



IPM-4-CITRUS IPM-4-Citrus, Final Meeting (19th & 20th December 2022, Nabeul & Hammamet, TUN)



WP4 Transfer and economic maturation


Business Plan Development

Presented by:
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This project has received funding from the European Union's Horizon 2020 Research and Innovation programme under Grant Agreement No 734921.

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EC Booster service application


Action	Date
Service application submission	30/03/2022
Application Approval	31/03/2022
Experts assignment	01/04/2022
1st meeting	15/04/2022




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EC Booster service Steps




Business Plan Development (BPD)

Step - 1 Introducing service delivery	Step - 2 Preparing the Lean Canvas	Step - 3 Preparing the Business plan
METHODOLOGY Collection of information using a structured set of tools, desk analysis, on-line interaction with beneficiaries.	METHODOLOGY Desk analysis, On-line capacity building sessions (2 webinars) with beneficiaries, One-day face-to-face workshop	METHODOLOGY Coaching sessions through on-line interaction with beneficiaries with use of best practices. Desk analysis.
DESCRIPTION (3 tasks) Validation of the services set-up, investigation on expectations and collection of updated information. Prioritization of support through the analysis of received information and readiness/maturity self-assessments.	DESCRIPTION (2 tasks) Introduction to the different sections of a business plan through the Lean Canvas, Javelin Board, Value Proposition Canvas. First draft of the Canvases and their review.	DESCRIPTION (4 tasks) Support in the preparation of the business plan and the roadmap for its implementation. Provision of final recommendations.
DELIVERABLES • Set of guidelines to draft (improve) the business plan	DELIVERABLES • Reviewed Lean Canvas • Reviewed Javelin Board • Reviewed Value Proposition Canvas	DELIVERABLES • D2.1 Business plan (including recommendations to develop it); • D2.2 Roadmap



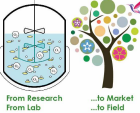
CALENDAR DAYS



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Deliverables: LEAN CANVAS

Manufacturing of a new BT-based Biopesticide				
<p>Problem</p> <p>Top 3 problems</p> <p>1/ 90% of biopesticide market is based on Bt strains which show less efficacy than chemicals 2/ Current Bt production is based on complicated and high cost process 3/ the application of chemical pesticides is not allowed for organic culture</p> <p style="color: red;">Present the problem under the perspective of the farmers!</p> <p>Existing Alternatives</p> <p>1/ Chemical Pesticides (obtained from fossil carbon industry.) 2/ Expensive biopesticides for agriculture and environment</p> <p>Cost Structure</p> <ul style="list-style-type: none"> • Intellectual Property costs • launch costs (infrastructure, salaries, product development) • variable costs (product updates, maintenance, debugging, etc.) • marketing costs (commercials, online ads, social media presence) • Operating costs 	<p>Solution</p> <p>1/ Alternative Bt strains: (Btk, BLB1 and LIP) with better yield and efficacy 2/ new simplified process for BT production 3/ new BT based biopesticide with proven safety</p> <p>Key Metrics</p> <p>1/ strain registration/lab testing; safety-efficacy 2/ number of units sold per year 3/ number of compliant production batches per year 4/ increase of the turnover per year</p> <p style="color: red;">New contracts for custom manufacturing</p>	<p>Unique Value proposition</p> <p>new innovative cheaper, user friendly biopesticide product that... *helps farmers protecting their cultures *reduce harmful effect of plant pests *Increase production yield while ensuring quality & safety</p> <p>High level Concept</p> <p>An ecofriendly BT based product that protects plants with high efficiency and without being harmful to health</p>	<p>Unfair advantage</p> <p>*Patents (early stage) *Industrial secret *Exclusive contract for BLB1 *Formulation on-demand (liquid/dry)</p> <p>Channels Path to customers</p> <p>1/ distributors 2/ B to B 3/ professional associations</p>	<p>Customer Segments</p> <p>Farmers</p> <p>Early Adopters</p> <p>Organic farmers</p>
<p>Revenue Streams</p> <p>Income from selling the product Custom manufacturing</p>				

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Deliverables: Unique value proposition

ad-lib

VALUE PROPOSITION TEMPLATE

Our new innovative cheaper, user friendly biopesticide product

help(s) farmers

who want to treat crops

by reducing High level of pesticides residues and high costs

and ...increasing efficiency and safety


Products and Services: new innovative cheaper, user friendly biopesticide product
 Customer Segment: farmers
 Jobs to be done: reducing High level of pesticides residues and high costs and a customer pain
 Verb (e.g., reducing, avoiding): reducing
 Verb (e.g., increasing, enabling): ...increasing and a customer gain




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Deliverables: BP structure V00




An initiative of the European Commission

The Business Plan Structure

KER Form for Name of the KER: New BT-based biopesticide

Problem	Each year, more than 30% of the world's plant production (forests, market gardening and industrial crops) are destroyed by phytophagous insects. Indeed, global losses caused by crop pests and pathogens are estimated at several billion dollars. Citrus plants are subject to various pests (<i>Phyllocnistis citrella</i> ; Prays citri) of citrus and diseases (Virus of Tristeza, <i>Phytophthora citrophthora</i> and <i>Phytophthora parasitica</i> , Fumagine) due to infestation by aphids, whiteflies and scale insects. The foliage is used as a food plant by the Lepidoptera larvae (butterfly and moth) such as the Geometridae Common Emerald (<i>Geometra aestivaria</i>) and Double-striped Pug (<i>Gymnoscelus rufifasciata</i>), the Arctiidae Giant Leopard Moth (<i>Hypercompe scribonia</i>), <i>H. eridanus</i> , <i>H. icasia</i> and <i>H. indecisa</i> , many species in the family Papilionidae (swallowtail butterflies), and the Black-lyre Leafroller Moth (<i>Ctenopoma lactatana</i>), a tortrix moth. In particular, these pests are capable of defoliating entire nursery groves or damaging young leaf flush on more mature trees.
	In order to protect crops and preserve public health, chemical insecticides have been used on a massive scale. To avoid the impact of these chemical on health and environment, farmers must use the biological pesticides which are based at 90% on <i>Bacillus thuringiensis</i> . However, these latter are more expensive than the chemicals due to the complexity of the technology applied for their production. Furthermore, as for chemical products, the development of insect resistance is a big problem for Bt products. That may thus be interesting to develop an alternative in case of resistance issues in place of the products available in the market.
	Interestingly, one of the pests that have been included by the EC in list of the 20 priority pests that present the most serious economic, environmental and social threat to EU countries is Spodoptera frugiperda. This pest is a lepidopteran insect that can be treated by Bt based products.
	ESOF Workshop: By encouraging discussions about the introduction of biopesticides into agricultural practices, the workshop raises awareness of the risks of chemical pesticides,



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From Research From Lab ...to Market ...to Field

Business Plan completion

- EC Booster recommendations
 - ➔ consortium to define the IP rules for exploitation
 - ➔ to complete the financial study



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From Research From Lab ...to Market ...to Field

Business Plan completion

- Meeting MediS/Wiki start-up: missing information listed and responsibilities shared
- Meeting MédiS/WSU/L.Fillaudeau: check the progress and clarify some technical aspects
- Training of WSU personnel by L. Fillaudeau about the process
- Improvement and completion of the V00 by S.Rouis and WSU



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From Research
From Lab

...to Market
...to Field

Business Plan completion: IPR

- Focused group discussion december 2nd, 2022
- MédiS/WSU/CBS/BIPCA/USJ
- Objectives:
 - Align views on the IP value stream developed by the IPM4CITRUS project
 - To agree on the financial assumptions to be used in the business plan.



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From Research
From Lab

...to Market
...to Field

Business Plan completion: IPR

- Focused group discussion december 2nd, 2022
- Tools:
 - TPMP Matrix tool (copyright @M.Khanfir)
 - Scientific publications
 - EC Booster material
 - Deliverables generated by secondments from/to BIPCA
 - Deliverables describing P&ID (WP2&3)



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From Research From Lab ...to Market ...to Field

Business Plan completion: IPR

- Focused group discussion december 2nd, 2022
- Outcomes:

TPMP Matrix more adapted to our project

- ➡ still financial part has to be completed and the production capacity increased
- ➡ discussion about the IPR exploitation possible scenarios and challenges
- ➡ group meetings have to be planned to complete the work after FM and before end



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From Research From Lab ...to Market ...to Field

MEDIS STORY: TO BE CONTINUED AND SHARED

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