



We create chemistry

Breakout Session Sub-region South

Our way forward
10 October 2019



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Sustainable Innovation to fulfil southern farmers' needs

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1 Provisia®

SUSTAINABLE INNOVATION TO FULFIL
SOUTHERN FARMERS' NEEDS

Complementary to Clearfield®, the innovative Provisia® technology ensures excellent post emergence control of grass weeds, as well as strong application flexibility.

Provisia® reaffirms BASF strategic commitment to deliver rice growers new tools that help manage daily challenges, safeguarding quantity and quality of harvest with advantages for the whole value chain.

Breeders



- Develop new varieties

Distributors



- Able to deliver new solutions to growers

Growers



- New trait to control ALS-resistant grasses and red rice biotypes
- Simple, convenient weed control
- Increased yield and production efficiency

Mills



- Off-type free rice
- Weed-free rice
- Increased yields
- Increased milling efficacy



2 Revysol®: Designed to Outperform

Revysol®: Fungicide Innovation

Farmers are striving for less complexity in farm management. Modern agriculture requires innovative tools like Revysol®, offering greater application flexibility and easier planning to achieve higher yields and maximize their profit.



**Max. yield,
quality and profit**



**One solution
for the farm**



Easy planning

REVLUTION:
Simplicity,
healthier crops,
consistent yields



SUSTAINABLE INNOVATION TO FULFIL
SOUTHERN FARMERS' NEEDS



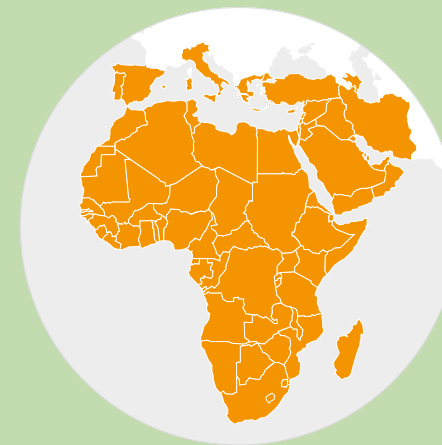
Tomatoes



Lettuce



Melon





3 Tessior®

SUSTAINABLE INNOVATION TO FULFIL
SOUTHERN FARMERS' NEEDS

**Tessior® System – the first and only
value preserving, reliable dual protection
against GTD**

Increase health & life expectancy of the
vineyard by:

- Ready to use formulation
 - No additional water needed
- Targeted precise application
 - To minimize the environmental impact in the vineyard
 - Flexible application under typical winter weather conditions
- Reduced workload and increased efficacy
- Maximize yield and quality
- Guarantee homogeneous harvest and quality from plants of same age
- Less investment for uprooting and replanting



Prune. Protect. Preserve.



4 Fibermax®

PARTNERSHIP PROJECTS
ALONG THE VALUE CHAIN

CSF (Certified Sustainable FiberMax®)

Cotton Production with Sustainable Farming Practices



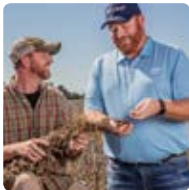
Optimizing
water use



Optimizing
crop protection



Energy Saving
Operation



Staff's
well-being



Safe application
of crop protection
products



Landscape
Management
Soil Fertility
Management





5 Olive Oil - Best agricultural practices

PARTNERSHIP PROJECTS
ALONG THE VALUE CHAIN

A tradition that should not be lost

An initiative of BASF, that in collaboration with Gaia Epicheirein, Haifa, Netafim and Pieralisi, has started an holistic approach of olive growing by creating innovative “demo farms”, which are visitable and are aimed to point out the good agricultural practices to ensure an effective crop management.

1

SET-UP 6 DEMO OLIVE GROVES ACROSS GREECE
– BEST AGRICULTURAL PRACTICES

2

SOLUTION PROVIDER APPROACH VIA PARTNERSHIP
WITH HAIFA, NETAFIM, GAIA, EPIXEREIN & PIERALISI

3

COLLABORATION WITH KEY PROFESSIONAL BODIES

More than

30

partners in 8
different countries

Founded

in 2002

Tenuta
Darola

More than

20 farms
spread across Europe

More than

2,500

visitors per year

6 Tenuta Darola - Rice Farm Network

PARTNERSHIP PROJECTS
ALONG THE VALUE CHAIN

With dozens of experts in **8 European countries**, the Farm Network is a BASF partnership that involves a varied range of professionals. Universities, Research Institutes, NGOs, and Technical Vehicle Companies collaborate together to increase the quality and quantity of agricultural production processes, while safeguarding biodiversity, water, and natural resources, and respecting the operator and consumer.

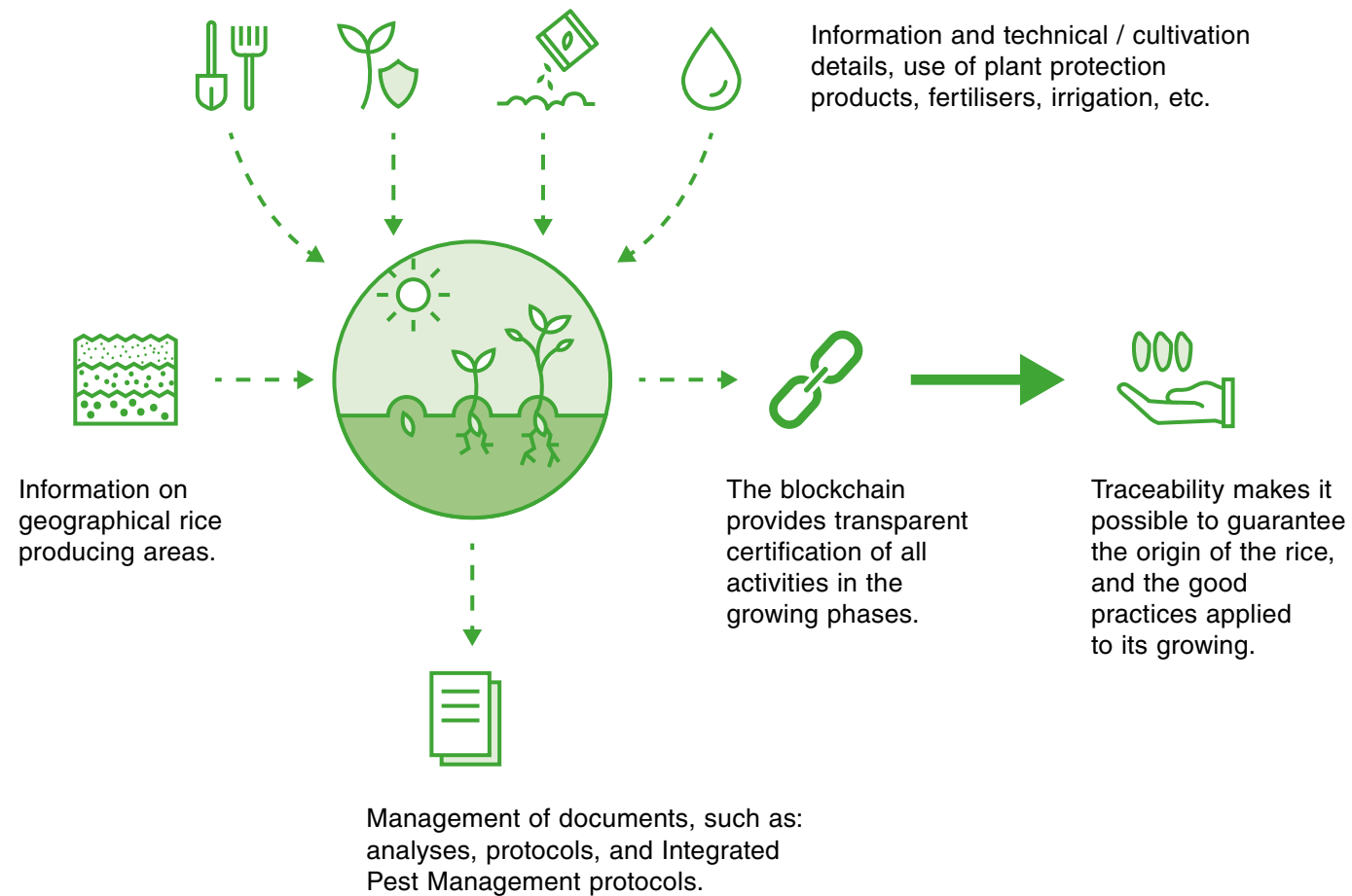
On the Darola Estate, the Farm Network concentrates on excellence in rice growing, and on how this centuries-old tradition can balance the producer's profitability, quality of harvesting, and respecting the operator, consumer and environment.

The actions promoted by BASF and its partners, aim to safeguard the profitability of rice growing, in what is now a globalised competitive arena.

Partners:

tecnoSEED





7 “Riso Chiaro” blockchain project

DIGITALIZATION
& SUSTAINABILITY @ E-APE/S

In partnership with a specialized digital start-up **Ez Lab** and the rice grower **Tenuta Darola**, **BASF's Farm Network**, the first blockchain project for rice production in Italy that traces data from the rice grain to sowing and harvesting, providing transparency from the grower to the end-consumer.

BLOCKCHAIN: TRACEABILITY AND CONTROL FROM SEED TO TABLE

Growing



Harvesting



Storage



Retail



Final consumer



About Ez Lab

Ez Lab is an innovative start-up company, which specializes in advanced digital solutions for the smart agri-food sector. It has developed AgriOpenData, a blockchain traceability platform. Ez Lab is the only Italian company to date to be granted access to Thrive, a worldwide business incubator in the agri-food sector, based in Salinas, California. The company was founded in 2014 in Padua by Massimo Morbiato, and is currently based in the StartCube Galileo Visionary District, the business incubator of Padua University, with branch offices in San Francisco, USA and Reims, France. For more info: www.ezlab.it.

About Tenuta Darola

Tenuta Darola is part of BASF's FarmNetwork and one of Italy's leading quality rice growers, with more than 1,000 hectares of land farmed by the Coppo-Garrione group of enterprises. The company is rooted in the history of the Piedmont region and is a genuine trendsetter for rice growing in that part of the world. Tenuta Darola has a consolidated success story in terms of the size of the business and, even more importantly, is in the avant-garde in its technical and technological approach.



Partnership Project

Hort@ developed an Interactive Decision Support Systems (DSS) for sustainable agriculture and precision farming

From Research to practical use:
SIMPLE, ROBUST AND USER FRIENDLY.

Decision Supporting Systems (DSS) allow farmers and technicians to take better decision in terms of crop protection product choice and spray timing thanks to disease forecasting models, that take into account weather conditions and crop specific data.

BASF, thanks to the partnership with Hort@ can provide big, medium and small farmers with direct access to bulletins containing in-time technical advice.

In partnership with **25** distributors this service reaches around **70** farmers directly and more than **2000** via bulletins. The initiatives are growing in other countries such as Spain in the region of La Rioja on grapes.



Hort@ is a spin-off of the Università Cattolica del Sacro Cuore, born in 2008 and providing highly-specialised services, on a national and international level, in the field of crop production. The aim is to increase the competitiveness of agricultural and agroalimentary companies. Hort@ is a permanent platform for enhancing results from research in the agroalimentary sector through:

- The development of decision support systems (DSSs) for sustainable crop management based on new Information & Communication Technologies (ICTs)
- The transfer of technological innovation to production areas at a national and international

level, in the sectors of intensive and extensive farming, agroenergetic production, quality brands, agroalimentary supply chains, with particular reference to productivity, environmental sustainability and food safety.

- The design, development and creation of new production itineraries and new products/technical means to put on the market.

For more info: www.horta-srl.it



9 #HAPI: Africa & Middle East

DIGITALIZATION
& SUSTAINABILITY @ E-APE/S

@Horta developed an Interactive Decision Support Systems (DSS) for sustainable agriculture and precision farming

#HAPI is a project to support Egypt's tomato small scale farmers and retailers. The cornerstone of the project is to adapt precision farming technology in a form of an early disease warning system (EDWS) to help farmers, who often suffer from lack of know-how cultivation practices, to increase tomato productivity with real-time, tailor-made recommendations.



Calibration Trials in Nubaria

Calibration of Disease Model

- Different parts of Egypt to reflect varying climatic conditions:
 - Nubaria, Delta, Upper Egypt

Communication Interface

- Send messages directly from EDWS



Ardena "Our Land", Disease Alert System

Digital Milestones

- EDWS version 1
- Registration App. Register:
 - farmer
 - retailers
 - nurseries
- Beacon App:
 - log tomato diseases found in fields

We support farmers to make a better life for themselves



8 #HAPI: Africa & Middle East

DIGITALIZATION
& SUSTAINABILITY @ E-APE/S



Use crop protection products safely.
Always read the label and product information before use.



We create chemistry

Agricultural Solutions E-APE/S

www.basf.com

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