

## 八倍体小滨麦与普通小麦杂交后代的细胞遗传学研究

傅杰, 陈漱阳, 张安静, 侯文胜, 杨群慧

中国科学院西北植物研究所; 杨陵 712100

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**摘要** 本文对八倍体小滨麦与普通小麦杂交后代的细胞遗传学及附加染色体的传递及丢失规律进行了研究和讨论。结果表明,BC<sup>1</sup>F<sup>1</sup>与F<sup>2</sup>相比较,染色体分离范围小,并且分离向染色体数目减少偏移,有利于43、44条染色体的分离;双单体附加和单体附加后代异染色体丢失严重,分别为65.79%和61.99%,双单体附加分离出单体附加占10.53%,单体附加的传递率为26.92%,单体附加后代分离出的二体附加为5.56%,二体附加自交世代中,异染色体的丢失率为29.03%,传递率为56.45%;PMC MI染色体构型为21.70II+0.05I+0.02III+0.01IV,2n=22II的细胞占88.96%。选育的附加系及具42条染色体的株系,不同程度地表现出大穗、大粒、优质、抗病等滨麦的优良性状。

**关键词** [八倍体小滨麦](#) [普通小麦](#) [细胞遗传学](#) [异源染色体附加](#) [传递](#) [丢失](#)

分类号

## Cytogenetic Studies on the Cross Progenies Between Octoploid Tritile vms and Triticum aestivum

Fu Jie Chen Shuyang Zhang Anjing Hou Wensheng Yang Qunhui

Northwest Institute of Botany Academia Sinica Yangling Shaanxi 712100

### Abstract

The cytogenetics of the cross progenies between octoploid Tritileymus (AABBDDJJ or AABBDDNN 2n=56) and Triticum aestivum (AABBDD 2n=42) were studied and the regularities loss and transmitting of the alien chromosome were discussed. The results showed that the segregation range of BC1F1 was narrower and tended towards decreasing of chromosome number as compared with F2 in which more segregations of 43 and 44 chromosomes were observed. The losses of alien chromosomes in the progenies of dimonosomic and monosomic additions were espicially serious ,their loss rates were 65.79% and 61.99% respectively.The monosomic additioned plants isolated by selfing from the dimonosomic plants accounted for 10.53%,the transmitting percentage of monosomic addition was 26.92% The disomic addition plants isolated by selfing from the monosomic plants accounted for 5.56% .In the selfing generations of disomic addition,the transmitting and loss rates of alien chromosomes were 56.45% and 29.03% respectively. The chromosome configuration was 21.70II+0.05I+0.02III +0.01IV at PMC MI of the disomic additions and the cells of 2n=22 II accounted for 88.96%.Several alien addition (2n=43,44)and euploid lines (2n=42) with desirable characters derived from Leymus mollis (JJNN 2n=28) were selected, such as with large spikes,big grains ,good quality as well as resistance to diseases.

**Key words** [Octoploid Tritileymus](#) [Triticum aestivum](#) [Alien chromosome addition](#) [Transmission](#) [Disruption](#)

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