

MEMORANDUM AGRASYS

Unique and highly attractive investment opportunity in the Agrifood / Health / Organic sector

"towards feeding people better within the limits of our planet" - EU goal

AGRASYS AT A GLANCE

Technology-based company in the Agri-food / functional foods area developing and commercializing new crops with added value

Products are developed from initial research done at the IAS-CSIC, licensed with exclusive rights for commercial exploitation

Investments from the venture capital firms
Uninvest SGECR S.A. (2008, 2011 and 2018) and Inveready SCR
S.A. (2015 and 2018)

Crops focussed on specific food and feed products with opportunities in fast-growing markets

Headquarters in Barcelona, R&D activities in Córdoba

Staff of 14 people in the company; in addition several external brokers / agents

Founded by a group of scientists with extensive experience in breeding and the Agri-food sector

Main product: Tritordeum - a new cereal for the food market, launched in 2013

Currently present in nine
European countries and
starting in Australia; plans
for further expansion

Executive Summary

INVESTMENT HIGHLIGHTS



Excellent acceptance of the first product, Tritordeum, in European countries since launch in the Spanish market in 2014



Excellent **growth opportunities** given the **increasing demand** from its **diversified markets** and its **environmentally-friendly** and **responsible value-chain** approach



Validated lucrative business model based on sale and licensing of its products and application of royalties along the value chain



Capacity to continue developing improved crop varieties according to market demands and opportunities



Highly skilled, and **experienced management team** lead by the founders of the company



Ambitious development strategy focused on consolidation and expansion leads to a highly attractive financial profile

MOST PRIZED CEREAL OF 2018











Low gluten high fiber wheat alternative swoops up Best Better-for-you Ingredient of the year

Tritordeum Wins Best Better-for-you Ingredient of the Year

Tritordeum Wins Award Better for you Ingredient in London

Mediterranean cereal awarded best better-for-you ingredient of





Low gluten wheat alternative wins sustainable food awards

Tritordeum reconocido en los Sustainable Food-Awards

Graansoort Tritordeum wint Sustainability Awards

Tritordeum wint Sustainability Award in Categorie Ingredient

Une Cereale Primée pour sa Durabilité





Agrasys, finalista en el 'nutrition greenhouse'

Tritordeum cereal supplier secures pepsico funding

Agrasys, elegida para el programa de incubación de pepsico

Finaleplaats in de nutrition greenhouse contest

Cereal revolution

La startup española agrasys escogida en el programa nutrition greenhouse de pepsico

ACTIVITIES

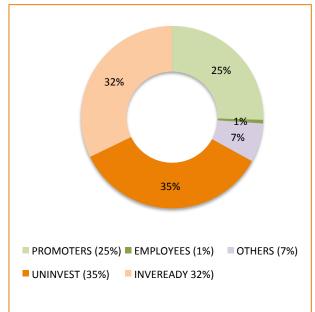
- »Technology-based company dedicated to the development of crops with added value for human nutrition, animal feed / biomass production
- » Crops are **focussed on specific food and feed products** targeting the markets of seeds, functional / healthy / organic and conventional food and feed / biomass
- » The main activity is the **development and commercialization of Tritordeum**, a new cereal with agronomic, organoleptic and nutritional advantages, on the market since 2014. The product has excellent prospects for expansion of sales in receptive markets worldwide
- » Given its **R&D** strength and its innovation capacity, Agrasys is able to develop **new products** according to the **market opportunities** identified by the company and its business partners
- » Products sold by Agrasys are **developed in-house** from research done in collaborative European and national R&D projects with the Spanish research council (CSIC), other public organisms and private companies
- » The business model is based on the sale of products to manufacturers and licensing to business partners with the application of royalties at specific points along the value chain





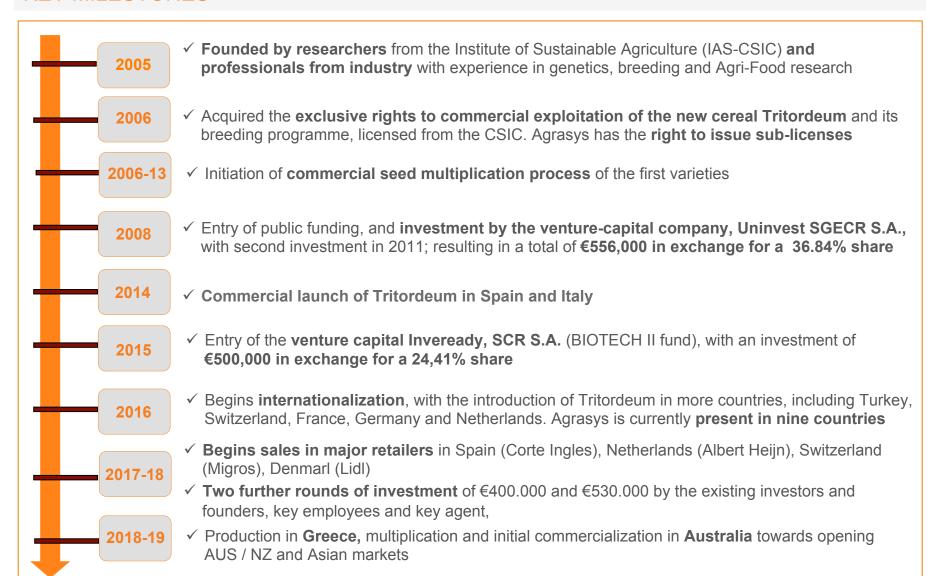


SHAREHOLDER STRUCTURE



- » Shareholders include seven founders (combined share 32%) and venture capital firms Uninvest and Inveready (35% and 32% respectively).
- » Among the founders, the promoters hold a 25% share, while the other founders hold a 7%.
- »Key employees and the agent for the Benelux market have entered the company recently and hold 1% of the shares.

KEY MILESTONES



PRODUCT PORTFOLIO

Tritordeum

New natural cereal (non-GMO) resulting from a cross between durum wheat and a wild barley

- » Agronomic and nutritional benefits
- » Ideally for food sectors like:
 - » Functional foods
 - » Healthy eating
 - » Organic products
 - » Gourmet and artisanal bakery products
 - » Low-gluten and digestible foods
 - » Beer-making
- » To date produced in Mediterranean regions
- » Sold in nine countries expanding into non-EU markets

Brought to market in 2014; well positioned as a new, healthy cereal with clear fast-growing business opportunities

DDRR

New biomass / forage crop produced by hybridization between rye (genome RR) and an ancestral wheat species (genome DD)

- » Related to the cereal triticale
- » DDRR first developed at the IAS-CSIC
- » Exclusive license for its exploitation
- » Exceptional capacity for biomass production, good digestibility - has high potential as an alternative forage crop
- » Collection of some 50 different DDRR lines available

Completing the development stage and being brought to market; high commercial potential

MARKETS AND COMPETITORS

TARGET MARKETS

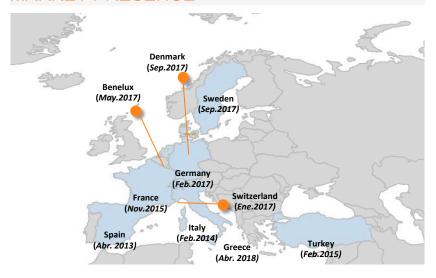
Priority A

- Spain
- Italy
- Benelux
- Switzerland
- Germany

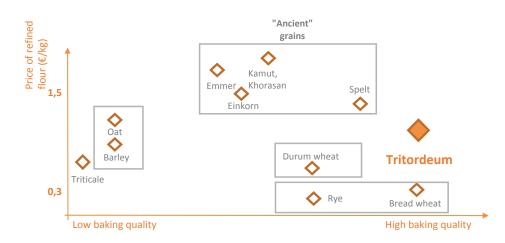
Priority B

- Scandinavia
- France
- Turkey
- Greece
- Australia

MARKET PRESENCE



PRICE POSITIONING AND COMPETITORS



KEY BENEFITS

- Health / Nutritional
- Agronomic / sustainability
- Sensorial
- Product diversity

TRITORDEUM - KEY SELLING POINTS

- » Tritordeum is a **new cereal** which fits well with current interest in **premium alternatives to wheat** (e.g. spelt, ancestral wheats, Kamut)
- » Superior nutritional, agronomic and organoleptic characteristics ideal to fulfill demand for healthy food products.
- » Agrasys holds exclusive rights to commercial exploitation and

has **full control** over the breeding program, the varieties of the crop and the production chain

» Suited to **conventional and organic production** and is currently being produced in Spain, Italy and France.

Value-Chain	Health and Nutrition	Sensorial Experience
 Traceability Full traceability from seed to flour Production under licensing with local farmers Repurchase of 100% of grain at predefined price and quality standards 	 Cluten Lower level of gluten proteins associated with intolerance than wheat Differences observed between Tritordeum and wheat were -41% in flour and -49% in bread, respectively Alternative for those who wish to reduce their intake of gluten 	 Colour Golden yellow colour of flour and finished goods thanks to presence of lutein Distinctive colour helps consumers to recognize Tritordeum among other cereals
 Sustainability Robust crop, best adapted to durum wheat areas Resistance to fungi e.g. Septoria and rusts Tolerance of drought, high temperatures and waterlogging 	 Fibre Source of dietary fibre Arabinoxylans predominate Insoluble fibre contributes to gut health and digestion 	 Taste Toasted flavour due to increased caramelization of product Slightly sweet taste due to higher level of free sugars in flour Nutty notes
 Fair trade Revenue model with fair margins for all actors in value chain Full transparency of revenue model Long-term relationships with partners 	 Ten times more lutein than in wheat Lutein is an essential pigment in the retina protecting against damage by sunlight and macular degeneration. 	 Texture Flour has a rich texture Bread crust is very crispy Bread crumb is soft, resilient and short-bite

TRITORDEUM PRODUCT APPLICATIONS

GRAIN, FLOURS, MALT, FLAKES

BREAD

PRODUCT BENEFITS

- Attractive colour of crust/crumb
- Very crisp crust
- Short-bite crumb
- Distinctive taste profile

PROCESS ADVANTAGES

- Less kneading
- Faster proofing
- Higher hydration

PI77A

PRODUCT BENEFITS

- Attractive colour of crust
- Reduced "burnt bubbles" on crust
- Softer yet crisp crust
- Short-bite crumb

PROCESS ADVANTAGES

- Extensibility of dough
- Faster proofing

BISCUITS

PRODUCT BENEFITS

- Attractive colour
- Enhances butter / egg taste
- Allows reduced butter / egg content

PROCESS ADVANTAGES

 Potential savings in ingredients

PASTA

PRODUCT BENEFITS

- Attractive intense yellow colour
- Texture similar to durum wheat
- Less breakage in filled pasta
- Better taste in fresh pasta

PROCESS ADVANTAGES

To be determined

CAKES / BRIOCHE

PRODUCT BENEFITS

- Attractive crumb colour
- Possibility to reduce butter / egg
- Improved moistness
- Distinctive taste profile
- Longer shelf life ?

PROCESS ADVANTAGES

- Higher level of liquids in recipes
- Potential savings in ingredients

BFFR

PRODUCT BENEFITS

- Novel source of malt particularly appealing to craft and artisanal brewers
- Distinctive new taste

PROCESS ADVANTAGES

Higher diastatic power

PEARLED GRAIN

PRODUCT BENEFITS

Better absorption of liquids upon cooking

PROCESS ADVANTAGES

To be determined

TOASTED BREAD

PRODUCT BENEFITS

- Attractive colour of crust/crumb
- Less breakage of product
- Longer shelf life

PROCESS ADVANTAGES

Same advantages in breadmaking (above)

Unique product: clear opportunity to exploit properties and position as an alternative healthy cereal offering nutritional, functional and organoleptic benefits, with stable prices and 100% traceability

TRITORDEUM SWOT ANALYSIS

WEAKNESSES		
 ▲ New cereal with nutritional benefits ▲ Viable alternative to wheat ▲ More sustainable environmental and socially ▲ Traceable - control over grain production ▲ Availability as conventional and organic ▲ Versatile - apt for use in a wide range of products ▲ Excellent taste, attractive texture and appearance ▲ Stable price with no fluctuations ▼ Limited awareness of product in some markets ▼ Grain quality may vary depending upon location of cultivation ▼ Quality of final product does not depend on Agrasys ▼ Agrasys does not control marketing of final products 		
THREATS		
 ▼ Dependence on third parties: growers, millers, manufacturers ▼ Sector with companies with poor communication skills ▼ Misunderstanding / fear of hybrid cereals ▼ Restrictive legislation from EFSA on communication of health benefits of food ingredients 		

BUSINESS MODEL - MARKETS OF FOCUS

DISRUPTIVE POSITION OF TRITORDEUM IN THE AGRI FOOD MARKET

- » The target market in which Tritordeum is commercialized is that of **cereals for human consumption**, a market with **extremely high volumes**, dominated by wheat (world wide production ca. 700 million tons).
- » Agrasys and its partners commercialize Tritordeum in two sectors of the cereals market the **Agricultural** sector, where the products are seed and grain and the **Food** sector, where products are flour and ingredients (e.g. flakes, sourdough, malt) and finished food products.
- » The main markets are **very large**, **mature** and **stable**, typified by high volumes and low margins, but they contain very **dynamic sub-sectors which show sustained growth**, driven by **strong trends in consumer demand** for innovative, healthy foods, produced by transparent and environmentally-friendly methods.

Agricultural market: seed and grain products – conventional and **healthy** / **specialist** cereals

Food market: flours and ingredients, functional / health products, organic foods sector

- » Products in these subsectors are marketed in terms of providing **added value** and are targeted at specific demands / needs, they command higher prices and have much **higher profit margins** than commodity products.
- » In the **initial stage** of entry into a target market, Agrasys' focus is on identifying partners at the early stages of the value chain, i.e. **grain producers, millers** and **distributors**.
- » In **the following stages** of business development the company partners with its licensees to work with both **manufacturers** and **retailers**, selected for their good fit with the positioning of Tritordeum and their market share / opportunities
- » Since **market launch in Spain in 2014**, Tritordeum has been introduced into **eight other countries**: Italy, Netherlands, Switzerland, Germany, Denmark, France, Turkey and Greece.

BUSINESS MODEL - COMPETITORS

- » The positioning of Tritordeum as an **added-value specialty cereal** means that it does not compete directly with standard wheat, although it aims to take market share within the general cereals market.
- » Tritordeum is fully controlled by Agrasys and there are no alternative sources of the crop, so the company does not have direct competition for the production or commercialization of the crop.
- » The most direct competitors for Tritordeum are other speciality cereals such as spelt, einkorn (ancient wheats), Kamut (a durum wheat) and historical wheat varieties, which are marketed as having added value for nutritional benefits or organoleptic qualities. It also competes with controlled value chains like Agriethique or brands like Banette.
- » Specialist cereals currently occupy only a very small proportion of the gigantic conventional wheat market but the sector of **premium cereals is clearly in expansion**, **driven by strong consumer demand**.
- » In this expanding sector, the different specialist cereals can have a "reinforcing" effect on each other rather than competing as they offer alternatives within the sector and assist in the consolidation and recognition of the sector.
- » At the crop level, Tritordeum, as a specialty cereal, grown only under contract, occupies a unique position. Its potential competitors would be other specialist cereals such as spelt or ancient wheats. However, the pool of growers for cereal production is very large and crops grown under contract are attractive for farmers, so limited competitive effects operate.

POSSIBILITY

FOR

GEOGRAPHICAL

OR TEMPORAL

EXCLUSIVITY

CONTRACTS

BUSINESS MODEL

ABILITY TO

DEFINE AND

MAINTAIN

PRICE

POSITIONING

Revenues from sales Revenues from licences





BUSINESS MODEL

AGRASYS

Seed producers

Grain producers

Food transformers

- ·Millers, maltsters,
- Ingredient makers

Food manufacturers and sellers

- Manufacturers
- •Distributors
- Retailers
- •Horeca

Consumers

AGRASYS SELLS SEED AND GRAIN TO PRODUCERS AND TRANSFORMERS



AGRASYS RECEIVES ROYALTIES FROM THESE ACTORS IN THE VALUE CHAIN

- AGRASYS carries out germplasm development, business development and commercialisation and marketing & communication
- Companies which multiply seed for growers which produce grain
- Grain producers or independent growers which buy seed to produce grain under contract
- Grain milling / processing companies who buy grain to make flour, malt and ingredients (mixes) for sale to manufacturers
- Companies manufacturing cereal products and selling them to the consumers via different channels

BUSINESS MODEL

A VALIDATED BUSINESS MODEL...

Agrasys holds **full and exclusive rights** of commercial exploitation of Tritordeum



The company controls development and commercialization of the product, so that companies without a licence cannot enter the market



The firm works directly with different actors from the value chain for the agreement of production and sales licenses



Agrasys receives royalties based on volumes of production, following an agreed pricing structure for seed, grain or flour



The royalty model has been well received by cereal crop producers and processors in Spain and other European markets

...BASED ON ROYALTIES FOLLOWING AN AGREED PRICING STRUCTURE

- » General royalty model is adapted to specific markets and partners depending on the business activities of the customer and whether or not Tritordeum can be cultivated in the partner's country:
 - » In Spain, royalties are applied separately to seed, grain and flour production.
 - » In countries where grain is produced (Italy and France) a combined royalty is applied to total seed and grain production.
 - » In countries where grain production is not possible, royalties are included in the price of grain or flour supplied from Spain.

DEVELOPMENT STRATEGY

FUTURE BUSINESS STRATEGY

- » With its lead product Tritordeum, Agrasys has excellent prospects for expansion into worldwide markets. In the short medium term, the Company has the following business development goals:
- Expand and consolidate business in key European markets
 - »Spanish, Benelux, Italian and German markets will be the main focus of attention during 2018-2020
 - » Support market expansion in Switzerland, Greece and Turkey
 - » Market development in Scandinavia. UK and Eastern EU countries will initially be developed via external agents in 2020
- Enter into selected non-European markets/ regions such as: Australia and Asia, via partnerships with licensed agents / representatives and distributors
- Prepare for entry into specific international markets of strategic importance such as USA and Canada.

- » In **strategic markets** / **regions**, the long term goal is to establish platforms for Tritordeum seed and grain production to serve processors and manufactures in these markets
- » The **development** / **marketing programme outside Europe** is to obtain regulatory clearance for Tritordeum at seed and food levels, and initiate cultivation of the crop, developing partnerships with processors and distributors

MARKETING PLAN

» Increasing market penetration in those countries where Tritordeum is already present requires a global strategy, combining direct commercial prospection activities with B2B & B2C communication actions. Focus will be on activities in mainstream products (bread, biscuits, pizza, pasta and beer) and organic markets.

Spain & Germany

- » Increase milling capacity and consolidate presence in the conventional and organic sector
- » Create consumer demand via B2C communication and launch digital marketing campaign
- » Develop social networks and relationships with bloggers and journalists

Benelux

- » Strengthen relationships with existing industrial producer and supermarket and increase number of outlets
- » Add new manufacturers
- » Initiate organic market



Italy

- » Develop organic market
- » Maintain commercial support for conventional market
- » Increase milling capacity
- » Support licensees in B2C communication to create demand

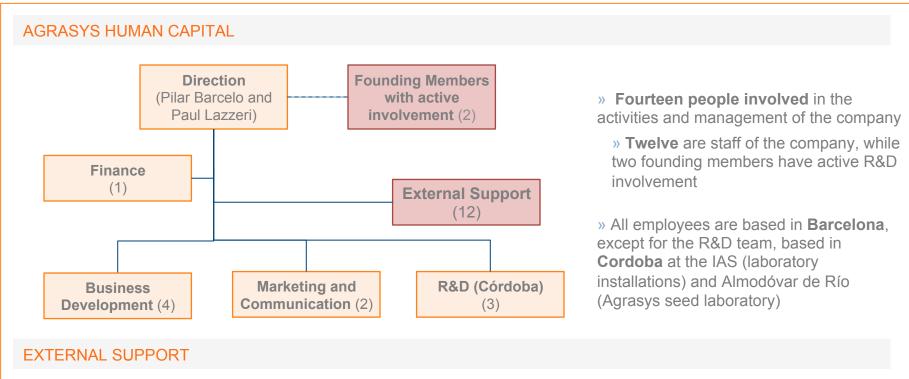
Switzerland

- » Support licensee in B2C and B2B communication and marketing
- » Focus on both conventional and organic markets
- » Initiate grain production for the Swiss market to full filled demand

AGRASYS IN NUMBERS



TEAM



- »Complementing Agrasys personnel, there is a **group of external brokers and agents** (ten brokers and two consultants)
- »These external agents have **contractual relationships with the company**, which are defined by market sectors or geographical regions
- »These agents collaborate in business development, commercialization or distribution of Tritordeum grain, flour or finished products
- »They earn commissions based on the income generated by their activities

FOUNDERS



Dr Pilar Barcelo Biologist, MSc, PhD in Plant Genetics CEO

- 33 years experience in R&D and management
- Ex Max-Planck, DuPont
 Wheat Research team
- Business strategy and investor relations



Dr Paul Lazzeri Botanist, PhD in Biotechnology CTO

- 35 years experience in R&D with 15+ research grants
- Ex Max-Planck, DuPont Cereal Biotech director
- ♦ Direction and funding of Agrasys´ R&D



Prof Francisco Barro Biologist, PhD in plant physiology **External Advisor**

- 33 years experience in cereal proteins and functionality
- Research Professor at CSIC
- Advisor for grain quality and health functionality



Cristobal Martinez Agronomist **External Advisor**

- 34 years experience in breeding and crop management
- Field trials director at IFAPA
- Advisor for breeding and agronomy

THE TEAM

And we count with a very multidisciplinary, international and committed team of professionals



Silvia Rosell Business and Financial Management CFO

- 15 years experience in financial management in R&D organisations
- Ex IMPPC, Institut Josep Carreras as Finance Manager
- Financial direction and securing funding for the company



Alba Martinez
Agronomist, MSc in
Plant Breeding
Breeding Program
Director

- 8 years experience in plant breeding
- Ex CSIC researcher in cereal molecular breeding
- Responsible for the breeding program
- ♦ Directs a team of 3



Etienne Vassiliadis Food Technology, Business Development Business Development Director

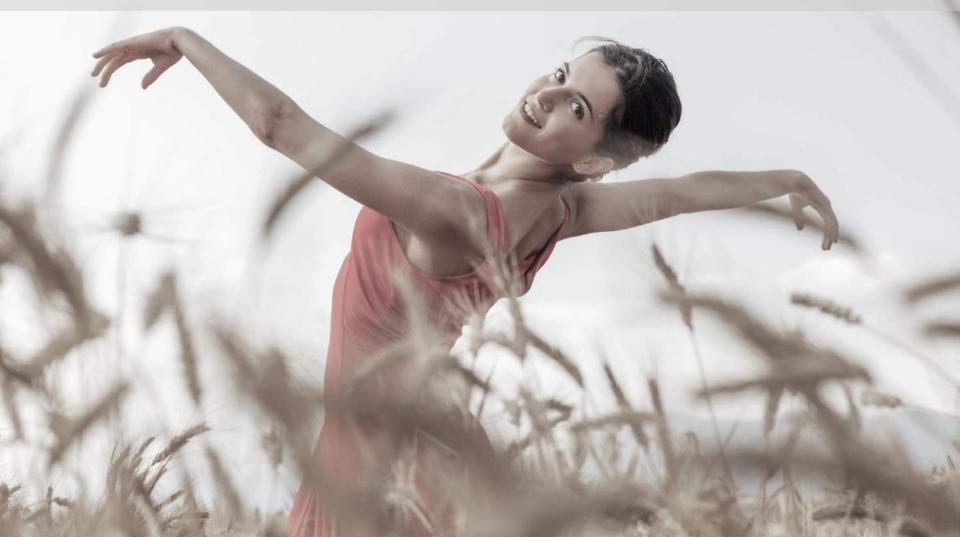
- 10 years experience in R&D in major industrial bread manufacturers
- Ex CSM Bakery Solutions R&D director
- Overseas business development in Europe and Australia
- Directs a team of 4



Veronica Guerra
Journalist, MSc in
Digital Marketing
Marketing &
Communication
Director

- 8 years experience in communications and marketing
- Ex Deloitte communications group
- External communication and marketing - B2B and B2C strategy
- Directs a team of 2

TRITORDEUM successes in Europe



SUCCESSFUL PRODUCT LAUNCH

Albert Heijn



- The largest Dutch supermarket chain
- Launch Feb 2018
- Product range: "Love & Passion"
- 725 shops
- More than 1 million breads sold
- Other products in development for 2019







SUCCESSFUL PRODUCT LAUNCH





- The leading Spanish department store
- Launch Oct 2016
- Breads from REBOLA
- In 135 Corte Inglés stores





SUCCESS STORIES - MIGROS - BLÉVITA



Launch of Tritordeum biscuits by Blévita in the leading Swiss retailer MIGROS in January 2019









SUCCESSFUL PRODUCT LAUNCH

- LiDL Denmark
- Flour for home breadmakers
- Launch Nov 2018
- In 115 LiDL stores









SUCCESSFUL PRODUCT LAUNCHES - ITALY



GRUPPO CASILLO









FARINA DI GRANO KHORASAN KAMUT® BIO



FARINA DI TRITORDEUM



MOLINO DALLAGIOVANNA















CORTE DE RIBALTA (GRUPPO GAVIO)



SUCCESS STORIES – NEW PRODUCTS (BEERS) ENTERING THE MARKET



MALNOMBRE



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CASTREÑA



LA SITGETANA

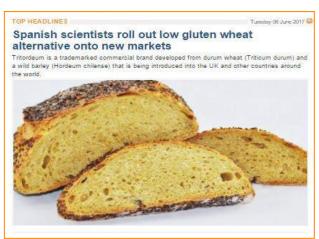


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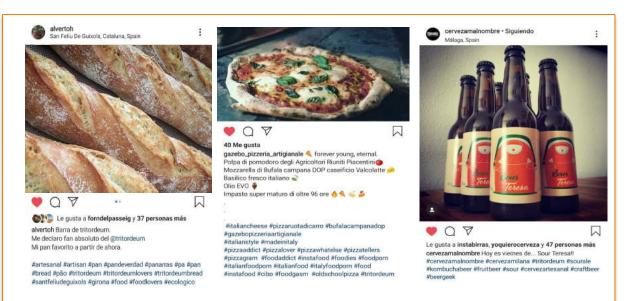
WHAT THE MEDIA SAYS ABOUT TRITORDEUM

+ 900 IMPACTS ACROSS EUROPE









INTENSE ACTIVITY – STRONG RECOGNITION THROUGHOUT THE SOCIAL NETWORKS

