



棉花学报 » 2012, Vol. 24 » Issue (5) :451-460 DOI: 1002-7807 (2012) 05-0451-10

[专题与述评](#)

[最新目录](#) | [下期目录](#) | [过刊浏览](#) | [高级检索](#)

[<< Previous Articles](#) | [Next Articles >>](#)

### 中国棉花纤维品质检验和评价的研究进展

熊宗伟<sup>1,2</sup>, 王雪姣<sup>3</sup>, 顾生浩<sup>3</sup>, 毛丽丽<sup>3</sup>, 张立祯<sup>3\*</sup>, 周治国<sup>1</sup>

1. 南京农业大学农学院/农业部作物生长调控重点开放实验室, 江苏 南京 210095; 2. 中国纤维检验局, 北京 100007; 3. 中国农业大学资源与环境学院, 北京 100193

### Reviews of the Cotton Fiber Quality Inspection and Evaluation in China

XIONG Zong-wei<sup>1, 2</sup>, WANG Xue-jiao<sup>3</sup>, GU Sheng-hao<sup>3</sup>, MAO Li-li<sup>3</sup>, ZHANG Li-zhen<sup>3\*</sup>, ZHOU Zhi-guo<sup>1\*</sup>

1. *Nanjing Agricultural University /Key Laboratory of Crop Growth Regulation of the Ministry of Agriculture, Nanjing Agricultural University, Nanjing, 210095, China;*  
 2. *China Fiber Inspection Bureau, Beijing 100007, China;* 3. *College of Resource and Environmental Sciences, China Agricultural University, Beijing 100193, China*

[摘要](#)

[参考文献](#)

[相关文章](#)

Download: PDF (664KB) [HTML](#) 1KB Export: [BibTeX](#) or [EndNote \(RIS\)](#) [Supporting Info](#)

**摘要** 在综述国内外棉花纤维主要品质指标研究进展和棉花纤维品质评价方法的基础上,比较并论述了棉花色特征指标如明度指标光反射率(Rd)和饱和度指示纤维黄度(+b)和传统棉花纤维品质指标如目测等级、长度、强度和细度的测定与应用,以及生态和气候类型对棉花纤维品质的影响等方面的研究进展。分析了棉花纤维品质指标与棉花色特征指标的关系。综述了在棉花质量标准革新与国际化背景下开展棉花色特征质量评价体系研究的重要性及色特征研究的发展前景。展望在构建棉花色特征气象生态模型基础上建立中国棉花分类分级系统的必要性,提出了将生态模型与GIS进行结合,对棉花纤维品质指标、生态指标和棉花纤维色特征的空间地域分异评价与预测。

**关键词:** 棉花纤维质量 品质评价 色特征 品质指标 生态模型

**Abstract:** This paper reviewed cotton fiber quality and its evaluation method in china. We discussed research progress of cotton color feature index e.g. fiber light reflection ratio (Rd) and fiber yellowness (+b), and compared with traditional fiber classification such as visual grade, fiber length, strength and fineness. We also analyzed the effects of ecological climatic factors on the cotton fiber quality, and the correlation between cotton fiber quality index and cotton color feature index. The results indicated the importance of application of cotton color feature in demand of standard cotton quality test. We proposed to build a new classification system of cotton quality, using GIS platform, ecological index and cotton color feature to evaluate and forecast the spacial distribution of cotton fiber quality.

**Keywords:** cotton fiber quality quality evaluation color property quality index ecological distribution

Received 2012-08-17;

Fund:

国家棉花产业技术体系项目(CARS-18-18)和转基因生物新品种培育重大专项(2012ZX08013010)

Corresponding Authors: zhanglizhen@cau.edu.cn

About author: 熊宗伟(1967-), 男, 副研究员, xiongzongwei@cau.edu.cn

引用本文:

熊宗伟, 王雪姣, 顾生浩, 毛丽丽, 张立祯, 周治国. 中国棉花纤维品质检验和评价的研究进展[J] 棉花学报, 2012, V24(5): 451-460

XIONG Zong-Wei, WANG Xue-Jiao, GU Sheng-Hao, MAO Li-Li, ZHANG Li-Zhen, ZHOU Zhi-Guo-. Reviews of the Cotton Fiber Quality Inspection and Evaluation in China[J] Cotton Science, 2012, V24(5): 451-460

链接本文:

[http://journal.cricaas.com.cn:8082/mhxb/CN/1002-7807\(2012\)05-0451-10](http://journal.cricaas.com.cn:8082/mhxb/CN/1002-7807(2012)05-0451-10) 或 <http://journal.cricaas.com.cn:8082/mhxb/CN/Y2012/V24/I5/451>

#### Service

- ▶ [把本文推荐给朋友](#)
- ▶ [加入我的书架](#)
- ▶ [加入引用管理器](#)
- ▶ [Email Alert](#)
- ▶ [RSS](#)

#### 作者相关文章

- ▶ [熊宗伟](#)
- ▶ [王雪姣](#)
- ▶ [顾生浩](#)
- ▶ [毛丽丽](#)
- ▶ [张立祯](#)
- ▶ [周治国](#)