



ABIM[®]
Annual Biocontrol Industry Meeting[®]




Antofénol
Solutions  Innovations  Environnement

THE EMERGING LEADER IN CIRCULAR BIOPESTICIDES

HOW TO USE AGRICULTURAL BIOPRODUCT TO DEVELOP BIOPESTICIDES

ANTOFÉNOL FIRST IDEA

Born in a glass of wine

Question: how to win more money for a wine maker?

- Valorisation of an agricultural waste
- Find a market of interest
- Find the right molecules
- Find a system in order to extract without organic solvent



MICROWAVE TECHNOLOGY EXTRACTION

Efficient chemical-free solvent extraction

Principle

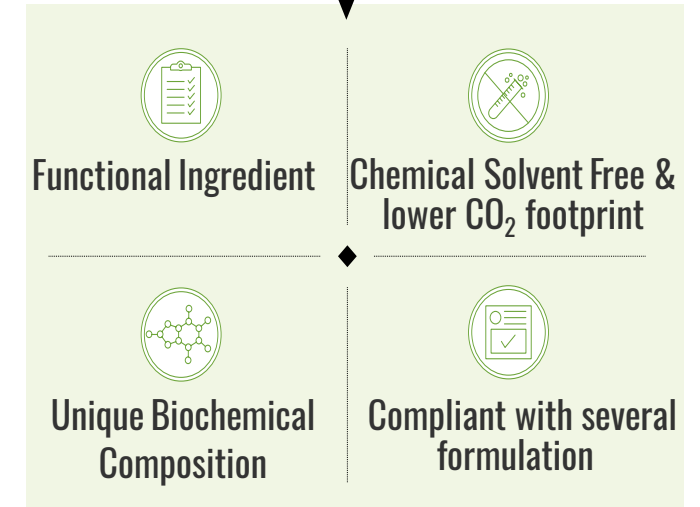
- Electromagnetic waves act on molecules (e.g. water), increasing the cells' internal temperature and pressure, as well as altering the cell walls
- These effects allow the efficient release of the intrinsic compounds of the plant cell

Antofénol's Capabilities

- Since 2014, Antofénol has acquired huge experience scaling up of microwave technology
- Antofénol use microwave at industrial-scale with 915MHz frequency
- With several hundred protocols carried out on its 450L reactors, Antofénol masters all the parameters allowing the production of Antoferine



UNIQUE TECHNOLOGY



MICROWAVE TECHNOLOGY EXTRACTION

A unique biochemical profile based on our feedstock & extraction process

Name : **Antoferine**

Origine : France

Physical state : powder

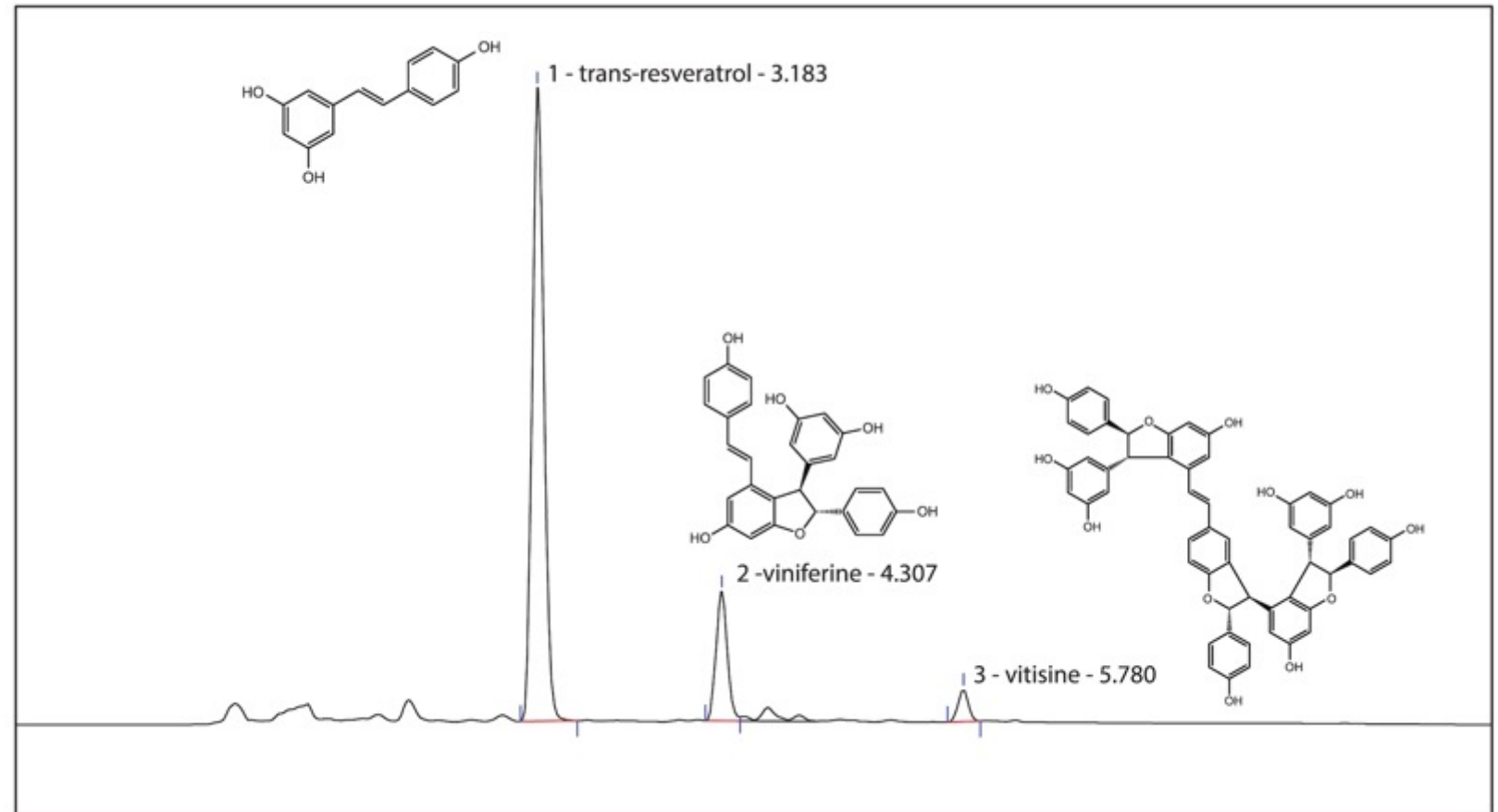
Colour : brown

Odour : bread

Composition : vine wood

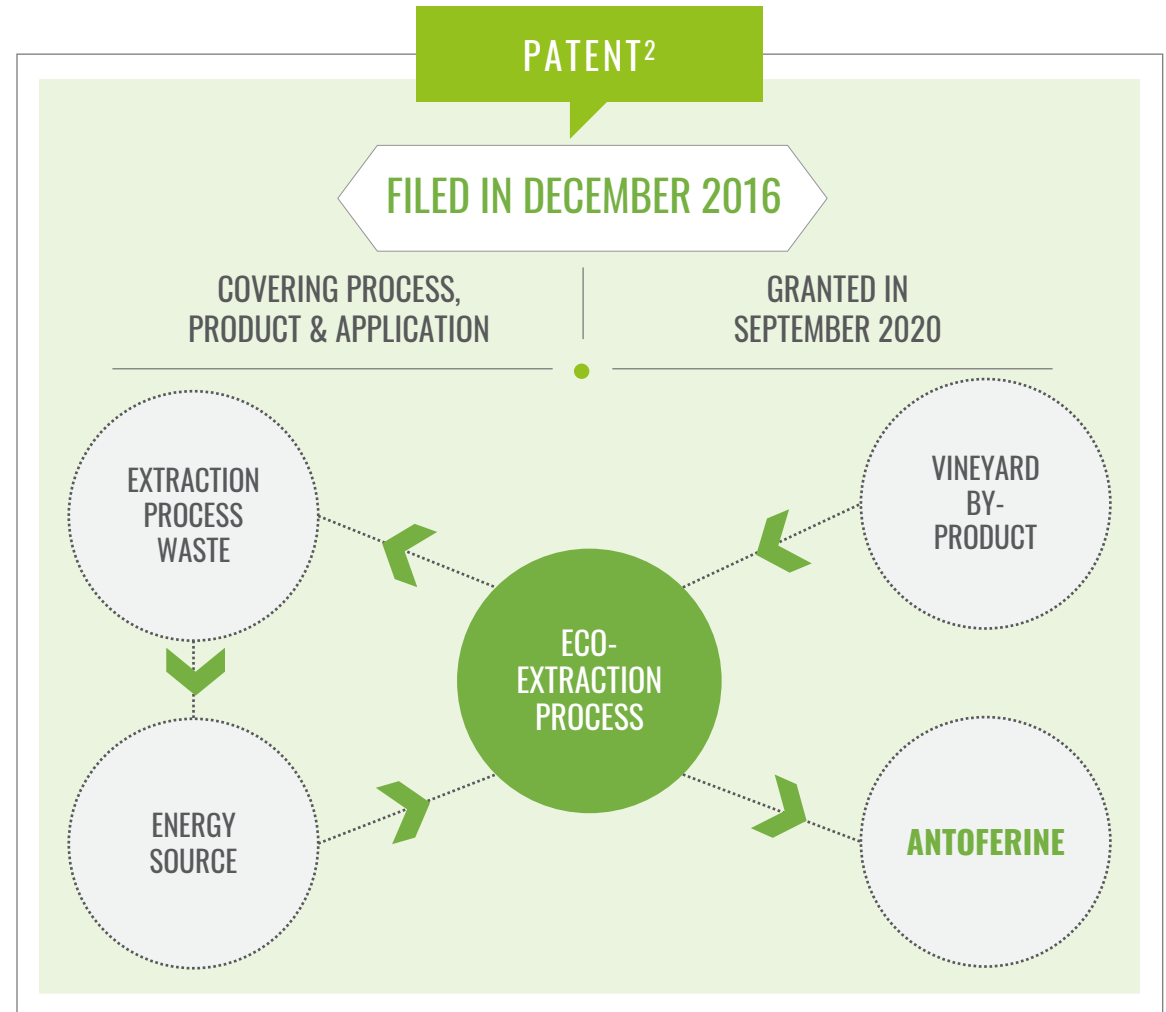
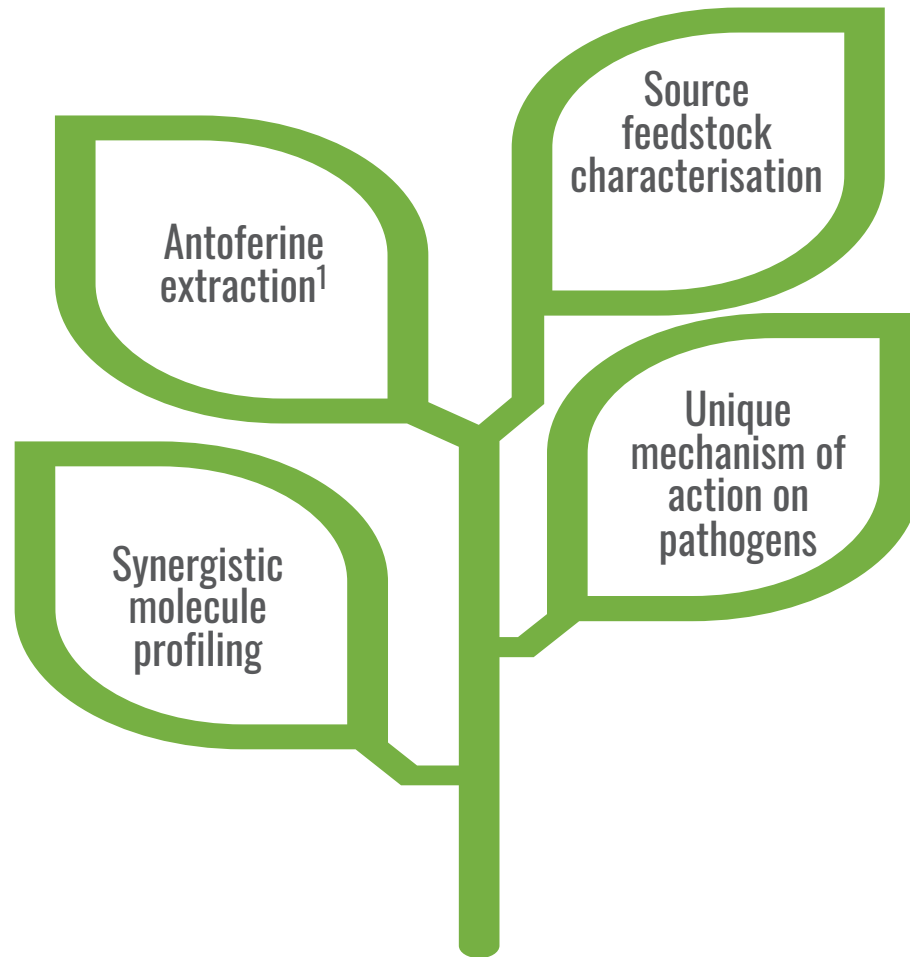
Activity : antifungal

Active molecules : polyphenols



IP FOUNDATION & STRATEGY

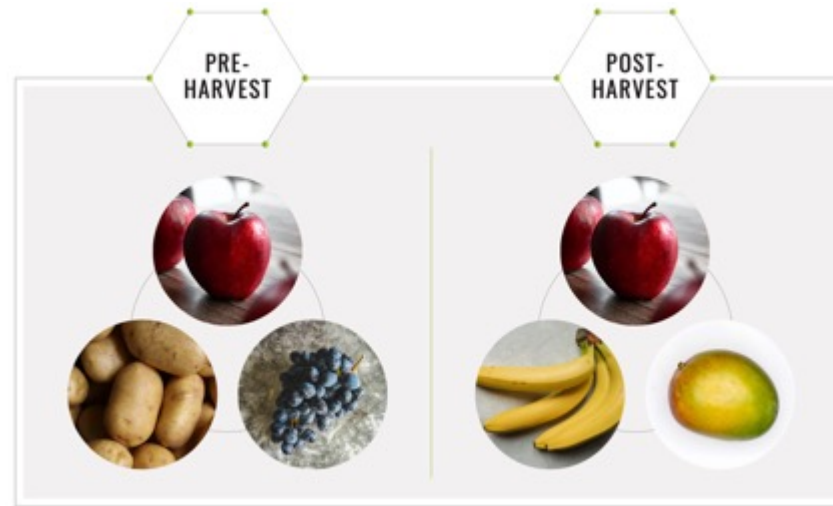
Feedstock, know-how, eco-extraction, usage – supported by patents and trade secrets



¹ patented; ² France FR 166320500, World WO2018115296

OUR ANTIFUNGAL SOLUTION : ANTOFERINE 100% NATURAL 'BIOFUNGICIDE' ...

Cost-competitive, effective, safe, circular, drop-in biofungicide



Growing our R&D pipeline for other crops and sourcing active component from other by-products



OUR "SAVOIR-FAIRE"

- A NATURAL ANTIFUNGAL SOLUTION
- A CHEMICAL-FREE EXTRACTION
- A UNIQUE PATENTED EXTRACT
- USING CIRCULAR ECONOMY APPROACH

ANTOFERINE

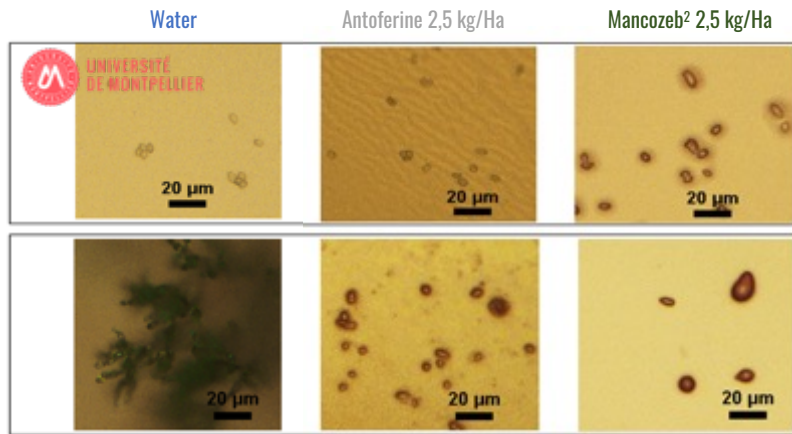
- USING VINE DEFENSE MECHANISM
- METHANOL-FREE EXTRACTION
- EFFICACY PROVEN ON 10 PLANT TYPES
- FROM VINE BY-PRODUCT

CUSTOMER BENEFITS

- SAFE TO HANDLE / APPLY
- POST- AND PRE- HARVEST EFFICACY
- COST-COMPETITIVE
- DROP-IN APPLICATION

ANTOFERINE EFFICACY VALIDATION¹ - APPLE CROP

From lab to field, in post- and pre-harvest, Antoferine shows equivalent efficacy over 4 agricultural seasons

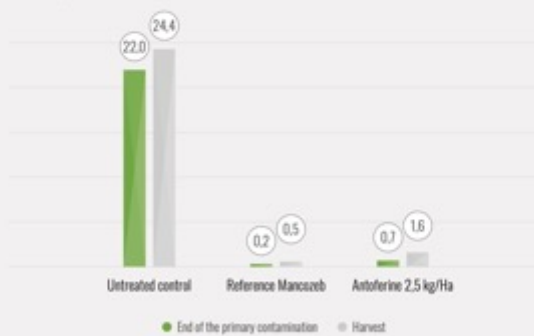


SUMMARY

- INHIBITION OF THE GERMINATION OF SPORES
- FIELD TRIALS DURING 4 SEASONS DEMONSTRATES SAME PROTECTION AS MANCOZEB AT SAME DOSE
- IN POST-HARVEST STRESS ('INOCULATED') CONDITIONS, SHOWS PROTECTION OF 80% OF APPLES

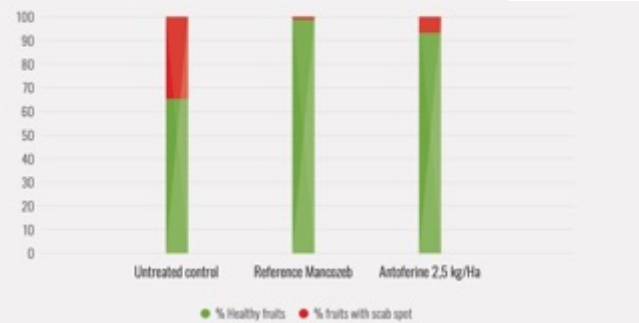
SCABBED SHOOT

FREQUENCY OF SCABBED SHOOT AT TWO STAGES OF NOTATION



SCABBED FRUITS

PROPORTION OF SALEABLE FRUIT



APPLE *BOTRYTIS CINEREA*³



NEGATIVE CONTROL (WATER)



ANTOFERINE (30G/L)



POSITIVE CONTROL (SWITCH®)

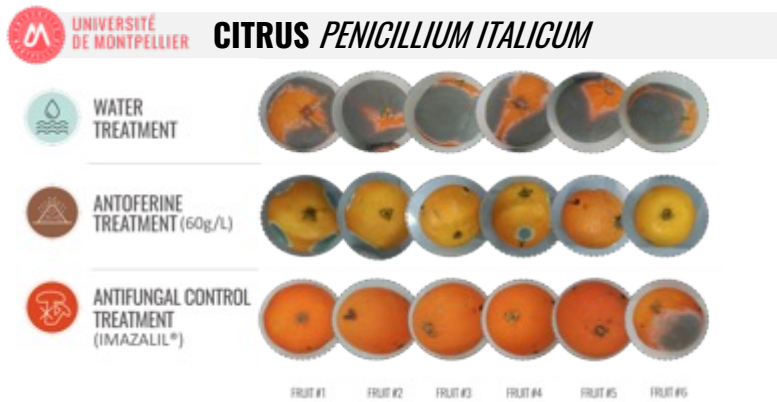


FRUIT #1 FRUIT #2 FRUIT #3 FRUIT #4 FRUIT #5

¹ independent tests conducted by IFPC, Agroscope, Université de Montpellier; ² Mancozeb banned in EU since 2021; ³ in viticulture commonly known as "botrytis bunch rot", in horticulture usually called "grey mold"

ANTOFERINE EFFICACY VALIDATION¹ - OTHER CROPS

Antoferine shows equivalent efficacy on several pathogens which represent different market segments



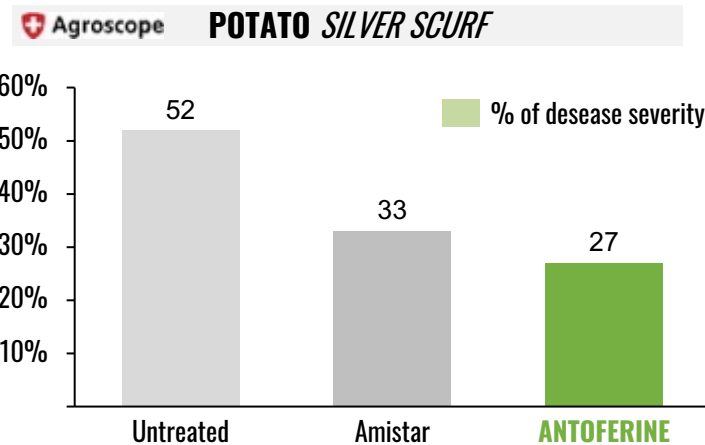
COPPER 100% EFFICACY
ARMICAB 94% EFFICACY
ANTOFERINE 91% EFFICACY



ANTOFERINE 86% EFFICACY
COPPER 78% EFFICACY
ARMICAB 72% EFFICACY



NO TREATMENT + ANTOFERINE



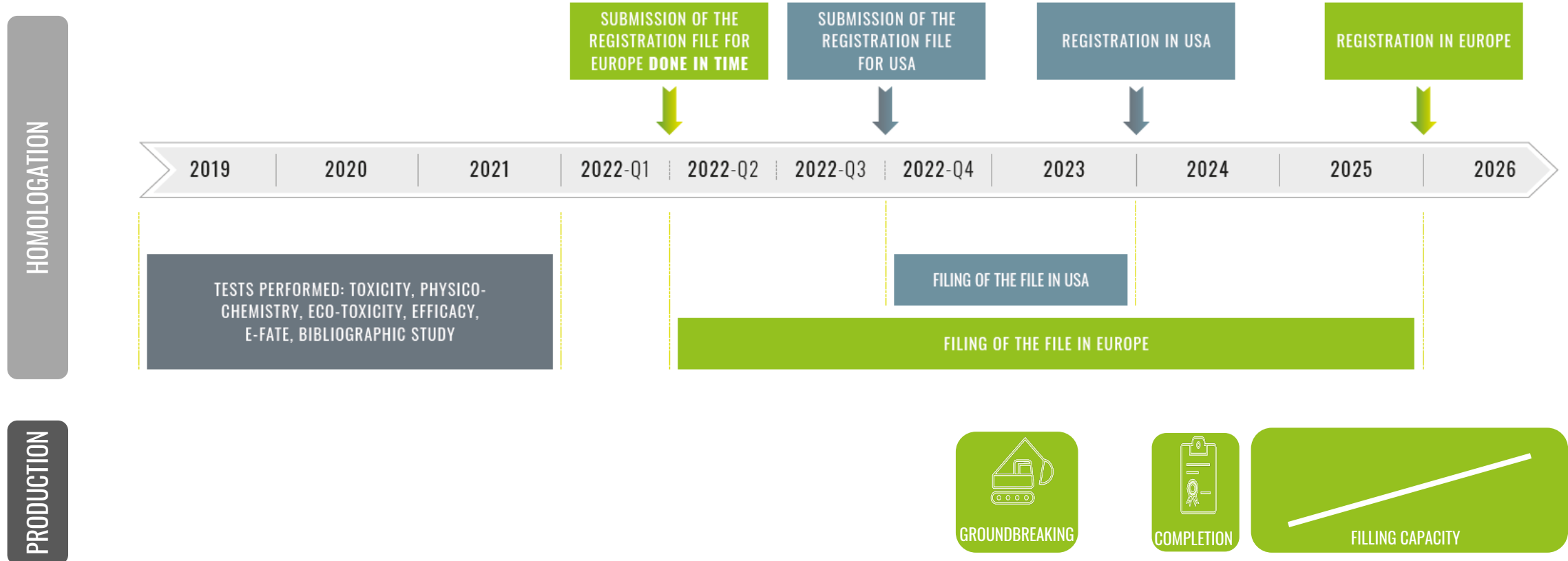
SUMMARY

- A PREVENTIVE PRODUCT
- ESTABLISHED GREENHOUSE & FIELD PROOF OF EFFICACY (1-2 TRIALS PER CROP)
- WITH BROAD RANGE OF PATHOGEN EFFICACY (MILDEW, BLUE & GREEN MOLD, COLETOTRICHUM...)

¹ independent tests conducted by Vegepolys, Staphyt, IFPC, Agroscope, Université de Montpellier

OUR COMMERCIAL SCALE-UP ROADMAP

The heavy lifting has already been completed for regulatory approvals



FACTORY CONCEPT

A unique industrial microwave extraction units



SUMMARY

- 6 150 M², 53M€ OF INVESTMENT, LAUNCH IN 2024
- CAPACITY TO VALORISE 14 000T OF BY PRODUCT, 1 TO 2T PER DAY OF ANTOFERINE
- 80 EMPLOYEES



FANNY ROLET

CEO & FOUNDER

f.rolet@antofenol.com

+33 (0)6 10 73 34 26

THANK YOU!