

普通小麦与鸭茅状摩擦禾的远缘杂交^① II. 未成熟胚的培养

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摘要 培养了由 26 个小麦(*Triticum aestivum*, 2n=6x=42) 品种(系)用鸭茅状摩擦禾(*Tripsacum dactyloides*, 2n=4x=72) 的花粉授粉14天后获得的645个未成熟的胚。结果表明, 未成熟胚培养的植株再生频率与胚来源的小麦基因型的杂交亲和性无关。胚的发育程度直接影响胚培养的结果。离体时分化完全的未成熟胚在无激素的培养基上可以迅速萌发成苗, 而分化不完全小胚在无激素的增培养基上分化进程不能继续, 而且在无激素补充的情况下, 萌发过程一旦启动, 即使将这些胚转至补加了激素的胚分化培养基上, 分化过程也不能再补救。讨论了提高未成熟胚培养成苗率的关键和措施。

关键词 [小麦](#) [鸭茅状摩擦禾](#) [远缘杂交](#) [未成熟胚培养](#)

分类号

Wild Hybridization Between *Triticum aestivum* and *Tripsacum dactyloides*

^① II. Immature Embryo Cultured

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Abstract

The total 645 immature embryos (after 14 days pollination) from 26 wheat (*Triticum aestivum*, 2n=6x=42) varieties (lines) crossed with *Tripsacum dactyloides* (2n=4x=72) were cultured on a hormone-free medium. The results indicated that there were no immediate relations between the frequencies of plant regeneration of cultured embryos and wheat genotypes from which the embryos originated. Well-differentiated immature embryos could speedily germinate and developed into plantlets on the hormone-free medium, while differentiation process of incomplete differentiated small embryos could not be continued on the same medium. They grew only coleoptile, coleoptilic and radicles, and even failed to germinate. Afterwards those cultures with coleoptilic of radicles and coleoptilic were transferred on an embryo differentiation medium containing 0.5mg/L KT and 0.5mg/L IAA, their differentiation processes were past remedy. The problems about immature embryo development and regeneration were also discussed.

Key words [Triticum aestivum](#) [Tripsacum dactyloides](#) [wild hybridization](#) [Immature embryo culture](#)

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