

Syngenta Vegetable Seeds and Heritable Agriculture enter collaboration to optimize commercial crop portfolios using AI

24 September 2025 | News

AI-Powered insights to identify the best vegetable varieties for growers worldwide; Heritable, a spinoff from Google parent Alphabet's innovation lab, will use AI-tools to help accelerate data-driven decisions for the best placement of vegetable varieties to offer growers



AI-Powered insights to identify the best vegetable varieties for growers worldwide; Heritable, a spinoff from Google parent Alphabet's innovation lab, will use AI-tools to help accelerate data-driven decisions for the best placement of vegetable varieties to offer growers

Vegetable seed companies with hundreds or even thousands of varieties are often faced with the difficult job of identifying the best placement of varieties for growers in diverse markets. It's not just about yield – growers need varieties that are best suited for their unique growing conditions and climate patterns. Traditionally, seed companies spend countless hours evaluating data, trialing different varieties and sourcing feedback from growers and the value chain. While these inputs are still important, technology now offers a way to accelerate these decisions.

Syngenta Vegetable Seeds and Heritable Agriculture announced today the signing of a collaboration to harness artificial intelligence (AI) technology to determine the best vegetable varieties to offer growers. Leveraging historical data on geographical conditions and crop trialing, Heritable will use AI-tools with Syngenta's global product portfolio, with the goal of better predicting the best-performing commercial varieties in different regions to ensure growers have the best possible product offering from Syngenta.

"Planting the right seed is critical to a grower's success. New technologies such as AI can help us bring the best innovation to the field or greenhouse," said Matthew Johnston, Global Head of Vegetable Seeds and Flowers at Syngenta. "We're thrilled to partner with a leader in AI and decision science in the agricultural space, which will provide an exciting opportunity to explore how to better leverage our portfolio for the benefit of growers."

Heritable was founded at Google X, Alphabet's Moonshot Factory, and is focused on bringing the best of AI to agriculture. For Syngenta, the Heritable team is dissecting the interaction between genetics and environment, weather conditions, soil variables, and additional proprietary data. If successful, they will be able to predict scalable vegetable seed performance for a grower anywhere in the world, up to a 10-meter resolution.

“We are excited to work with Syngenta to help bring cutting-edge AI tools to help them place products more efficiently,” shared Brad Zamft, CEO of Heritable Agriculture. “This collaboration with their vegetable seeds team is a great example of the kinds of markets and applications that can be embraced when targeting the latest in AI towards all portions of the agricultural industry.”

Syngenta has been at the forefront of the agricultural industry in its adoption of AI in all parts of its business, from crop inputs to bio-stimulants to digital platforms, including recently adding a specialist AI chatbot into the Cropwise digital platform Cropwise AI. This collaboration is another step in exploring how technology can better support food security and ensure reliable and affordable produce supply in the face of constantly changing climate conditions.

Syngenta has a strong heritage of breeding vegetable varieties dating back more than 150 years ago, and today is the most global organization in the industry with Vegetable Seeds teams operating in more than 60 countries and shipping seeds to 124 countries.