



CABI and EPPO

Related Activities

Lucinda Charles, Content Manager, Compendium Programme

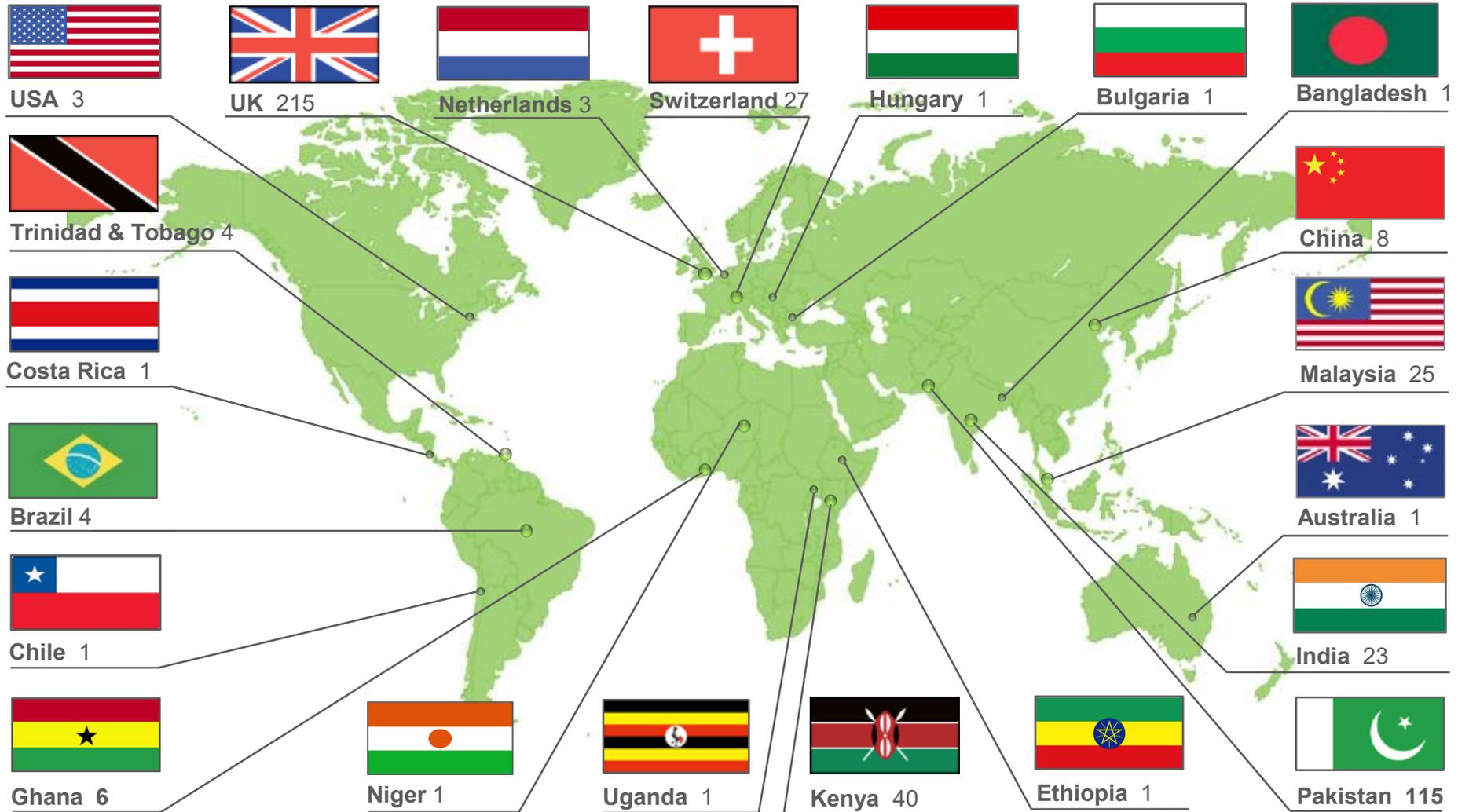
EPPO PPI Panel Meeting, 4-5 February 2020, Utrecht



CABI in brief

- **not-for-profit** intergovernmental organisation established in **1910** by a UN treaty
- With a mission to improve people's lives by applying scientific expertise to solve problems in **agriculture** and the **environment**
- Owned by **49 member countries**
- Expertise in: **scientific publishing** and **international development**
- Parent organisation of **SciDev.Net**

Global reach We have 480+ staff across 21 locations worldwide



Update from CABI on main areas of common interest

- Global pest distributions
- Pest and invasive plant datasheets
- Pest reports
- Decision support
 - Horizon scanning Tool
 - PRA Tool
- IYPH news

Other CABI sites : Home Overview About Help Contact Mobile Sign out

CABI Crop Protection Compendium
The world's most comprehensive site for information on crop pests

Datasets Abstracts Full Text Library Glossary More Resources

Search Crop Protection Compendium Smart searches My CABI

Search over 27,000 datasets and over 390,000 abstracts

prays citri Filter by type Search

Advanced Bibliographic Search → Advanced Datasheet Search →

Prays citri (citrus flower moth)

Index Summary

Pictures
Identity
Taxonomic Tree
Notes on Taxonomy and Nomenclature
Distribution
Distribution Table
Risk of Introduction
Hosts/Species Affected
Host Plants and Other Plants Affected
Growth Stages
List of Symptoms/Signs
Biology and Ecology
Notes on Natural Enemies
Natural enemies
Pathway Vectors
Plant Trade
Impact
Prevention and Control
References
Distribution Maps

Last modified
14 July 2018

Datasheet Type(s)
Pest

Preferred Scientific Name
Prays citri

Preferred Common Name
citrus flower moth

Taxonomic Tree

Distribution Maps

You can pan and zoom the map

Analyze by: Density
 Present: not further
 Present: not further

Distribution Maps of Plant Pests and Diseases

June 2017 *Tripliphium nigerrimum* Map No. 616

AFRICA
ASIA
EUROPE
MIDDLE EAST
NORTH AMERICA
SOUTH AMERICA

Distribution Maps of Plant Pests
Compiled by CABI in association with EPPO
Map No. 616 Issued June 2017

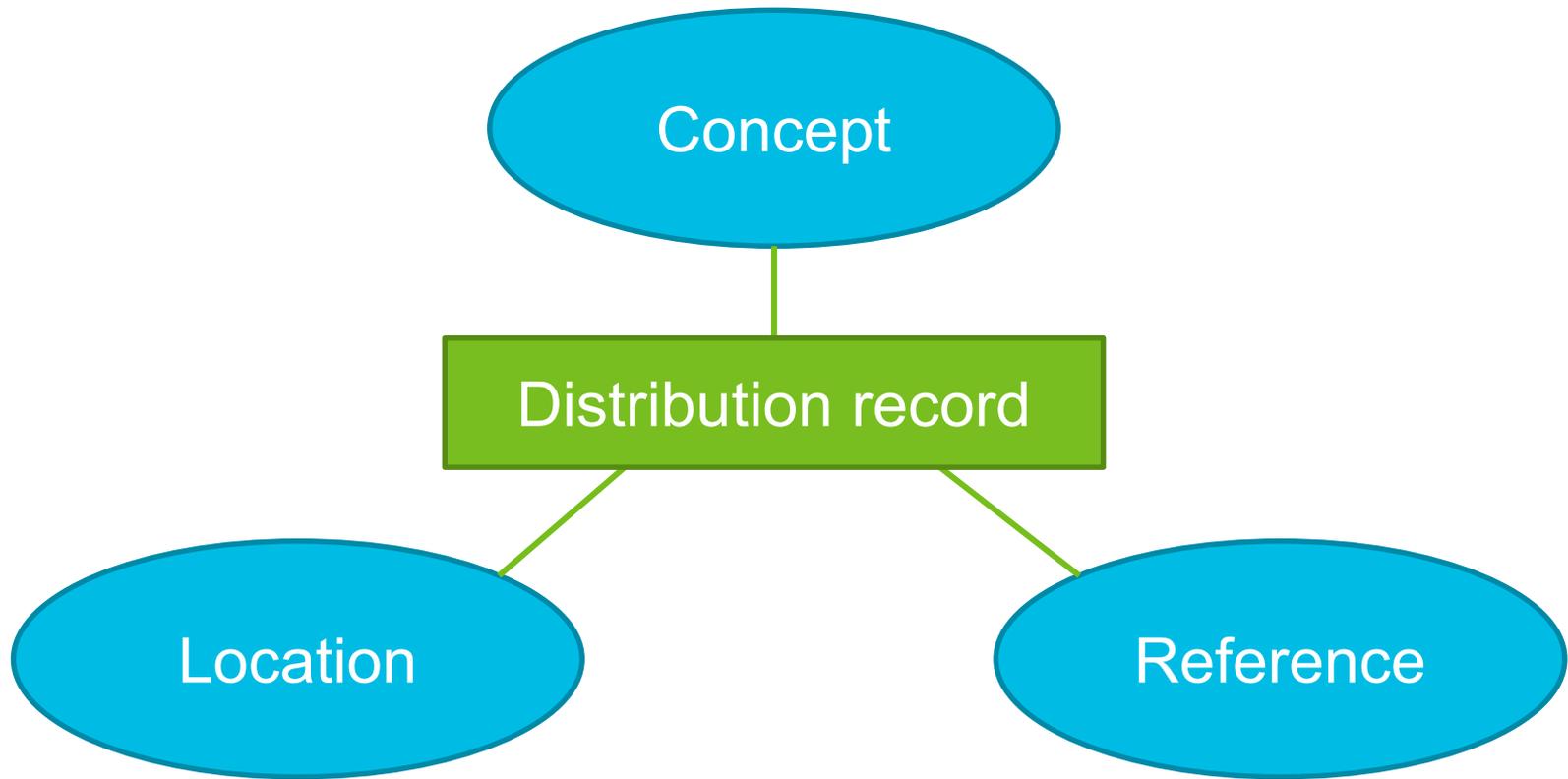
Tripliphium nigerrimum (Bezzi)
Hemiptera: Tripliphidae
Hosts: *ginger*

Present: national record
 Present: subnational record

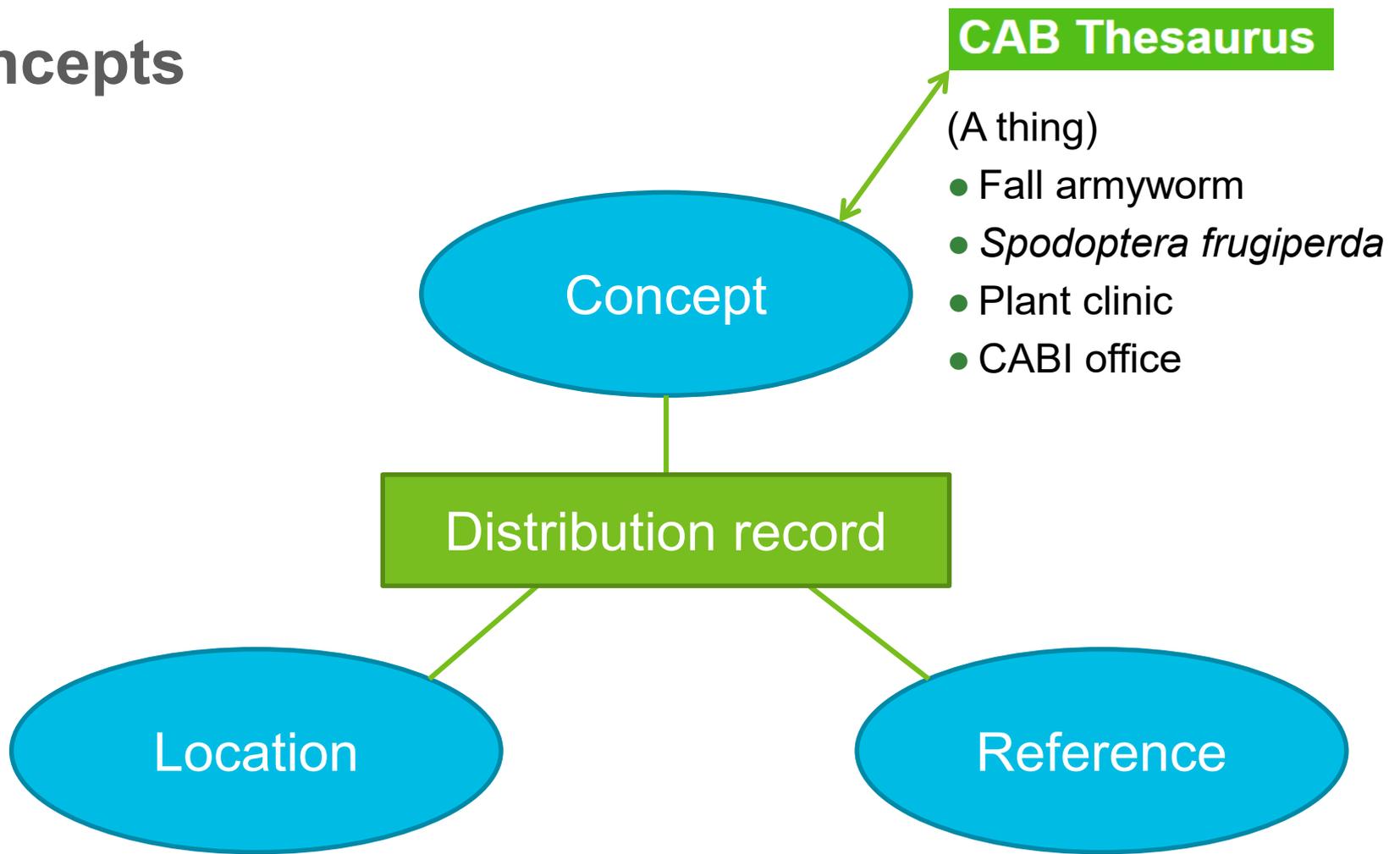
Global pest distributions are addressed in 3 published formats:

- Compendia:
Crop Protection Compendium (CPC)
Forestry Compendium (FC)
Invasive Species Compendium (ISC)
- Distribution Maps of Plant Pests and Diseases:
Published in association with EPPO
- Plantwise Knowledge Bank

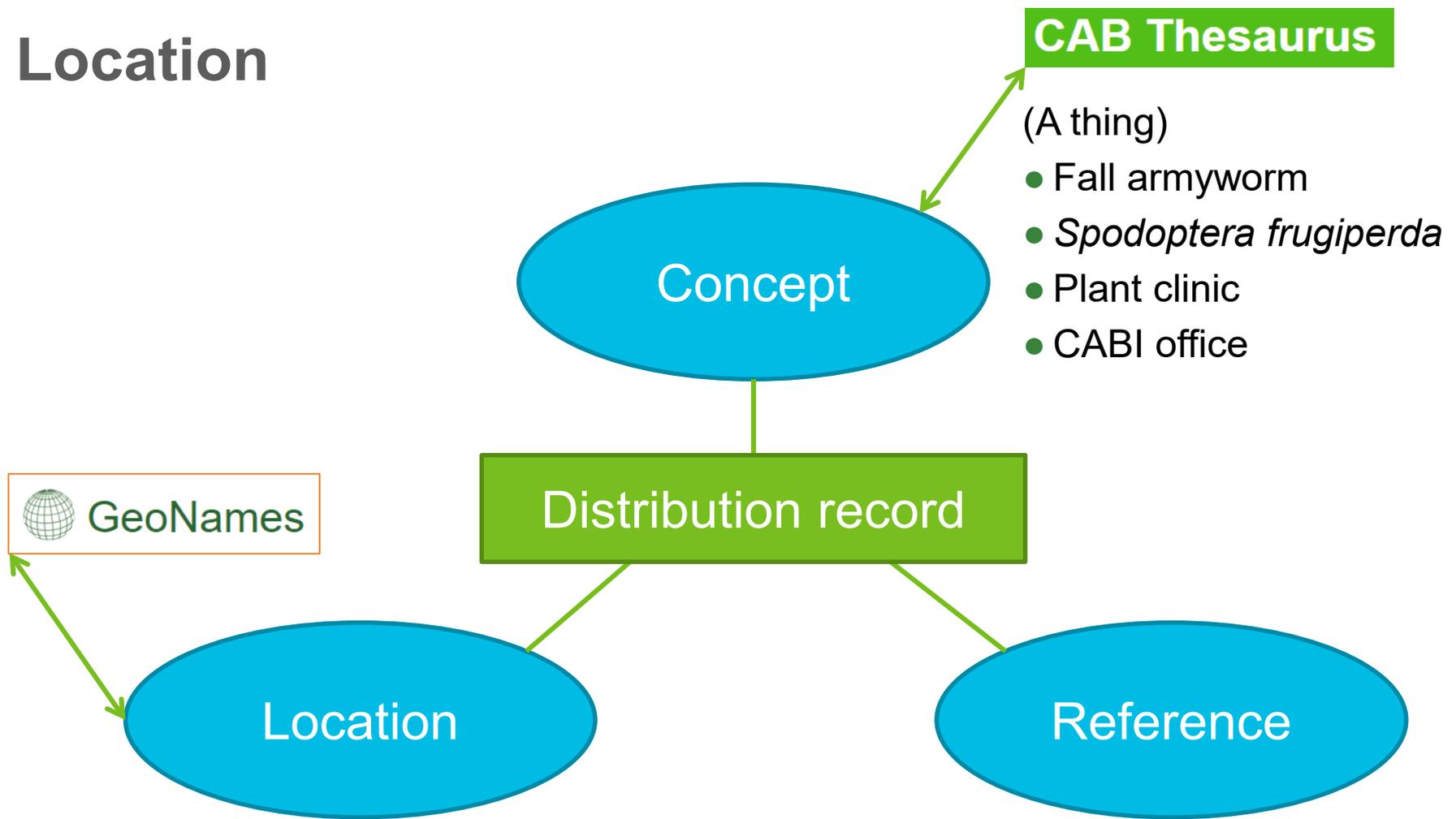
A new distribution database behind the scenes



Concepts



Location



CAB Thesaurus

(A thing)

- Fall armyworm
- *Spodoptera frugiperda*
- Plant clinic
- CABI office

Concept

Distribution record

Location

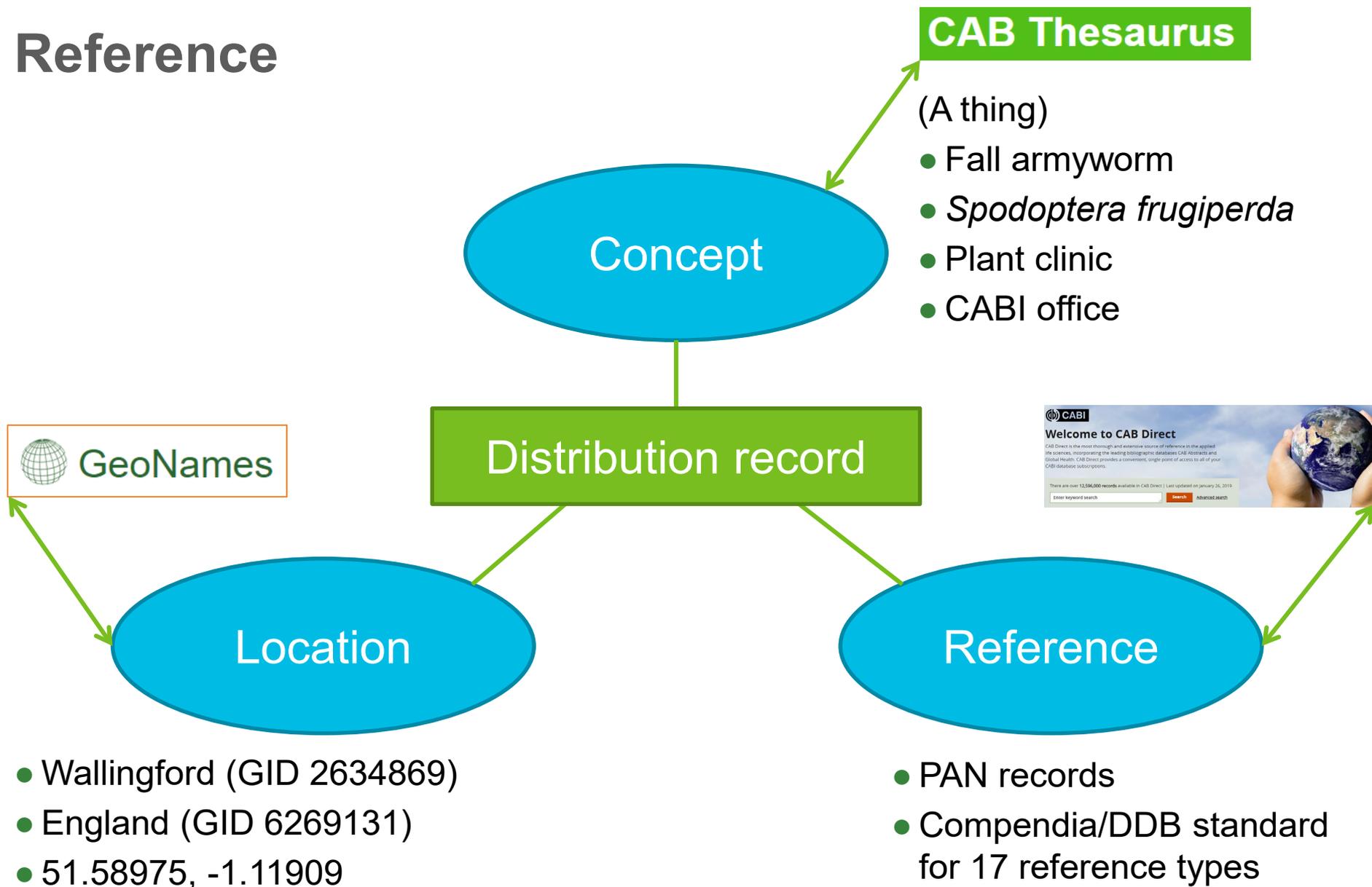
Reference



GeoNames

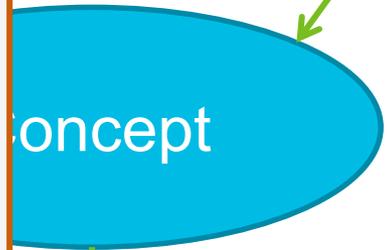
- Wallingford (GID 2634869)
- England (GID 6269131)
- 51.58975, -1.11909

Reference



Distribution status

Distribution	
Presence :	<input type="text" value="Present"/>
Extent :	<input type="text" value="Widespread"/>
Origin :	<input type="text" value="Introduced"/>
Invasive :	<input type="text" value="Invasive"/>
Basis Of Record :	<input type="text" value="Human observation"/>
Management :	<input type="text" value="--Select--"/>
Record Quality :	<input type="text" value="Confirmed present by survey"/>
First Reported :	<input type="text" value="1999-04-30"/> or Year : <input type="text" value="1999"/>
Last Reported :	<input type="text" value="2018-04-02"/> or Year : <input type="text" value="2018"/>
Notes :	<input type="text" value=""/>

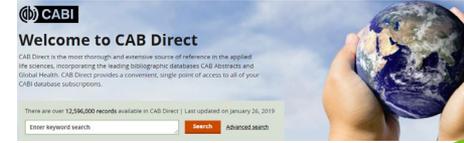


CAB Thesaurus

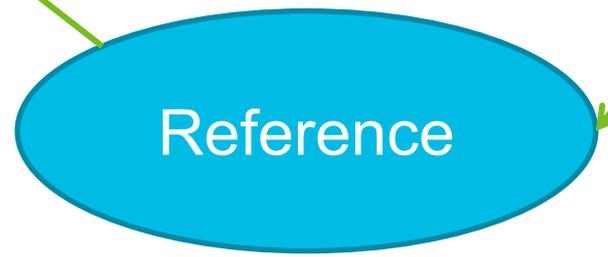
(A thing)

- Fall armyworm
- *Spodoptera frugiperda*
- Plant clinic
- CABI office

Distribution record



- Wallingford (GID 2634869)
- England (GID 6269131)
- 51.58975, -1.11909

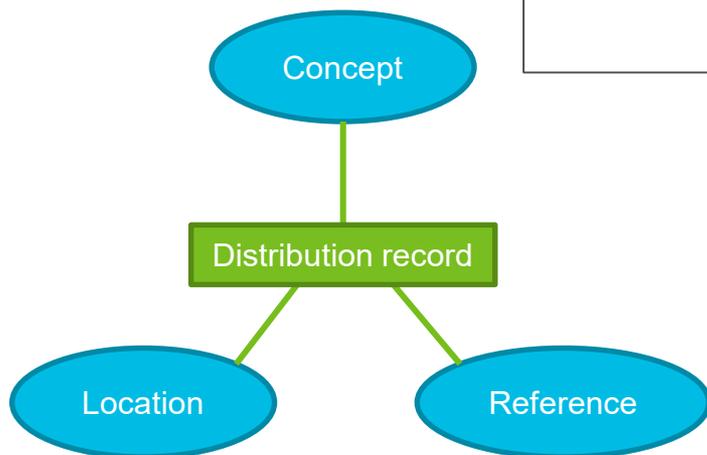


- PAN records
- Compendia/DDB standard for 17 reference types

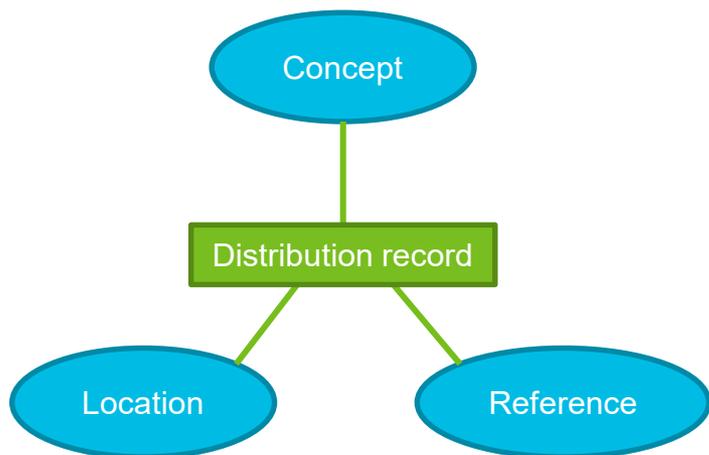
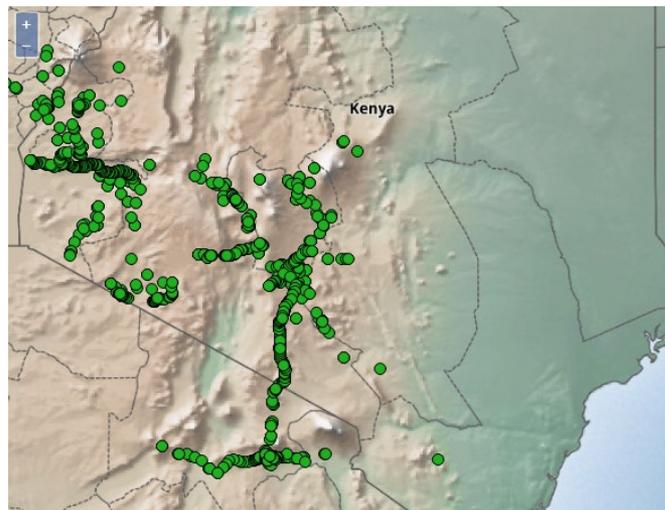
What's in the database?

The screenshot shows a web page with the following content:

- Logos:** FAO (Food and Agriculture Organization of the United Nations) and IPPC (International Plant Protection Convention).
- Navigation:** Home, Countries, Cameroon, Pest Reports. Search bar with 'Everything' selected.
- Breadcrumbs:** Home / Countries / Cameroon / Pest Reports / First report of the fall army worm *Spodoptera frugiperda* in Cameroon
- Title:** First report of the fall army worm *Spodoptera frugiperda* in Cameroon
- Metadata:**
 - Publication Date: Fri, 02 Jun 2017, 13:02
 - Last Updated: June 2, 2017, 3:39
 - Report Number: CMR-04/6
 - Country: Cameroon
 - Pest Id: *Spodoptera frugiperda*
 - Report Status: Final
 - Hosts: - Taxonomy notes : recorded from the / Africa. Sopotoptera them in Africa - Hos feeding on at least maize, sorghum, ric developmental stag The pest status in C
- Abstract:** Molecular methods to detect *Spodoptera frugiperda* in Ghana, and implications for monitoring the spread of invasive species in developing countries.
- Abstract details:**
 - Author(s): Cock, M. J. W.; Beseh, P. K.; Buddie, A. G.; Cafá, G.; Crozier, J.
 - Author Affiliation: CABI, Bakeham Lane, Egham, TW20 9TY, UK.
 - Author Email: a.buddie@cabi.org
 - Journal article: Scientific Reports 2017 7 1 4103
 - ISSN: 2045-2322
 - DOI: 10.1038/s41598-017-04238-y
 - Publisher information: Nature Publishing Group London UK
 - Language of Text: English
 - Language of Summary:
 - Geographical Location: Africa, America, Developing Countries, Ghana, Nigeria, Togo, West Africa



What's in the database?

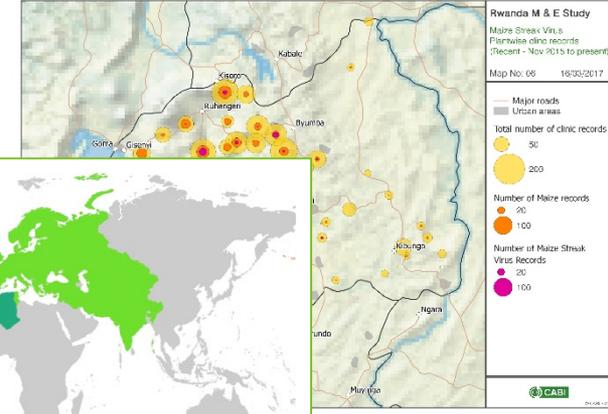


Concept : *Eucoleus boehmi*

Products	Continent	Country	ADMI	Location	Presence	Extent	Invasive	Reference (Author, Year)
Compendia Plantwise	Oceania	Northern Mariana Islands	Saipan Municipality		Present	Formerly present	Invasive	
Compendia Plantwise	Europe	Germany	Land Mecklenburg-Vorpommern		Absent	Transient under surveillance	Naturalized	
Compendia Plantwise	Europe	Germany	Rhinland-Pfalz		Absent	Transient under surveillance	Naturalized	
Compendia Plantwise	Europe	Norway	Vest-Agder fylke		Absent	Transient under surveillance	Naturalized	
Compendia Plantwise				Point data (Lat: -38.0722 Long: 39.1849)	Present	Transient under eradication	Naturalized	

Set up for...

Better quality data, easier updating



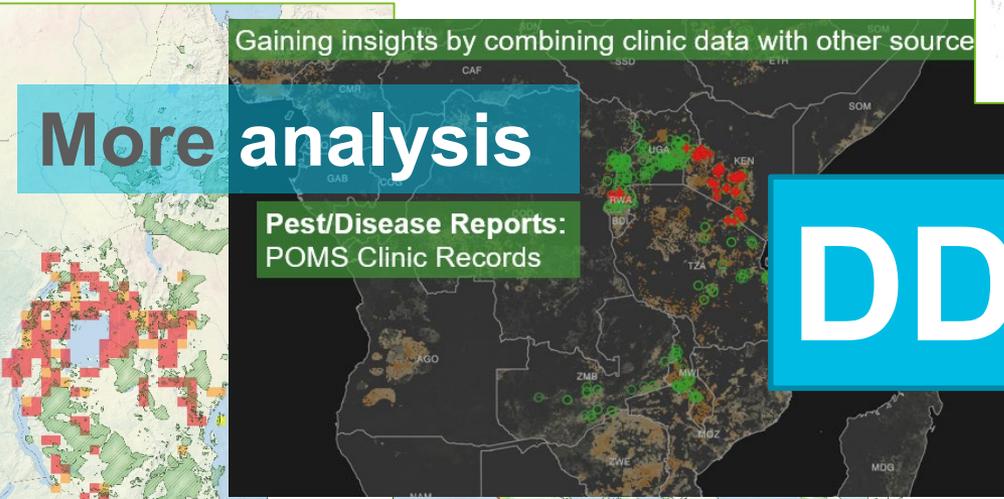
Better maps

Gaining insights by combining clinic data with other source

More analysis

Pest/Disease Reports: POMS Clinic Records

DDB



Source countries

Pathways

Plant hosts

Plant parts in trade

Habitats

Taxonomic group

Select areas of interest where pests might enter Brazil from:

Select neighbouring countries of Brazil:

- All
- Argentina
- Bolivia
- Colombia
- French Guiana
- Guyana
- Paraguay
- Peru

More geo-tools

New information



Distribution References

- AVA, 2001. Diagnostic records of the Plant Health Diagnostic Services., Singapore, Plant Health Centre Agri-food & Veterinary Authority.
- Baker RT, Cowley JM, 1991. A New Zealand view of quarantine security with special reference to fruit flies. In: First International Symposium on Fruit Flies in the Tropics, Kuala Lumpur, 1988, [ed. by Vijayasegaran S, Ibrahim AG]. Kuala Lumpur, Malaysia: Malaysian Agricultural Research and Development Institute. 396-408.
- CABI, EPPO, 2003. *Bactrocera cucurbitae*. [Distribution map]. In: Distribution Maps of Plant Pests, Wallingford, UK: CAB International. Map 64.
- CABI, Undated. CABI Compendium: Status as determined by CABI editor. Wallingford, UK: CABI
- CABI, Undated. Compendium record. Wallingford, UK: CABI
- Dhillon M K, Singh R, Naresh J S, Sharma H C, 2005. The melon fruit fly, *Bactrocera cucurbitae*: A review of its biology and management. Journal of Insect Science. 40.
- Drew RAJ, 1982. I. Taxonomy. In: Economic Fruit Flies of the South Pacific Region, [ed. by Drew RAJ, Hooper GHS, Bateman MA]. Brisbane, Australia: Queensland Department of Primary Industries. 1-97.

Datasheet report for *Bactrocera cucurbitae* (melon fly)

KEY: T = Text Section, M = Map, L = List

Generate Report

- L: Pictures
- L: Identity
- T: Summary of Invasiveness
- L: Taxonomic Tree
- T: Notes on Taxonomy and Nomencl.
- T: Description
- T: Distribution
- L: Distribution Table
- L: Distribution Table Details
- T: History of Introduction and Spread

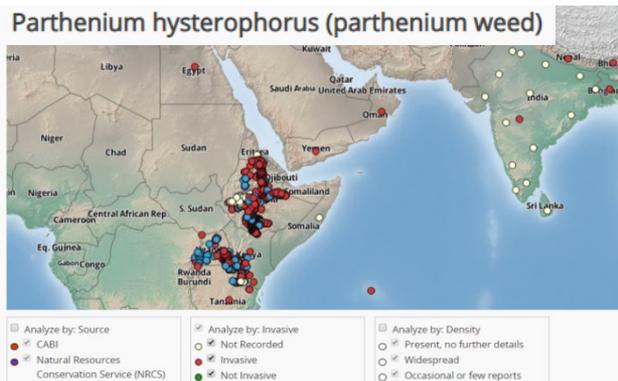
- All Sections →
- All Maps →
- Remove Sections ←
- Remove Maps ←

L: Distribution Table Details

- ↑
- ↓



Parthenium hysterophorus (parthenium weed)



Recent Compendia changes

- Separate Distribution References section in datasheets
- Some changes to names arising from linkage to GeoNames
- Minor changes to distribution categories
- Citations tidied up
- ‘CABI undated’ records
- Unlimited List of Pests CSV download from country datasheets
- Filters are being added to maps – CPC default map only shows presence dots, not ‘extent’

Index	Summary
Pictures Identity Taxonomic Tree Notes on Taxonomy and Nomenclature Description Summary of Invasiveness Distribution Distribution Table History of Introduction and Spread Risk of Introduction Habitat List Hosts/Species Affected Host Plants and Other Plants Affected Growth Stages Symptoms List of Symptoms/Signs Biology and Ecology Air Temperature Rainfall Notes on Natural Enemies Natural enemies Pathway Causes Pathway Vectors	<p>Last modified 24 January 2020</p> <p>Datasheet Type(s) Pest Natural Enemy</p> <p>Preferred Scientific Name <i>Bactrocera cucurbitae</i></p> <p>Preferred Common Name melon fly</p> <p>Taxonomic Tree Domain: Eukaryota Kingdom: Metazoa Phylum: Arthropoda Subphylum: Uniramia Class: Insecta</p> <p>Host Plants and Other Plants Affected <i>Abelmoschus moschatus</i> (musk mallow) <i>Artocarpus heterophyllus</i> (jackfruit) <i>Benincasa hispida</i> (wax gourd)</p>




Pest and Invasive Plant Datasheets

- Some new pest datasheets and expert updates commissioned
- In-house updating focuses on pests prioritized by CABI programmes, emerging pests and new distribution and host records
- Referencing hosts is on our agenda too!
- Also, capturing economic impact information better
- Recent funded datasheet projects for ISC cover:
 - Invasive plants of the Caribbean Islands
 - Emerging plant pathogens of concern to the US
 - Invasive species of concern to Hawaii

Title	Habit
Caption	Phyllostachys aureosulcata (yellow groove bamboo): habit, with yellow groove shooting along a roadside.
Copyright	©Caryn Rickel/Institute of Invasive Bamboo Research



Summary of Invasiveness

P. aureosulcata is a highly invasive running bamboo native to China, mainly in Zhejiang, Jiangsu and Anhui provinces. It has been introduced outside of its native range for ornamental purposes and is now particularly problematic and invasive in Australia and North America. This woody, perennial grass grows rapidly from a dense underground rhizome system. Invasive bamboos are among the fastest growing plants on Earth the spread is rapid in all directions and increases each successive year. As a result, it is possible for *P. aureosulcata* to form dense monocultures, suffocating native plants, decreasing biodiversity and altering the entire ecosystem of an area. As well as having detrimental effects on the environment this species may also damage property and pose as a potential health threat from harbouring a fungus responsible for causing Histoplasmosis disease. The closely related species, *Phyllostachys aurea* is also invasive.

Home Other CABI sites - About - Help

CABI

Invasive Species Compendium

Detailed coverage of invasive species threatening livelihoods and the environment worldwide

Filter by type - Search

Featured species

Click through to information portals for featured invasive species



Spodoptera frugiperda
(Fall armyworm)



Parthenium hysterophorus
(Parthenium weed)



Tuta absoluta
(Tomato leafminer)

Latest news



How an invasive species muscled into the Rideau River
 Publisher - Edmonton Sun
 09:28 PM - 03 October, 2018
 (Search term - invasive species)



Science On Tap, OC-WHIP
 Both Talking Invasive Species
 This Week
 Publisher - WxPR
 09:49 PM - 02 October, 2018
 (Search term - invasive species)



CABI Invasives
 @CABI_invasives
 Integrated Pest Management

Latest invasive species datasheets



Thaumastocoris peregrinus (bronze bug)
 T. peregrinus is a serious sap-sucking insect pest infesting non-native Eucalyptus plantations in Southern Africa, South America and Europe. Severe...

In progress: platform upgrades

- Review of ISC website ahead of other Compendia transitions
- Review of datasheet presentation
- Dates and DOIs for datasheets
- Advanced searching
- MyCABI improvements

bactroceras Filter by type -

Datasheets (277)

Basic datasheets (227)

Full datasheets (50)

Research articles (684) (approx.)

Abstracts (654)

CABI hosted full text (30)

Identification and management (87)

Identification guides (2)

Management factsheets (85)

Manuals (0)

Posters and leaflets (0)

Reports (0)

Videos (0)

Glossary (0)

Clear all Search

Search results Selected records

Search results: 1,048 results (approx.)

All Sort by: **Relevance** Show: **10** Page: **1** of 105

Datasheet (Full)



Bactroceras dorsalis (Oriental fruit fly)
 Bactroceras dorsalis is a highly invasive species. Native to Asia, Oriental fruit fly is now found in at least 65 countries, including parts of...

Datasheet (Full)



Bactroceras passiflorae (Fijian fruit fly)
 The economic impact of B. passiflorae is not documented clearly. However, as with most pest Bactroceras spp., damage levels can be anything up to 100%...

Toolbox

Invasives Open Data

Horizon Scanning Tool

Mobile Apps

Country Pest Alerts

Pest reports: Species portals in the ISC

Developed under the Action on
Invasives Programme

Created as a central repository for the
latest resources on the most
devastating invasive species

- Fall armyworm
- Tomato leafminer
- Parthenium weed
- TR4

Home Other CABI sites About Help

CABI
Invasive Species Compendium
Detailed coverage of invasive species threatening livelihoods and the environment worldwide

Filter by type Search

Fall armyworm portal

Latest news

- 'Growing alarm' over Fall Armyworm advance, with cash crops 'under attack' ac...
Publisher - UN News
01:00 AM - 21 March, 2019
(Search term - fall armyworm)
- Thailand's Agricultural Community Braces for the Invasion of Fall Armyworm -
Publisher - Chiang Rai Times
12:35 AM - 20 March, 2019
(Search term - fall armyworm)
- CABI Invasives** @CABI_Invasives
RT @USAIDSouthSudan: A new partnership in #SouthSudan is combatting #FallArmy...
08:24 AM - 13 March, 2019
- CABI Invasives** @CABI_Invasives
🇮🇳 Fall Armyworm in Eastern India more vulnerable to infestation * War...
12:00 PM - 12 March, 2019
- CABI blog** Fall Armyworm attack: 'Eastern India more vulnerable to infestation'
09:59 AM - 12 March, 2019
- CABI blog** CABI announces major commitments in fight against invasive species
02:06 PM - 06 March, 2019

see more news...

Toolbox

- Horizon Scanning Tool
- Mobile Apps

Analyze by: Source
 CABI
 Natural Resources Conservation Service (NRCS)
 CABI Invasive Species Data

Analyze by: Invasive
 Invasive
 Not Recorded

Analyze by: Density
 Present, no further details
 Widespread
 Localised
 Occasional or few reports

Download KMZ file Download CSV file

Welcome to the fall armyworm portal. The fall armyworm (*Spodoptera frugiperda*) is a Lepidopteran pest that feeds in large numbers on leaves and stems of more than 80 plant species, causing major damage to maize, rice, sorghum, sugarcane but also other vegetable crops and cotton.

Fall armyworm is native to tropical and subtropical regions of the Americas. In 2016 it was reported for the first time in Africa where it is causing significant damage to maize crops and has great potential for further spread and economic damage.



Horizon Scanning Tool

- Uses CABI data to help identify and categorize possible cross-border invasive species threats
- Generates a list of species that are absent from your selected 'area at risk' but present in 'source countries' which may be neighbouring countries, regions with similar climates or countries with major trade or transport links
- Provides filters for refining the list by taxonomic group, habitat affected or pathway of introduction in both the ISC and CPC, and also plant host and plant part in trade in the CPC version only
- Provides links to the species datasheets
- Enables analysis of the list of species using the CSV export option



Horizon Scanning Tool

Results

CSV output

Copy URL to replicate scan

Save and share scan

Download as CSV

Refine by : ?

- Source countries
- Pathways
- Plant hosts
- Plant parts in trade
- Habitats
- Taxonomic group

Results: 140 species found

Show: 25 Page: 1 of 6

Preferred scientific name	International common name	Taxonomic group	View datasheet
Aculops lycopersici	tomato russet mite	Invertebrates	CPC (Full) ISC (Full)
Adelphocoris lineolatus	lucerne bug	Invertebrates	CPC (Full)
Agriotes lineatus	wireworm	Invertebrates	CPC (Full)
Alfalfa mosaic virus	alfalfa yellow spot	Viruses	CPC (Full)
Alternaria alternata	alternaria leaf spot	Fungi/Chromista	CPC (Full)

Link to compendia datasheets



Recent updates to the Horizon Scanning Tool

- Addition of top trading countries
- Improvement of climate matching
- Improved habitat data
- Addition of fields for prioritization in CSV output



Pest Risk Analysis Tool

- Presents scientific information from the CPC to aid the selection of appropriate measures for reducing the risk of pest introduction and facilitating the safe movement of plants and plant products
- Designed for risk assessors and risk managers working in National Plant Protection Organizations (NPPOs) and research
- Follows standards set out by the International Plant Protection Convention (IPPC)
- Provided as an add-on to a CPC subscription (gratis to lower income countries)



Features of the PRA Tool

- A framework in which risks associated with the importation of plant commodities and the introduction of pests into new areas can be identified and assessed
- PRA initiation 'By Pathway' or 'By Pest'
- Generation and categorization of pest lists associated with a commodity pathway
- Facilities for users to add new information and overrule existing Compendium data
- Links to relevant CPC datasheets
- A template to complete risk assessments for individual pests
- A template to assign management measures to each pest or pathway identified as a risk
- An editable report (html and Word)

Generation of a list of pests associated with a selected commodity pathway

Home > Initiation: By Pathway > Pest list

Session#: P00057

Import of tomato from South Africa to Zambia

1. Pest lists and risk assessments

2. Pest risk management

3. Pest risk analysis summary

Categorized pest lists

Pests have been categorized into two lists based on CABI's distribution data and details of crop and commodity types entered at the Initiation stage. Select which list to view below:

- Pests potentially requiring phytosanitary measures
- Pests excluded from assessment

Or view both lists by downloading the full pest list

[Download full pest list](#) 

86 Pests potentially requiring phytosanitary measures

Pests recorded on selected crop, recorded as present in the exporting country and not recorded or recorded as absent in the importing country or present with special regulatory status. Individual risk assessment can be completed on pests included in this table.

Categorized pest lists

Pest lists are categorized by the tool. The automated list generation relies on the CPC host and distribution data. Lists can be adapted using a set of users actions

Use the 'user action' button **⋮** to:

-  Go to and complete risk assessments for each pest
-  Exclude the pest from the assessment (moving it to the 'Pests excluded from the assessment list')
-  Add Regulatory status

-  Add notes
-  Link to CPC species datasheets

User actions	Type	Pest name	On crop	On commodity type	Exporting Country	Importing Country	Number of countries where present	Regulatory status	Risk assessment	Notes	Modified by user
⋮	Arthropoda	Agrotis ipsilon (black cutworm)	Yes	?	Present	Absent	106		Incomplete		
		Agrotis ipsilon (black cutworm)									
	Go to risk assessment										
	Exclude from assessment										
	Add Regulatory status										
	Add notes										
	View datasheet										
	Generate Datasheet										
		trus blackfly)	Yes	?	Present	Absent	72		Incomplete		
		hid)	Yes	Yes	Present	Absent	111		Incomplete		
		ut mosaic)	Yes	Yes	Present	Absent	57		Incomplete		
		uld of onion)	Yes	Yes	Present	Absent	73		Incomplete		
		let tea mite)	Yes	?	Present	Absent	59		Incomplete		
		e spider mite)	Yes	?	Present	Absent	89		Incomplete		
		ax scale)	Yes	?	Present	Absent	44		Incomplete		

Risk assessment

Four tabs classify the risk assessment questions. Under each tab an editable form containing questions aligned to ISPM 11 is available.

Risk assessment for: *Aphis fabae* (black bean aphid)

Probability of entry

Probability of establishment

Probability of spread

Potential consequences

Probability of entry

1. What is the probability of the pest being associated with the commodity at origin?

Add rating

Not assessed



Add confidence level

Not assessed

Other questions listed

Summary

Add summary rating

Not assessed

Add summary confidence level

Not assessed

Add a summary note

The aphid can also be carried in trade on planting material and some vegetable products.

(2910 characters left)

Save

Save and return to pest list

Save and view summary

Pest risk management

Phytosanitary measures can be assigned to each pest in the risk analysis

Risk management for: **Alternaria alternata** (alternaria leaf spot)

▲ At the place of production

Inspection or testing

Type your note here...

(3000 characters left)

Post-harvest treatment

Type your note here...

(3000 characters left)

Other options listed

Add a summary note

Type your summary note here...

(3000 characters left)

Are management options for *Alternaria alternata* complete?

Yes No

Save

Save and return to pest list

Outputs

HTML format



Actions



PRA report: Import of tomato from South Africa to Zambia

Date created: 10 December 2018

Session#: P00057

Type: By Pathway

Date modified: 27 February 2019

Details of pathway:

Exporting country: South Africa

Importing country: Zambia

Crop(s):

Solanum lycopersicum (tomato)

Commodity type(s):

Fruits including pods

Details of pathway:

Scope of PRA

To facilitate importation of tomato fruits for supply in retail shops

PRA Area

Zambia

Notes

There is a shortage of tomatoes in the country. Zambia is also implementing the Free Trade Area

Volume/ quantity of commodity

100 metric tonnes over period of 2 months

Pests potentially requiring phytosanitary measures

Word format

Session Title: Import of tomato from South Africa to Zambia

Date created: 10 December 2018

Last modified: 27 February 2019

PRA Session: P00057

Details of Pathway

Importing country: Zambia

Exporting Country: South Africa

Crop(s): *Solanum lycopersicum* (tomato)

Details of PRA

Scope of PRA

To facilitate importation of tomato fruits for supply in retail shops distributed all over the country

PRA Area

Zambia

Notes



In progress

- Improving login
- Further enhancements to be prioritized by user feedback and expert input
- Offered free to NPPOs of 97 lower income countries
- Support and training

Pests potentially requiring phytosanitary measures 6 Pests <small>Not recorded or recorded as absent from the importing country or present with special regulatory status</small>	Pests excluded from the assessment 6 Pests <small>Present in the importing country (with no special regulatory status)</small>	Pest risk management following completion of individual pest risk assessment 0 Pests <small>First add pests and then define the management procedures</small>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

This table allows you to:
 - Select the pest name to see more information on the CPC pest datasheet
 - Edit the importing country distribution status and PQ status
 - Add or complete an individual risk assessment by selecting the risk assessment stage
 - Add your own notes for each pest by using the notes column

Modified by user	Type	Pest name	On crop	On commodity type	Exporting country	Importing country	Number of countries where present	Pest quarantine (PQ) status	Risk assessment	Notes	User actions
	Insect	Aphis fabae (Insect, aphid)	Yes	Yes	Present	Absent	58		Incomplete		...
	Insect	Atherodes orientalis (Insect, weevil, leaf fly)	Yes	Yes	Present	Absent			Incomplete		...
	Insect	Cephus caryi (Insect, leaf fly)	Yes	?	Present	Absent			Incomplete		...
	Insect	Chromogasteria horrida (Insect, leaf miner)	Yes	Yes	Present	Absent			Incomplete		...
	Insect	Clypeosinus chalybeus (Insect, weevil, ground)	Yes	?	Present	Absent			Incomplete		...
	Insect	Crepidula forsteri (Mollusc, quill)	Yes	Yes	Present	Absent			Incomplete		...

IYPH News



[INFORMATION](#) [PROGRAMME](#) [PAPERS/PANELS](#) [REGISTRATION](#) [INDUSTRY](#) [HOTELS](#) [RESOURCES](#)

[REGISTER NOW](#)

Plant Health, Agriculture & Bioscience Conference

Mark your calendar now for the 1st international meeting of experts and contribute to the shaping of our future. Join PHAB 2020 on 9-11 September 2020 in The Hague, the Netherlands.

PHAB 2020 conference
9-11 Sep., The Hague
CABI, Koppert and
Wageningen University



You are here: [Home](#) / [Publishing Products](#) / [CABI Agriculture and Bioscience Journal](#)

CABI Agriculture and Bioscience Journal

CABI Agriculture and Bioscience is a broad-scope, open access journal publishing original research and data in all fields related to agriculture and the biosciences.

شكرا جزيلًا
mercici
शुक्रिया
zikomo
xie-xie
obrigado
efharistó
merci
zikomo
gracias
asante
thank you
urakoze
danke
terima kasih
dhanyawaad

CABI is an international intergovernmental organisation, and we gratefully acknowledge the core financial support from our member countries (and lead agencies) including:



Ministry of Agriculture,
People's Republic of China



Agriculture and
Agri-Food Canada



Ministry of Foreign Affairs of the
Netherlands



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development
and Cooperation SDC