



地黄叶片试管块根诱导体系优化的研究

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中文摘要: 目的: 研究不同浓度蔗糖和植物生长物质对地黄叶片试管块根诱导的影响, 建立从地黄叶片诱导试管块根的高效体系。方法: 以85-5地黄试管苗的叶片作为外植体, 先经生根诱导, 后转接至正交设计的培养基中, 诱导地黄试管块根。结果与结论: NAA对试管地黄诱导影响显著, 其次分别为蔗糖和6-BA, 以试管苗叶片为外植体诱导地黄试管块根的最佳培养基为MS+6-BA 3 mg · L⁻¹, NAA 0.1 mg · L⁻¹+蔗糖 70 g · L⁻¹。该研究为今后利用地黄试管块根进行人工种子和次生代谢研究提供了高效的培养体系。

中文关键词: 地黄 叶片 试管块根 正交试验

Study on optimization of induction system of test-tube tuberous roots from leaves of *Rehmannia glutinosa*

Abstract/Objective: To study the effect of sucrose and plant growth substances of different concentrations on the induction of test-tube tuberous roots of *Rehmannia glutinosa*, in order to establish an efficient system for the induction of test-tube tuberous roots from leaves of *R. glutinosa*. **Method:** Leaves from test-tube seedlings of 85-5 *R. glutinosa* were used as explants. After rooting induction, they were transferred to medium with orthogonal design for inducing test-tube tuberous roots of *R. glutinosa*. **Result and Conclusion:** NAA played a significant role in induction of test-tube tuberous roots of *R. glutinosa*, followed by sucrose and 6-BA. With leaves from test-tube seedlings as the explants, the optimal medium for inducing test-tube tuberous roots of *R. glutinosa* was MS+BA 3.0 mg · L⁻¹+NAA 0.1 mg · L⁻¹+sucrose 7%. The study provides an efficient induction system for studies on artificial seeds and secondary metabolism with test-tube tuberous roots of *R. glutinosa*.

keywords: *Rehmannia glutinosa* leaf tuberous root orthogonal test

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