



Bernard Blum Award 2024



The founding father of IBMA

Bernard Blum
1934 - 2014





- An independent jury selects a winning biocontrol product to receive the Gold award. It must demonstrate an effective solution in the management of pests or diseases while having a low impact on human health and the environment –. Silver and Bronze recognition are also awarded to second and third placed innovations
- For the first time in 2021 a fourth award was also introduced for best innovative product assisting the uptake of biocontrol
- This year we received 30 applications from 14 countries
- All four winners are given the chance to present their innovations.
- IBMA will award a trophy, interview and product placement in the following publications:

New AG
International

2B
MONTHLY
The Global Biocontrol &
Biostimulants Newsletter

The Panel of Judges



Johannes Jehle

Julius Kühn-
Institut,
Darmstadt

GERMANY



Alberto Urbaneja

Valencian Institute
of Agricultural
Research (IVIA)

SPAIN



Helma Verberkt

Artemis

NETHERLANDS



David Cary

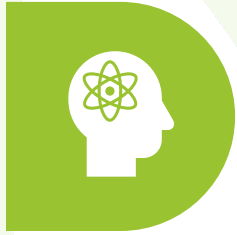
Coordinator and
Chair

UK

In the case of a tie David Cary has a casting vote

What we look for ?

Each entry is scored independently by each judge against four criteria:



Scientific Foundation and Merit



Degree of **Innovation**



Contribution to **Sustainable Agriculture**



Commercial opportunity

- Has to be for **biocontrol**
- Has to be **registrable** if required
- Has to be **novel**
- Has to have the potential to **make an impact in the market**

1. Each judge evaluates every entry against the four criteria: Scientific, Innovation, Sustainable Agriculture and Commercial
2. All criteria have equal weight
3. Adding the scores for each criteria gives a total score for that entry
4. The entries are then ranked first to last by each judge
5. All the rankings are then combined to give an overall rank – first to last
6. The products Assisting Biocontrol Uptake are also assessed using the same criteria





Please consider entering your product in the future



Remember to highlight the four essential criteria

Best of luck!



Best innovative product assisting the uptake of biocontrol



WINNER

CottonCAP®



WINNER

CottonCAP®



Anna Madden

CottonCap[®]

Mass-releasing beneficial insects

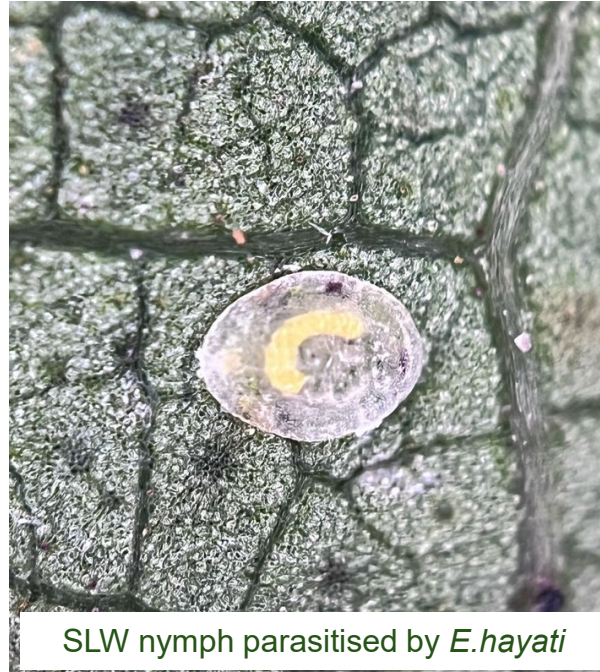


What is CottonCap[®]?

- Distribution device for *Eretmocerus hayati* larvae



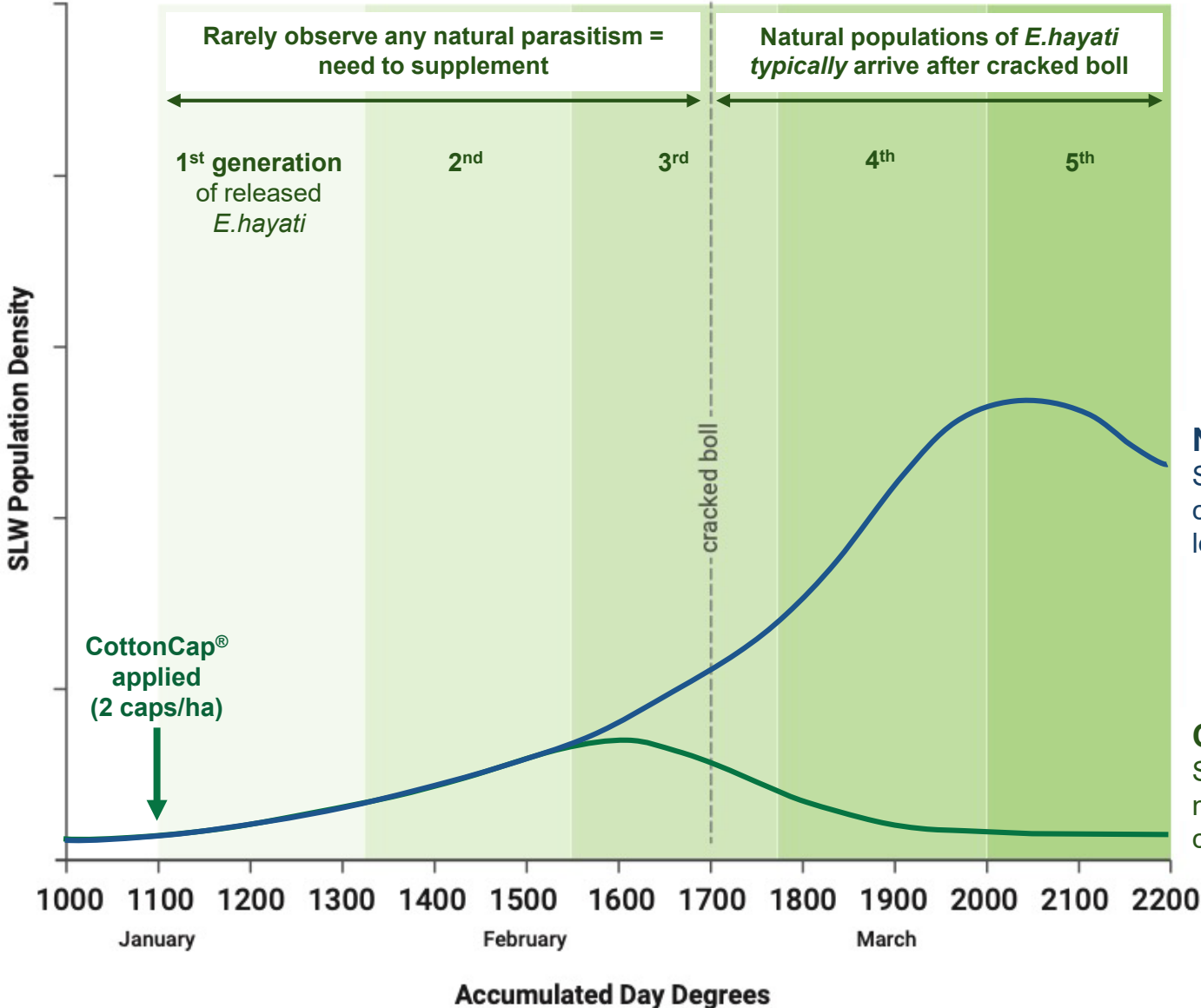
- Inoculative biocontrol of silverleaf whitefly (SLW) (*Bemisia tabaci*)



- Rapid application with light aircraft



Impact of early *E.hayati* releases on SLW populations



Natural parasitism only:
SLW will only be suppressed after cracked boll. High risk of incurring some level of honeydew contamination

CottonCap®:
SLW suppressed by supplementary AND natural parasitism. Minimal honeydew contamination

Why CottonCap®?

2012 - 2014

HAND release: 400 ha



2015 - 2019

DRONE: 4000 ha



2020 - 2024

CAPSULE: **> 35 000 ha**
and growing



Attributes of CottonCap®

- Capsule promotes insect health, survival and mating
- Protection from predators
- Insulating & buoyant
- Locally produced device components
- Made entirely from renewables
- Biodegradable and compostable



Benefits of CottonCap®

- Insects released 24 - 48 hours after insectary harvest
- QA program to ensure quality at all stages
- CapMap
- Encourages Area Wide Management
- Pest resistance management
- Encourages in-crop biodiversity
- Helps industry sustainability targets to reduce chemical use by 25% by 2025



CottonCap[®]

for mass-releasing beneficial insects



Best product of the Year – Bronze



Best product of the Year – Bronze

BRONZE



Best product of the Year – Bronze

BRONZE



Carlo Boutton



EVOCA™, the first biocontrol from Biotalys’ AGROBODY Foundry™

ABIM- Basel 21 October 2024

Carlo Boutton, CSO

Shaping the future of sustainable and safe food supply



AgTech company developing novel **protein-based solutions** to protect crops against pests and diseases

















Antibody-based technology already successfully applied in pharma

AGROBODY™ platform generating novel biocontrols as true replacers for chemical pesticides.

Novel modes-of-action that offer farmers alternatives to fight pests & diseases

Regulatory review ongoing in the **US and EU** for **EVOCA™,2**, Biotalsys' first product aiming to offer fruit & vegetable growers a **new tool to fight major fungal diseases**

Innovative pipeline of biofungicides and bioinsecticides

Program	Target	Market	Discovery	Early Development	Late Development	Registration	Partnership Agreement
 EVOCA 1 st Gen	Botrytis, powdery mildew	High-value fruits & vegetables	●	●	●	— — — — — 	 
 EVOCA Next Gen	Botrytis, powdery mildew	High-value fruits & vegetables	●	●	●		   
 BioFun-6	Botrytis, powdery mildew, Anthracnosis	High-value fruits & vegetables	●	→			Discussions ongoing
 BioFun-7	Cercospora spp. (leafspot disease)	Cowpeas and other legumes	●	→			
 BioFun-4	Oomycetes (water mold)	Potatoes / High-value fruits & vegetables	●	→			Discussions ongoing
 BioFun-8	Alternaria spp.	Fruits & Vegetables and specialty crops	●	→			
 BioIns-2	Key insect pests	Non-disclosed	●	→			

1 new program per year resulting in +10 AGROBODY biocontrols to be launched on the market between 2025 and 2040



Distribution agreement



Manufacturing agreement



Research agreement

EVOCA™: A novel tool for biocontrol¹

Effective rotation product, as demonstrated in global field trial program³

Contact activity for preventive control of grey mold (*Botrytis cinerea*) and powdery mildew

New mode-of-action for resistance management: replacement of conventional chemicals in rotation programs

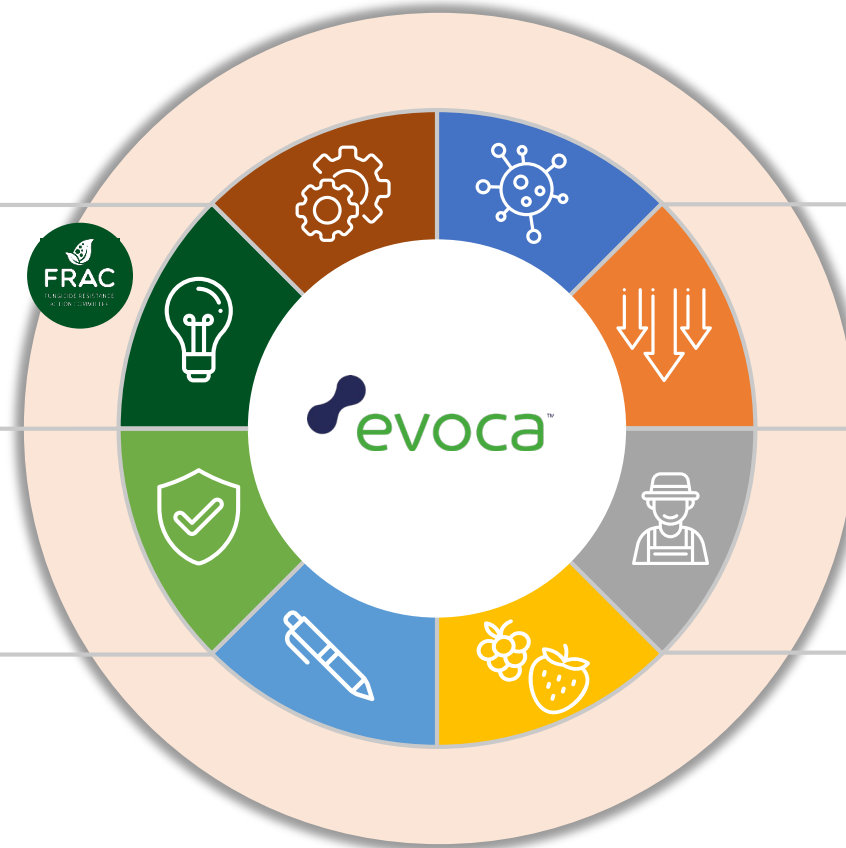
Supports residue reduction in rotation programs³




Convenience, storability and reliability of traditional chemicals²

Designed to be safe for workers, consumers & the environment

Regulatory review ongoing in the US and EU

Introduction crops: Vines and high-value fruit & vegetables

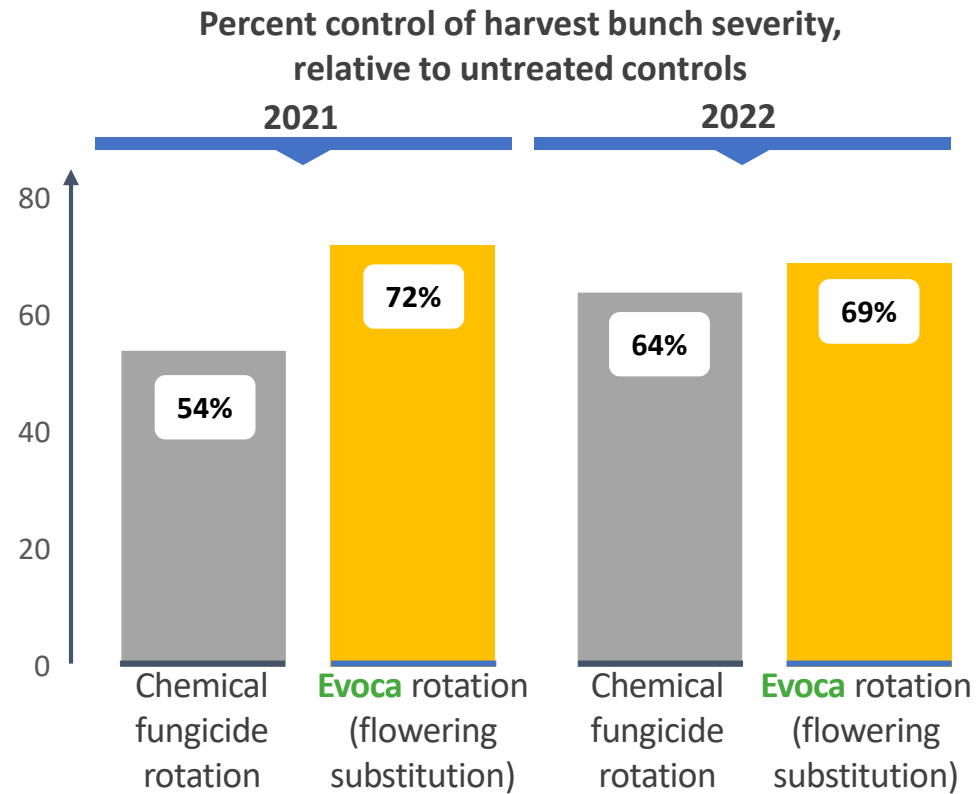


  **Evoca wins World BioProtection Award 2022 for best biofungicide product** 

Note: 1. Evoca™ is pending registration. This product is not currently registered for sale or use in the United States, the EU or elsewhere, and is not being offered for sale; 2. Formulated as water soluble granules
Source: 3: Biotallys data

EVOCA™ consistently performed as good as synthetic counterparts in field trials

Independent trials executed by designated growers



EVOCA™ has been tested in over 600 trials since 2017 across numerous crops, demonstrating consistent performance over various growing seasons and fighting resistance, providing growers a competitive alternative to synthetic counterparts





Thank you

Best product of the Year – Silver



SILVER

REMO-PIRA-SAMO



SILVER

REMO-PIRA-SAMO



Marion Canale



Cearitis



ABIM - 2024

BERNARD BLUM AWARD



BERNARD BLUM
AWARD





CEARITIS

Start-up created in 2020 and specialized in biocontrol and biotechnologies



The History

- Solena Canale Parola & Marion Canale, co-funders of Cearitis but also cousins and farmers' granddaughters
- Based in Aix-en-Provence (13)

Key points:

- Fund raising – 800K€ in May 2023
- 14 by the next few weeks
- 400m² of lab and 2500m² experimental orchards

Innovation at the right time

Today, arboriculturists are caught in a vice.



Farmers must guarantee their harvest without chemicals A regulatory, societal and agronomic impasse.



At Cearitis, we believe in agronomy, in Plant-based chemistry to reach sustainable agriculture goals



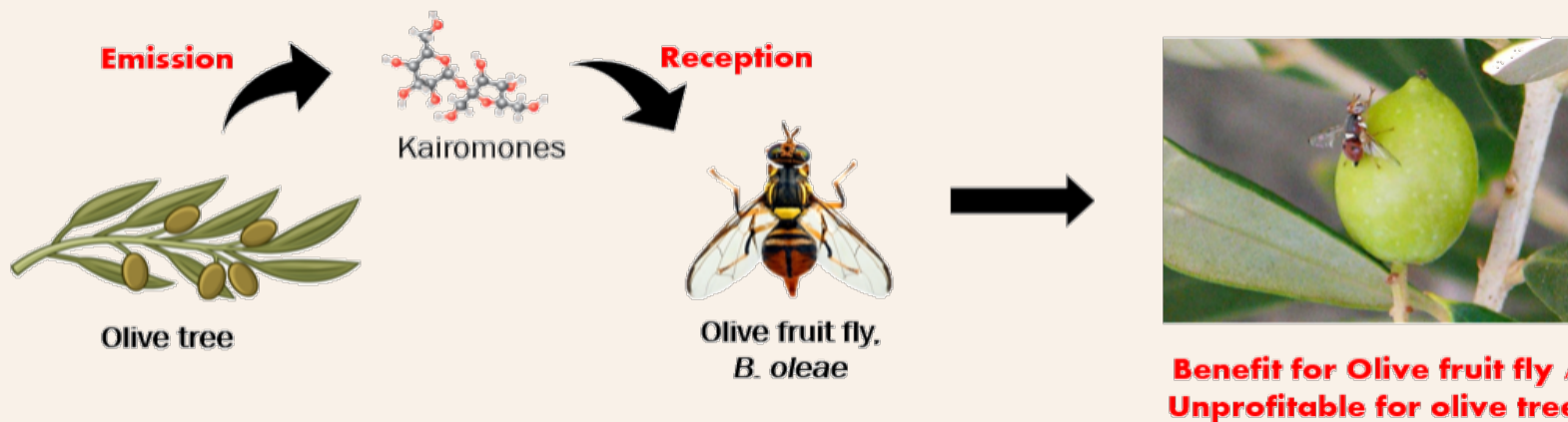
What is biocontrol?

Focus on chemical ecology

CE n° 1107/2009

Biocontrol is defined by the European commission as the use of natural or organic substances for pest management to prevent crop loss. Different substances can be used : natural substances, macro-organisms, microorganisms and **chemical mediators**.

Chemical ecology is the science dealing with **chemical signals involved in the interactions between organisms and their environment** (Takken & Dicke, 2006). This chemical messages are classified into four distinct categorises: **pheromones, synomones, kairomones and allomones** (Wood, 2017).



CEARITIS uses natural kairomones to mimic the threatened tree and create a mass-trapping crop protection.



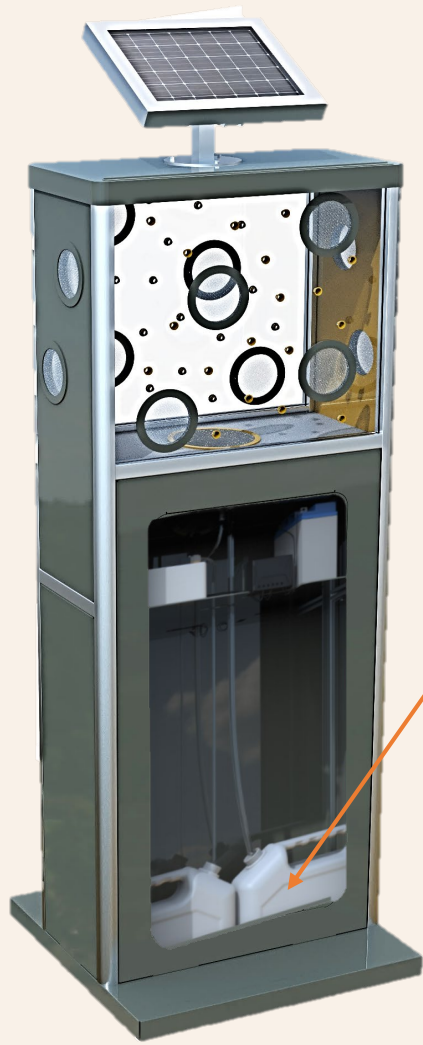
Our solution

A biocontrol system gathering biotechnology and digital solution

SAYENS SATT
CATALYSEUR D'INNOVATIONS



1m40



1- The PIRA® trap

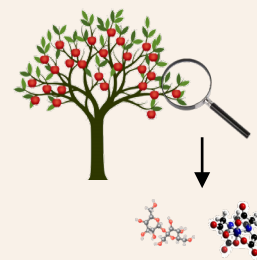


- Autonomous et supplied by the solar panel
- A unique trapping zone attracting only female pests
- 8 years available on field

2- The attractant SAMO®

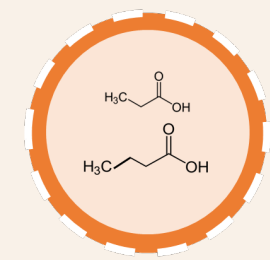


- Composed of **attractant kairomones** present on threatened crops
- **5 years of R&D**



3- The repellent REMO®

- Composed of **repellent fatty acids** specific to fruit flies
- Nontoxic and biodegradables
- Active material **encapsulated**
- **8 years of R&D at CNRS**



The liquid encapsulated
(orchards)



Our solution

A double repellent action to capture fruit crop pests

Combination of a **REMO**[®] repellent to be sprayed on crops and a **PIRA**[®] trap diffusing a **SAMO**[®] attractant to attract insects deviated from the plot



Between 70 and
90% efficiency in
the field



Field trials

Multiples trials have been performed on different crops and in several countries




	2022		2023		2024		
Crops	Olive	Cherry	Cherry	Strawberry	Strawberry	Blueberry	Olive
Country	Spain, Portugal	France	France	France	France	France	France
Protocols	Push&pull alone compared with NTC and Chemical reference	Push&pull alone compared with NTC and Chemical reference	Push&pull alone compared with NTC and Chemical reference	REMO on diffusor form with chemical reference	Push&pull combined with a chemical reference	Push&pull combined with a chemical reference	Push&pull alone
Results	Between 80 to 96% of efficacy	1/3 trial validated, 1/3 trial non-val and 1/3 abandoned	Between 75 to 93% of efficacy	Significant reduction of damages -10%	Significant reduction of damages – 20%	Ongoing	Ongoing







Our solution

A double action to repel pests.

Our Know-how

-  **8 years of R&D** – 4 patents – 1 operating license with the CNRS
-  **Unique product to protect 300 varieties of fruit**
-  Patent-protected formulation of technologies for encapsulating repellent and attractive molecules

Our Forces

-  **No pesticide residue**
-  Response to consumer concerns because it is **non-toxic** for humans and biodiversity
-  **Complies with current and future standards imposed by the French and European governments**
-  Optimization of the time spent on the installation of solutions compared to the existing one



From the lab to the market

A real performance that positions Cearitis with a 6-year technological lead over the competition.



Identification of a **UNIQUE biological solution**
Effective on **3 major pests**



FIELD TRIALS in France, Spain and Portugal
90% validated crop protection



First sales
First sales of POC and agro services

2016

2020

2021

2022

2023

2024

Patent on the formulation of the compound and the method of diffusion in the field

Patent on an innovative method of fly trapping



Cearitis

Partnerships between farmers and the fruit processing industry
Aptunion, Cerifrais, Andros



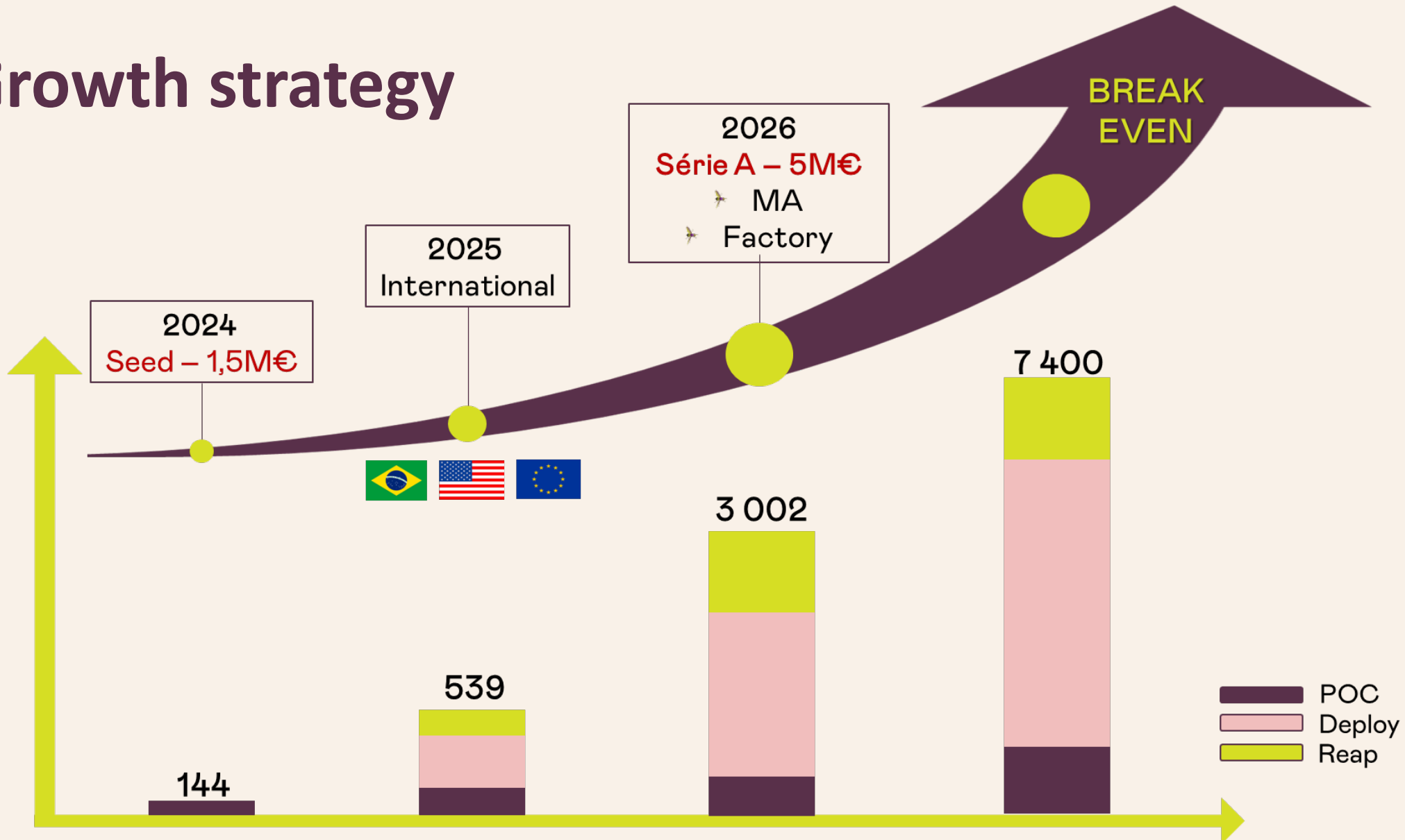
Launch of the Marketing Authorization (MA) procedure
EU, Brazil and US

More than 50% of the dossier is completed, studies ongoing
Deposit planned in 2025





Growth strategy



Partnership with an Agro company of funds

MA delivery



CEARITIS

marion.canale@cearitis.com

06 80 78 58 33

www.cearitis.com

Cearitis est soutenu par



Best product of the Year – Gold



GOLD



TOLTEK[®]



Certis Belchim
GROWING TOGETHER



CERTIS
● ● ● *Biologicals*

GOLD

**TOLTEK**[®]



Certis Belchim
GROWING TOGETHER

CERTIS
● ● ● *Biologicals*



Jan Mostert



Certis Belchim

GROWING TOGETHER

TOLTEK[®]

First biological for control of Take-All disease

Jan Mostert
Head of Biorational Projects

Rodolphe Royer
Global Product Portfolio Manager

TOLTEK

First biological for control of Take-All disease

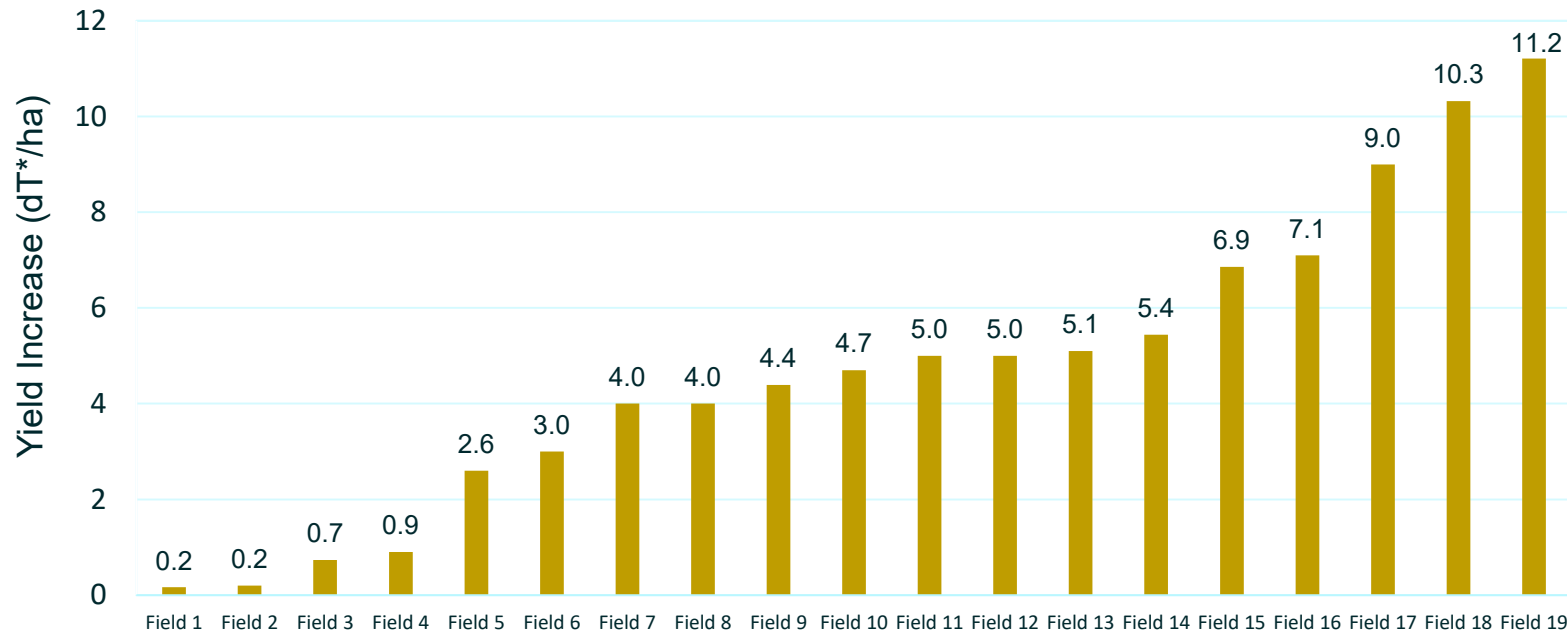
- ✓ Seed treatment for cereal (wheat and barley)
- ✓ Active ingredient: *Bacillus amyloliquefaciens* strain D747
- ✓ Formulation & registration by Certis Biologicals
- ✓ Development & distribution by Certis Belchim
- ✓ Target: Take-All (*Gaeumannomyces tritici*)



TOLTEK

Consistent yield increase

**Yield – Cereals - Trial per Trial results – Take-all infected fields
Toltek + Fludioxonil *Versus* Fludioxonil**



*dT = Quintal = Deciton = 100 kg of seeds

Consistent yield increase

Average + 4 dT / ha

Up to 11 dT/ ha

TOLTEK

More than a product...

> 1500 field trials



Take-All prediction model

Recommending TOLTEK when it is needed



Farmer

<https://certisbelchim.fr/bonneattitude/>



Distributeur

Under final phase of development

TOLTEK

In a nutshell...



Discovery



Certis Belchim
GROWING TOGETHER

Development & distribution



Fermentation, formulation & registration



France (registered), Germany, United Kingdom,
Ireland, Belgium, Austria, Czech republic



> 50 persons involved



Certis Belchim

GROWING TOGETHER



BERNARD BLUM
AWARD 2024

Thank you!

