



# Certis Belchim

GROWING TOGETHER

# Growing For The Future

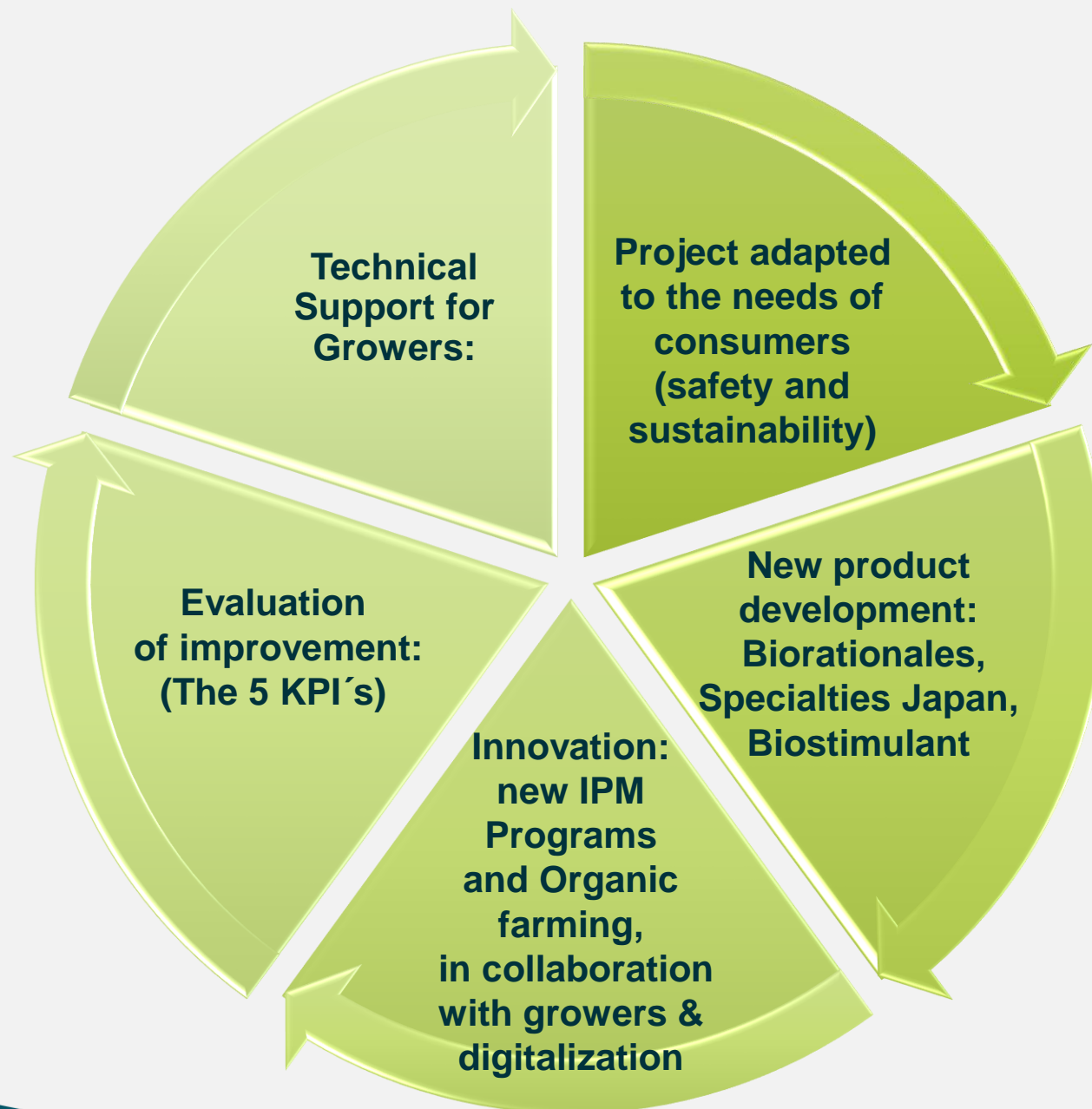
Madrid, 5<sup>th</sup> October 2023

# Certis Belchim G4TF & Food Chain Value Proposition



- To create present and future sustainability of our agriculture, supporting food production based on food security, and on a final benefit for the entire value chain (Food Chain) - growers, retailers and supermarkets, and the final consumer.
- To satisfy the current requirements that European supermarkets and consumers are demanding from our fruit and vegetable producers, and to be a high leader contributor to FFTF European directive.
- The current portfolio of Certis Belchim Europe, based on Biorationals and Chemicals , allows the creation of **"IPM G4TF protocols"** that solve the problem of pests and diseases in different crops, helping our producers and technicians to collect and send fruits and vegetables fully adapted to the requirements of supermarkets and consumers , supporting growers to produce without Residues, reduce the environmental impact, improve biodiversity and be part of EU technology transfer.

**5 elements,  
to develop  
our project**





# Our company, is committed to growers, sustainable agriculture and food safety



- Collaboration with growers
- CRO's & Labs
- Food Chain



- Solutions towards:  
Green deal, & EU strategies



- Food safety & Sustainability

# The BIG Picture (3 levels)



## 1. European Green Deal (approved in 2020)

Set of proposals adopted by EU COM to reduce by at least **55% by 2030 greenhouse gas emissions** compared to 1990 levels and **aiming at making Europe a carbon neutral continent by 2050.**



## 2. Farm To Fork (F2F) strategy: A pillar of the European Green Deal

Introducing of mandatory 50% use and risk reduction targets by 2030 for chemical pesticides via different pieces of legislation (revision of the Sustainable Use Directive (SUD) and orientation of the Common Agricultural Policy (ACP) National Strategic Plans.



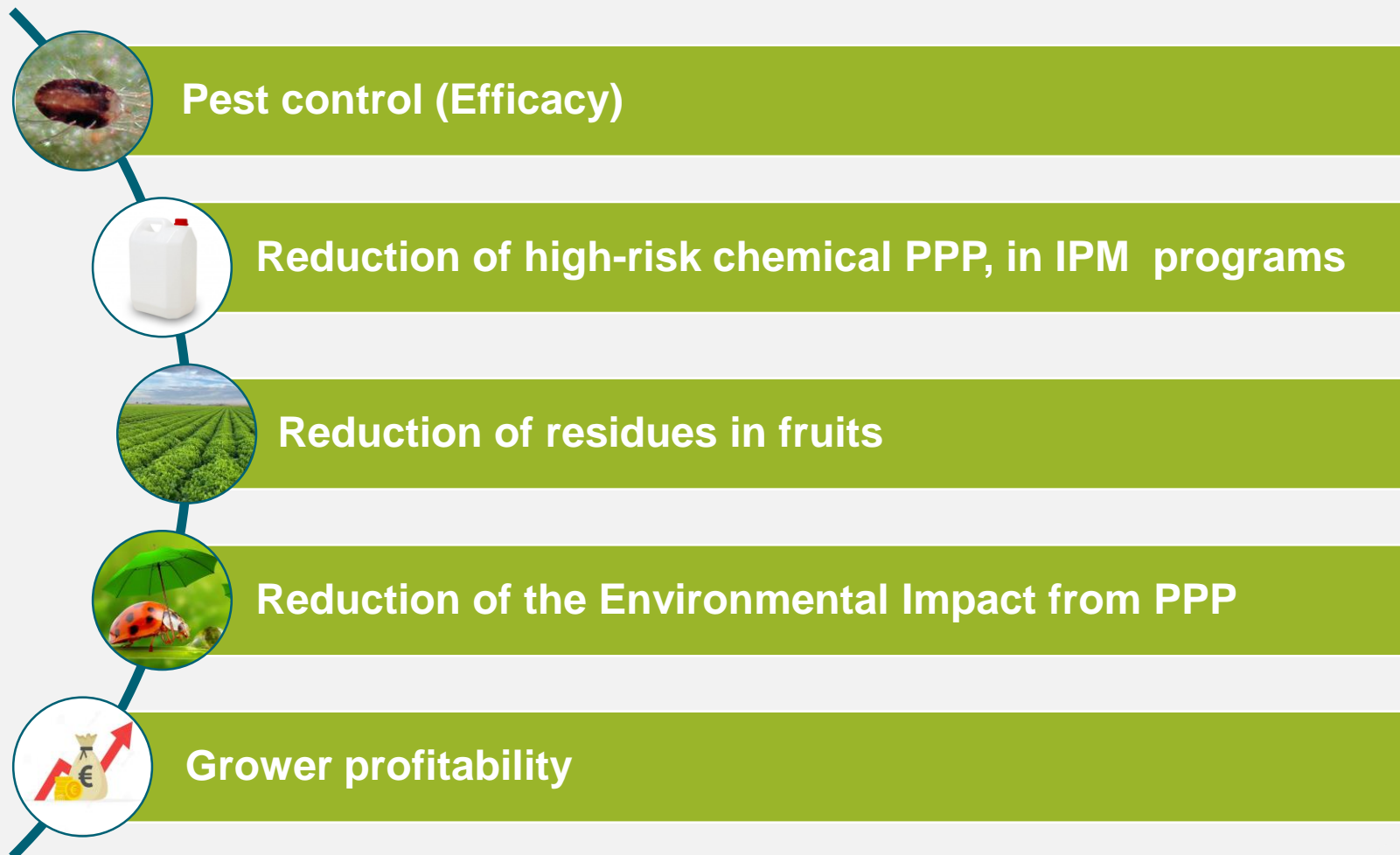
## 3. Sustainable Use Directive (SUD)

**Aim:** to reduce the risk and impacts of pesticide use on human health and the environment.

To achieve this, National Action Plans (NAP's) are adopted by Member States (IPM, reduction of use, indicators, ...)

**Harmonized Risk Indicators** (HRI's) were established to complement indicators at National level and to monitor the progress.

# Key Performance Indicators (5) KPIs





# New IPM Tools: towards sustainable agriculture & reduction of chemical pesticides

## Pheromones:

Matting disruption  
vs Lepidoptera

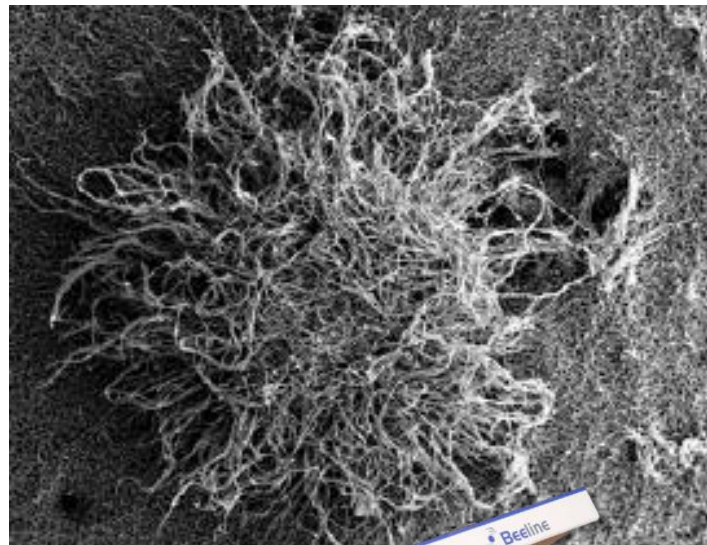


## Attract & Kill: Control of MedFly



## Biorationals:

*Beauveria bassiana* GHA  
vs broad spectrum insects



## Vegetation cover:

improves the structure of the soil and its  
capacity to retain water, and favoring bio-  
diversity and the biological control of pests

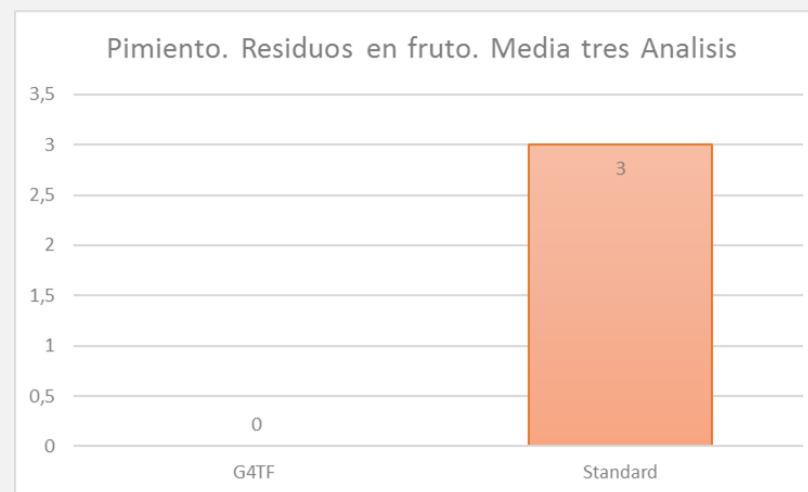
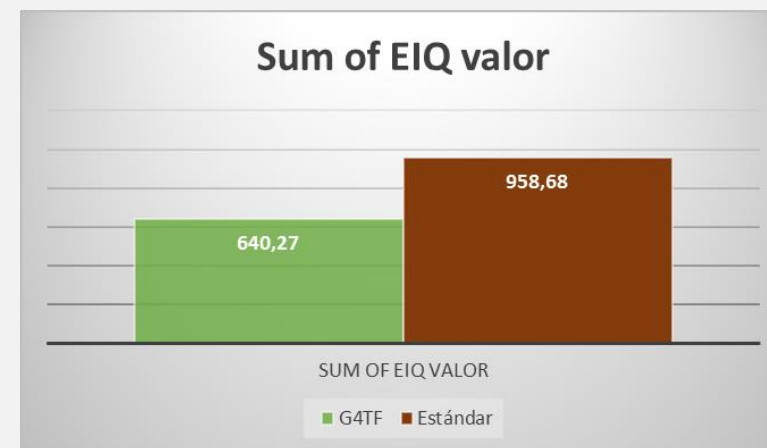




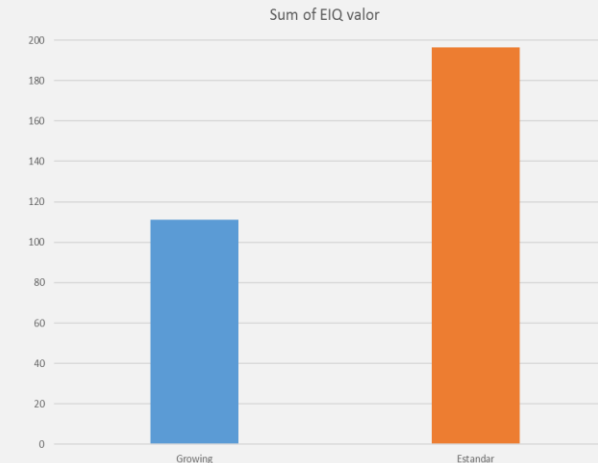
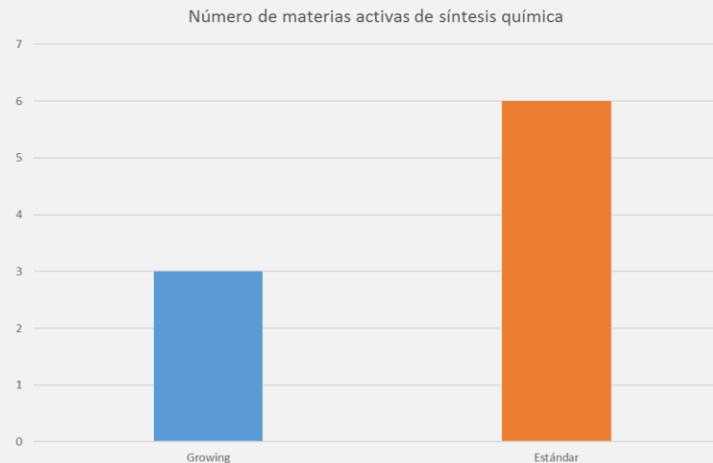
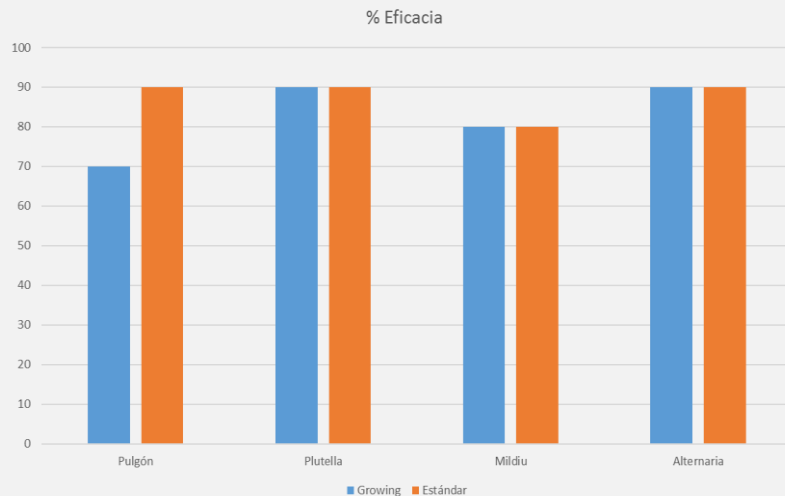
# Results (5) KPIs in perennial crops. CRO's results

KPIs	Lemon (Fino 49)	Mandarin (Orri)	Mandarin (Oronules)	Mandarino Clemenules	Mandarino (Orri)	Olivo (Arbequina)	Olivo (Arbequina)
<b>Efficacy</b>	equal	equal	equal	equal	equal	equal	equal
<b>Reduction of chemical PPP</b>	70%	67%	38%	63%	63%	equal	50%
<b>Reduction of residues in fruits</b>	100%	100%	100%	100%	100%	100%	100%
<b>Reduction of Environmental Quotidien EIQ (program)</b>	67%	48%	21%	99%	93%	2%	17%
<b>Profitability</b>	+14%	equal	equal	equal	equal	+13%	+23%

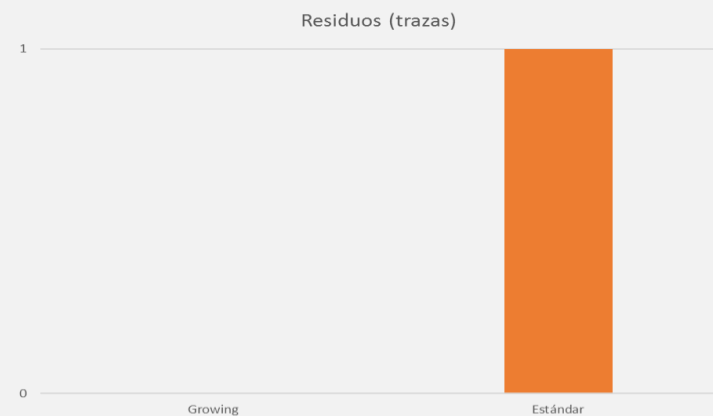
# Results KPI's in peppers. Fully adapted to the new trends.



# G4TF Brocoli. CRIKET KPI's



- Pest & Diseases. Equal efficacy
- 50 % reduction use of chemical products
- No Residues . Food Safety
- 43 % Reduction Enviromental impact



# Results (5) KPIs in vegetable crops. CRO's results

KPIs	TOMATO	PEPPER	CUCUMBER	LETTUCE	BROCOLI
<b>Efficacy</b>	Igual al estándar	Igual al estándar	Igual al estándar	Igual al estándar	Igual al estándar
<b>Reduction of chemical PPP</b>	70%	67%	38%	63%	63%
<b>Reduction of residues in fruits</b>	100%	100%	100%	100%	100%
<b>Reduction of Environmental Quotidian EIQ (program)</b>	67%	48%	21%	99%	93%
<b>Profitability</b>	+14%	equal	equal	equal	equal



# Transfer of Technology: technical support to growers and technicians





# Certis Belchim

GROWING TOGETHER

For more information, visit [certisbelchim.com](http://certisbelchim.com)