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## 植物生产层

野生结缕草成熟胚愈伤组织诱导及再生体系的研究

马彩云,王 栋,马金萍,马春晖

摘要:

以野生结缕草(Zoysia japonica)的成熟胚为外植体,通过胚性愈伤组织诱导进行植株再生。试验结果表明,不同的预处理方法对愈伤组织的诱导有较大的影响,经研钵研磨去除种子颖壳,30% NaOH浸泡1 min,流水冲洗30 min处理的成熟胚在MS+2,4 D(3 mg/L)+6 BA(0.1 mg/L)为最佳,愈伤组织诱导率达82.67%。将愈伤组织在2,4 D(2 mg/L)和6 BA(0.20.5 mg/L)的继代培养基中继代12次,可明显改善愈伤组织状态,增加胚性愈伤数。筛选继代后的胚性愈伤组织置于分化培养基MS+KT(1 mg/L)+NAA(0.1 mg/L)中,分化率达86%。分化后的簇状植株移栽成活率达100%。

关键词: 野生结缕草 成熟胚 再生植株

Study on induction of callus from mature embryo and plant regeneration of Zoysia japonica

MA Cai yun, WANG Dong, MA Jin ping, MA Chun hui

## Abstract:

The embryo of Zoysia japonica was used as explant to induce the embryogenic callus and then regenerate the plant. The result showed that the pretreatment method remarkably affect embryogenic callus induction and the ratio of embryogenic callus induction was 82.67% by removing hull, 30% NaOH soaking for 1 min, then rinsing 30 min with tap water. The basal MS media was supplemented with 3 mg/L of 2,4 D and 0.1 mg/L of 6 BA. The quality and quantity of embryogenic calli were obviously improved and increased respectively by 1 to 2 rounds re culture on the basal MS media supplemented with 2 mg/L of 2,4 D and 6 BA (0.2 and 0.5 mg/L). Embryogenic Calli were inoculated on the basal MS media supplemented with 1 mg/L of KT and 0.1 mg/L of NAA and the ratio reached 86%. The rooted plantlet clusters could be easily transplanted and the survival rate was 100%.

Keywords: Zoysia japonica mature embryo plant regeneration

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