



Bayer AG
Communications
51368 Leverkusen
Germany
Phone +49 214 30-1
media.bayer.com

News Release

Crop Science R&D Pipeline Update 2022

Bayer highlights advancements of agriculture industry's most prolific R&D pipeline

- Industry-leading investment expected to translate to nearly €30bn peak sales potential
 - Game-changing Short Stature Corn advances, readying for 2023 commercial trials
 - More than 500 new high-performing seed hybrids and varieties deployed and greater than 300 new registrations refresh crop protection portfolio
 - Digital transformation well underway as Climate FieldView™ reaches more than 180 million acres; unlocks climate-smart models with expansion of Bayer Carbon Initiative
-

Leverkusen, February 16, 2022 – Bayer announced today the advancement of key innovation projects that showcase the latest in crop protection, seeds & traits and digital solutions. These significant advancements, plus more than 500 seed deployments and greater than 300 new crop protection product registrations in 2021 are expected to fuel both mid-and-long-term growth for the company as they bring new value to growers around the globe. The company's new solutions for agriculture are geared to support farmers in their need to meet the growing global demand for food, feed, fiber, and fuel, while also advancing a climate-smart future for the industry. This commitment to Bayer's farmer customers and innovative research brings forward a pipeline valued at up to €30bn peak sales potential over the next two decades.

"Our pipeline reflects the dedication of our world-class scientists and the value our suite of cutting-edge technologies has in bringing sustainable and integrated farmer-focused solutions to life," said Rodrigo Santos, Member of the Board of Management of Bayer AG and President of the Crop Science Division.

“Fueled by an investment in research and development that’s unmatched in the industry, Bayer has a clear, transformative and deep-seated commitment to maximize the value we can offer to our farmer customers.”

Game-changing corn technologies expected to empower growers across the globe

Bayer’s Short Stature Corn moves a step closer to farmers’ fields as the company’s shorter hybrids advance to Phase 4. Standing one-third shorter than standard height corn hybrids, the technology improves standability, including better greensnap and stalk lodging tolerance, to help reduce crop loss from challenging environmental conditions and extreme weather like high winds. Short Stature Corn allows for the more precise application of crop protection and the optimized use of key inputs such as nitrogen. Thanks to benefits like these Bayer sees an incremental peak sales opportunity of about €1bn for North America alone.

In addition, work continues on a full system approach to managing corn more sustainably through Bayer’s Smart Corn System. The system, an entirely new growing structure for one of the world’s most widely produced crops, creates a way for growers to take full advantage of Bayer’s entire portfolio of digital tools, customized seed and crop protection prescriptions, crop health management, and density planting optimization. The Smart Corn System is a win for farmers, sustainability, and food security.

Seeds and traits pipeline demonstrates best-in-class innovation and a farmer-first approach

Bayer’s commitment to customers and sustainable agriculture is underscored by key pipeline advancements in traits, which sees critical products enter the next phase of development.

- Bollgard® 4 cotton moves into Phase 3, offering season-long protection with multiple modes of action for key lepidopteran pests, along with HT4 cotton with five herbicide tolerances.
- The launch of the next-generation technology Intacta 2 Xtend® offers a significant performance advantage for soybean farmers delivering about 2.9 bushels per acre compared to similar varieties that are in the market. With the third-generation project in Phase 3, the company announced the fourth generation is moving to

Phase 1, cementing the franchise's position as the cornerstone for how Bayer is leading the industry in protecting soybean yield against insect and weed pressure.

- To bolster the company's offerings for below-ground insect control in corn, VTPRO4™ Technology and SmartStax® PRO give growers in the Americas access to Bayer's new RNAi-based corn rootworm trait – the first in the industry and crucial for resistance management. It offers the most advanced technology for control of insects in Brazil while supplementing SmartStax® corn in the U.S. with another mode of action.

Launching new approaches in crop protection and complimenting biological solutions

In crop protection, Bayer's newest launches directly address growers' most critical needs.

- In Brazil, Bayer upgrades its number one position in soybean fungicides in Latin America, with the next generation in the Fox franchise, Fox® Supra. Expected to launch later this year, this new formulation includes Indiflin®, a novel active ingredient for unrivalled control of Asian Soybean Rust.
- Australia expects to see two launches in 2022. Xivana, a new global horticulture fungicide with a best-in-class mode of action with very low use rates, delivers outstanding protection of grapes, potatoes, and vegetables. Mateno® Complete, with a third herbicide mode of action, is for use in wheat and barley.
- Bayer's biological crop protection portfolio remains an industry leader with more than 20 commercial and in-licensed products reaching 60 million acres in row crops and high value vegetables. Recent launches, like Flipper™ and Serenade™, provide excellent control options in all organic production systems and are complementary to Bayer's conventional crop protection.

Leading the digital transformation of agriculture and unlocking climate-smart business models

The use of data and analytics continues to rapidly evolve, and agriculture is no different, which is why Bayer is committed to leading digital transformation in the industry. The company's digital farming solutions are positively impacting agriculture by increasing yield and profitability, managing risk and variability, and improving efficiency and sustainability on the farm through more informed decisions. The digital opportunity set for Bayer also

extends beyond the farm, as it expands its digital platforms and marketplaces, and seeks to create downstream value in carbon.

Climate FieldView™, now across more than 180 million acres in 23 countries with the largest database of grower and field trial seed performance data in the industry, continues to help farmers better manage their operations and optimize yields. For instance, Bayer is seeing higher product sales when growers compare and track performance through the digital interface of the FieldView™ platform. Specifically, in the U.S., sales were more than 5% higher for Bayer corn seed customers using FieldView™ Plus versus non-users. Digital capabilities support efforts to offer farmers tailored solutions for their operations and create new offerings in regions around the world. Climate LLC research programs and FieldView™ are utilizing advanced data analytics and agronomic modeling to allow farmers to understand their operations better than ever before.

To unlock downstream value and enable climate smart business models, Bayer expanded its Carbon Initiative with Project Carbonview focused on the United States, designed to create low-carbon feed, fuel, and fiber products. This collaboration, conceptualized by Bayer and developed with support from Bushel and Amazon Web Services is a first-of-its-kind technology solution that will enable ethanol producers to report, analyze and better assess their end-to-end supply chain carbon footprint. Bayer is also working with The Andersons, one of the leading ethanol producers in the U.S., to bring this value to growers.

Finally, the partnership with Microsoft will build a new cloud-based set of digital solutions for use in agriculture and adjacent industries, bringing new infrastructure and foundational capabilities to accelerate innovation, boost efficiency and support sustainability across value chains. Orbia, the company's digital ag marketplace in Brazil, has expanded its reach to more than 185,000 farmers covering more than 70% of the country's planted area, and expansion throughout Latin America is underway.

“Once again Bayer’s pipeline extends the company’s track record of converting R&D into value-adding solutions for growers,” said Bob Reiter, Head of R&D for the company’s Crop Science Division. “Whether it is leading innovation in the core business, tackling climate change with carbon-smart practices, or transforming agriculture with Digital Farming Solutions, Bayer continues to deliver solutions and remains committed to making

global food systems more resilient while catering for the need to feed a growing population.”

Notes to journalists:

To hear Head of R&D Bob Reiter and additional Bayer R&D experts discuss 2022 R&D Pipeline highlights, join a virtual media Q&A session for journalists on February 17 at 8 a.m. EST / 2p.m. CET. Please register [here](#).

About Bayer

Bayer is a global enterprise with core competencies in the life science fields of health care and nutrition. Its products and services are designed to help people and planet thrive by supporting efforts to master the major challenges presented by a growing and aging global population. Bayer is committed to drive sustainable development and generate a positive impact with its businesses. At the same time, the Group aims to increase its earning power and create value through innovation and growth. The Bayer brand stands for trust, reliability and quality throughout the world. In fiscal 2020, the Group employed around 100,000 people and had sales of 41.4 billion euros. R&D expenses before special items amounted to 4.9 billion euros. For more information, go to www.bayer.com.

Contact for media inquiries:

Charla Lord, phone +1 313 343 7196

Email: charla.lord@bayer.com

Alexander Hennig, phone +49 175 30 89 736

Email: alexander.hennig@bayer.com

Contact for investor inquiries:

Bayer Investor Relations Team, phone +49 214 30-72704

Email: ir@bayer.com

www.bayer.com/en/investors/ir-team

Find more information at www.bayer.com.

cl (2022-0011E)

Forward-Looking Statements

This release may contain forward-looking statements based on current assumptions and forecasts made by Bayer management. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Bayer's public reports which are available on the Bayer website at www.bayer.com. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.