

## 猕猴精母细胞联会复合体的银染色观察

施立明, 刘瑞清, 陈玉泽

中国科学院昆明动物研究所

收稿日期 修回日期 网络版发布日期 接受日期

**摘要** 作者以银染的雄性猕猴减数分裂标本, 研究联会复合体的形成和行为, 特别是性泡内X、Y染色体有规律的变化。指出常染色体联会复合体的形成开始于偶线期, 成熟于粗线期, 开始消失于弥散期。在粗线期可见20条清晰的常染色体联会复合体, 其中1条带有呈深黑色的核仁 组织者。X、Y染色体同源区段的配对, 开始于早粗线期。随着粗线期的发展, 由侧面配对转为端部配对状。性染色体配对的解体也比常染色体联会复合体晚, 在弥散期仍清晰可见。在整个前期, X、Y的着色也比常染色体联会复合体深。在一些细胞中, X染色体显示一种特殊的“发夹状”结构。这是在性染色体进化过程中X染色体由于易位得到的重复片段在粗线期同源配对的一种细胞学表现。

关键词

分类号

## Observation on Silver-stained Synaptonemal Complex in Rhesus Monkey Spermatoocytes by Light Microscopy

Shi Liming, Liu Ruiqing, Chen Yuze

Kunming Institute of Zoology, Academia Sinica, Kunming

### Abstract

Using a combination of silver staining and light microscopic technique, on Rhesus monkey meiotic preparation, it is feasible to study the morphology and behavior of both autosomal synaptonemal complex (SC) and sex chromosome axes. Autosomal SC is formed in mid-zygotene, mature in pachytene, and disappears in diffuse stage. The fully formed 20 SC appear as distinct thread-like elements. An Ag-NOR is found in an autosomal SC. The formation of the axis in the X, Y chromosome is delayed with respect to the autosome by early pachytene. The X and Y chromosomes appear to have undergone pairing and form a short SC between homologous region of X, Y chromosome. The length of the pair region between X and Y then decreases and the pattern of end to end association of sex chromosome is observed with the advancement of the pachytene stage. The disappearance of sex chromosome is delayed as compared with autosomal SC. They are still visible in diffuse stage. In addition, there is one hairpin-like fold. The presence of a hairpin-like fold suggests that the X chromosome should contain a duplicated segment which may have arisen from an unbalanced translocation occurring between original-X, Y chromosomes.

### Key words

DOI:

通讯作者

### 扩展功能

#### 本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(1066KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [参考文献](#)

#### 服务与反馈

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [复制索引](#)
- ▶ [Email Alert](#)
- ▶ [文章反馈](#)
- ▶ [浏览反馈信息](#)

#### 相关信息

- ▶ [本刊中 无 相关文章](#)
- ▶ 本文作者相关文章
- [施立明](#)
- [刘瑞清](#)
- [陈玉泽](#)