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# 菜用大豆高效胚尖离体再生基因型筛选

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摘要： 以华东地区4个主栽菜用大豆品种（交大05-133、交大02-89、沪宁96-10、青酥二号）的胚尖为起始外植体，研究消毒方法、预培养天数、6-BA浓度和培养基组合等对不定芽的诱导和伸长的影响。结果表明：用0.1% $HgCl_2$消毒10 min后配合5%的NaClO消毒5 min，消毒效果最佳，胚尖活力好，且适用于各个品种；预培养时间为2 d，6-BA浓度为3.0 mg·$L^{-1}$，有利于菜用大豆不定芽的诱导；1.0 mg·$L^{-1}$6-BA+0.1 mg·$L^{-1}$ NAA培养基组合有利于增加有效不定芽数；0.05 mg·$L^{-1}$ 6-BA+0.1 mg·$L^{-1}$IBA培养基组合有利于不定芽的伸长；交大05-133为最佳胚尖离体再生基因型，其分化频率为90.86%，诱导15 d后外植体平均不定芽数为4.65个，不定芽平均长度为1.38 cm。

Abstract: To study the effect of sterilization,pre-culture days,different concentrations of 6-BA and medium formulations on induction and elongation of adventitious buds,embryonic tips from four vegetable-type soybean varieties 'Jiaoda 05-133', 'Jiaoda 02-89', 'Huning 96-10' and 'Qingsuerhao' were used as the initial explants.The results showed that the optimal sterilization was using 0.1% $HgCl_2$for 10 min and 5% NaClO for 5 min.The optimal adventitious buds induction formulation was $MSB_5$base medium with 3.0 mg·$L^{-1}$6-BA,and the optimal pre-culture days of embryonic tips was 2 d.The combination of 1.0 mg·$L^{-1}$6-BA and 0.1 mg·$L^{-1}$NAA benefited to produce many adventitious buds.The combination of 0.05 mg·$L^{-1}$6-BA and 0.1 mg·$L^{-1}$IBA benefited to the elongation of adventitious buds.Among the four varieties,the embryonic tips from Jiaoda 05-133 is the best one for regeneration,with 90.86% of adventitious buds induction rate,4.65 of mean number of adventitious buds and 1.38 cm of mean length of adventitious buds after culture for 15 d.

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