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**Emma Jenner** Strategic Planning and Operations Manager Tour of the Portal



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Steve Edgington Biopesticides Team Leader UK

Data management system overview



Frankie Downs Programme Support Officer User analytics and market reports





# Introducing CABI and the CABI BioProtection Portal



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### **CABI** in brief

Not-for-profit intergovernmental organization, established by a United Nations treaty-level agreement

Owned by **49 Member Countries** which have an equal role in the organization's governance, policies and strategic direction **Global reach** – 450+ staff across more than 11 major operations 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, ebooks, digital learning, compendia and online information resources

## **Our member countries**











Colombia



















The Netherlands



Anguilla



British Virgin Islands



Cote d'Ivoire



India



Myanmar



Solomon Islands







Brunei Darussalam







Jamaica



Nigeria



South Africa



Uganda





Burundi











Sri Lanka























St Helena\*









Ψ

Barbados

Chile





Philippines

Switzerland

Zambia





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Bermuda

China

Grenada



Mauritius



Tanzania









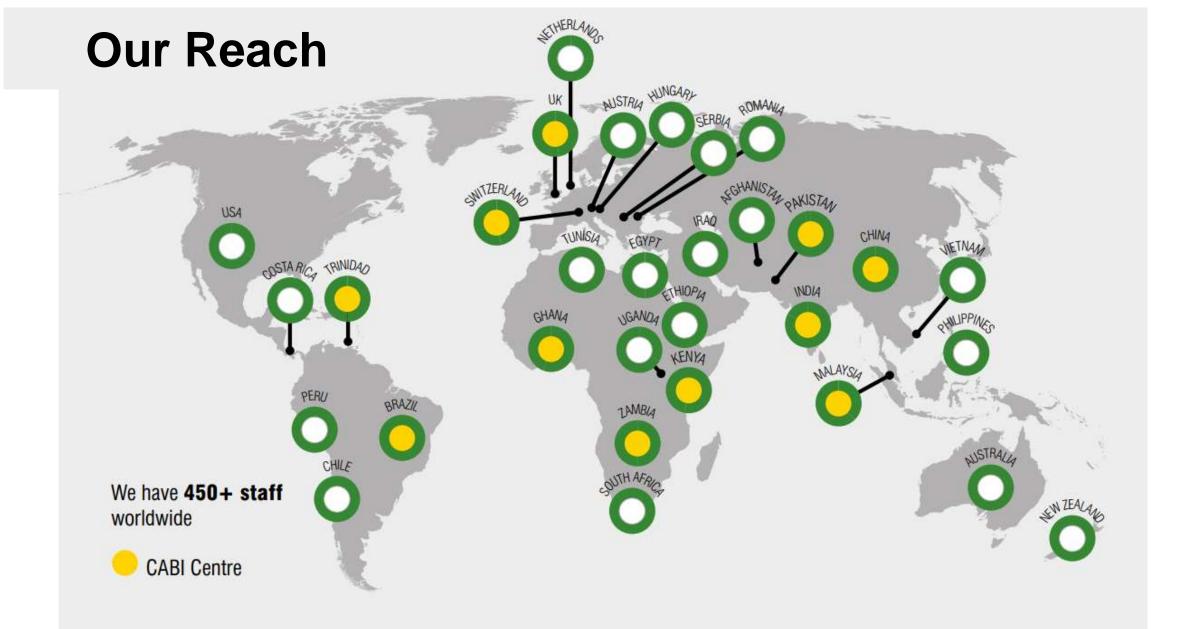














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## Who is CABI?

CABI is tackling the biggest challenges facing humanity – hunger, poverty, gender inequality, climate change and the loss of biodiversity.

Our vision is for a world where the sharing of agricultural and environmental knowledge empowers people and protects the planet, while fulfilling our mission to:

"Improve people's lives worldwide by providing information and scientific expertise to solve problems in agriculture and the environment"





## Why is CABI Bioprotection Portal needed?

- The biocontrol market is growing, but lack of knowledge is hindering widespread adoption the Portal aims to bridge this gap
- By providing valuable information and resources to growers and agricultural service providers, it fosters the understanding and adoption of sustainable alternatives to chemical pesticides
- The Portal supports the transition towards sustainable agricultural practices by promoting the use of biological solutions, which contribute to the preservation of soil health and biodiversity
- Access to up-to-date regulatory information on the portal helps farmers and advisors ensure compliance with local and international pesticide regulations, and potentially helps them enter new markets





### **Tour of the Portal**





## Your chance to win a CABI Swiss Army Knife!

- Listen carefully to the next presentations
- Fill in your name, email and company on the quiz sheet in front of you
- Look at the task presented
- Answer the first 3 questions
- Wait for further instructions....

#### CABI BioProtection Portal Quiz

Enter for a chance to win a CABI Swiss Army Knife!

Name:

Email:



Company:

Task:

1. On your smartphone, go to the CABI BioProtection Portal:

https://bioprotectionportal.com/



2. Search the Portal in Kenya for Fall Armyworm on Maize

What is the name of the partner product available?

What is the name of one non-partner product available?

Feedback for the Portal?

Ideas for increasing user uptake?





# The Data Management System - Product Data



### (b) CABI BioProtection Portal

### Find bioprotection products for your crop

The largest open access resource for biological plant protection

Select your country

Type to search

Select your occupation

Type to search

#### Search crop

Type to search

#### Search pest

ii bioprotectionportal.com

Product data team, based in UK and Switzerland

Our responsibility is to ensure the product data is accurate and up to date

We liaise with each national authority to obtain permissions to publish their data

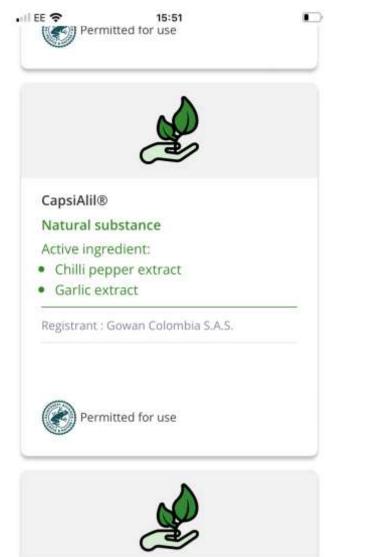
We then build and manage the data in CABI's Data Management System and then deliver it onto the portal

And implement processes of data updates and maintenance

Some of the above is automated but a significant amount is manual curation of the data



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a bioprotectionportal.com

We are adding Biopesticide PPPs and IBCAs (+25B, EAMU, parallels)

We work with our network of associates, organisations, IBMA to help split chemical vs biological PPPs

As we build the data sets we keep aware that the data must be accurate but also user-friendly for growers and advisors

Data updates range from every 2-months up to every 12-months, depending on government source; with ongoing investigations on automatic updates (for some countries)

We rely on industry and our portal partners to ensure their data on the portal is accurate – we rely on your support!





< Back to Search results

Product last updated: 23/08/2023



CapsiAlil®

NATURAL SUBSTANCE CHILLI PEPPER EXTRACT GARLIC EXTRACT



i bioprotectionportal.com

We presently have a product search engine for 42 countries, including USA, Spain, UK, Germany, France, Brazil, Canada, Mexico, Australia and New Zealand. Each month we add another country – upcoming The Philippines, Egypt, The Netherlands.

Over 5000 products listed, 1000+ registration holders, 2000 + crops, 7000+ pests/diseases

Country	microbes	natural substances	semiochemicals	IBCAs*
USA	250	234	51	105
Brazil	225	25	43	57
Spain	80	47	220	293
Germany	51	89	10	102
UK	55	71	4	145
Canada	129	82	17	170
India	395			
Chile	62	29	28	66
Kenya	50	34	10	27





## Market Insights Reports Data Pools, Data Points and Big Opportunities



### What type of data is being collected (DMS)

#### At the country level, in the local language as well as English

### For all products:

- Registrant name and registration number
- Active ingredient
- Commercial name of product & local name

#### Manufacturer

Crop-Pest information

For partner products:

- Safety datasheet, factsheet & product label
- Distributor details (if provided by the manufacturer/partner)

If partners provide further information for data enhancements, these are included on the Product Search App (live website).

See list on following slide



## **Enhanced data for Partners**

- Storage requirements
- Shelf Life
- Restrictions
- Pre-harvest interval
- PPE Requirements
- Packet sizes
- Minor use

- Formulation
- For larvae
- Entry interval
- Concentration
- Application Info
- Pest and crop specifications



## Questions that could be answered by DMS Data

- How many Products? Countries? Crops? Active Ingredients?
- What active ingredient(s) are used across products most?
- What is the distribution of Company X Products by Category? Or Country?
- Where is the spread of Active Ingredients across all Company X Products?
- What is the Registrant X or Manufacture Y's Product Reach geographically?
- What Country(s) is a given product registered for use in (or not)?
- What are the PPE requirements in place for a given Product?
- What is the geographical distribution of a Product or Active Ingredient?
- Are their gaps in Products for certain Crops or Pest combinations; does this vary by Country?
- How many products are registered for fall armyworm globally?
- How many active ingredients are registered for (pest-A) in (X-Country) or in other countries in the region?

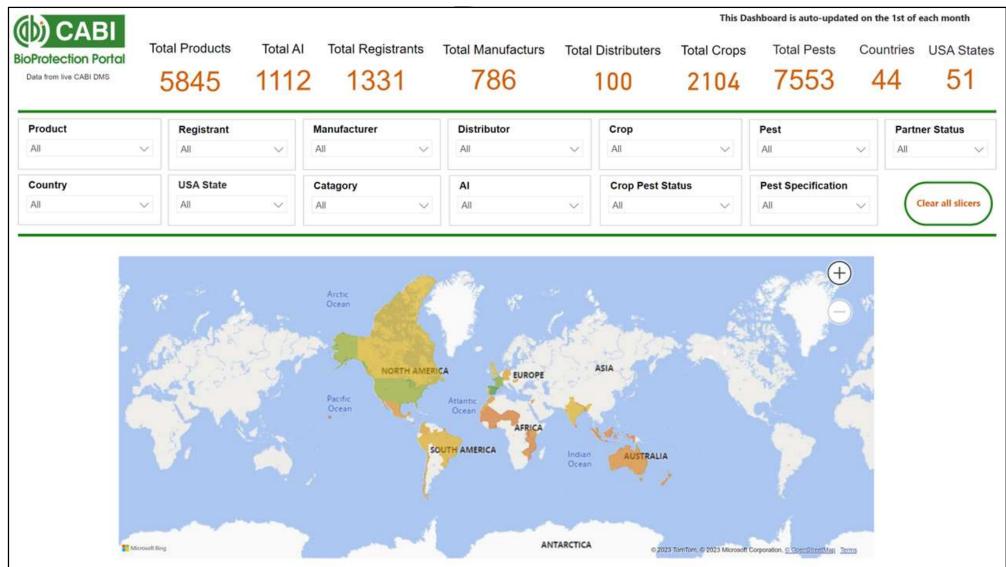


### CABI Internal Dashboard example using DMS Data

	То	tal Products	fotal AI Total Regis	strants	Total Manufactur	s Total Di	stributers To	This t tal Crops	Dashboard is auto-updat Total Pests	ed on the 1st Countrie	
Data from live CABI DMS		5845 1	112 133	1	786	1	00 2	2104	7553	44	51
Product		Registrant	Manufacturer		Distributor		Crop		Pest	Pa	rtner Status
All	$\sim$	All	All	$\sim$	All	$\sim$	All	$\sim$	All	∼ All	~
Country USA State		USA State	Catagory		AI		Crop Pest Status		Pest Specification		$\frown$
All	$\sim$	All	All	$\sim$	All	~	All	$\sim$	All	~ (	Clear all slicers
Product Name		Active	Ingrediant	Ca	tagory Name	Partner Statu	is Country Nam	e Regi	strant Name	Man	ufacturer Name
"Ory Lure 0,0005 SL"		Ethyl 4-	methyloctanoate	Ser	niochemical	no	Indonesia	PT Ag	ritek Tani Indonesia		
"Suteki 93,40 RB"		Pherom	ione	Ser	niochemical	no	Indonesia	CV NI	usagri		
3 Hour Weedkiller		Fatty ac	ids	Na	tural substance	no	United Kingdor	n SBM l	ife Science	SBM	Developpement
3 Tac		Trichod	erma harzianum	Mie	robial	no	Chile	Avanc	e Biotechnologies	Avan	e Biotechnologies
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## **CABI Internal Dashboard example using DMS**





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# What type of data is collected (Google Analytics, Matomo)

- User Acquisition, i.e., where does traffic come from; Social, Google Search, etc
- Occupation of User performing a Search
- Website language selected by User
- All Search Data (Crop, Pest, Country, etc)
- Landing Page (i.e., start page) of all Sessions
- User Engagement rate
- Total Sessions, Page views, and Users over any timeframe
- Session Duration and average time on page
- Country, e.g., which country was the User in by IP
- Device of User (Desktop, Mobile, Tablet)
- Browser of User
- Day, hour, minute, second of usage.

Google Analytics, and other website usage tools, collected data about a user interactions on a website, e.g., making a search, looking at a page.

The image below, shows visually, how this collection process works in the Google ecosystem.



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## Questions that could be answered by 'Website Usage Data'

- Search Data what do Users search for and in what volume; which Crop, Pest?
- What County do website Users come from, and which App version do they use?
- What Product is most clicked?
- What is the most prevalent User Group (Farmer, Agro Dealer, etc)
- Do people use the links from the Product Pages to view extra resources?
- What is the geographical distribution of a Product or Active Ingredient being viewed (User type, or referral path)?
- Which Products are viewed most over X timeframe vs X timeframe?
- What is the most Viewed Product in any given Country or group of countries?



### Example of Dashboards offering detailed website usage statistics (from Google or other web tracking tool) but suffer by being limited to website data only

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## Our Objective is to provide Partners with a robust set of Tools that answer key questions only possible when *combining* DMS and Website Usage data...

#### **Gap / Demand Analysis**

E.g., a high volume of website searches for a Crop / Pest Combination in a given Country(s) (GA Data) with a small number of effective products available (DMS Data).

#### **Product Launch Analysis**

E.g., I need to see where there is a demonstrable demand for a Product in a given market (GA Data) and I also know there are only a small number of Registered products available to address (DMS Data)

#### **Active Ingredient Analysis**

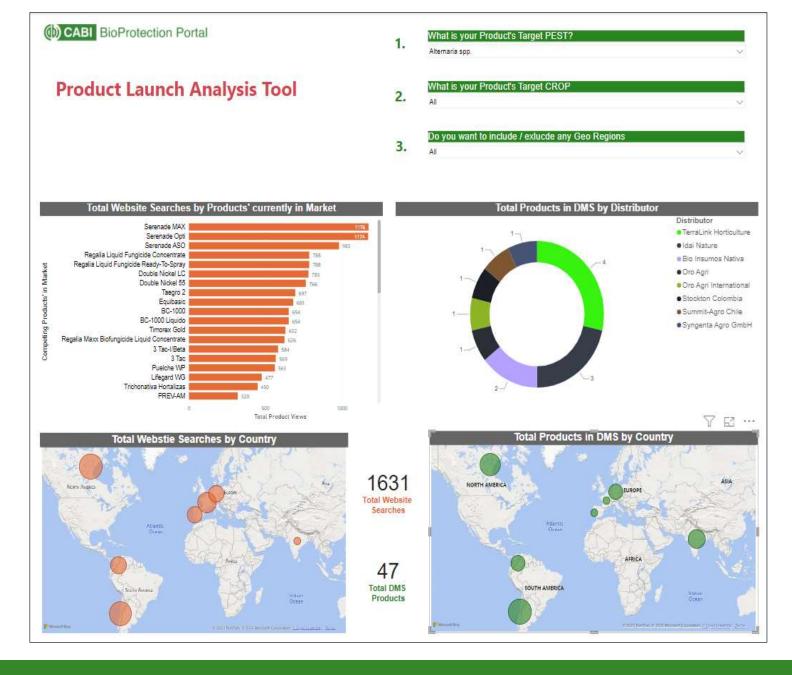
E.g., a high volume of Users searching for a Pest/Crop problem in a Country in which a suitable AI is not registered

## The following slides give an early sneak peek of the Tools we are working on!



### Product Launch Analysis

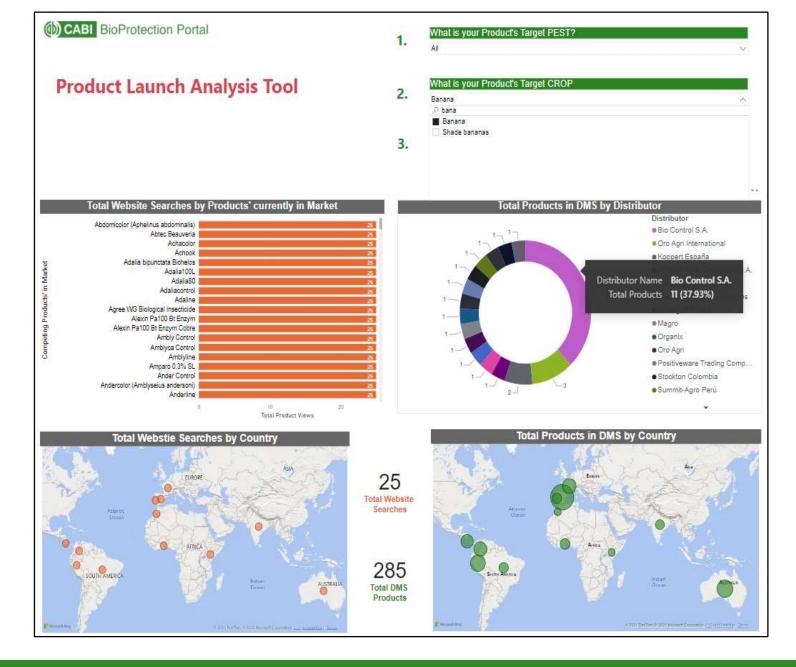
**Usage Example 1** 





### Product Launch Analysis

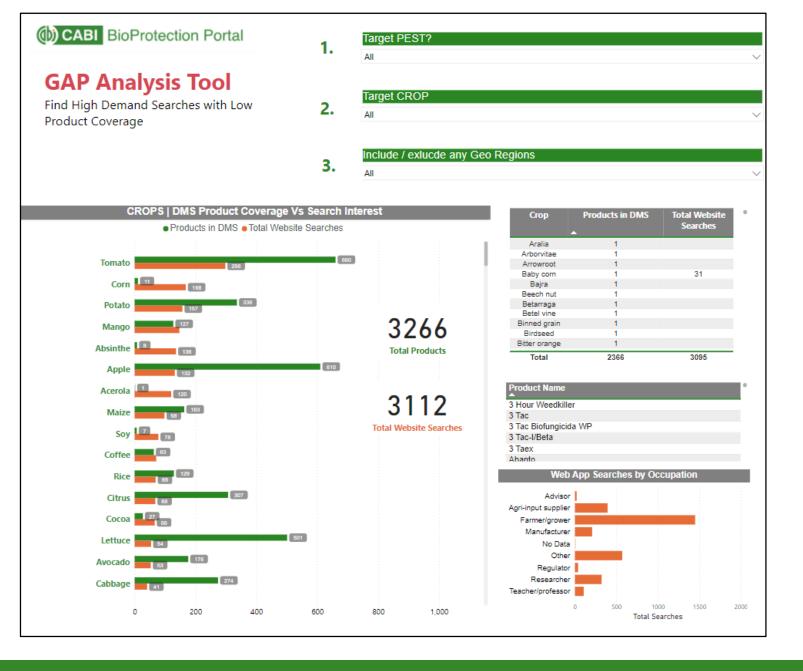
**Usage Example 2** 





### Gap / Demand Analysis

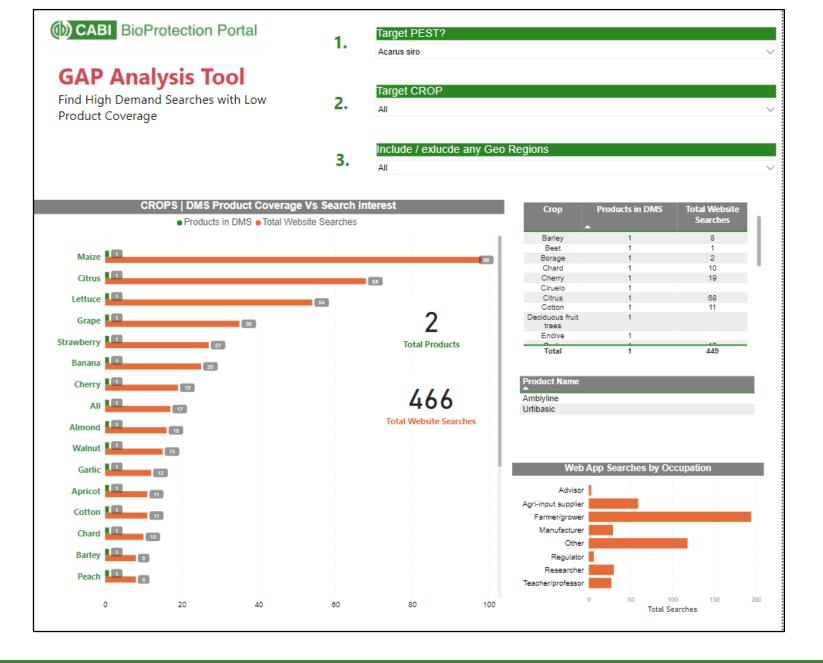
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Usage Example 1
```





### Gap / Demand Analysis

**Usage Example 2** 







## **Promoting Portal Uptake**



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## Making end-users aware of the Portal

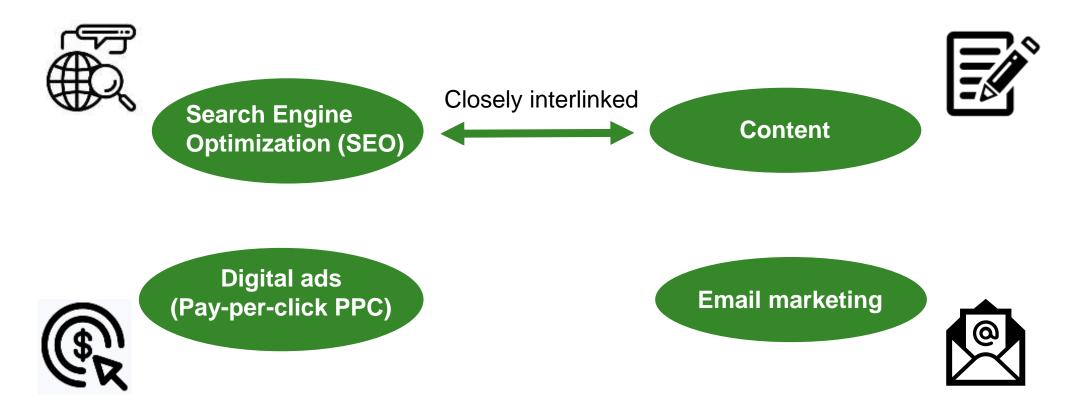
- 1. Digital advertising via paid ads and content creation
- 2. Direct communication to agricultural advisors and farmers
- 3. Communication via the Portal's members to their partners, employees, and audiences

### Coordinated strategy in place to drive traffic to the CABI BioProtection Portal



1. Digital advertising via paid ads and content creation

4 main channels of digital marketing:





## The value of organic traffic

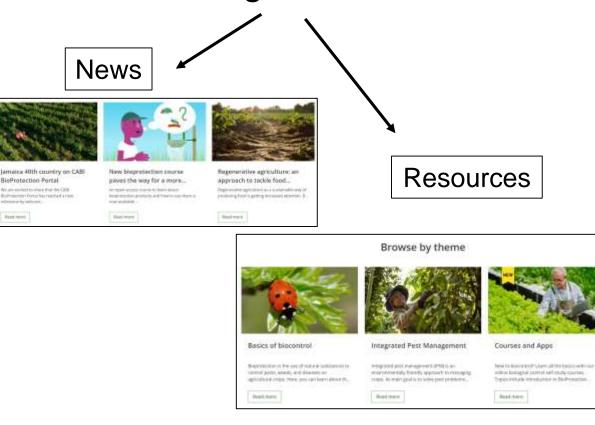
- Users from organic traffic spent longer on the site compared with paid social and paid search
- Investing in organic traffic is more sustainable financially and may deliver the right users to our site

		1. 11	E	E	E	
	First user defa channel group 🔹 🕂	↓ New users	Engaged sessions	Engagement rate	Engaged sessions per user	Average engagement time
		20,301	13,894	38.66%	0.61	Om 54s
		100% of total	100% of total	Avg 0%	Avg 0%	Avg 0%
1	Paid Social	7,302	3,416	18.64%	0.39	0m 22s
2	Organic Search	5,522	4,711	64.69%	0.80	1m 23s
3	Paid Search	4,859	3,284	53.86%	0.63	0m 46s



### Renewed focus on content quality and SEO

• 2-fold approach to content marketing:



- Focus on:
  - Keyword optimization
  - Readability score
  - Accessibility
  - Internal links to product pages



## 2. Direct communication to agricultural advisors and farmers

- Case studies: India and Bangladesh
- Workshops held by Agri-Digital Tool Coordinator for extension agents and agronomists
- Overview of the BPP and other CABI digital tools
- Feedback form provided
- Dissemination to growers











## **Outreach in India**

Universities/Academia	<ul> <li>ANGRAU (Acharya N. G. Ranga Agricultural University)</li> <li>One-day workshop for extension scientists, separate session for university students</li> </ul>
NGOs	AFEC (Agriculture Export Facilitation Centre)     One-day workshop for technical extension staff members
National-level extension institution	<ul> <li>MANAGE (National Institute of Agricultural Extension Management)</li> <li>Training session for extension workers and extension training institute, SAMETI</li> </ul>
Associations	<ul> <li>PMFAI (Pesticides Manufacturers &amp; Formulators Association of India)</li> <li>Training session for pesticide manufacturers and officials across the world</li> </ul>
National level Research organization	<ul> <li>NIPHM (National Institute of Plant Health Management)</li> <li>Physical session 44 extension officials, online session with engineers and extension officers (ongoing)</li> </ul>





## **Outreach in Bangladesh**

- Agri-Digital Tools Coordinator on the ground as of this month
- Interactive workshops presenting the Portal and Introduction to Bioprotection Products self-study course
- Promotion within universities and farmer advisories (SFSA, iDE)







3. Communication via the Portal's members to their employees and audiences

Example 1. Sponsorship with **Nespresso** 

- Coffee Berry Borer led to collaboration with CABI to educate farmers on sustainable pest management of coffee
- Portal provides enhanced usage information on bioprotection product pages, plus educational materials
- Nespresso promotes the portal to their team of 400 agronomists that actively work with farmers to push biologicals



-		÷	-		
C	011	re	е	C	rop

What are the benefits of using natural pe	st.
control on your coffee crops and how do do it?	you

Theme: Crop guide

Read more



## Example 2. Sponsorship with **Rainforest Alliance**

- Relationship started with getting products on the Portal RFA certified
- Led to cross-promotional activities via social media



Bioweed Organic Herbicide Concentrate Natural substance

Active ingredient:

Pine oil

Registrant : Greenpro Solutions Pty Ltd





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at Alliance	Kambrost Alliansa 1622/99 Minosty 1611 (10	
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	Since its launch in 2020, the website has attracted over a million users. As you'll not coty fave the opportunity to support <b>PlantanaticeAgriculture</b> v but you'l also have intreased product wideRy to a global autoenal.	
	Click on the line to learn more and be a part of our mission to increase an usage of sustainable forms of part managements in https://tinkd.in/dbAr	
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## **Quiz sheet**

You can now complete the last question of the quiz on user uptake

Drop your sheet in the box by the door and 10 winners will be drawn

Winners will be displayed and prizes distributed at the CABI BioProtection Portal booth (number 10)!







# How to guarantee open access to the CABI BioProtection Portal?

The importance of building memberships to support sustainability





## Funding mechanism to guarantee open access

Portal must receive funds to ensure it is maintained enhanced as an open access, up-to-date and reliable global source for bioprotection information:

- **Partnership** (e.g. private sector biocontrol manufacturers, distributors, etc.)
  - 3-year commitment via a fixed annual partnership fee based on annual bioprotection product revenue
- **Sponsorship** (e.g. private sector stakeholders)
  - 3-year commitment via annual sponsorship fee determined by the size of the company (based on OECD definitions)
- **Donorship** (e.g. governmental development agencies)
  - Contributions from governmental agencies based on their priorities, focus countries, and funding schemes

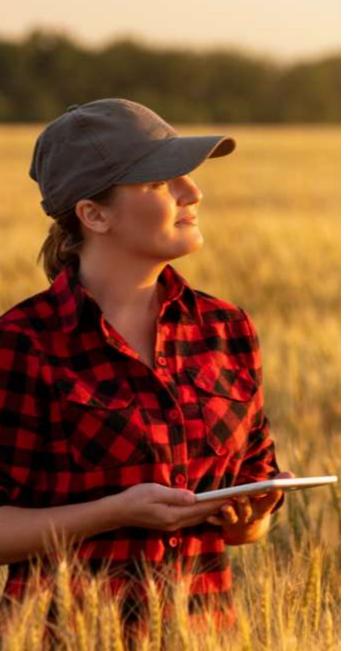




#### Funding mechanisms to guarantee open access







#### Join us and receive these partner benefits:

#### Increased visibility of your products

- Partner products at the top of searches
- Valuable data (labels, factsheets) on product pages
- Distributor contact information provided

Display of **your logo and links** on the Portal and in promotional materials



Invitation to biannual Development Consortium meetings – have your say in how we grow



Access to bespoke company **user analytics dashboard** for unique market insights

Partners get >2x more clicks, plus google search boost!



### **Annual Partnership Fees**

Annual Biocontrol Product Sales	Annual Partnership Fee
Euro <0.5 M	Euro 830
Euro 0.5-1 M	Euro 1,100
Euro 1-2 M	Euro 1,660
Euro 2-5 M	Euro 4,420
Euro 5-10 M	Euro 6,620
Euro 10-50 M	Euro 8,830
Euro 50-100 M	Euro 16,560
Euro >100 M	Euro 22,080

The Partnership Fee is a threeyear commitment, payable annually which help ensure future sustainability of the CABI BioProtection Portal as a free-toaccess resource.

Members of IBMA and/or BPIA with an annual turnover of less than Euro 10 million are entitled to a 25% discount on the annual partnership fee for the first three years.



#### **Earlybird Partnership Promotion**

Sign up as a partner before 31<sup>st</sup> of December 2023 and receive a reduction in your annual partnership fee!

- Large companies<sup>1</sup>: 10% discount
- Small-medium companies<sup>2</sup>: 25% discount

- 1. Companies with an annual turnover of bioprotection products >Euro 10 million
- 2. IBMA and/or BPIA member companies with an annual turnover of bioprotection products <Euro 10 million





#### Be part of a global initiative Bioprotection is the future!

- We are passionate about increasing awareness and use of bioprotection products as a safer and more sustainable form of pest management
- Our members' support is what allows this valuable digital tool to remain open access to users globally
- Drive the change you would like to see by joining our mission and to make an even bigger impact





## Introduction to Bioprotection Products

Online learning for farmer advisors





#### **Introduction to Bioprotection Products**

Online learning for farmer advisors





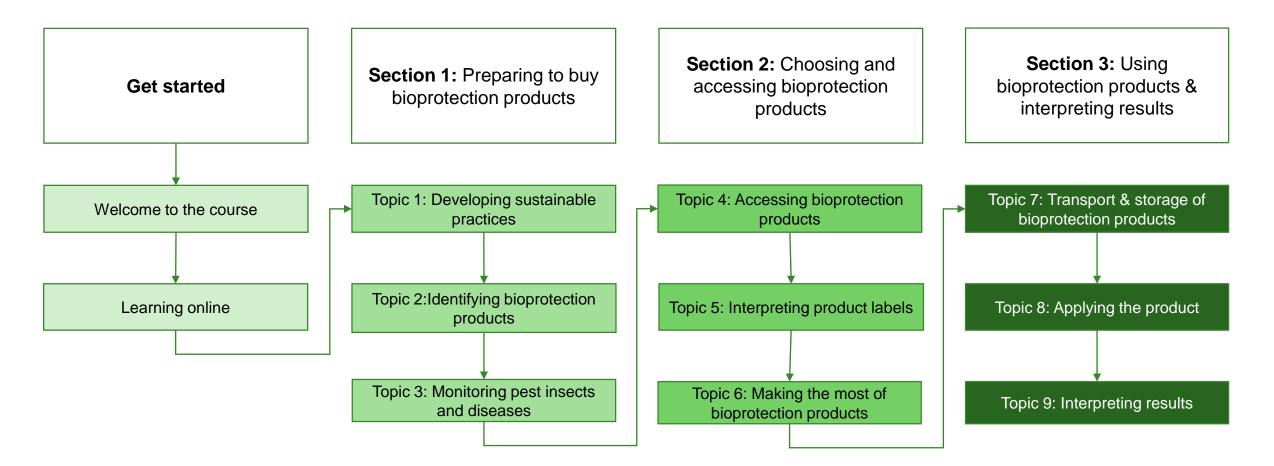
#### **Course information**

- About the course:
  - Farmer advisors
  - Choosing, using and interpreting results of bioprotection products
- Course length:
  - Approx. 10 hours (Including assessments)
- Availability
  - Open access to all globally
  - Hosted on the CABI Academy





#### **Section & topic structure overview**





### Activity types

#### Meet our bioprotection characters

Throughout the course, our bioprotection characters will appear to help talk about some of the important ideas that we'll be exploring.

Meet Jade: Jade is a farmer who grows a variety of crops. He has inherited his family farm and has recently started to use bioprotection products in his field.

Meet Lara: Lara has been an extension worker for 12 years. She has a special interest in sustainable farming practices and works with local farmers to help them apply and interpret the results of input products on their farms.

Here, Jade and Lara discuss how some naturally occurring defences work to protect crops in the field.

#### Working with the natural world

When Jade was young and he played in his family's fields, he would watch as red beetles found and ate smaller insects (Figure 1).



In this video, we compare macrobial (predator insect) bioprotection products and traditional pesticide products. We look at the different ways these 2 approaches can both help to manage pest insect numbers in the field over time.



#### Good label information

Product labels give users details about the correct and safe quantities of the product to be applied in the field. Standardisation of product labels gives users confidence in the information included, helping users to find the information they need.

As a minimum, a good product label should provide the following type of information:

- Product details (active ingredient (a.i.), concentrations, target pest, crop, re-entry and preharvest intervals)
- Registration number
- Manufacturing details (licenses, premise address, company)



Figure 1: Input products on a shelf at an agro-input dealer shop © CAB<sup>2</sup>



#### Activity types

Scarce 7-spot ladybird © Gilles San Martin/via	t
Nematode ×	This answer is incorrect. This is an image of a ladybird, which has big eyes, which helps it to see it's prey, and strong mouth parts, which helps it to catch and kill pest insects. Nematodes are worm-like creatures which move around in the soil, spreading deadly bacteria to pest insects.

You respond, "It sounds like you've used too many chemical pesticide products over the years. As well as killing the pest insects, the helpful insects have been killed too."

Now you have established what is causing the issues with the tomato crop, what type of product would you advise Jade tries in the future to provide the best long-term solution to his pest issue?



Compare ....

Cottan bollworm (Helicoverpa armigena) Iarui Ø Gyorgy Csoka, Hungary Forest Research Institute/via Bugwood.org (CC BY 3.0 US)

#### What long-term solution would you offer for this pest issue?

Select your answer.

A different chemical pesticide product A macrobial biocontrol product: Predator Insects

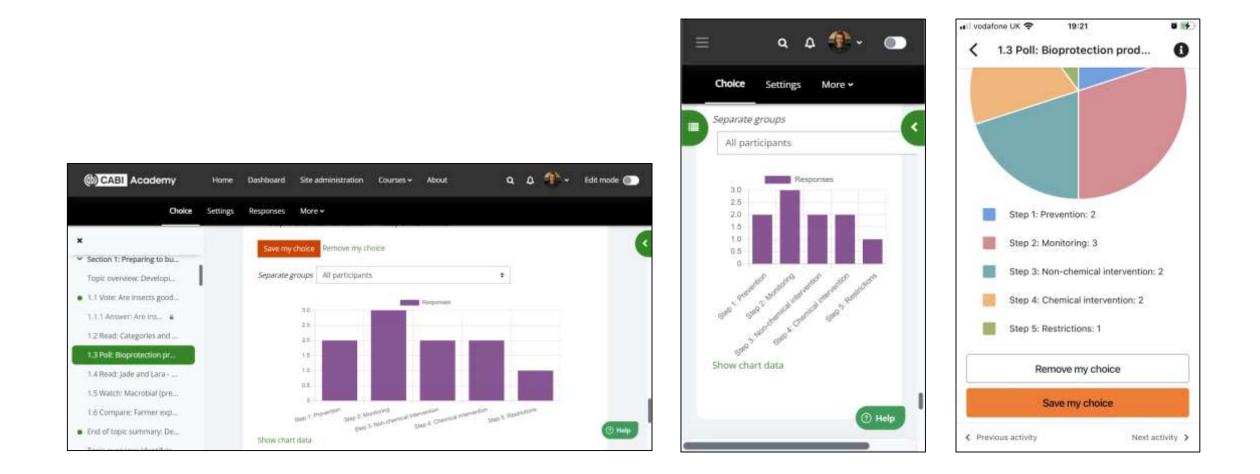
A semiochemical biocontrol product: Pheromone trap



Search forum	ns Q	Add discussion topic		Subscribe to forum
Separate groups	All participants	÷		
Discussion	Group	Started by	Last post 1	Replies Subscribe
Prefer qui acting	ick	Philemon Guardi	Philemon Gramfi	



#### **Responsive & Moodle Mobile App**





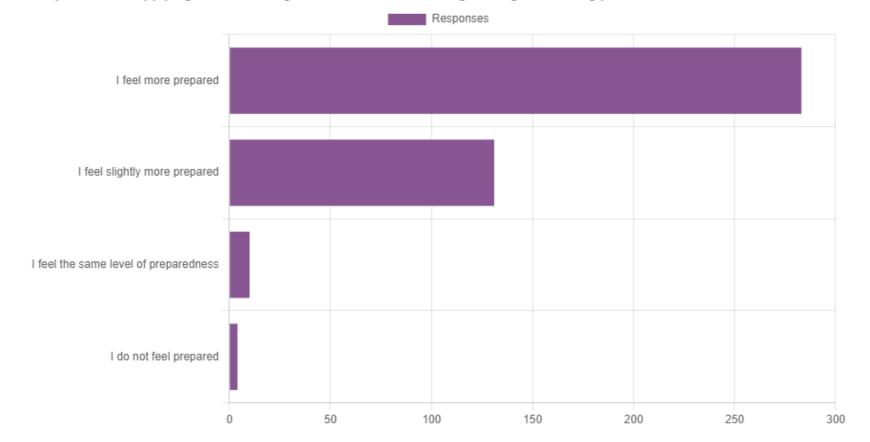
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						🌒 1.1 تصويت: هل الحشرات جي
	ه الدورة	باية الحيوية في هذ	سنيف منتجات الحم	کیف یتم تح		1.1.1 الإجابة: هل الحشرا 🔒
	ميعها وتصنيفها بعدد من الطرق	نات وأمراض المحاصيل. يمكن تج	حماية الحيوية وتسويقها لإدارة آف	تم تطوير منتجات ال المختلفة.		1.2 اقرأ: فئات وأنواع منتجات ا
						1.3 استطلاع: منتجات الحماية
	النوع (غير مغطى	النوع (المغطى في		فئة		1.4 اقرأ: Jade و Lara - العمل
	في هذه الدورة)	هذه الدورة)				1.5 مشاهدة: الماكروبية (المفت
	<ul> <li>الكائنات الحية الدقيقة</li> </ul>	• بكتيريا		الميكروبات		Help ⑦ جارب المزارعين
	الأخرى	<ul> <li>الفطريات</li> <li>الفدوسات</li> </ul>	" عامل المكافحة البيولوجية	يُعرف أيضًا باسم		• ملخص نفاية الموضوع: تطويب



#### **Learner analytics**

(Application) How prepared are you to start applying new knowledge and skills after accessing this digital learning product?



Show chart data



#### **Assessments**





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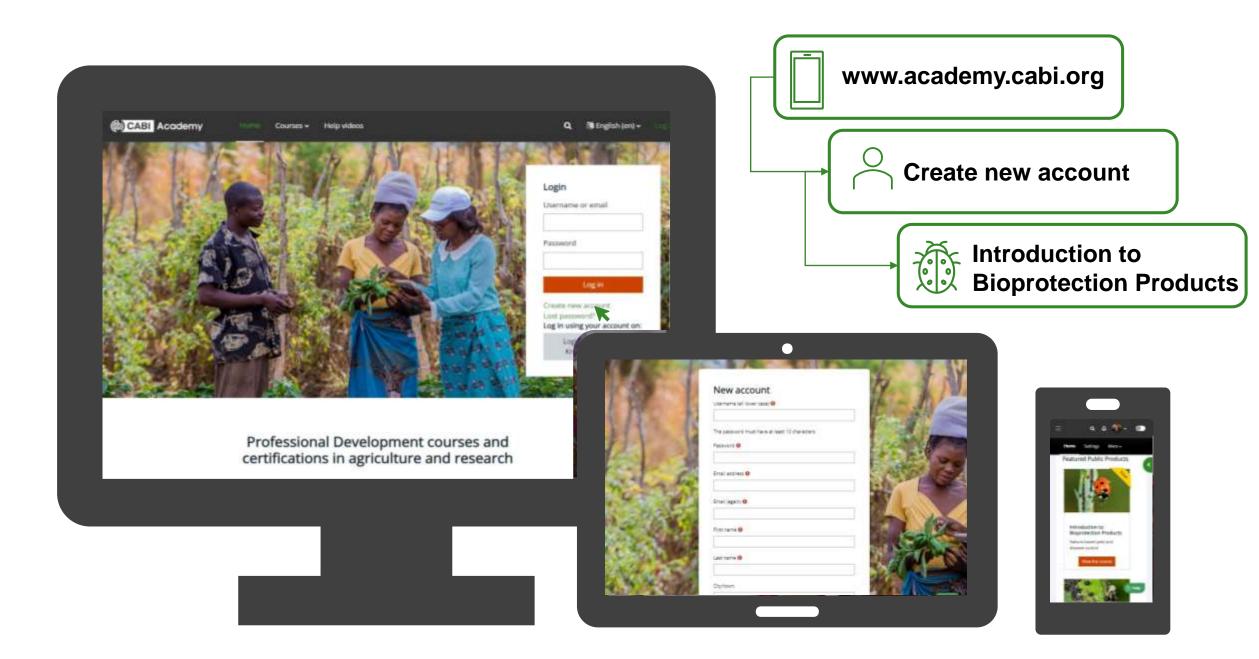
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