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# 提莫菲维小麦C-带和N-带异染色质的比较研究

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摘要 利用C-带和N-带分别及连续处理技术对提莫菲维小麦（Triticum timopheevi Zhuk.）的染 色体带型及异染色质的类型与分布进行比较分析。结果表明，提莫菲维小麦的4A染色体以及 G-染色体组带型丰富，并具有明显的端带，其异染色质是多样化的。4G和6G为随体染色体， 随体显带明显。在提莫菲维小麦的染色体中异染色质类型有：（1）只有C+N+型（4A、4G、6 G、和7G染色体）；（2）只有C+N-型（1A、5A、6A和7A染色体）；（3）C+N+和C+N-型（2A 、3A、1G、2G、3G和5G染色体）。在C-带和N-带连续处理中，N-带异染色质的消失部位在1G 、2G、3G和5G染色体的端部，3A染色体的着丝点附近以及染色体1A、2A、5A、6A和7A的着丝 点附近及端部。本文还讨论了C-带和N-带异染色质的异同以及端部异染色质在G染色体组进 化中的可能作用。

关键词 提莫菲维小麦,分带,异染色质,染色体组,进化

分类号



# Comparative Studies on C-banded and N-banded Heterochromatin of Triticum timophe evi Zhuk

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**Abstract**

With separate C-and N-banding and sequential C-and N-banding analyses ,we observ ed that C-and N-bands were prominent in T.timopheevi Zhuk chromosomes,and the lo meric bands existed on most of the chromosomes in G genome,which appears to corr espond to the diversity of T.timopheevi Zhuk.heterochromatin.Chromosomes 4G and 6G are satellitic chromosomes,and C- and N-bands could be identified in their sat ellites.Three types of heterochromatin appeared in A and G genomes,they are:(1)o nly C-banding positive and N-banding positive heterochromatin(C+N+)in chromosome s 4A,4G,6G,and 7G,(2)only C-banding positive and N-banding negative heterochroma tin(C+N+in chromosomes 1A,5A,6A and 7A,and (3)both C+N+ and C+N- in chromosomes 2A,3A,1G,2G,3G and 5G.The deficiency of Nbanded heterochromatin occurred near th e centromere of chromosome 3A,the telomeres of chromosomes 1G,2G,3G and 5G,and b oth the centromeres and telomeres of chromosomes 1A,2A,5A,6A and 7A,respectively .The differences between C-banded and N-banded heterochromatin and possible effe cts of telo-heterochromatin modifications on the evolution of G genome were also discussed.

**Key words** T.timopheevi Zhuk Banding Heterochromatin Genome Evolution

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