Field trials of non-browning CRISPR-edited potatoes begin in Argentina

In a study published recently in the <u>Frontiers in Plant Science magazine</u>, scientists from Argentina and Sweden reported they have edited a polyphenol oxidase gene in potatoes (*Solanum tubersoum* L.). After successfully editing the gene, they obtained tubers free of enzymatic browning.

In potato, oxidized polyphenol enzymes are encoded by a gene family with different expression patterns in the plant. As stated in the publication, the "results show that the CRISPR / Cas9 system can be applied to develop transgene-free [non-GMO] potato varieties with reduced enzymatic browning in tubers, through the specific edition of a single member of the gene family"

. . .

With the approval of the National Agricultural Biotechnology Advisory Commission (Conabia), field trials began that "will generate data to register the variety with [Argentina's Instituto Nacional De Semillas] INASE," [said Matías González, a co-author of the study].

During the field trial, researchers will observe the selected lines in the context of normal production, allowing scientists to analyze other morphological aspects of the plants obtained.

[Editor's note: This story was published in Spanish and has been translated and edited for clarity.]

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