NDD Natural Plant Protection by UPL

Company transformations from chemistry to biology

- Ezio Costa, NPP BU Leader

Annual BioControl Industry Meet, Basel, Switzerland. 25th October 2022



Our Purpose drives everything we do

OpenAg[®]

Reimagining Sustainability with an open network to create sustainable growth for all – no limits, no borders. Our Mission

We are changing the game

Making every single food product more sustainable

Our Challenge

UPL

People	Planet	Patterns	Pests
Worldwide, 500 million smallholder households live on less than \$2 per day.	Agricultural activity is the source of 30% of global Greenhouse Gases.	Each year, 1.3 billion tons of food goes to waste globally.	Rice blast is responsible for ~30% of rice production losses globally — the equivalent of feeding 60 mn people.
World bank	Farm Carbon Toolkit	FAO	FAO
By the next century, 11bn people will need to eat 33bn meals per day.	Agriculture accounts for 70% of water usage worldwide.	Agricultural production is limited by the increasing scarcity and diminishing quality of land and water resources	A single swarm of locusts can eat the same as 35,000 people every day.
WRI	OECD	FAO	World Bank



Food security

Increase food security, supply & safety of food systems

Economic & social

Build economic resilience for farmers & farming communities

Environment

Reduce environmental impacts



The world in perfect balance

At NPP, we reimagine the micro impacts of biosolutions to create a macro impact – contributing in measurable ways to food security, farmer resilience and the environment.

Global Innovation Footprint



9 Manufacturing Sites

- Cerexagri, France · Goemar, France
- NPP, India NPP, France
- GBM, Mexico Stimuplant, South Africa
- Veriosis, South Africa

🤷 6 Labs

- NAT Lab, Cary, USA Guelph lab, Canada
- GBM, Saltillo, Mexico · Veyrios, South Africa
- Laboratories Goemar, St. Malo & Pau, France
- NPP Bangalore, India

7 Experimental Centres

- Abasolo, Mexico Ituverava, Brazil
- Pereira, Brazil Shray Hill, UK
- Karnal, India Pune, India
- Karawang, Indonesia

One global brand





BioSolutions portfolio



BioControl and Plant & Soil Health categories

Biocontrol

Focus on Biocontrol Solutions



Weed Management Natural herbicides to protect your crop

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Disease Management Natural fungicides for healthier crops

Pest Management Natural insecticides with low ecosystem impact

Soil biocontrol Natural protection from diseases and pests

Plant & Soil Health

Focus on Plant & Soil Health Solutions



Nutrient availability

Naturally boosting how your crops use nutrients



Water Management Natural products for more yield with less water



Soil Health

Naturally improving your soil for better crops



Seed & plant stimulation Natural help through the plant life cycle for better yields



Abiotic Stress Management

Naturally maintaining crops in extreme conditions



Integrated crop health

Proactive, protective, profits

Our pioneering programme integrates bio and conventional solutions to improve crops around the world, meaning greater efficiencies, yields and profits – delivered more sustainably.

Integration Pioneers

pronutiva®

Crop Protection + BioSolutions

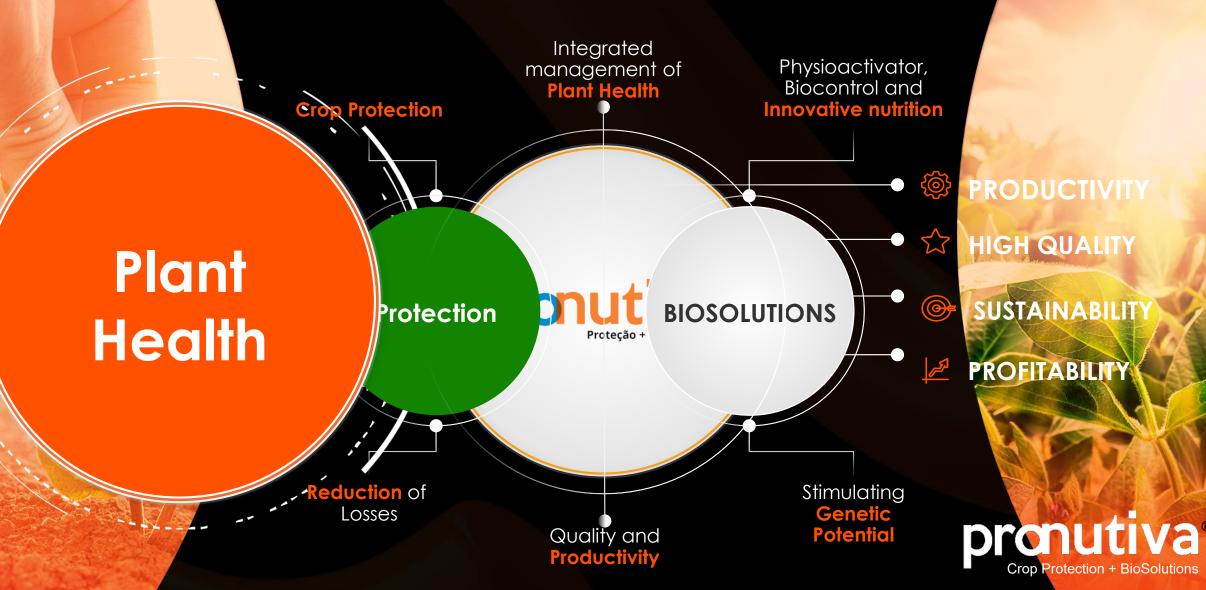


Since 2009, UPL offers integrated crop health solutions through the ProNutiva[®] programme – combining targeted conventional crop protection and Biosolutions for increased crop and soil health. Higher yields, healthier crops with lower residues. Available through UPL's global distribution network. ٠

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Plant Health is: Pronutiva

An EXCLUSIVE UPL PROGRAM



Examples & Application: Apple Program

= PGR's



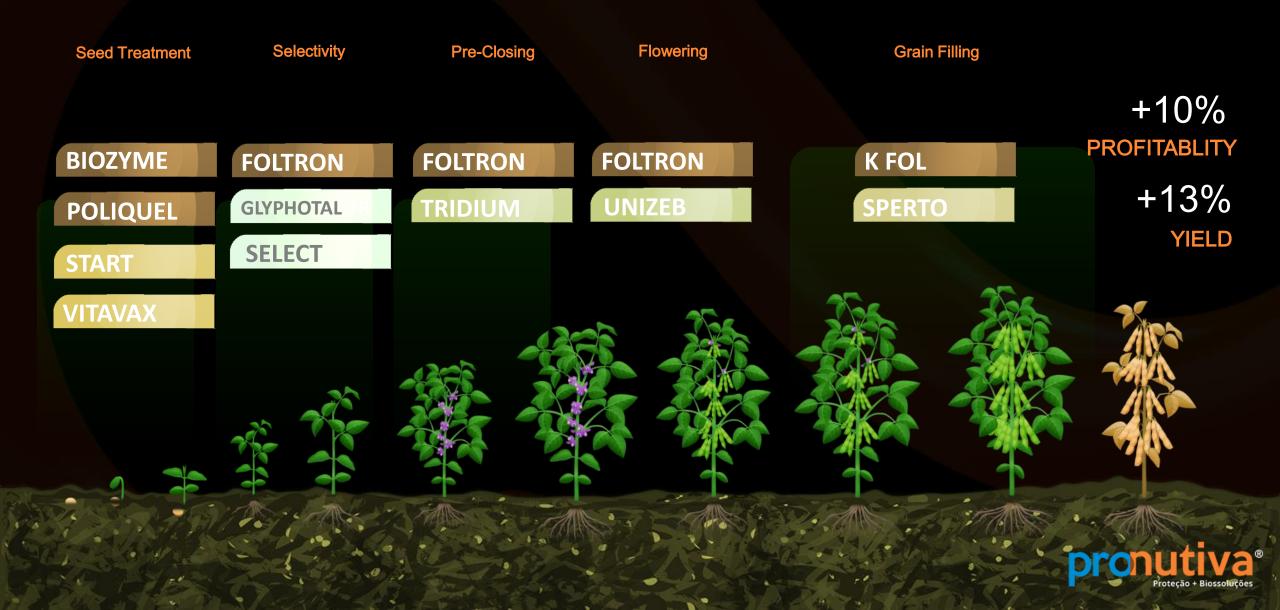
+15% Average Yield +34% Average Russet +13.5% Average Color -25% Average Residue Residue 51 59 Captan 80WG / Malvin (Captan) Promalin (gibs + BA6) Syllit. WP (Dodine) Topper (3,5,6 TPA) Pyrus (Pyrimethanil) Vaxiplant (Laminarin) Colorado (GA + Mn + Zn) BM (GA + B + Mg + Mo)DiPel (Bacillius thuringiensis) Carpovirusine Super Gold (Organosilicone)

= BioStimulant

= Fungicide = BioControl

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Examples & Application: Soybean





PURPOSE

Focus



