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[1]周 洁,于 崧,王珊珊,等.抗盐碱转基因大豆对根际土壤固氮细菌多样性的影响[J].大豆科学,2013,32(06):801-805.[doi:10.11861/j.issn.1000-9841.2013.06.0801]
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摘要: ?以抗盐碱转基因大豆（SRTS）为主要研究对象，应用PCR DGGE技术分析种植大豆后土壤细菌固氮酶 nifH 基因的分子多样性，从而为在盐碱地建立转基因作物土壤生态安全评价技术体系和监测提供基础研究资料。结果表明：SRTS的DGGE多样性指数、均匀度指数均高于其受体亲本黑农35，但差异不显著；而显著高于抗线王和野生大豆。聚类分析显示，SRTS与黑农35和合丰50的相似性最大。总体表明种植转基因大豆对土壤固氮细菌多样性无显著影响。

Abstract: ?The molecular diversity of soil bacteria nitrogenase nifH gene after planting the salt tolerance of transgenic soybean,(SRTS),its recipient parent Heinong 35,as well as Hefeng 50,Kangxianwang and Yesheng 21 was analyzed by polymerase chain reaction-denaturing gradient gel electrophoresis (PCR DGGE),so as to provide technical basis for establishing soil ecological security assessment system for transgenic crops in saline soil.The Shannon-Wiener diversity indexes(Dsh)and evenness indexes(Jsh)of SRTS were higher than Heinong 35 without significant difference,while significantly higher than Kangxianwang and Yesheng 21.Cluster analysis of DGGE bands showed SRTS had higher similarity with Heinong 35 and Hefeng 50.Results suggest planting genetically modified soybeans has no obvious influence on diversity of soil nitrogen fixing bacteria.

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