EDITORIAL

WILL DIGITAL TECHNOLOGIES PROVIDE TO FARMERS BETTER EXPERIENCE AS SEED USERS?

It’s fairly common for a whole host of brands to declare that our daily experience as customers will be improved thanks to digital technologies. Nevertheless, in some cases digitalisation might be felt to be too intrusive. Agriculture will not escape this global trend and it is certain farmers will accept the adoption of digital tools as soon as they feel they retain control of their data and can get more value than inconvenience. In the seed business, the speed of the technological evolution is very fast and not limited to genetics as it also benefits from the capacity for data analysis. Thanks to clever usage, digital technology will be able to deliver added value to farmers and to the entire seed chain. Analysis of crossed big data-gathering genetics, pedoclimatic conditions and farmers’ practices are able to build an accurate predictive varietal recommendation adapted to the context of each field.

Euralis is developing different tools in this respect: OR Master apps to control broomrape in sunflower, Click ‘N’ Seed to optimise varietal choice and the Airbus Farmstar® tool to manage fertilisation in oilseed rape. Increasing the interaction between the brand and clients may provide huge win-win benefits. The ultimate goal is clear: improving user satisfaction.

Jean-Pierre Dufourcq
Business Development Manager

GOOD NEWS!

CHERKASSY PLANT SETS THE BENCHMARK FOR SEED PRODUCTION IN UKRAINE

The Euralis seed production plant in Cherkassy, Ukraine, is ranked among the country’s top five giants in the sector, according to Agravery’s ranking. The plant supplies Ukraine and Belarus, an area where the demand for seed is growing. In terms of quality, economics and logistics, local production meets the expectations of Ukrainian farmers. Furthermore, agrochemical companies responsible for seed treatments are also present in the country. The partnerships established between Euralis and these companies improve the quality of the offer.

IN SPAIN, THE SAP MANAGEMENT SYSTEM OPTIMISES SEED STOCK MANAGEMENT FLOWS AND THEIR QUALITY

Following France and Ukraine, the SAP management software (System Application and Production) has been operational since September 2018 at the Spanish seed production plant. “Having this standardised process tool within the group offers global visibility of the seed production activities for the three factories at any given moment. It’s a strategy to optimise flows, based on customer needs, and managing the transfer of goods from one site to another if necessary. It offers total traceability of batches, both in terms of their quality and quantity, throughout the production chain”, explains Maria Porras Saldana, Project Manager in the IT department.

CLICK ‘N’ SEED: A DIGITAL TOOL FOR FARMERS

To help producers maximise the potential of their maize fields, Euralis has developed Click ‘N’ Seed, a unique decision support tool. In just a few minutes, producers get a free recommendation on the varieties most adapted to their environments and practices. In order to achieve this, they need to provide their geographical location, average yield, water supply and the sowing and harvesting dates targeted for that particular field. The tool first indicates the level of risk for the field in the case of water stress and for extreme temperatures during the vegetative and reproductive periods. Click ‘N’ Seed then recommends between one and three varieties, along with the appropriate sowing density.

All pedoclimatic conditions evaluated

For successful modelling, Euralis relies on meteorological data collected over 15 years. “Our varieties have been characterised in 500,000 plots across Europe to measure their adaptability to different soil and climate conditions,” explains Céline Cauhapé, Corn Market Development Manager. “We eliminate those varieties sensitive to the risks identified during the diagnosis conducted for the site.” Already launched in France, Click ‘N’ Seed will be trialled in spring 2019 in Germany, Romania, Ukraine and Russia. It will be presented during this summer’s Fields Days and be fully operational by the autumn. Click ‘N’ Seed will be adapted to the catalogue of each country. “The diagnosis objectifies the feelings of the grower. And this scientific data also strengthens the varietal advice given by technical sales staff,” underlines Céline. In the future, Euralis aims to provide further support to growers’ crop management plans: sowing and harvest dates, indications of development stages etc. Click ‘N’ Seed will be soon available for sunflower.
STABLE DIGESTIBLE YIELD AS A BREEDING CRITERION

Update on the silage maize range with Oliver Becker, Maize Market Development Manager

“F

or the first time, the area dedicated to silage maize has exceeded that of the area planted with grain maize in France and Germany, where we expect an increase of around 5%. In recent years, Euralis has developed the Silobreed programme in order to integrate the idea of ‘stable digestible yield’ as a breeding criterion in our research programmes. This approach reflects farmers’ expectations regarding forage quality. The new semi-early ES Joker is part of this approach. Post-inscription in Germany, it is already officially recommended just a year after its launch. Combining excellent yield and energy content, ES Joker is ideal for silage, but is also used for grain and biogas production. By 2020 we should be marketing full range of Silobreed varieties to cover all segments of the early silage maize market, which represents 900,000 ha in Europe, mainly in the UK, Benelux, France and Germany.”

WINNING TRIO: YIELD, STABILITY AND DESICCATION SPEED

Y

ields remain a priority for maize producers. They are increasingly looking for stable production. ‘This is ever more relevant given the greater impact of weather events like we saw in the 2018 season, with long periods of drought observed in Western Europe,’ explains Céline Cauhapé, Corn Market Development Manager. For grain maize, desiccation speed is also a key issue for all European producers. In Western Europe, it reduces drying costs, while in Eastern Europe, where maize is harvested dry in the field, the priority is to harvest the crop before weather conditions deteriorate with the arrival of winter. Many selection criteria are being combined in the second generation of Tropical Dent, genetic material which is unique to Euralis. Tested throughout Europe, these hybrids, such as the ES Faraday variety, perform well in all weather conditions.

ES Faraday in numbers

<table>
<thead>
<tr>
<th>Country</th>
<th>2018 Harvest (Mt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>60 Mt</td>
</tr>
<tr>
<td>Romania</td>
<td>12 Mt</td>
</tr>
<tr>
<td>France</td>
<td>11.8 Mt</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>3.5 Mt</td>
</tr>
<tr>
<td>Russia</td>
<td>12 Mt</td>
</tr>
<tr>
<td>Ukraine</td>
<td>34 Mt</td>
</tr>
</tbody>
</table>

‘Tropical Dent’s genetics have allowed us to make a strong comeback in the grain maize market. By testing our lines throughout Europe, we select genetic material suitable for both Eastern and Western Europe. ES Faraday is an example. In 2020, it is expected to become Euralis’ best-selling maize variety.’

MAIZE SILAGE

STABLE DIGESTIBLE YIELD AS A BREEDING CRITERION

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MAIZE MARKET

RECORD YEAR IN ROMANIA AND CONFIRMED EXPORT POWER OF BLACK SEA COUNTRIES

In line with all the countries bordering the Black Sea, 2018 saw an exceptional maize harvest in Romania, which at 12 million tonnes (Mt) made the country Europe’s leading producer for the year. Very good weather conditions during sowing and rainfall during grain formation contributed to this excellent result. France ranked second with 11.8 Mt, with variable yields in non-irrigated grain maize due to the summer drought. Ukraine produced a record harvest of more than 34 Mt and is ranked the second largest exporter at 25 Mt. These countries have strengthened their logistics, offering large volumes at a very competitive price of €15 to 20 euros per tonne to supply feed manufacturers in Catalonia and North Africa. They are also turning towards markets in northern Europe and are not restricted to animal feed as starch producers have committed to import programmes from Romania, Bulgaria and Ukraine. Russia remains a small operator in the maize market but is seeking to grow, with a particular focus on Western genetic material.
CLEARFIELD PLUS + OR MASTER: TWO GENETIC TRAITS TO CONTROL BROOMRAPE AND WEEDS

Two-thirds of Europe’s sunflower crop, that’s more than 11 million hectares, is currently affected by broomrape, an aggressive parasitic plant that is constantly expanding. Left uncontrolled, this pest attaches to sunflower roots and diverts the host’s reserves for its own use, producing major impacts on yields. To overcome this, Euralis offers varieties with double tolerance. “Since the launch of the range in 2015, Euralis has become a real player in the sunflower market,” explains Cédric Delavent, Sunflower Market Development Manager at Euralis. “Our offer of ‘Clearfield Plus + OR Master’ meets a real expectation from farmers. While tolerance to Clearfield herbicide improves hybrid performance by maintaining yields, it does not always ensure sustainable broomrape control. The addition of the OR genetic trait makes this possible because it targets the most aggressive races.” Varieties combining these two attack systems also offer an additional benefit: when pest pressure is low, herbicide doses can be reduced, generating savings for the user.

MARKET

SUNFLOWER LOOKING EAST

In 2018, Europe’s sunflower harvest was a record 9.8 Mt, driven by Romania (2.6 Mt), Bulgaria (2 Mt) and Hungary (2 Mt). These countries all recorded an increase in production of around 10%. French production fell by 25% to 2 Mt in 2018. The importance of Eastern countries is underlined with Russia and Ukraine each producing 10 Mt. Crushing plants have been established in these countries and oil is being exported to Western Europe and Asia.

RAPESEED

FARMSTAR®, FOR MANAGING NITROGEN AND ENHANCING OILSEED RAPE GENETICS

Trialled for two seasons by Euralis teams in Central and Eastern Europe, the Farmstar® Decision Support Tool was rolled out in 2018 over nearly 13,000 ha of oilseed rape. Based on the capture of two satellite images of the canopy biomass, before and after winter, this service makes it possible to control the nitrogen fertilisation of crops through personalised advice. This strategy optimises oilseed rape productivity, both in terms of its quantity and quality, and optimises the benefits of new genetics. Euralis sales teams can now offer a combination of Euralis varieties and the Farmstar® tool, which is of particular interest to farmers equipped with guidance systems on their tractors. Farmstar® is a brand of Airbus Space & Defence.

“Farmstar® gives to farmers the opportunity to maximize their crop potential at the intra-field scale thanks to automatic modulation. Moreover, it is a reliable tool at the disposal of our sales teams to differentiate offer.”

Cyprien Goupil, Euralis’s Digital Tools Project Manager
Faced with an increase in the number of droughts and the rise of agroecology with reduced input use, sorghum provides solutions. It’s the reason why Euralis has published a brochure focusing on this cereal, which is still too often a victim of popular misconceptions. Designed for feed manufacturers and users, this guide provides agronomic references for sorghum, plus details of its advantages and possible uses in animal feed. Benefiting from the largest research programme dedicated to sorghum in Europe, Euralis’s teams created hybrid varieties which guarantee very good yield levels, even in dry conditions, with good grain quality and the absence of tannins, the latter being the number one concern in animal nutrition.

Frederic Guedj, Sorghum Market Development Manager

“While 60% of wheat, barley and maize is destined for animal feed, sorghum plays a complementary role: it is high in protein, with starch to provide energy and shows little sensitivity to mycotoxins in the field, enhancing the sanitary and nutritional quality of feed rations. Sorghum offers a safeguard for animal nutrition.”

RESEARCH

HOW EURALIS IS ADAPTING ITS PORTFOLIO TO MATCH EUROPE’S PROTEIN PLAN

The protein plan, published on November 22, 2018, by the European Commission, goes beyond the issue of self-sufficiency in plant protein, a market still dominated by soybean imported from the Americas. “The protein plan is not a crop-by-crop response, but is based on a range of species to be exploited within rotations,” explains Thomas Foubert, Rapeseed Breeder at Euralis. It clearly displays a willingness to play on the strengths of each crop, while benefiting from the contributions genetics can make to boost yields and adapt quality according to the crop’s final purpose.

SOYA OFFERS THE BEST PROTEIN LEVELS

Currently, the European Union meets only 6% of its soya requirements. Soya is the plant with the highest protein levels in the world, offering 42% protein in dry matter. Its major advantage is that it produces the most protein per hectare. In irrigated cultivation, the best varieties grown with the appropriate techniques, such as sowing by seed numbers rather than kilograms and harvesting with a combine equipped with a flexible cutter, can produce 60 quintals per hectare. This equals 25 q of protein per hectare. “These results are important because the number of hectares is limited,” explains François Paybou, Responsible for Soybean Technical and Market Development. “The goal of our research is to continue to increase yields and protein in our varieties, while achieving good tolerance to lodging and disease. We are working on varieties with protein levels topping 46%.” Euralis is developing tremendously in Northern Europe, Ukraine and Russia. These areas require very early soybean varieties. Appropriate research programmes have been launched in these regions to boost yields and increase soybean acreage in the East.

FRANÇOIS PAYBOU, Soybean Technical and Market Development Manager

“The leader in Europe’s soyabean market, Euralis started its breeding activities on this crop as far back as 1975, after an EU embargo on soybean meal. Since then, Euralis has continuously invested in non-GMO soybean research, focusing on both yields and protein.”

RAPESEED IS A SOURCE OF QUALITY PROTEIN FOR ANIMAL FEED

By spotlighting the advantages of locally produced plant protein, particularly to supply animal feed factories, Europe has clearly recognised the role of rapeseed meal. “Rapeseed is an important source of vegetable protein for animal feed,” says Rapeseed Breeder Thomas Foubert. “The protein plan reinforces the direction our research programmes have taken over the past four years.” For several years, Euralis has been integrating protein content and meal digestibility into the selection criteria for its varieties. In terms of quality, the amino acid profile in rapeseed is every bit as interesting as soyabean. Now room for improvement mainly concerns the content, which remains inferior to soybean, as well as digestibility. Concerning its final purpose, varieties offering seeds which have been bred to be lower in fibre, thereby providing more digestible meal, will also be able to conquer the poultry feed sector.

THOMAS FOUBERT, Rapeseed Breeder

“We are really at a turning point. The environmental and economic framework has pushed us to take the initiative for the past four years. We are working on rapeseed genetic material to ensure there are improvements in protein quantity and quality.”