

Title (en)

METHOD FOR PRODUCING TRANSGENIC PLANTS WITH MODIFIED 5-AMINOLEVULINIC ACID BIOSYNTHESIS, METHOD FOR IDENTIFYING 5-AMINOLEVULINIC ACID SYNTHESIS EFFECTORS

Title (de)

VERFAHREN ZUR HERSTELLUNG TRANSGENER PFLANZEN MIT VERÄNDERTER 5-AMINOLÄVULINSÄURE-BIOSYNTHESE UND VERFAHREN ZUR IDENTIFIZIERUNG VON EFFEKTOREN DER 5-AMINOLÄVULINSÄURE-SYNTHESE

Title (fr)

PROCEDE DE PRODUCTION DE PLANTES TRANSGENIQUES PAR BIOSYNTHESE MODIFIEE D'ACIDE 5-AMINOLEVULINIQUE, ET PROCEDE D'IDENTIFICATION D'EFFECTEURS DE LA SYNTHESE D'ACIDE 5-AMINOLEVULINIQUE

Publication

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Application

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Priority

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Abstract (en)

[origin: DE19754929A1] The invention relates to a method for producing transgenic plants by means of modified 5-aminolevulinic acid biosynthesis, transgenic plant cells, transgenic plant parts, transgenic seeds, and transgenic reproduction material. The invention is characterised in that one or several nucleic acid molecules coding for a protein with a 5-aminolevulinic acid synthase function (ALAS), selected from a group of feedback regulated ALAS, animal ALAS and bacterial ALAS, an active fragment thereof or an antisense or complementary sequence thereof, are integrated into the plant genome in a stable form. Effectors of natural 5-aminolevulinic acid biosynthesis in plants are found using a method for determining effector efficacy of a test substance in relation to a GSAAT, by: a) determining the enzymatic activity of the GSAAT in the absence of a test substance b) determining the enzymatic activity of the GSAAT in the presence of a test substance; and c) by comparing the enzymatic activities determined under a) and b).

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