



Fit³, HRB Partner on disease-resistant, longer-lasting tomato varieties

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The long-term collaboration will use genome-editing technology to develop tomato varieties with improved disease resistance, shelf life and nutritional value



Spanish vegetable seed company Fit³ and Netherlands-based Hudson River Biotechnology (HRB) have entered a long-term partnership to accelerate the development of new tomato varieties, combining precision genome-editing capabilities with established breeding expertise.

The collaboration will focus on generating new genetic variation directly in Fit³'s proprietary breeding lines, with research and development teams jointly prioritising traits that address growers' production challenges and evolving consumer expectations.

Disease and pest resistance will be central to the programme, alongside consumer-oriented characteristics such as shelf life and nutritional value. The partnership also seeks to address the pressures facing vegetable breeders, including changing growing conditions, evolving pest and disease threats, the transition towards lower agrochemical use and shifting market demands.

The initiative combines Fit³'s germplasm, breeding capabilities and market knowledge with HRB's BioMaas platform, which integrates genome editing, plant regeneration and trait expertise. The platform is designed to translate biological insights into useful genetic material that can be incorporated into commercial breeding programmes.

"Successful breeding starts with understanding what growers, the value chain and consumers need, and finding the best way to translate that into new varieties," said Laia Fit³, Chief R&D Officer at Fit³. She added that the partnership would expand the possibilities for innovation and help bring successful varieties to market faster.

HRB will work as an extension of Fit³'s R&D operations, contributing technology and trait knowledge while collaborating on project priorities, trait selection and development decisions. The companies will adjust their programmes as research generates new findings, with the objective of moving promising traits into breeding material with practical commercial value.

Ferdinand Los, CEO of HRB, said the partnership would bring together the companies' capabilities and enable them to learn collaboratively while focusing on the requirements for advancing promising ideas into breeding programmes.

Lotte Westerhof, Chief Scientific Officer at HRB, said combining the BioMaas platform and its trait catalogue with Fit's genetics and breeding expertise would help translate biological insights into material relevant to commercial breeding.

The agreement also reflects the companies' preparations for the European Union's new regulatory framework for new genomic techniques (NGTs), which is expected to take effect in 2028. Both companies are working to develop the capabilities needed to respond as the regulatory and commercial landscape evolves.

The partnership highlights the growing role of genome-editing technologies in vegetable breeding, particularly as breeders seek to develop varieties that can withstand changing environmental conditions, reduce dependence on crop-protection chemicals and meet increasingly demanding quality expectations. Its commercial significance will ultimately depend on how effectively the research translates into improved varieties for growers and consumers.