

### 低温预处理与植物生长调节剂对结缕草愈伤组织诱导的影响

朱晓花, 孙吉雄, 梁慧敏, 李 晶

#### 摘要:

以结缕草 *Zoysia japonica* 的茎尖、茎基、根尖为外植体材料, 研究了低温预处理、不同激素配比对结缕草诱导愈伤的影响, 结果表明: 10 ℃低温预处理3次(即累积30 d)为最佳低温预处理时间; 经过3次处理后, 3种外植体的愈伤诱导率都明显提高, 其中茎基最好, 愈伤诱导率达94%, 较对照提高了38%, 芽分化率为74.47%; 以此为基础, 在配方为MS+2,4 D(2 mg/L)+6 BA(0.1 mg/L)的培养基上, 3种外植体均获得最高的愈伤诱导率, 其中茎基最好, 为94%; 外植体材料中最佳为茎基, 出愈容易, 且出愈率高。

关键词: 外植体; 低温预处理; 愈伤组织; 芽分化

### Effect of low temperature and plant growth regulators on callus induction and regeneration of *Zoysia japonica* cv. Qingdao

ZHU Xiao-Hua, SUN Ji-Xiong, LIANG Hui-Min, LI Jing

#### Abstract:

The stem apex, stem node and root cusp were used as the explants to study the effect of plant growth regulators and low temperature pre treatments on callusing and regeneration of *Zoysia japonica* cv. Qingdao. The results showed that 3 times (30 days) of low temperature pre treatment (10 ℃) was the best and the highest callus induction rate could be obtained from the 3 types of explants, in which, the stem nodes was the best and its callus induction rate reached 94%, 38% higher than CK and the regeneration rate was 74.47%. As for, , all of the 3 types of explants got the highest rates of callusing and regeneration on the culture medium of MS+2,4 D(2 mg/L)+6 BA(0.1 mg/L), and the stem node was also the best, its callusing rate was 94%.

Keywords: xplantst low temperature pre treatment callus bud regeneration

收稿日期 修回日期 网络版发布日期

DOI:

基金项目:

通讯作者:

作者简介:

作者Email:

#### 参考文献:

本刊中的类似文章

#### 扩展功能

##### 本文信息

- ▶ Supporting info
- ▶ PDF(1470KB)
- ▶ [HTML全文]
- ▶ 参考文献PDF
- ▶ 参考文献

##### 服务与反馈

- ▶ 把本文推荐给朋友
- ▶ 加入我的书架
- ▶ 加入引用管理器
- ▶ 引用本文
- ▶ Email Alert
- ▶ 文章反馈
- ▶ 浏览反馈信息

##### 本文关键词相关文章

- ▶ 外植体; 低温预处理; 愈伤组织; 芽分化

##### 本文作者相关文章

- ▶ 朱晓花
- ▶ 孙吉雄
- ▶ 梁慧敏
- ▶ ??晶

##### PubMed

- ▶ Article by Shu, X. H.
- ▶ Article by Sun, J. X.
- ▶ Article by Liang, H. M.
- ▶ Article by Li, J.