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农杆菌介导不同基因型大豆品种子叶节遗传转化条件的研究

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作者： 杨 喆[1] (KeySearch.aspx?type=Name&Sel=杨 喆)；2 (KeySearch.aspx?type=Name&Sel=2</sup>) (KeySearch.aspx?type=Name&Sel=2</sup>)； 唐晓飞[1] (KeySearch.aspx?type=Name&Sel=唐晓飞)； 张 颖[1] (KeySearch.aspx?type=Name&Sel=张 颖)； 董兴月[1] (KeySearch.aspx?type=Name&Sel=董兴月)； 王凤义[2] (KeySearch.aspx?type=Name&Sel=王凤义)； 刘丽君[1] (KeySearch.aspx?type=Name&Sel=刘丽君)
1.黑龙江省农业科学院 大豆研究所，黑龙江 哈尔滨 150086；
2.东北农业大学 农学院，黑龙江 哈尔滨150030

Author(s): YANG Zhe[1] (KeySearch.aspx?type=Name&Sel=YANG Zhe)； TANG Xiao-fei[1] (KeySearch.aspx?type=Name&Sel=TANG Xiao-fei)； ZHANG Ying[1] (KeySearch.aspx?type=Name&Sel=ZHANG Ying)； DONG Xing-yue[1] (KeySearch.aspx?type=Name&Sel=DONG Xing-yue)； WANG Feng-yi[2] (KeySearch.aspx?type=Name&Sel=WANG Feng-yi)； LIU Li-jun[1] (KeySearch.aspx?type=Name&Sel=LIU Li-jun)
1.Soybean Research Institute,Heilongjiang Academy of Agricultural Sciences,Harbin 150086;
2.College of Agriculture，Northeast Agricultural University,Harbin 150030,Heilongjiang,China

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摘要： 以黑农46、黑农53和黑农56的子叶节为转化受体，对农杆菌介导大豆子叶节遗传转化中的6-BA浓度、草丁膦浓度、侵染时间、共培养时间以及伸长培养基进行筛选，确定适合不同基因型的最佳转化条件。结果表明：黑农46、黑农53和黑农56的最佳6-BA诱导浓度分别为1.7、1.6 和1.7 mg·L^{-1}；最佳草丁膦筛选浓度分别为2.0、3.0和2.0 mg·L^{-1}；同时确定了侵染时间、共培养时间和伸长培养基类型的最佳组合是侵染时间25 min、共培养时间3 d和Ⅲ型伸长培养基。

Abstract: Cotyledonary-nodes of Heinong 46,Heinong 53 and Heinong 56 were used as transformation receptors.Culture conditions including 6-BA concentration,glufosinate concentration,infection time,co-culture time and type of elongation medium were screened,in order to find the optimal conditions for Agrobacterium-mediated genetic transformation from different soybean genotypes.Result showed the optimal 6-BA induction concentrations for Heinong 46,Heinong 53 and Heinong 56 were 1.7,1.6 and 1.7 mg·L^{-1},respectively;the optimal concentrations of glufosinate for Heinong 46,Heinong 53 and Heinong 56 were 2.0,3.0,and 2.0 mg·L^{-1},respectively;the optimal combination of infection time,co-culture time and type of elongation medium was infection time 25 min,co-culture time 3 d and type Ⅲ of elongation medium.

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第一作者简介：杨喆（1978-），男，在读博士，研究方向为大豆遗传育种与植物生物技术。E-mail:yz78100@163.com。
通讯作者：刘丽君（1958-），女，研究员，从事大豆遗传育种工作。E-mail:nkyssbd@126.com。

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