

CABI BioProtection Portal: an innovative free access decision support tool

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KNOWLEDGE FOR LIFE



CABI

- **not-for-profit** intergovernmental organisation, established by a United Nations-level agreement
- owned by **49 member countries**, which have an equal role in the organisation's governance, policies and strategic direction
- **over 480 staff worldwide**
- addresses issues of global concern such as **food security** and **food safety**, through research and international development cooperation
- major publisher of scientific information – books, e-books, full text electronic resources, compendia and online information resources

Invasive Species Compendium – Free Access

The screenshot shows the homepage of the Invasive Species Compendium. At the top, there is a navigation bar with the CABI logo, the site name, and links for 'Other CABI sites', 'About', 'Mobile', and 'Help'. Below this is a search bar with the text 'fall armyworm' and a search button. A secondary search bar offers options for 'clear search', 'Advanced search', 'Advanced bibliographic search', 'Smart searches', and 'Login to My ISC'. The main content area is divided into several sections: 'Topical species in the news' featuring images and names of *Spodoptera frugiperda* (fall armyworm), *Parthenium hysterophorus* (parthenium weed), and *Tuta absoluta* (tomato leafminer); 'Latest news' with a tweet from CABI Invasives and a link to 'see more blogs...'; 'Popular invasive species datasheets' listing *Spodoptera frugiperda*, *Tuta absoluta*, *Monochamus sutor*, *Euwallacea fornicatus*, *Maconellicoccus hirsutus*, and *Phthorimaea operculella*; a 'Toolbox' with buttons for 'Horizon Scanning Tool', 'Apps', and 'Sign up for country pest alerts'; and 'Resources' with buttons for 'ID guides', 'Posters + leaflets', 'Factsheets', 'Manuals', 'Reports', 'Latest research', 'Useful links + resources', and 'Videos'. At the bottom, there is a footer with contact information and a copyright notice: '© Copyright 2016 CAB International. CABI is a registered EU trademark.'

www.cabi.org/isc

Content:

- Species “portals”
- Improved mapping
- Toolbox
 - Horizon scanning
 - Pest risk analysis (PRA)
- Resources
 - Diagnostics
 - Communication materials
 - Data
- Abstracts
- News

**Around 2.1 million hits annually –
268,020 in one month (November 2019)**

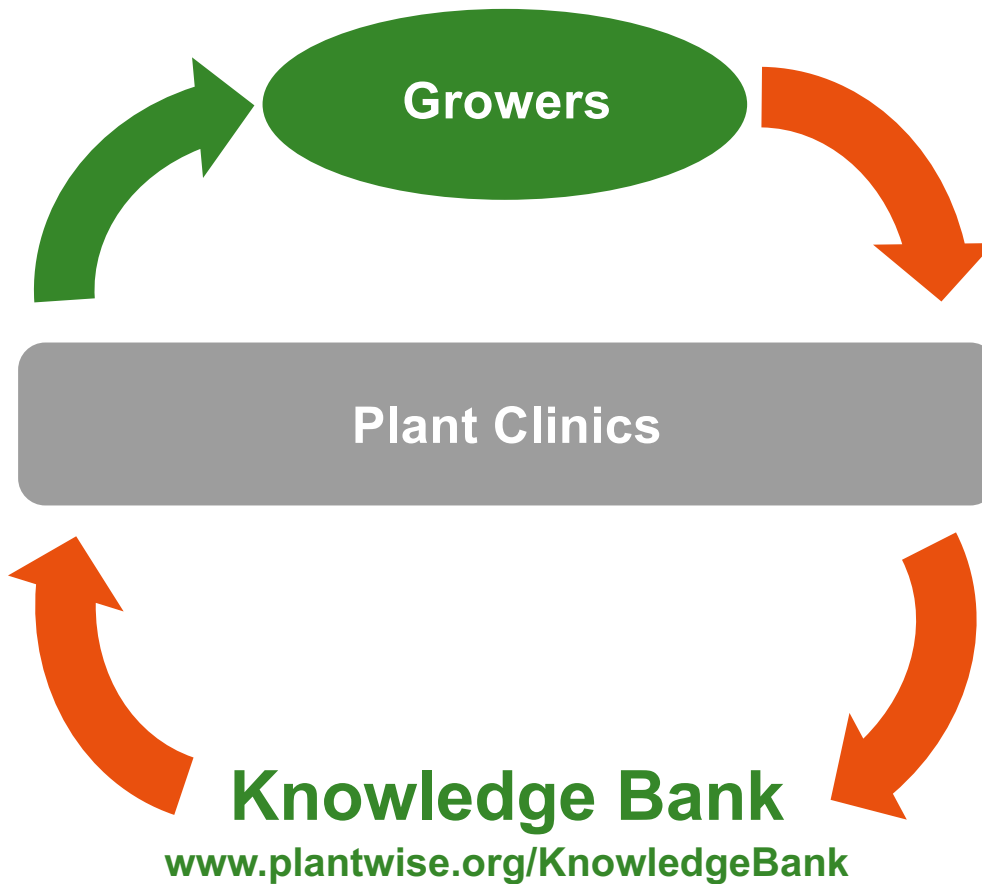
Plantwise – CABI’s flagship programme

Plant clinics are channels for the 2-way flow of information to and from farmers

Diagnosis and recommendation



Extension materials and other support tools



Grower interviews and data collection



Intelligence on pests causing problems



Study to assess the contribution of extension service to the uptake of biological control

- Baseline study in six low- to lower-middle-income countries analysing extension material developed within the Plantwise programme and advice given by extension workers relating to the **management of insect pests using microbial and macrobial biocontrol products**.
- We focussed on the following research questions, among others:
 - Do nationally registered biocontrol products make it into the extension material available to the plant doctors?
 - Where extension material does include biocontrol products, how frequently are plant doctors recommending these products to farmers?

What did we learn from this baseline study?

- Results revealed that nationally registered biocontrol and biopesticide products are not always included in the extension material compiled by national experts in CABI's led Plantwise programme; India and Nepal are better in this respect
- Even if biocontrol and biopesticide products are mentioned in the extension material used at the plant clinics, they are only sometimes (or never – in Ghana and Zambia) recommended to the small-holder farmers by the advisory services
- Advisory service providers have a lack of knowledge / awareness about biocontrol products and their use



- Dougoud, J., Cock, M. J., Edgington, S., & Kuhlmann, U. (2018). A baseline study using Plantwise information to assess the contribution of extension services to the uptake of augmentative biological control in selected low- to lower-middle-income countries. *BioControl*, 63(1), 117-132.
- Publication available open access

Barriers to the uptake of biocontrol and biopesticide products

- Complex regulatory approval pathways
- Lack of awareness and familiarity with these products
- Biocontrol and biopesticide products are often more expensive
- Lack of compatibility with certain chemical products
- More labour-intensive application techniques
- Not widely stocked by distributors in developing countries (e.g specific storage conditions & short shelf-life for certain products)

How can we facilitate improved uptake of biological control and biopesticide products by growers and advisors?

- Create a free to use website for use on all devices to facilitate the **identification, sourcing and application of biocontrol and biopesticide products** by growers and advisory service providers

Who is it for (end-users) and what are the specific benefits?

- **Growers and advisors** who need current and reliable information, on-demand, regarding the availability and correct use of effective, lower toxicity products that are registered locally and meet market/export standards
- **National authorities responsible for regulation/registration of plant protection products** who require information on registered products in neighbouring countries
- **Biocontrol manufacturers** looking to promote wider uptake of their products and identify new markets

In partnership with the biocontrol manufacturers

- Partners are given the opportunity to upload information and related documents about their registered products to help users source and correctly apply the products
- Links are also provided to the partner websites, product-specific websites and labels
- Partners also have the unique opportunity to purchase detailed, geo- and company-specific website and app analytic reports, which offer great advantages for market research and analysis
- Information displayed for products of non-partners includes only the information provided on the national pesticide register

CABI BioProtection Portal



- Users enter their country and crop-pest query
- The search generates a list of biocontrol and biopesticide products, together with their active ingredient and manufacturer, that are registered for the specified crop-pest problem in the selected country.
- This information is sourced directly from national governments' lists of registered plant protection products
- Further guidance on correct storage and application is also provided for products that belong to partner biocontrol manufacturers, together with links to product labels and distributor details

You are currently viewing registered biocontrol and biopesticide products for Kenya

If you cannot find a certain crop or pest with the drop down menu below, this indicates that there are currently no registered biopesticide products. We would value your **feedback** to capture such examples to discuss with CABI's Development Consortium and the appropriate bodies.

Farmer/grower x | v Tomato x | v Tuta absoluta x | v Bungoma x | v Search

5 results

Sort by | v

★ Products manufactured by partners of the CABI BioProtection Portal

Nimbecidine

Active ingredient: Azadirachtin
T. Stanes & Company Ltd.

Tutrack - rubber septum

Active ingredient: E3, Z8, Z11-tetradecatrienyl acetate + E3, Z8-tetradecadienyl acetate
Zhangzhou Enjoy Agriculture Technology Co Ltd.

Tutrack - blue sticky trap

Active ingredient: E3, Z8, Z11-tetradecatrienyl acetate + E3, Z8-tetradecadienyl acetate
Zhangzhou Enjoy Agriculture Technology Co Ltd.

Bio-magic

Active ingredient: Metarhizium anisopliae
T. Stanes & Company Ltd.

Tutrack - yellow sticky trap

Active ingredient: E3, Z8, Z11-tetradecatrienyl acetate + E3, Z8-tetradecadienyl acetate
Zhangzhou Enjoy Agriculture Technology Co Ltd.

- Detailed information about each of the products will be provided, to facilitate decision making and correct application, for example:
 - addresses and contact details of the distributor
 - mode of action
 - specific storage/application instructions
 - links to product labels, manufacturers' websites, product factsheets, safety data sheets

Partners

The CABI BioProtection Portal is brought to you by CABI in collaboration with its network of partner biocontrol manufacturers and donors who provide invaluable support in the form of technical inputs, strategic guidance, and funding.





View our official partners and donors on this page, and find out how to join the CABI BioProtection Portal.

Partners






Donors

Join us

Why join us?

 The Development Consortium

In return for their valuable contributions, partners enjoy the following privileges:

- Opportunity to contribute product data (e.g. labels, product technical factsheets, distributor information, etc), in local languages, relating to their biological control products that are registered in the countries included in the CABI BioProtection Portal
- Complimentary access to Market Analytics Reports from the CABI BioProtection Portal for the Initial Period (3 years) and a 10% discount from the annual purchase price of the Market Analytics Reports for the first three years after the Initial Period
- A 10% discount from the annual Partner Membership Rate for the first three years after the Initial Period

Enquire

First Name ★

Last Name ★

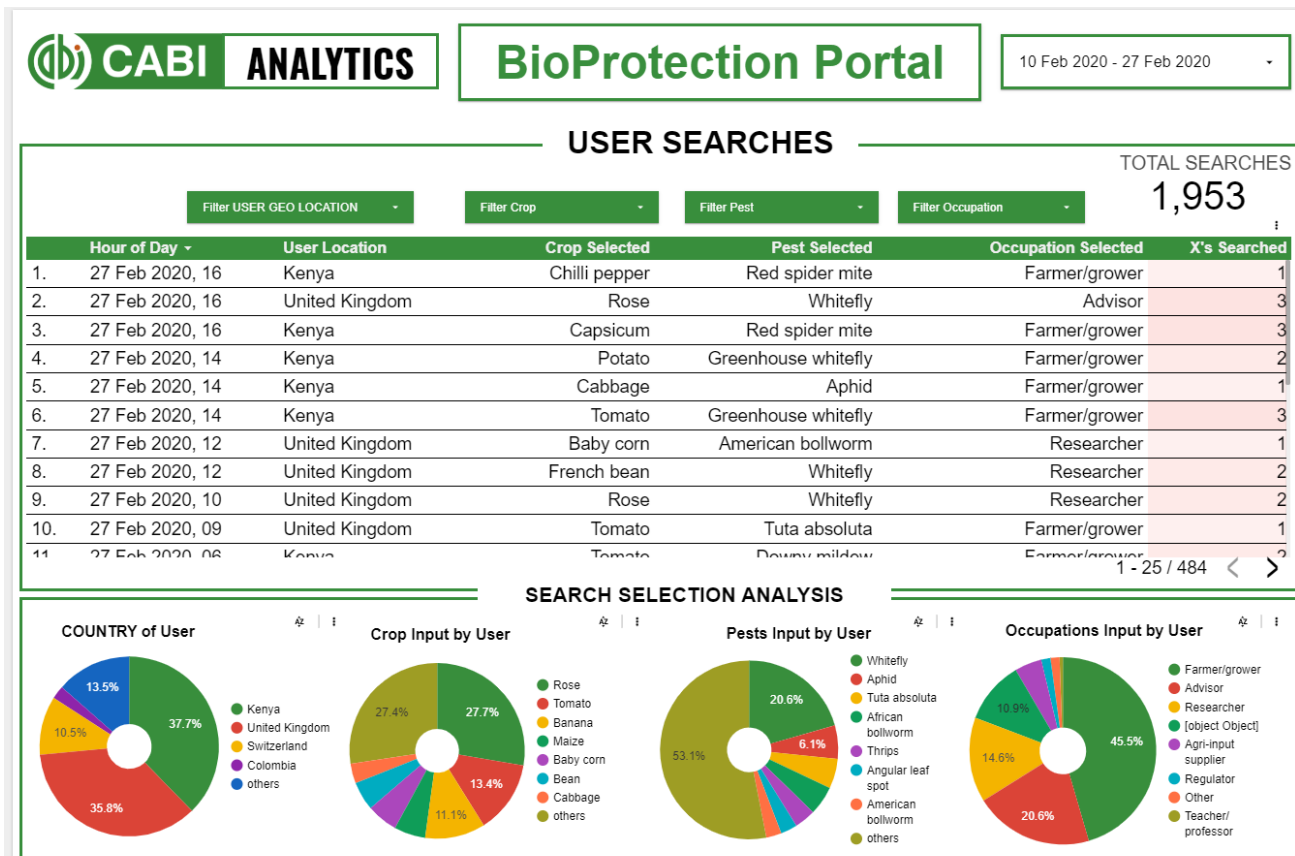
Company ★

Email ★

Phone ★

Detailed data tracking for every user and every visit

Our custom data points include...



User Search

- Pest
- Crop
- Occupation
- Location

User Product Views

- Manufacturer
- Distributor
- Registration Number
- Category
- Crops (as per Search made)
- Target Pests (as per Search made)

We also track the following user event interactions for all Products viewed...

CABI ANALYTICS **BioProtection Portal** 14 Feb 2020 - 27 Feb 2020

PRODUCT VIEWS

Filter Product Filter Company

Product Name	Company Name	Date / Time of View	Views
Achook	Godrej Agrovet Ltd.	19 Feb 2020, 15	4
Achook	Godrej Agrovet Ltd.	27 Feb 2020, 09	3
Achook	Godrej Agrovet Ltd.	23 Feb 2020, 09	2
Nematech	Flamingo Horticulture (K) Ltd.	23 Feb 2020, 10	2
Biosure	Totales Insumos S.A.	23 Feb 2020, 10	2
Explorer	Ningbo Yihwei Chemicals Co., Ltd.	25 Feb 2020, 15	2
Hypotech	Dudutech Ltd.	18 Feb 2020, 12	2
M-TRON PLUS	Caltex Petroleum Australia (pty) Ltd.	26 Feb 2020, 11	2
Neemraj super-3000	Neem India Products	24 Feb 2020, 09	2
Achook	Godrej Agrovet Ltd.	20 Feb 2020, 20	2
Explorer	Ningbo Yihwei Chemicals Co., Ltd.	26 Feb 2020, 16	2

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SEARCH CRITERIA LEADING TO THE PRODUCT VIEW

Country of User	Crop Selected	Pest Selected	Occupation Of User
Kenya	Morbidick flowers	Greenhouse whitefly	Researcher
Kenya	Maize	Spodoptera	Researcher
Kenya	Tomato	Fruit fly	Researcher
Kenya	Mango	Aphid	Researcher
Kenya	Rose	Bemisia tabaci	Researcher

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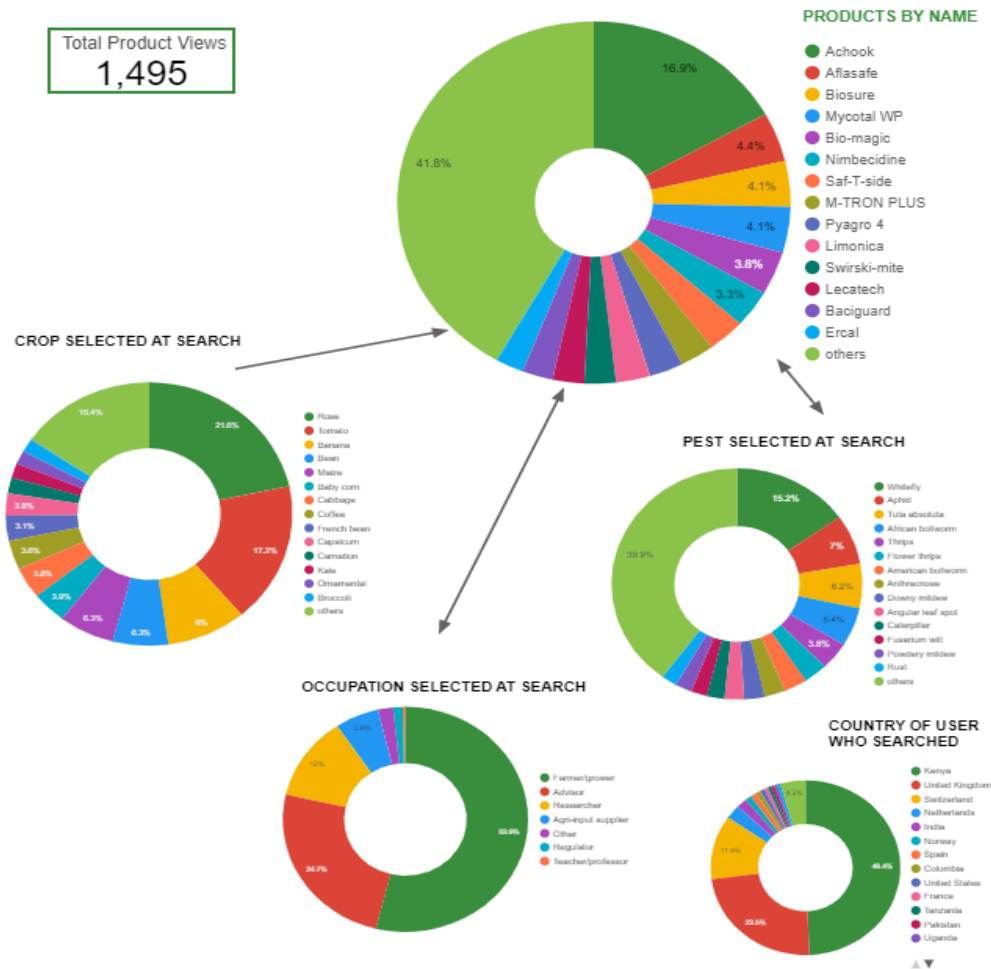
- Clicks of 'Product Factsheet' button
- Clicks to Distributor website
- Clicks on 'Label' PDF'
- Clicks to 'Safety Datasheet'

For all interaction on bioprotectionportal.com website, we collect more data...



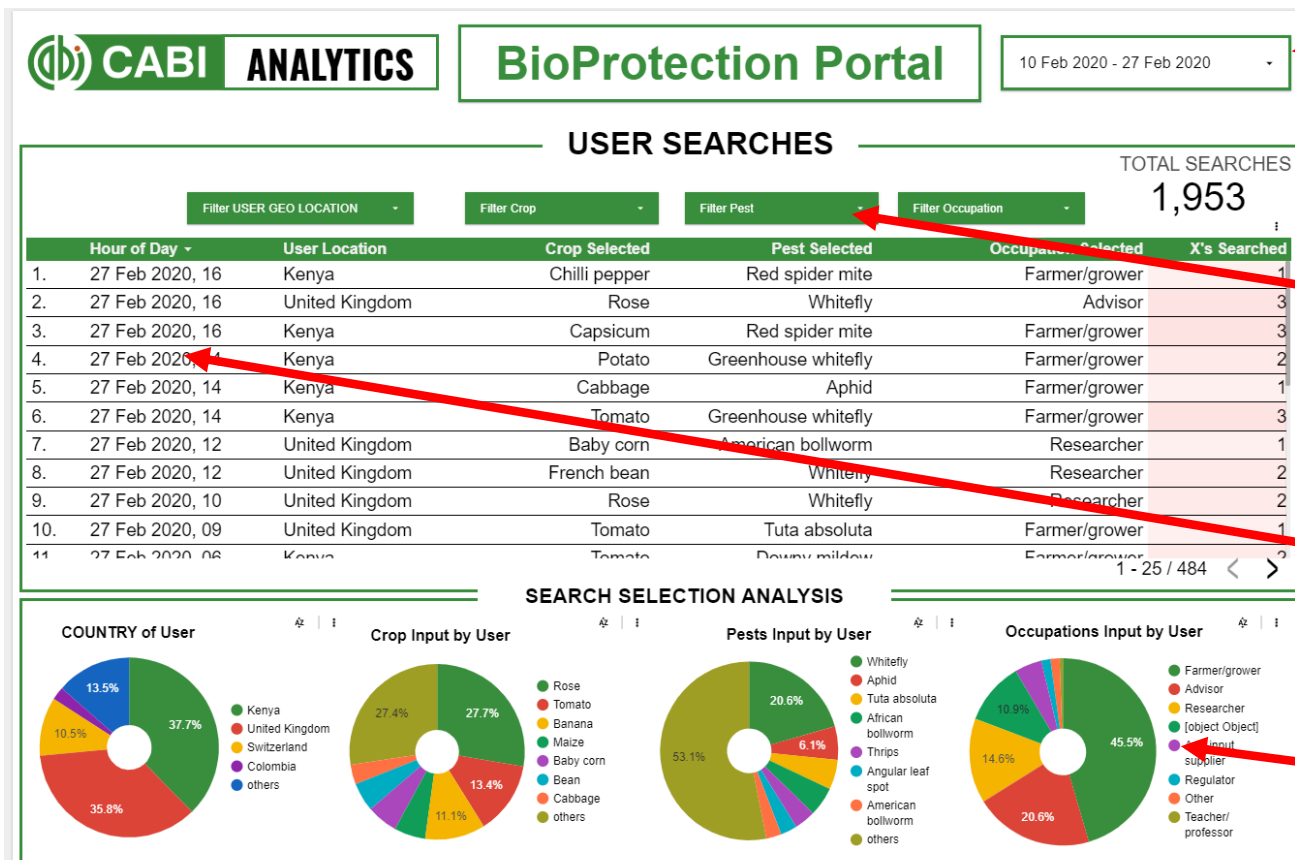
[Go back to Homepage](#)

Total Product Views
1,495



- Language of User device
- Country of User
- City of User
- Demographics of User, e.g., age, gender
- Frequency of a Users' visits and length
- Acquisition method of user (e.g., Google Search, Bookmark, Social Media, etc).
- All Organic (e.g., Google) search keywords used to find bioprotectionportal.com
- Flow and usage patterns of every user across all pages
- Every single page viewed by a User by URL and Page Title
- Browser of User
- Operating System of User

Combining all the collected data points facilitates detailed cross analysis of all user interactions via intuitive dashboards...



Custom date range for reporting over any time period on the fly.

Filter searches to focus on any combination of search terms.

All searches are time stamped and stored for anytime recall.

Analyse search at volume and drill down into data points that matter.

Sustainability model

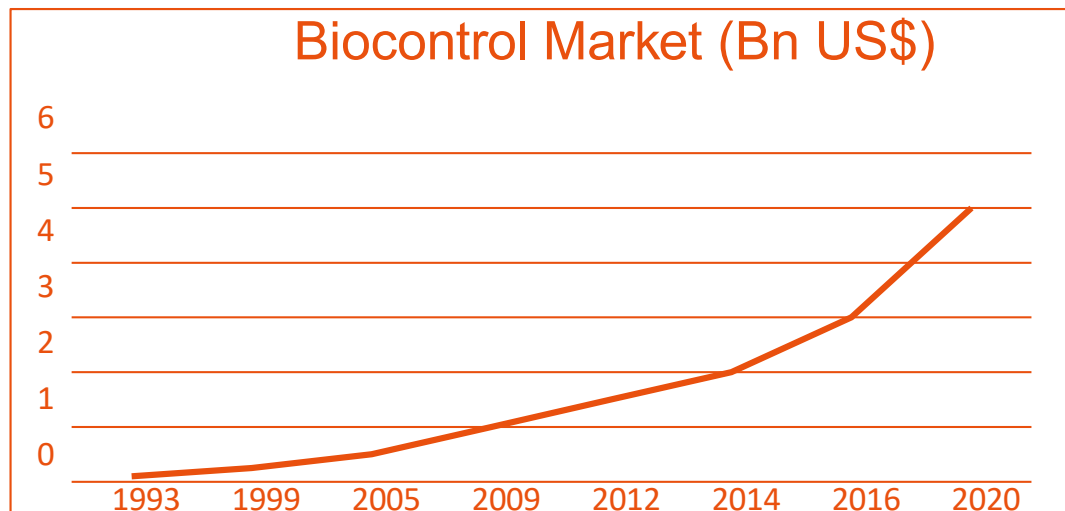
- **Partner Membership** – partners (e.g. private sector biocontrol manufacturers, distributors) make a three-year commitment to developing the portal and pay fixed annual partnership fees built around their annual biocontrol revenues
- **Sponsorship** – sponsors (e.g. private sector stakeholders) may contribute through a tiered annual sponsorship towards the development and maintenance of the portal
- **Donor funding** – CABI is seeking contributions from governmental agencies and foundations to develop and maintain the portal according to their priorities, focus countries and funding schemes.

Countries to be added in 2020



-and others as decided by the **Development Consortium** members

Market development and outlook



Source: Dunham Trimmer LLC

Market anticipated to reach US\$ 8.8 billion by 2022 and US\$ 11 billion by 2025

- Through improved knowledge and awareness of growers and advisors, the uptake and integration of biocontrol products in integrated crop management approaches will be significantly enhanced
- Growers will be better able to respond to consumer/food market demands for more sustainable food production and reduced chemical residues on produce



CABI BioProtection Portal



www.bioprotectionportal.com

CABI BioProtection Portal

The innovative free-to-use tool, is being made available by CABI in collaboration with its network of partner biocontrol manufacturers:



And donors:



Ministry of Foreign Affairs of the Netherlands



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Agency for Development and Cooperation SDC



AFRICAN DEVELOPMENT BANK GROUP





Interested to join? CABI is looking for partners to help ensure the success of the CABI bioProtection Portal.

Please contact u.kuhlmann@cabi.org

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 and Rural Affairs, 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