

Title (en)

PRODUCTION AND APPLICATION OF TRANSGENIC MUSHROOM MYCELIUM AND FRUITBODIES

Title (de)

HERSTELLUNG UND ANWENDUNG VON TRANSGENEM PILZ-MYZEL UND FRÜCHTKÖRPERN

Title (fr)

PRODUCTION ET APPLICATION DE MYCELIUM ET DE SPOROPHORES DE CHAMPIGNONS TRANSGENIQUES

Publication

**EP 0708826 A1 19960501 (EN)**

Application

**EP 94925030 A 19940713**

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Abstract (en)

[origin: WO9502691A2] The invention involves different methods to modify genetic characteristics of homobasidiomycetes in particular commercial homobasidiomycetes such as the common or button mushroom Agaricus bisporus via treatment with donor DNA or fusions using protoplasts and via matings between strains. The methods may be used for the improvement of commercial characteristics and for the commercial production of enzymes and metabolites. The invention is in particular directed at a method for obtaining a selectable stable transformant of a homobasidiomycete capable of expressing integrated donor DNA comprising at least a dominant selectable marker at a detectable level, wherein said host is optionally non-auxotrophic and can be transformed without cotransformation with said dominant selectable marker and is transformed with said donor DNA. The invention is also directed at a method for production of stable transgenic fruitbodies directly from transformed heterokaryons or indirectly through mating or protoplast fusion of transformants obtained through mating of transformants obtained. A method for providing a genetic fingerprint of both homokaryotic and heterokaryotic material obtained through transformation is also described as well as a method for producing homokaryotic, material from transformed heterokaryotic material. A specific vector for use in transformation is described as is a method for producing such a vector.

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