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[1]姚丙晨,沈艳茹,韩雪,等.大豆子叶节和胚尖再生体系的比较及大豆SR1基因的遗传转化[J].大豆科学,2012,31(03):364-367, 373. [doi:10.3969/j.issn.1000-9841.2012.03.006]  
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## 大豆子叶节和胚尖再生体系的比较及大豆SR1基因的遗传转化

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摘要: 以合丰23和合丰35的子叶节和胚尖为外植体,通过农杆菌介导对抗大豆疫霉根腐病基因SR1进行遗传转化。结果表明:合丰35胚尖和子叶节体系的出芽率(96.1%和79.1%)均显著高于合丰25(66.45%和74.4%);胚尖转化体系的平均再生周期(40 d)低于子叶节转化体系(68 d);在诱导培养基上培养20 d时胚尖转化体系的转化效率(96.1%)高于子叶节体系(77.8%)。以合丰35胚尖为外植体成功转化大豆抗疫霉根腐病基因SR1,共获得6株转基因植株。

Abstract: In this study, the soybean cotyledonary node and embryonic tip were used as explants to transform SR1 gene into Hefeng 25 and Hefeng 35, which are susceptible to soybean Phytophthora root rot. The results showed that the regeneration of Hefeng 35 reached 96.1% and 79.1%, in embryonic tip and cotyledon node system, respectively, which was significantly higher than that of Hefeng 25 (66.45% and 74.4%). The mean regeneration period of Hefeng 35 in embryonic tip and cotyledonary node transformation system was 40 and 68 d, respectively. When the explants of the two systems grew on the SIM or SEM for 20 days, the regeneration frequency of embryonic tip (96.1%) was higher than that in cotyledonary node transformation system (77.8%). The SR1 gene was transferred into Hefeng 35 by embryonic tip explants, and obtained 6 transgenic plants.

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