



News Release

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

Gene Editing: Pairwise and Bayer start new five-year multi-million Dollar collaboration to further advance short-stature corn

- New agreement will focus on CRISPR applications for Bayer's Preceon™ Smart Corn System
- Collaboration builds on successful initial gene-editing partnership between the two companies that resulted in 27 novel traits being transferred into Bayer's testing programs

Durham, N.C., Monheim, Germany, August 29, 2023 – Pairwise, a food and agriculture company known for bringing the first gene-edited food to the U.S. market, and Bayer today announced a new five-year, multi-million Dollar agreement focused on innovations in short-stature corn. This new program leverages Pairwise's Fulcrum™ platform and builds on the success of the companies' initial five-year collaboration for corn, soy, wheat, cotton, and canola.

The upcoming collaboration between Pairwise and Bayer will be focused on optimizing and enhancing gene-edited short-stature corn for future use in Bayer's Preceon™ Smart Corn System. Short-stature corn – with a targeted height of 30 to 40 percent less than traditional corn – is an innovative new approach to growing corn and offers a number of sustainability benefits, including protections from crop loss due to increasingly severe weather events and extreme winds brought about by climate change. Short-stature corn also allows for more precise application of inputs throughout the growing season, sustainably growing more through reduced risk of crop loss.

“Pairwise's proprietary base editing tools allow for specific changes at virtually any location in the genome, which has the potential to make targeted and much needed improvements in agriculture,” said Bob Reiter, Head of R&D at Bayer's Crop Science Division. “These kinds of new genomic techniques are extraordinarily focused and

produce results much more quickly and precisely than the conventional breeding process, ensuring that we can accelerate the delivery of solutions that growers need.”

The initial five-year collaboration focused on corn, soy, wheat, cotton and canola with the aim of empowering producers to grow more with fewer inputs on the same amount of land. The partnership, which concluded in June 2023, resulted in 27 novel traits being transferred into Bayer’s testing programs. Results of the program demonstrated significant commercial value including edited corn phenotypes with a 20 percent increase in kernel row numbers, which could lead to significantly more yield on the same number of acres. Another outcome has been edited soy that reduces the severity of Asian soybean rust, potentially reducing the need for fungicides to combat the disease and protecting the potential for higher yields.

These, and other significant achievements, were made possible through the development of custom gene editing tools by Pairwise. These include REDRAW™, or RNA encoded DNA replacement of alleles with CRISPR, a precise templated editing toolbox that can make any type of small edit at CRISPR-targeted sites. Another tool is SHARC™, a proprietary enzyme that works well for cutting, base editing, and REDRAW editing. These tools will also be used in the new collaboration focused on advancing short-stature corn.

“We look forward to continuing our work with Bayer, with new emphasis on contributing to their novel smart corn system,” added Tom Adams, Co-founder and CEO at Pairwise. “Working closely with Bayer on furthering this revolution in corn gives us the market reach to enable our technology innovations to more quickly adjust to the biggest challenge of our time: the changing climate.”

Pairwise has already demonstrated the successful use of CRISPR and other emerging technologies to accelerate the delivery of new products to markets, and recently launched its first product, Conscious™ Greens into the U.S. foodservice channel. Through the leading use of cutting-edge technologies, and due to the efficiency of the company’s [Fulcrum Platform](#), the product was advanced from concept to commercialization in just four years. In addition, Pairwise works with other innovative companies and has licensed its IP for applications in additional crops of global importance, including licensing elements of the Fulcrum Platform to [Tropic Biosciences for applications in banana and coffee](#).

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 the planet thrive by supporting efforts to master the major challenges presented by a growing and aging global population. Bayer is committed to driving sustainable development and generating 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 2022, the Group employed around 101,000 people and had sales of 50.7 billion euros. R&D expenses before special items amounted to 6.2 billion euros. For more information, go to www.bayer.com.

About Pairwise

Pairwise is a company dedicated to building a healthier world through better fruits and vegetables and is driven by the belief that healthy food should be consistently fresh, delicious, and convenient, Pairwise brings together leaders in agriculture, technology, and consumer foods to harness the transformative potential of new genomics technologies to create innovative new products. Pairwise is working to develop new varieties of crops, and to partner with organizations that seek to drive innovation and access across the plant-based economy. In February 2021, Pairwise raised \$90 million in a successful series B funding round, bringing total fundraising to \$115 million. Backed by industry leading investors Deerfield, Aliment Capital, Leaps by Bayer, and Temasek, Pairwise has grown to over 160 employees in five years with locations in North Carolina and California. The company was founded by Chief Executive Officer Tom Adams and Chief Business Officer Haven Baker, with scientific co-founders J. Keith Joung, Professor of Pathology at Harvard Medical School, David Liu, Director of the Merkin Institute of Transformative Technologies in Healthcare, and Vice-Chair of the Faculty at the Broad Institute of Harvard and MIT; and Feng Zhang, McGovern Investigator and a professor at MIT. For more information, visit www.pairwise.com

Learn more about the Fulcrum Platform [here](#).

Contact for media inquiries:

Bayer:

Alexander Hennig, phone +49 175 3089736

Email: alexander.hennig@bayer.com

Pairwise :

Jess Fitzgerald, phone +1 925 247 4057

Email: Jess.Fitzgerald@edible-inc.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.

Follow us on twitter.com/bayer

ahe (2023-0150E)

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.