

## 呼伦贝尔市岭东黑土区耕地土壤肥力的演化

崔文华<sup>1</sup>;于彩娴<sup>2</sup>;毛国伟<sup>1</sup>

1.内蒙古呼伦贝尔市农技推广服务中心 内蒙古海拉尔021008;2.中北大学分校 山西太原030008

## Changes of fertility of cultivated land in Lingdong black soil zone of Hulunbuir city

CUI Wen-hua<sup>1</sup>;YU Cai-xian<sup>2</sup>;Mao Guo-wei<sup>1</sup>\*

1 The Technological and Servical Center of Agriculture of Hulunbuir; Inner Mongolia; Haila'er 021008; China; 2 Branch College of North University of China; Shanxi; Taiyuan 030008; China

[摘要](#)[参考文献](#)[相关文章](#)Download: [PDF \(520KB\)](#) [HTML 0KB](#) Export: [BibTeX](#) or [EndNote \(RIS\)](#) [Supporting Info](#)

**摘要** 本研究结合全国耕地地力调查与质量评价项目的实施,利用“3S”技术对呼伦贝尔市岭东黑土区的68.11万公顷耕地进行了系统调查。根据1980~1982年全国第二次土壤普查927个土壤农化样点,与2002~2003年全国耕地地力调查与质量评价项目的1007个农化样点的同位对比资料,对该地区土壤的肥力现状进行了系统的分析。结果表明,该地区的耕地土壤肥力退化明显,其中土壤有机质、全氮、碱解氮和速效钾下降幅度较大,20年间分别下降了15.52g/kg、0.813.g/kg、27.7.mg/kg、64.3.mg/kg,下降幅度分别为25.38%、26.3%、12.93%和27.35%。只有土壤速效磷表现明显上升趋势,增长幅度达105.83%,这与多年大量施用磷肥有关,说明人类的生产活动对土壤肥力的变化有重大影响,通过合理有效地补充土壤养分是能够调节土壤养分平衡的。

**关键词:** 黑土区 耕地 土壤肥力 黑土区 耕地 土壤肥力

**Abstract:** Lingdong black soil zone of Hulunbuir city is located in the foothill belt in which mountainous region of Great Xingan Mountains transits to Songnen Plain. It is an important constituent of black soil area of Northeast China. Due to the long term development use and cultivation influence, soil physics properties and chemistry characters have had an obvious change; and the soil fertility degeneration has been serious. Combining with the implementation of the project 'national soil fertility investigation and its quality appraisal on cultivated land', a systematic investigation was carried out on a 681100 ha farming area using "3S" technique. Base on the same position paring comparison between the 927 soil chemistry sampling points in the second national soil survey in 1980—1982 and 1007 soil chemistry sampling points in the captioned project in 2002—2003, we carried out a systematic analysis on the present soil fertility on the cultivated land (mainly was black soil, dark brown soil and meadow soil) of Lingdong black soil zone. Result showed that soil fertility of cultivated land dramatically degenerated. All nutrient indexes except available P showed a decline tendency, among which soil organic matter, total nitrogen, hydrolyzed N and available K were dramatically declined. Throughout the past 20 years, soil organic matter, total nitrogen, hydrolyzed N and available K declined by 15.52 g/kg, 0.813 g/kg, 27.7 mg/kg and 64.3 mg/kg, and the percentage decline was 25.38%, 26.3%, 12.93% and 27.35%, respectively. However, soil available K showed an upward tendency with percentage increase being 105.83%, which related to long term P application. This indicated that anthropogenic disturbance had a significant influence on the variation of soil fertility and soil nutrient balance could be adjusted through rational effective nutrient supplement.

**Keywords:**

## 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

## 引用本文:

崔文华<sup>1</sup>;于彩娴<sup>2</sup>;毛国伟<sup>1</sup>.呼伦贝尔市岭东黑土区耕地土壤肥力的演化[J] 植物营养与肥料学报, 2006,V12(1): 25-CUI Wen-hua<sup>1</sup>;YU Cai-xian<sup>2</sup>;Mao Guo-wei<sup>1</sup>.Changes of fertility of cultivated land in Lingdong black soil zone of Hulunbuir city[J] Acta Metallurgica Sinica, 2006,V12(1): 25-