LS03-154 - Glycodesign in plants

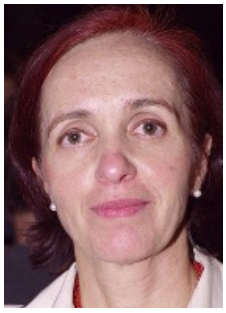
Zusammenfassung

The goal of the project is the production of plant lines that are capable of producing pharmaceutically relevant glycoproteins which are, among other things, applicable in human therapy.

Plants are becoming more and more important for the production of therapeutically important proteins but do not have the capability to generate human-identical sugar structures. However, this form of modification is of great importance for a multitude of therapeutically relevant proteins. Thus selected plant cells will be modified by means of the targeted turning off and adding of genes in a way that allows them to carry out certain protein modifications analogously to human cells. Proteins produced in these plant cell lines by means of gene technology will be modified so that they,
(i) on the one hand, no longer produce plant-specific structures that can cause immune reactions in humans and,
(ii) on the other hand, carry important sugar residues like sialic acids that otherwise can only be found in mammals.
This approach offers an alternative to the conventional, very limited and expensive production capacity of therapeutically usable glycoproteins in animal and human cells.

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Status: Abgeschlossen (01.02.2004 – 30.09.2008)

Weiterführende Links zu den beteiligten Personen und zum Projekt finden Sie unter
https://wwtf.at/funding/programmes/ls/LS03-154/