研究论文

不同小麦品种愈伤组织诱导和再生体系建立

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摘要 为了筛选适合组织培养的小麦基因型,建立一套有效的小麦诱导再生体系,以24 个小麦品种的幼胚为研究材料,选用4种诱导培养基和3种分化培养基,研究了影响小麦组织培养的各种因素. 结果表明:①培养基之间存在显著差异,MM2培养基的诱导效果最好,平均诱导率为98.5%;M5B培养基的分化效果最佳,平均分化率为39.8%.

②不同品种在诱导愈伤和分化再生上都有显著的基因型差异.③愈伤组织诱导率和分化率之间无显著相关性.

关键词 小麦 幼胚 愈伤组织诱导 分化再生

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Callus Induction and Plant Regeneration for Different Elite Wheat (Triticum aestivum L.) Varieties

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Abstract To set up an efficient plant regeneration system and select wheat genotypes suitable for tissue culture, factors affecting tissue culture were studied with the immature embryos of 24 elite wheat varieties under various conditions including four callus induction media and three differen—iation media. The results indicated that MM2 was the best callus induction medium with an average induction frequency of 98.%, and M5B was the best differentiation medium with an average differentiation frequency of 39.% in all media. Callus induction and plant regeneration capacity of different varieties were significantly different. There was no significant correlation between callus induction and plant regeneration.

Key words <u>Triticum aestivum L. Immature embryo</u> <u>Callus induction</u> <u>Differentiation and regeneration</u>

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