

## 家蚕蛹睾丸DNA单链上的逆向重复顺序

夏邦颖, 郭 鄂

中国科学院动物研究所, 北京

收稿日期 修回日期 网络版发布日期 接受日期

**摘要** 将热变性后淬火的家蚕蛹睾丸DNA溶液, 利用蛋白质单层膜技术, 铺样于电镜铜网上。在电镜下观察到, 在DNA单链上的段落复性, 形成反向折叠区, 这表明它们是DNA单链上的重复顺序, 但方向相反, 称之为逆向重复顺序, 归纳起来有四种类型, 即: (1) 相邻逆向重复顺序, 形成无环发卡式结构; (2) 间隔逆向重复顺序, 形成具环发卡式结构; (3) 间隔逆向重复顺序间还有相邻逆向重复顺序; (4) 间隔逆向重复顺序间还有间隔逆向重复顺序。对逆向重复顺序的结构和功能进行了讨论。

**关键词**

**分类号**

## Inverted Repeated Sequences on a Single Strand DNA in Pupal Testis of *Bombyx mori*

Xia Bangying , Guo Fu

Institute of Zoology, Academia Sinica, Beijing

### Abstract

In the paper, for the first time, we describe the inverted repeated sequences on a single strand of DNA in pupal testis of *Bombyx mori*. The protein monolayer technique is used to spread denaturated DNA as usual and the grids are examined under electron microscope. It is worthwhile to notice that several regions of single strand DNA are renaturated to form inverted folded regions by two complementary nucleotide sequences, that are both repeated and reversed. Summarizing our observations, we find four kinds of inverted repeated sequences appearing on single strand DNA, namely: neighboring inverted repeated sequences, interval inverted repeated sequences, neighboring inverted repeated sequences situated between a pair of interval inverted repeated sequences and a pair of interval inverted repeated sequences situated between a pair of interval inverted repeated sequences. The significance of the results mentioned above is discussed. Nevertheless, the problem about how to control the course of transcription in the region of the inverted repeated sequences remains to be solved.

### Key words

DOI:

通讯作者

### 扩展功能

#### 本文信息

- ▶ [Supporting info](#)
- ▶ [PDF\(1065KB\)](#)
- ▶ [\[HTML全文\]\(0KB\)](#)
- ▶ [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
  - [夏邦颖](#)
  - [郭 鄂](#)