



The Vegetable Seeds Business of Bayer





Vegetables R&D

Innovation Stories



To support the Vegetable Seeds business in its goal of becoming both a global market and thought leader, we must demonstrate our customer-centric approach to innovation.

The following stories summarize how the Vegetables R&D organization is delivering on its innovative strategy today.

	Speedier Solutions to Growers' Toughest Challenges	<i>Unlocking innovative, high quality traits to solve grower challenges faster than ever before.</i>
	Power of Precision	<i>Utilizing the power of data earlier in the pipeline to generate more precise solutions to, on and beyond the farm.</i>
	Consumer-Driven Pipeline	<i>Applying predictive analytics so that our varieties can deliver what consumers want and need to eat.</i>
	Global Diversity, Local Delivery	<i>Bringing together diverse talent and germplasm from around the world to unleash new traits tailored to the local needs of customers globally.</i>





Power of Precision

Farming has always involved a long list of inherent risks, from changing weather patterns and volatile markets to labor shortages, pests and disease. While some of these challenges are outside the realm of control, new advancements in automation and precision analytics are making it possible to mitigate risk, enable more sustainable production, and improve grower outcomes better than ever before.

But the power of these precision techniques isn't just felt on the farm, it starts long before a seed is even planted in the ground. Just like growers use digital technology to better understand what's happening in their fields, our Vegetables R&D teams are utilizing the power of data and automation earlier in the pipeline to generate more precise solutions and varieties, ultimately resulting in greater uniformity, efficiency and quality regardless of growing environment.





Power of Precision

Solutions:

Our Vegetables R&D teams leverage predictive modeling to identify critical information early in the pipeline to make advancement decisions. Automated, digital phenotyping is then used to describe products precisely and objectively. *Related innovations include:*

// **Tablet Imaging Platform**

// **Automated Scale Imaging System**

Results:

20x

potential increase in trial data

20%

or more increase in selection precision

Greater uniformity

decreasing waste and maximizing profit

//// Key Takeaway

Automating data collection and analysis allows us and our customers to be more prescriptive and predictive in production methods to generate improved yield and more desirable and uniform output.

“We are getting more and more predictive and prescriptive, helping our R&D pipeline and providing growers with more data on their operation for their crop.”

- Tom Osborn, Analytics and Pipeline Design Lead

