

研究报告

波兰小麦和矮兰麦45S rDNA和5S rDNA基因位点FISH分析

廖进秋^{1,2}, 杨瑞武¹, 周永红², 辻本壽³

1. 四川农业大学生命科学与理学院, 雅安625014;
2. 四川农业大学小麦研究所, 都江堰611830;
3. 鸟取大学农学部植物遗传育种研究室, 日本鸟取680-8553

收稿日期 2006-7-29 修回日期 2006-9-28 网络版发布日期 2007-3-12 接受日期

摘要 采用双色荧光原位杂交技术, 以45S rDNA和5S rDNA基因为探针, 对波兰小麦(*Triticum polonicum* L.)和矮兰麦(*T. turgidum* L. cv. Ailanmai)进行了分析。结果表明, 高秆波兰小麦(*T. polonicum* L. High)和矮兰麦的45S rDNA和5S rDNA基因位点高度一致, 都显示4个45S rDNA和6个5S rDNA基因位点; 矮秆波兰小麦(*T. polonicum* L. Dwarf)的45S rDNA基因位点与高秆波兰小麦和矮兰麦也一致表现出4个位点, 而其5S rDNA基因位点有8个。同时讨论了rDNA基因位点的数目和分布位置在种间和种内存在差异的原因。

关键词 [波兰小麦](#) [矮兰麦](#) [rDNA基因](#) [荧光原位杂交](#)

分类号

FISH analysis of 45S rDNA and 5S rDNA genes in *Triticum polonicum* L. and *T. turgidum* L. cv. Ailanmai

LIAO Jin-Qiu^{1,2}, YANG Rui-Wu¹, ZHOU Yong-Hong², Tsujimoto Hisashi³

1. *Biology and Science College, Sichuan Agricultural University, Yaan, 625014 China;*
2. *Triticeae Research Institute, Sichuan Agricultural University, Dujiangyan, 611830 China;*
3. *Laboratory of Plant Genetics and Breeding Science, Faculty of Agriculture, Tottori University, Tottori 680-8553, Japan*

Abstract

<P>Using the method of double color fluorescence in situ hybridization (FISH), we had analyzed *Triticum polonicum* L. and *T. turgidum* L. cv. Ailanmai with the probes of 45S rDNA and 5S rDNA. The results indicated that there were highly consistent in *T. polonicum* L. High and *T. turgidum* L. cv. Ailanmai, both having four 45S rDNA loci and six 5S rDNA loci. In *T. polonicum* L. Dwarf, there were also four 45S rDNA loci, the same as that in *T. polonicum* L. High and *T. turgidum* L. cv. Ailanmai, but there were eight 5S rDNA loci. At the same time, we discussed the reason of interspecific and intraspecific variation of the two types of rDNA in locus number and location between *T. polonicum* L. and *T. turgidum* L. cv. Ailanmai.</P>

Key words [Triticum polonicum](#) [T. turgidum cv. Ailanmai](#) [rDNA genes](#) [fluorescence in situ hybridization](#)

DOI: 10.1360/yc-007-0449

通讯作者 杨瑞武 yrwhqr@yahoo.com.cn

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