

Bayer advances genome-editing initiatives for nutrition-enhanced vegetables

29 May 2024 | News

Collaboration with G+FLAS to develop new tomato varieties addresses Vitamin D deficiency affecting a billion people worldwide



Collaboration with G+FLAS to develop new tomato varieties addresses Vitamin D deficiency affecting a billion people worldwide

As part of its strategic open innovation approach global life science company Bayer has advanced two initiatives with external partners to bring forward genome editing in vegetables. Bayer and South Korean biotech company G+FLAS have agreed to collaborate on developing genome-edited tomato varieties that are nutritionally enhanced with vitamin D3. Vitamin D deficiency is a widespread issue globally, particularly in countries where winter sunlight is limited. It affects an estimated billion people worldwide and can lead to a range of health issues including rickets.

“Bayer is committed to achieving “Health for All, Hunger for None”. As we work toward this mission, we are proud to address a widespread nutrition problem and to support a healthy diet through cutting-edge technology. The collaboration leverages G+FLAS’s genome editing technology and Bayer’s proprietary tomato germplasm,” said JD Rossouw, Head of Vegetables Research & Development at Bayer during the World Seed Congress in Rotterdam where the industry gathers from May 27-29.

Part of the agreement is also the ambition to develop seeds for a broader variety of tomato products using genome editing. The technique allows us to make changes to a plant’s genome that could also occur in nature or through conventional breeding but in a more precise and faster way. “Modern breeding technologies, such as genome editing, can provide health benefits and resilience to a changing climate. It is an important new technology in a breeder’s toolbox, and we anticipate it being a part of our pipeline moving forward,” said JD Rossouw.