

## 一种变形拉丁方设计

王金明

青海省农业科学院作物研究所

收稿日期 1991-4-6 修回日期 1991-6-28 网络版发布日期 接受日期

**摘要** 为了在两个方向上控制田间试验的地力差异,而又不过分限制处理数 $m$ 的取值,本文提出了一种变形拉丁方设计的试验方法。该种设计是在随机区组设计的基础上,将 $n$ 个区组做为行区组看待。再将这 $n$ 个行区组的 $m$ 个小区分成 $n$ 个段作为列区组来布置试验,并使所有处理在每个行区组和每个列区组中都只出现一次。在方差分析中,将行区组和列区组的方差从机误方差中分离出来,减少了随机误差,使试验效率得到提高。

**关键词** [田间试验分段设计](#)

分类号

## A Variant of Latin Square Design

Wang Jingming

Qinghai Academy of Agricultural and Forestry Sciences

**Abstract** In order to control the difference of soil fertility in two directions and at the sametime to have enough number of treatments, a variant of Latin square design was developed. This method was designed on the basis of randomized block design. The  $n$  blocks were considered as row blocks. Then the  $n$  blocks were divided into  $n$  segments, i.e. column blocks. Thus, all treatments appear one and only one time in every block of rows and column. In analysis of variance of this design, the variances of row and column blocks can be isolated from the error variance. Thus, the random error was reduced and the efficiency improved.

**Key words** [Segmented experiment design](#)

DOI:

通讯作者

### 扩展功能

本文信息

▶ [Supporting info](#)

▶ [PDF\(213KB\)](#)

▶ [\[HTML全文\]\(0KB\)](#)

▶ [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 包含“田间试验分段设计”的相关文章](#)

▶ [本文作者相关文章](#)

▶ [王金明](#)