

Crop Science Weekly Briefing

23 January 2024

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Bayer to adopt streamlined model amid deep jobs cuts

19 January 2024

The Bayer group is adopting its previously proposed “dynamic shared ownership [DSO]” operating model to cut hierarchies and streamline structures. The company’s chief executive officer, **Bill Anderson**, unveiled the concept late last year, highlighting its three criteria: mission, innovation and strengthening performance. Board and employee representatives have agreed to adopt the worldwide model, which they stress will maintain the existing three divisions within the group. The restructuring is to include significant staff cuts at group companies in Germany.



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Bayer says that the development will eliminate bureaucracy and make company operations more agile, as well as significantly improve its performance.

Board of management member and labour director of Bayer Heike Prinz explains that the move comes amid the company finding itself in “a difficult situation”. He says that the “far reaching measures” are being adopted “in order to make rapid, sustainable improvements to our operational performance”.

Maintaining the three divisions

A chorus of board and employee representatives insists that the goal is to maintain all three divisions, including Crop Science, at the group. There had been much speculation of selling the agriculture business. Last year, the company admitted to considering a divestment of either Consumer Health or Crop Science, while ruling out splitting the company into three businesses.

Chairwoman of Bayer’s central works council, Heike Hausfeld, notes: “As an employee representative body, we are vigorously campaigning for the continued existence of the Group with all three divisions.” Member of the supervisory board and of the executive board of the Mining, Chemical and Energy Industrial Union, Francesco Grioli, echoes the sentiment. “We see the greatest opportunities for this in the existing ‘one Bayer’ structure.” He notes that agreement between board and employee representatives on the new model was on such an understanding.

Job cuts are to be implemented “swiftly over the coming months” and completed by the end of 2025. The company says that implementation will be decentralized, and as such, have not yet been quantified. The lay-offs will include employees with management or co-ordination tasks. Bayer employs around 22,200 people in Germany.

The company is detailing severance conditions with potential compulsory redundancies delayed until the end of December 2026. “The fact that job security is only being extended by one year makes it clear that we are in an exceptionally serious situation,” Ms Hausfeld notes.

The board and employee representative deal reaffirms Bayer’s “Future Concept for Germany” that it adopted some two years ago. It aims to strategically develop Bayer in Germany and align its business units there. The corporate headquarters in Germany will be further developed, Bayer says.

Restructuring

Bayer explained the concept of the new structures late last year. Virtually everyone in the company would work in small, self-managed teams that are focused on a customer or a product, comparing it to a small business model. Everything off-mission would go away, it added.

Progress was to be measured in 90-day cycles and that would translate into far faster customer response and product innovation. This was to entail major management cuts. Mr Anderson rated the previous six years of cost-cutting programs a failure.

Bayer has been **under pressure** from institutional investors, with some publicly calling for a split of its pharmaceutical and Crop Science businesses. Particularly since the **Monsanto takeover** over five years ago, the business has suffered from a wave of lawsuits and multi-billion dollar losses surrounding allegations against the legacy company's glyphosate-based herbicide, Round-up, and the company's failure to warn over professed cancer risks. That has heavily hit Bayer's share price and market capitalization.

Syngenta/Enko discover novel fungicidal chemistry

19 January 2024

Syngenta Crop Protection has reported the discovery of a novel fungicidal chemistry in collaboration with US crop health business Enko (Mystic, Connecticut). The chemistry features a new mode of action designed to target diseases that harm cereal crops, say the businesses.

The partners highlight screening billions of chemical molecules within Enko's DNA-encoded libraries, followed by using artificial intelligence (AI) and machine learning models to identify suitable molecules. "This significantly shortens the time required for the discovery process, while ensuring molecules meet specified safety criteria," notes Syngenta.



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The discovery was part of the duo's multi-year **partnership** agreed in 2021 to develop solutions intended to curb resistant pests and novel diseases. The businesses have entered the next phase of their collaboration to optimize fungicide attributes and "rigorously" test them for safety and efficacy.

Furthermore, Syngenta and Enko have signed a new agreement to discover novel chemistries for herbicides. The targeted herbicide solutions would combat widespread resistance and eliminate aggressive weeds, such as Palmer amaranth (*Amaranthus palmeri*), the companies report.

Seeds market tames setbacks to grow in 2023

17 January 2024

The global seeds market is projected to have grown 4.5% in 2023 to hit a valuation of \$52.4 billion, according to a preliminary analysis by stablemate publication *Crop Science Market Data and Analysis*. Higher demand drove the rally, fuelled by a moderate uptick in crop acreages, especially of corn (maize), sorghum, soybeans and sunflowers. Moreover, enhanced farmer income on account of a significant rise in commodity prices in 2022 translated into increased grower interest in better quality seeds.



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However, sectoral growth was arrested by the ongoing war between Russia and Ukraine. The revenues of many seed companies are likely to have fallen because of their exit from Russia, or suspension of operations in that country. The problem was compounded by the high cost of seed production in 2022 as well as Covid-19 impacts-induced supply chain disruptions.

Notwithstanding the tailwinds, the players are expected to have recouped some of the losses by marking up seed prices.

Preliminary 2023 global seed market projections

Year	US\$B	Change from the previous year
2017	44.8	13.5%
2018	45.6	1.7%
2019	43.7	-4.3%
2020	44.9	3.0%
2021	48.0	6.8%
2022	50.2	4.4%
2023P*	52.4	4.5%

Note- P* is preliminary estimate of the market value

Data compiled January 2024.

Source: S&P Global Commodity Insights.

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Regional markets

On the geographical front, North America emerged as the largest seed market by value, accounting for 36% of global sales. The Asia Pacific region was a distant second with a 24% share, while markets in Europe, Middle East, and Africa (EMEA), and South America, generated 22% and 18% of sales, respectively.

The US was the major market in North America, with corn, cotton, soybeans, sugar beet and vegetables generating the bulk of sales. While the gains were partially offset by a steep decline in cotton prices and lower sales, the effects were counteracted by robust canola and rapeseed sales in neighbouring Canada. A decline in sales of vegetables seeds was exacerbated by inclement weather, but companies mitigated the downwards trend by increasing prices.

A contraction in cotton acreage, as well as sluggish sales of vegetables seeds hit operations in the Asia Pacific. Additionally, markets in the geography braved pressures in the form of currency headwinds, especially, in China, India and Japan. However, a rise in Chinese corn acreage brightened sectoral prospects, with increased rice production in that country, as well as India and Thailand, translating into accelerated sales.

Business in the EAME region benefited from increased planted areas for rapeseed and sugar beet. A rise in prices of sugar beet seeds was aided by slackening sugar supply from China, India and Mexico on account of

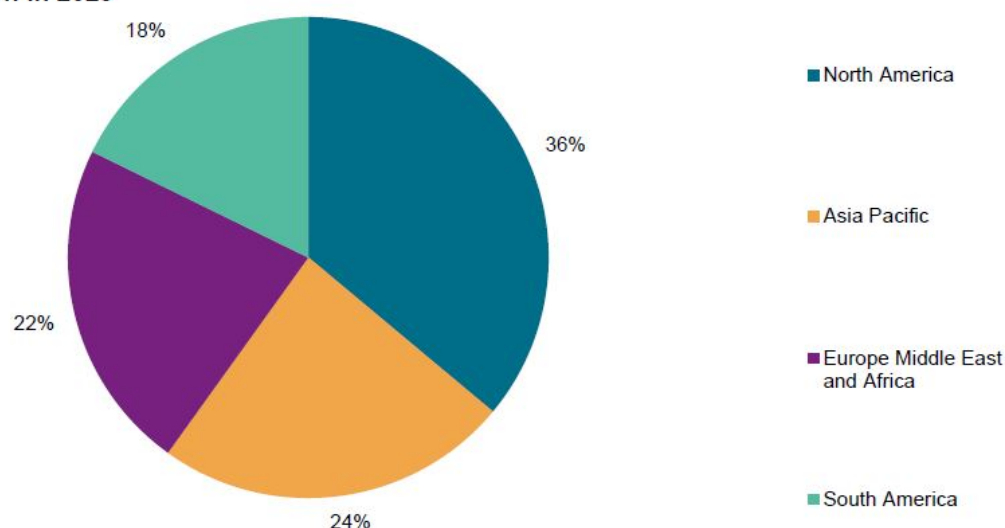
unfavourable weather, and the utilization of sugar cane for bioethanol production. The sales of wheat seeds also gathered pace. On the other hand, the European fruits and vegetables segment faltered because of a drought-induced reduction in Spanish cropping areas.

The overall seeds sector in the EAME region gained from the appreciating value of the euro.

Bullish sales of corn and soybean seeds in Brazil led sectoral expansion in South America. Areas under plantation of corn and soybeans are expected to have grown in 2023, with new soybean traits from leading players likely shoring up prices.

2023 Regional market analysis

Global seed market by region in 2023



Preliminary estimates
Data compiled Jan. 11, 2024.
Source: S&P Global Commodity Insights.
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Preliminary global seed market performance 2023P* - split by region (US\$B)

Region	2022	2023	YoY (Change)
North America	18.1	18.9	4.7%
Asia Pacific	12.2	12.5	2.7%
Europe Middle East and Africa	11.1	11.7	5.4%
South America	8.8	9.3	5.7%
World	50.2	52.4	4.5%

Note- P* is preliminary estimate of the market value
Data compiled January 2024.
Source: S&P Global Commodity Insights.
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Outlook

Crop Science Market Data and Analysis anticipates a low single-digit fall in seed market value in 2024. A decline in commodity prices and low cost of seed multiplication is expected to fuel the trend. Seed prices could further remain subdued because of a reduction in costs of crop protection products and fertilizers in 2023.

Weather-related events such as the El Niño phenomenon could disrupt the seeds sector in several South American markets, while business in Europe may be affected by high inflation across the region.

A detailed overview of the seeds market in 2023 is [available here](#).

Crop Science Market Reporting is a part of S&P Global's Commodity Insights division.

BASF rolls out Axant Flex cotton in the US

18 January 2024

BASF has introduced its genetically modified herbicide-tolerant and insect-resistant Axant Flex cotton traits in the US through the launch of four new varieties under the FiberMax and Stoneville portfolios. AxantFlex was **unveiled** in the US in late 2021, and the launch makes BASF the first company to offer a quadruple herbicide-tolerant trait stack in the nation's market. It follows the company communicating its **plans** to roll out Axant Flex cotton in the region in August last year.



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The development includes three FiberMax cotton lines – FM 765AX, FM 868AXTP, and FM 823AXTP. All three varieties offer resistance to root knot nematodes (*Meloidogyne* spp), besides being tolerant to storms.

Additionally, FM 765AX is characterized by early/mid maturity. It is tolerant to Verticillium wilt (*Verticillium* spp) and bacterial blight and is suitable for the US High Plains region. FM 868AXTP and FM 823AXTP, on the other hand, are medium maturity varieties that also contain BASF's TwinLink Plus insect resistance traits. They offer resistance to lepidopteran pests, as well as tolerance to herbicides through the Axant Flex trait.

BASF notes that FM 868AXTP has larger seeds and is characterized by "outstanding" early-season vigour, highlighting that it is intended for cultivation in the nation's south-west, and far west regions. FM 823AXTP is targeted towards growers in the US High Plains region, as well as those in the far west, and the states of Oklahoma and Texas. It provides added protection against bacterial blight and Verticillium wilt.

The sole new product in the Stoneville lineup, ST 6000AXTP, combines Axant Flex and TwinLink Plus traits. It is a medium-to-full maturity variety that can be cultivated across cotton growing regions in the US Cotton Belt. BASF states that the GM cotton line is resistant to bacterial blight, *Meloidogyne* spp, and lepidopteran pests, besides yielding "excellent" fiber quality, and high gin turnout potential.

Blending multiple traits

Axant Flex introgresses four GM herbicide-tolerant cotton traits for enhanced efficacy against weeds such as Palmer amaranth (*Amaranthus palmeri*). These include the novel Axant (GT27) trait, as well as BASF's established XtendLink, LibertyLink (LL25) and GlyTol (GHB614) traits. The resultant cotton events provide tolerance to the herbicides, Alite 27 (isoxaflutole), Liberty (glufosinate-ammonium) and Engenia (dicamba), besides those based on glyphosate.

Additionally, the XtendLink technology enables growers to undertake over-the-top applications of Engenia on Axant Flex cotton.

BASF claims that Alite 27 is the first group 27 4-hydroxyphenylpyruvate dioxygenase (HPPD) inhibitor herbicide offering broad spectrum weed control. However, the solution is yet to be approved for application on

Axant Flex TwinLink Plus cotton by the US EPA. The company notes that the offering would provide more flexibility for growers earlier in the season and can be used pre-emergence or early post-emergence upon the receipt of regulatory clearance.

Alite 27 can also be tank-mixed with other residual and knockdown herbicides to work within growers' weed management programs, says BASF. The formulation's current label restricts its use to GM **LibertyLink GT27** soybeans in select counties across seven US states. The product is not available for sale.

Besides tolerance to the aforementioned herbicides, BASF underlines that Axant Flex cotton is introgressed with a three-gene insect resistance technology.

UK OKs emergency use of thiamethoxam on sugar beet

22 January 2024

The UK's Department of Environment, Food and Rural Affairs (DEFRA) has granted a 120-day emergency use authorization for the neonicotinoid insecticide, thiamethoxam, in England for application on sugar beets. The nod applies to Syngenta's seed treatment, Cruiser SB, and seeks to control aphids, which spread beet yellow viruses that cause yellowing in the crop. The authorization does not cover the devolved administrations of Northern Ireland, Scotland and Wales.



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Cruiser SB was granted a **similar authorization** by the UK in 2022. Although thiamethoxam was one of the three neonicotinoid insecticides **banned** by the EU in 2018 when the UK was a member state, the latter's approach to emergency authorizations do not align with the EUs because it left the bloc in early 2020.

Stringent requirements

DEFRA notes that there are no alternative seed treatments to address threats posed by beet yellow viruses, although there are insecticides that can be applied as foliar sprays. It adds that pesticide sprays are less effective than the seed treatment, particularly in emerging sugar beets, and are only able to provide around six weeks' protection. They do not, therefore, provide effective cover for the full 12 to 16-week period where the crop is most susceptible to the viruses.

Cruiser SB is to be applied as a seed treatment before sugar beets are planted and any virus threat is observed, says the Department, noting that it is not possible to identify the "precise magnitude of the threat before deciding whether to treat the crop." Consequently, the approval comes with strict conditions, permitting the product's application only if independent modelling under the Rothamsted YV forecast model predicts a virus incidence of 63% or above. If the threshold is not met, then the neonicotinoid-treated seeds cannot be used.

Furthermore, if the threshold is met and limited use is allowed, then stringent conditions are to be applied to minimize risks. Such conditions cover the maximum number of seeds planted per hectare, as well as restrictions on planting flowering crops in subsequent years in any field where the treated seeds have been used. Among other guidelines, fields growing sugar beets treated with thiamethoxam can be used within 32 months to plant only a specific list of crops, none of which flower before harvest. Additionally, no further use of thiamethoxam-based seed treatments is to be allowed on the same field within a 46-month period.

“We recognize the potential danger of an outbreak of the beet yellows virus on the nation’s sugar beet crop and the impact it could have on the production of UK sugar,” says Farming Minister Mark Spencer, adding that the decision has “not been taken lightly” and is based on “extensive and rigorous scientific assessment”.

Other jurisdictions

At least 11 EU member states have granted emergency authorizations for crop protection products variously containing clothianidin, imidacloprid, thiamethoxam and thiacloprid since the bloc banned them in 2018.

In December 2020, the European Commission asked the European Food Safety Authority (EFSA) to launch an inquiry into the validity of these authorizations following warnings to member states on repeated neonicotinoid derogations. The EFSA study covered 21 emergency authorizations of clothianidin, imidacloprid, thiamethoxam and thiacloprid granted by Austria, Belgium, Croatia, Denmark, Spain, Finland, Lithuania, Poland, Romania and Slovakia.

Last year, the Court of Justice of the European Union (CJEU) **ruled** that EU member states should not be permitted to grant emergency authorizations for banned pesticides including neonicotinoid insecticides, such as imidacloprid, clothianidin and thiamethoxam.

This was followed by France’s highest court, the Conseil d’État (council of states), **ruling** that temporary **derogations** granted by the country’s Ministry of Agriculture in 2021 and 2022 for the sowing of sugar beet seeds treated with products containing imidacloprid and thiamethoxam were illegal. The decision reversed a favourable judicial stance, when in March 2021, the Court **validated** the government’s move allowing the use of neonicotinoid insecticides to tackle yellowing virus damage to the country’s sugar beet crops.

Since the CJEU judgement, France **decided** not to extend its neonicotinoid derogations to the 2023 season, with the move sparking **protests** by farmers across the country.

Farmers Edge scores valuation mark up amid takeover bid

16 January 2024

Canadian digital agriculture supplier Farmers Edge (Winnipeg, Manitoba) reports receiving an updated offer from its majority stakeholder to take the business private. The revised proposal from Canadian financial holding company Fairfax Financial Holdings (Toronto, Ontario), which owns 61.4% of the former’s shares, involves the purchase of all outstanding shares in the company for 35 Canadian cents each (26 US cents). The development marks a 40% increase to the **previously proposed** purchase price of 25 Canadian cents (18 US cents) per share.

Farmers Edge notes that the latest offer marks a 218% premium to the company’s closing price at the Canadian Toronto Stock Exchange, and to the 20-day volume weighted average price per share, as of the close of trading on November 15, 2023. It reports signing a letter of intent with a Fairfax affiliate concerning the proposed transaction following the revised offering, adding that the arrangement was mutually agreed upon by the boards of both the entities.



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Adama launches five cereal fungicides in Europe

17 January 2024

Adama has launched five cereal fungicides across Europe that tackle diseases impacting yields at each stage of a crop's reproductive phase. The business rolled out the portfolio in the UK last year, with further launches planned across Europe, including the UK and Ireland throughout 2024. All fungicides contain the demethylation inhibitor (DMI), prothioconazole, and are based on Adama's proprietary Asorbital formulation technology.

The portfolio includes: Soratel (prothioconazole), a broad-spectrum solution that can be used in various segments alone or in mixtures; Maxentis (azoxystrobin + prothioconazole), a broad-spectrum, multi-crop and "easy-to-use" fungicide with flexible spray timings; and Forapro (fenpropodien + prothioconazole), a broad-spectrum fungicide that controls major diseases in wheat such as *Septoria* spp, rust and powdery mildews.

The launch also comprises the fungicide, Maganic (difenoconazole + prothioconazole), that protects wheat against all ear diseases, including *Fusarium* spp, resulting in lower mycotoxin levels and higher quality grain, and the broad-spectrum fungicide, Avastel (prothioconazole + fluxapyroxad), that provides curative and preventive disease control.

Adama states that the products will offer a "comprehensive portfolio" designed to address different application stages – T1, T2, and T3 – and various value segments.

"Our new, enhanced cereal fungicide portfolio is a powerful demonstration of our ability to deliver value and innovation through enhancing the performance of existing molecules with proprietary formulation technologies and delivering products to our customers that provide excellent disease control, keep the crop safe and address the different value segments in the market," says head of global fungicides Alex Mills.



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CropLife Brasil expresses surprise at agchem law vetoes

22 January 2024

Industry association CropLife Brasil says that it was surprised by the Brazilian President's vetoes in approving the country's new pesticide law, Lei 14785/2023. The presidential sanction on radical reforms to the country's agrochemical law **included vetoes** on measures that the sector has seen as crucial, and which were approved by the Senate as bill **PL 1459/2022**.

Despite advances in the approved legislation, the sanctioned text surprised the sector, CropLife says. The industry was expecting full sanction of the bill. "The original version would have brought fundamental institutional advances for agribusiness to continue with access to technological innovations present in several agricultural producing countries worldwide," it says.



Getty images

Key vetoes

The association highlights the veto stopping the move to center analysis and inspection of agrochemicals at the Ministry of Agriculture. This would have replaced the existing protocols in which the Ministry, the national health surveillance agency, the Anvisa, and the environmental agency, the Ibama, are each required to approve a product before its final registration. “The Ministry’s leadership would have ensured greater predictability for the private sector and efficiency for public administration, without renouncing the rigid technical-scientific criteria of health [through Anvisa] and environmental [via the Ibama].”

CropLife says another “unjustifiable” veto concerned indelible labelling of company brand names on packaging. “Currently, Brazil has one of the most advanced ‘reverse logistics systems’ in the world, with 93% of the packaging used for controlled recycling.” Reverse logistics refers to the recovery and recycling of empty containers after use.

“The veto therefore represents only an additional cost without any benefit to the environment,” CropLife says. The association further criticizes a veto of a “unified” tax. “[This] provided for investment in the structure of regulatory agencies and greater supervision of agricultural chemical pesticides,” it claims.

“We should bear in mind that environmental agencies had already gained amendments to the bill as a condition of support, and the bill was approved across Parliament after 24 years of debate. Therefore, our expectation was for full approval and sanction.”

The new law including the vetoes of the President will go for consideration and potential assent of both houses of Parliament.

BASF provisional Q4 sales down 7%

22 January 2024

BASF’s Agricultural Solutions business is expected to have fallen 6.8% to €2,126 million (\$2,275 million at the average rate for the quarter) at the mid-point of analyst estimates for the fourth quarter of 2023. The provisional estimates are wide ranging. They go from €1,769 million-€2,714 million (\$1,893 million-\$2,904 million).

Earnings before interest and tax (EBIT) before special items are expected to have crashed by over 98% to just €2 million (€2.1 million). The estimates also vary widely from a loss of €113 million (\$121 million) to a profit of €86 million (\$92 million).

The full-year turnover is expected to have dropped 2.8% to €9,992 million (\$10,791 million at the average rate for the year) at the mid-point of analyst estimates. The estimates range from €9,635 million-€10,580 million (\$10,406 million-\$11,426 million).

EBIT before special items for the year is expected to have climbed some 25% to €1,528 million (\$1,650 million) at the mid-point, with estimates ranging from €1,413 million to €1,612 million (\$1,526 million-\$1,741 million).

First quarter 2024

The company has also issued estimates for the current quarter and year. For the first three months of 2024, BASF estimates sales to have dropped 8.1% at €3,576 million (\$3,898 million at the current rate) within a range of €3,191 million-€3,988 million (\$3,478 million-\$4,347 million). EBIT before special items at the mid-point estimate would total €1,133 million (\$1,235 million).

The company estimates full-year 2024 sales of €9,910 million (\$10,802 million) with a bottom end estimate of €8,898 million (\$9,699 million) and a top end of €10,800 million (\$11,772 million). EBIT before special items at the mid-point estimate would total €1,373 million (\$1,497 million).

Last interim report

Turnover of the business dropped heavily in the **third quarter** of last year. Sales were down almost 19% for the three months, but by only less than 2% for the first nine months. However, EBIT for the first nine months rose by almost 40%.

John Deere/SpaceX ally for satellite-based ag services

19 January 2024

US farm equipment manufacturer John Deere (Moline, Illinois) has agreed a partnership with Hawthorne, California-based US space technology company SpaceX. The strategic deal involves John Deere leveraging the latter's Starlink satellite internet constellation to provide communication services to its clients. The businesses rate the collaboration as an "industry first" and anticipate the development translating into enhanced adoption of precision agriculture technologies.

John Deere explains that the satellite communication service will connect new as well as existing farm machinery through satellite internet and "ruggedized" satellite terminals. It expects the approach to increase growers' utilization of innovations such as autonomy, "real-time" data sharing, remote diagnostics, self-repair solutions, and machine-to-machine communication.

The offering is to undergo a limited release in Brazil and the US in the second half of 2024. Activating the service will involve John Deere dealers installing a satellite terminal alongside a 4G LTE modem on compatible machinery to connect them to the company's farm management system, Operations Center.

Agritask/Pessl partner to integrate weather offering

19 January 2024

Israeli agronomic intelligence provider Agritask (Tel Aviv) has partnered with Austrian digital agriculture company Pessl Instruments (Weiz) to integrate the latter's METOS weather stations into the Agritask platform. The deal involves the former's customers gaining access to METOS to help mitigate risks associated with extreme weather events and climate change shifts.

METOS uses a variety of "real-time" environmental parameters in combination with other agronomic data sources. The technology provides insights into soil and crop conditions, enabling resource-efficient practices, says Agritask, adding that the weather station data will provide a more advanced agronomic picture for users leveraging the company's platform.

The partners anticipate the integration addressing farmer needs depending on their crops, farming locations, and associated weather patterns, seasons and risks. In addition to real-time alerts about weather conditions such as rainfall, Agritask notes that farmers could enhance long-term planning with seasonal weather data and optimize irrigation with insights on soil moisture and evaporation rates.

"We are excited to be collaborating with one of the industry's premier weather stations to provide more advanced weather insights to Agritask customers," says Agritask chief executive officer Ofir Ardon.

Lindsay to invest \$50 m for facility expansion

22 January 2024

US agricultural equipment and irrigation specialist Lindsay Corporation (Omaha, Nebraska) plans to infuse more than \$50 million over the next two years to expand and modernize its manufacturing facility in Lindsay, Nebraska. The company notes that the investment aligns with its strategic growth plan, adding that enhancements to the unit are to be focused on data connectivity, analytics, artificial intelligence (AI), automation and robotics. Furthermore, the improvements will lead to the facility expanding by 40,000 sq ft (3,716 m²).

Lindsay intends to begin the modernization process in the second quarter of 2024 and complete the exercise by the end of next year.

Brazil Ag Ministry/Serpro to build dig ag platform

15 January 2024

The Brazilian Ministry of Agriculture and national government agency data processing service, Serpro, have agreed to co-develop and operate a digital agriculture innovation platform, AgroHub Brasil. The platform will be a “virtual open innovation environment”, seeking to foster the interaction of various regional ecosystems in the agriculture sector.

With multilingual support and employing technological solutions such as application programming interface (API) and artificial intelligence (AI), the platform will connect academia, government, civil society, entrepreneurs and investors, the partners say. They seek to create a technology transfer network focused on innovative solutions that serve growers and foster technological entrepreneurship, they add.

The Ministry’s secretary of innovation, sustainable development, irrigation and co-operation, Renata Miranda, says that platforms such as AgroHub Brasil, are “essential” tools to get technology to growers. “Brazil is a country of continental dimensions, with different needs and potential in each region. With open innovation it is possible to work with public policies more focused on these particularities, with more sustainable strategies and greater engagement,” she adds.

China bans four insecticides

11 January 2024

The Chinese Ministry of Agriculture and Rural Affairs has decided to ban the use of four insecticides. They are: the organophosphate insecticide/acaricide, omethoate; the insecticide/nematicide, carbofuran; and the insecticides, methomyl and aldicarb. The Ministry had **invited comments** for the proposal to ban the active ingredients last year.

The registration for the end-use formulations of the four insecticides will be revoked on June 1 this year. Meanwhile, existing stocks of products can be sold and used until June 1, 2026. The Ministry adds that producers of the ais can amend their registrations for export-only purposes.

Furthermore, carbofuran and methomyl can be continued to be produced as precursor materials for the insecticides, benfuracarb, carbosulfan, and thiodicarb, and circulated to downstream factories.

US EPA extends consultation on amended neonic rules

17 January 2024

The US EPA has **extended** by two months a public consultation on a petition from two environmentalist groups to amend its rulemaking process involving neonicotinoid as well as other systemic insecticides under the nation's Fungicide, Insecticide and Rodenticide Act (FIFRA). The deadline to submit comments has been revised to March 25, 2024, from the earlier cut-off of January 23.

In their **petition** from November last year, the groups had urged that the EPA mandate applicants and registrants of neonicotinoid insecticides to furnish it with performance and efficacy data of the active ingredients and products in their registration applications as well as during registration reviews. Additionally, they had sought filing of the data with the Agency within 180 days if the amended guidelines were to be implemented.

Argentina approves GM yeasts for bioethanol production

16 January 2024

The Argentine Ministry of Economy's agriculture secretariat has approved the commercialization of four genetically modified yeasts targeted at bioethanol production. They represent the first GM yeast approvals in Argentina.

The secretariat has authorized the commercialization of the yeast *Saccharomyce cerevisiae* strains GICC03486 (GPY10009), GICC03506 (GPY10023), GICC03578 (GPY10168) and GICC03588 (GPY00603), from US biologicals business Danisco's Argentine subsidiary, Danisco Argentina. The yeasts offer improved capacity for the production of bioethanol from the fermentation of grains.

Secretary Fernando Vilella welcomed the approvals, saying: that "the initiative has the potential to transform our future in a significant way, placing us in a new stage focused on the bioeconomy, where biotechnology and bioinputs are combined to promote the obtaining of bioenergy, an environmentally friendly energy source".

The approvals were issued in the official gazette through Resolutions 3/2003 and 6/2004.

Brazil's Embrapa develops fruit fly bioinsecticide

17 January 2024

The Amapá state division of the Brazilian agricultural research corporation, the Embrapa, has developed a bioinsecticide based on the fungus, *Metarhizium anisopliae*, to fight fruit flies. These include the quarantined, carambola fruit flies (*Bactrocera carambolae*).

The quarantined pest is present throughout the state of Amapá and in restricted areas of Roraima and Pará states in the north of Brazil. *M anisopliae* fungus isolate came from a soil in the city of Macapá, Amapá. Because it was obtained in an Amazonian environment, the micro-organism is ideal for the control of fruit flies that occur in tropical environments, the Embrapa says.

Fruit farmers would have to apply the bioinsecticide in the canopy cover of host fruit trees. The product works on the larvae, pupae and adults of the pest while they are in the soil. As for adult insects coming out of the treated soil, most emerge infected and die before completing the pre-oviposition period, and thus do not produce offspring, the corporation explains.

Embrapa researchers note the bioinsecticide's potential for the control of carambola fruit flies as well as Mediterranean fruit flies (*Ceratitidis capitata*), Oriental fruit flies (*Bactrocera dorsalis*) and South American fruit flies (*Anastrepha fraterculus*). They add that applications could be made abroad as well as in Brazil.

Corteva's Utrisha N to lead bio debuts in Australia

18 January 2024

Corteva Agriscience plans to launch a new range of biological products in Australia, starting with a biostimulant. The first product to be introduced onto the market will be the nutrient efficiency optimizer, Utrisha N (*Methylobacterium symbioticum* strain SB23).

The company states that Utrisha N is effective in all plants, including cereals, canola and horticultural crops, adding that the product enhances a naturally occurring process that allows a plant to absorb nitrogen from the atmosphere and convert it to ammonium to boost nutrition and yields. Corteva conducted some 100 trials for the offering across Australia in a variety of crops and conditions.

Last year, Utrisha N was launched in **Argentina**, **Mexico** and was **validated** by the USDA under its Process Verified Program (PVP). The business also bolstered its position in the global biologicals market with the **takeover** of Spanish biological crop protection supplier Symborg (Murcia), as well as US biostimulants business Stoller (Houston, Texas).

Nigeria approves commercial release of GM Tela maize

16 January 2024

Nigeria has approved the commercial release of the genetically modified insect-resistant and drought tolerant corn (maize) line, Tela. The four varieties that have received approval are SAMMAZ 72T, SAMMAZ 73T, SAMMAZ 74T, and SAMMAZ 75T.

Tela maize can tolerate moderate drought and is resistant to insects such as fall armyworms (*Spodoptera frugiperda*) and stem borers (*Chilo partellus* and *Busseola fusca*). The country **approved** the maize variety for open field trial cultivation in 2021, followed by conducting **trials** the year after.

The **Tela Maize Project** was launched in 2018 and is part of an international consortium co-ordinated by the African Agricultural Technology foundation (AATF). Partners in the project include Bayer's Crop Science division, the International Maize and Wheat Improvement Center (CIMMYT), and the national agricultural research systems of seven African countries including Ethiopia, Kenya, Mozambique, Nigeria, South Africa, Tanzania and Uganda.

Nigeria issued its biosafety law in **2015** and started GM crop **trials** the same year.

SGS to divest crop science ops to Eurofins Scientific

12 January 2024

Swiss inspection, verification, testing and certification company SGS (Geneva) has agreed a deal with contract research company Eurofins Scientific to divest its crop science operations in 14 countries. The agreement is subject to consultation with stakeholders and is expected to close in the coming months.

SGS's crop science activities are composed of contract research, agricultural input testing and precision farming and agronomy services. "The scope of divested operations includes over 480 employees located in 14 countries in Europe, North America, South Africa and Brazil with revenues amounting to approximately CHF 46 million [\$54.6 million at the current rate] in 2022," says the company.

The divestment is part of SGS's strategic portfolio aimed at further aligning the group to the testing, inspection and certification sector trends in chosen markets.

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