

蕉类的细胞遗传学研究^①

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摘要 本文对芭蕉属(Musa)正蕉组(Eumusa)内的一些有代表性的野生种(AA, AB, BB型)和包括香蕉、大蕉在内的二倍体和三倍体食用栽培蕉,共18个材料进行了核型比较分析,对其中5个重要的栽培蕉品种的花粉母细胞减数分裂进行了观察。从核型、染色体配对以及染色体特殊分离行为等3个方面得到的证据表明,并非所有香蕉都是同源三倍体,有一些香蕉品种的3个染色体组之间同源程度很低。通过对一些特征染色体的分析,推测这种香蕉的单染色体组很可能来自BB野生蕉、大蕉的3个染色体组之间表现出较高的同源性。因此,本文认为Simmonds'分类系统侧重于形态,与染色体组的构成并无必然的对应关系,香蕉的进化是多元的,在香蕉的杂交育种中引入适当的B染色体组是值得尝试的途径。本文还报道了香蕉中的假减数分裂现象。

关键词 [芭蕉属](#) [核型](#) [染色体组](#) [减数分裂](#)

分类号

Cytogenetical Studies in Musa (Eumusa)^①

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Abstract

The karyotypes of ten cultivated varieties of Musa were analysed and compared with that of eight wild bananas, which included AA group (Musa acuminata), BB group (Musa balbisiana) and AB group (M. acuminata X M. balbisiana). Cytological observation was made in PMC's of some cultivars representative of bananas (AAA group) and plantains (ABB group). The evidences from the karyotypes, chromosome pairing and abnormal segregation of chromosome in meiosis show that not all triploid bananas are autotriploid, the two genomes of some bananas are not so homologous. According to the analysis of some characteristic chromosomes, the single genome of the bananas probably come from the BB wild banana. The three genomes of the plantains are very homologous. So the inference can be made that the Simmonds's classification system is a morphological classification system which has no certain relation to the combination genome, and the triploid cultivated varieties of Musa are multifarious in origin. It is worth trying to make use of B genome in the banana cross breeding. In this paper, an abnormal meiosis in banana was reported for the first time.

Key words [Musa Karyotype Genome Meiosis](#)

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