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(54) Title: EXPRESSION OF SUCROSE PHOSPHORYLASE IN PLANTS

(57) Abstract

Introducing sucrose phosphorylase activity into plants by transformation with a gene for the enzyme increases the rate of sucrose hydrolosis, leading to increased starch, oil, and protein levels. The preferred gene is from *Streptococcus mutans*. Surprisingly, in potatoes transformed to express this gene in tubers, reduced bruise discoloration susceptibility and increased uniformity of starch deposition throughout the tuber are achieved.