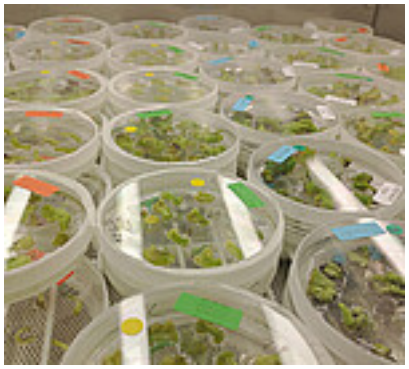
Research project: ENABLE - Establishment of New Breeding ~~Techniques in Su~~gar Beet (Beta vulgaris L.) for Genome Editing

New breeding techniques including genome editing through site-specific endonucleases (e.g., TALEN, CRISPR/Cas9) enable far-reaching new approaches to accelerate breeding progress. Decisive advantages include the possibility of a) creating new genetic variation, b) precisely switching off or changing gene activity or function, c) circumventing the breeding problem of linkage drag (coupling with unfavorable properties) and associated yield losses, and d) targeting of multiple genes simultaneously. The aim of the project is to establish new breeding techniques in sugar beet in order to create new possibilities for addressing urgent challenges in sugar beet breeding. One focus of the project is on innovative transgene-free methods that do not require the transfer of DNA in sugar beet.

Funding program KMU-innovativ: Biotechnologie - BioChance

Project duration: April 1, 2019 - September 30, 2022

Project partner: CGS Crop Genetic Systems UG, University of Hamburg, Christian-Albrechts-University of Kiel



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