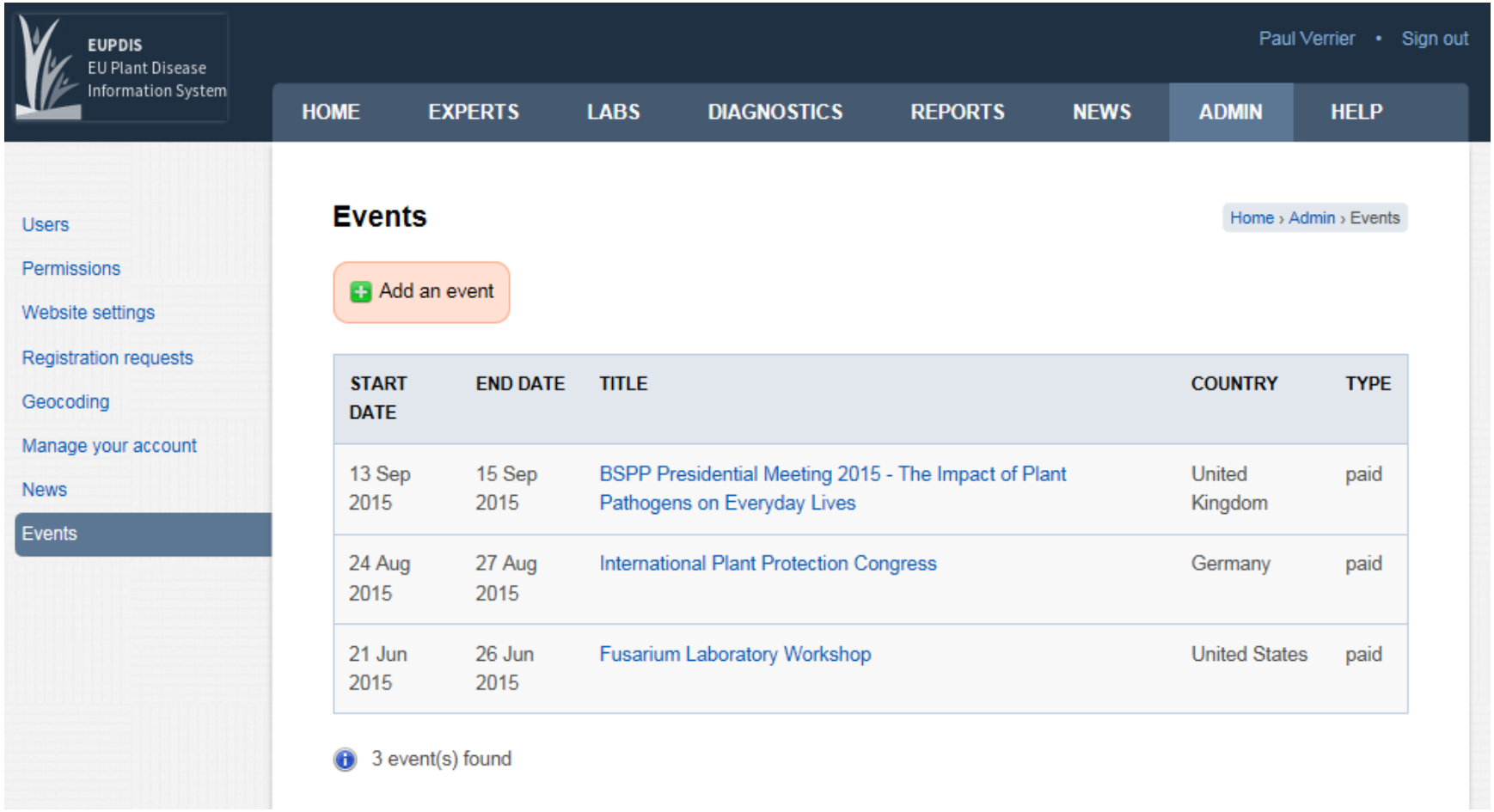
Add sample

Diagnostics dashboard

Home › Diagnostics › Dashboard

My samples (0) | My lab (216) | United Kingdom (167) | ★ Follow up (3)

ID	DATE SAMPLED	CROP OR HOST	PATHOGEN(S)	TOWN	
343	14 Jan 2016	Actinidia chinensis	American plum line pattern virus	Cambridge	✓
329	13 Jan 2016	Actinidia chinensis	Acleris variana Aculops fuchsiae	Cambridge	✓
333	13 Jan 2016	Actinidia deliciosa		Cambridge	✓
338	13 Jan 2016	Actinidia deliciosa		Cambridge	⌛
337	13 Jan 2016	Actinidia kolomikta		Cambridge	⌛
341	13 Jan 2016	Alnus spp	Aculops fuchsiae	Cambridge	⌛
339	13 Jan 2016	Anacardium occidentale	Agrilus planipennis	Cambridge	✓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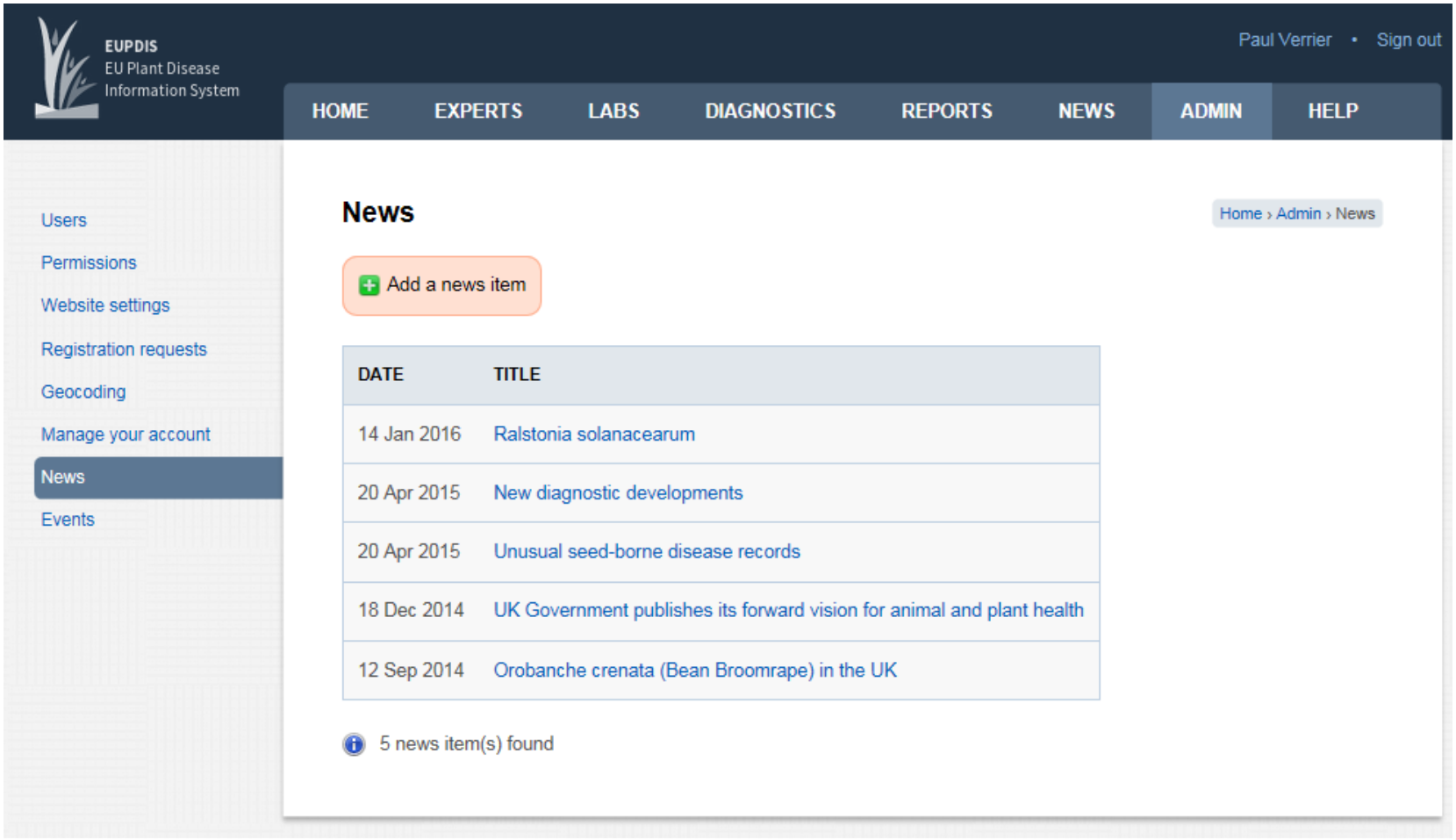
Events
Home › Admin › Events
Add an event
START DATE
END DATE
TITLE
COUNTRY
TYPE
13 Sep 2015
15 Sep 2015
BSPP Presidential Meeting 2015 - The Impact of Plant Pathogens on Everyday Lives
United Kingdom
paid
24 Aug 2015
27 Aug 2015
International Plant Protection Congress
Germany
paid
21 Jun 2015
26 Jun 2015
Fusarium Laboratory Workshop
United States
paid
3 event(s) found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14 Jan 2016
Ralstonia solanacearum
20 Apr 2015
New diagnostic developments
20 Apr 2015
Unusual seed-borne disease records
18 Dec 2014
UK Government publishes its forward vision for animal and plant health
12 Sep 2014
Orobanche crenata (Bean Broomrape) in the UK
5 news item(s) found

EUPDIS thanks

- PDIS system and James Stack both of KSU
- PLANTFOODSEC EU project which spawned EUPDIS
- Stuart Green (NIAB) for coding the system