

本期目录 | 下期目录 | 过刊浏览 | 高级检索

[打印本页] [关闭]

论文

黑龙江省大豆籽粒异黄酮含量生态差异

张大勇, 李文滨

东北农业大学大豆研究所, 黑龙江哈尔滨150030

摘要:

大豆异黄酮由于其特有的生理保健功能而受到日益广泛的关注。为了明确黑龙江省大豆籽粒异黄酮含量的生态差异规律, 2005选定5个生态条件差异明显的试验点及4个大豆品种进行试验。结果表明, 年份、地点、基因型及基因型×环境互作对大豆籽粒异黄酮总含量及3种酸解处理后所得苷元的含量具有显著效应。2006年的大豆异黄酮总含量及3种苷元组分含量的平均值显著高于其他2年; 大豆籽粒异黄酮含量不同基因型间及不同地点间均差异显著, 大豆籽粒异黄酮总含量及其3种酸解后所得苷元含量与纬度呈极显著正相关。据此认为, 大豆籽粒异黄酮含量在黑龙江省存在优势生产区, 对大豆籽粒异黄酮含量进行品质区划是可行的。

关键词: 大豆籽粒 异黄酮 基因型 生态环境 黑龙江

Ecologic Difference of Isoflavones Content in Soybean Seeds in Heilongjiang Province

Soybean Research Institute, Northeast Agricultural University, Harbin 150030, China

Soybean Research Institute, Northeast Agricultural University, Harbin 150030, China

Abstract:

Isoflavones in soybean is paid widely and extensively attention due to its function in physical health care. As important secondary metabolic compounds in soybean seeds, isoflavones content have been reported to be easily impacted by environment. To survey the difference of isoflavones content in soybean seeds in different environment in Heilongjiang, which is main area to plant soybean in China, four cultivars were planted at five locations from 2005 to 2007. There were significant difference in total and individual isoflavones contents among years, locations, genotypes and genotypes × locations. The mean contents of total isoflavones and individual hydrolyzing isoflavones were significantly higher in 2006 than those in the other two years. And, total and individual isoflavone contents were significantly positively correlated with latitude of the locations at the 0.01 probability levels. As a whole, there are predominant production regions for isoflavones of soybean seeds in Heilongjiang province, so it was feasible to categorize the production regions based on soybean isoflavone in Heilongjiang province.

Keywords: Soybean seeds Isoflavones Genotype Ecological environment Heilongjiang

收稿日期 2008-08-18 修回日期 2008-12-13 网络版发布日期 2009-02-16

DOI: 10.3724/SP.J.1006.2009.00711

基金项目:

本研究由国家科技支撑计划(2006BAD01A04)和黑龙江“十一五”科技攻关项目(GA06B101-1-3)资助。

通讯作者: 张大勇

作者简介:

参考文献:

本刊中的类似文章

文章评论 (请注意: 本站实行文责自负, 请不要发表与学术无关的内容! 评论内容不代表本站观点.)

扩展功能

本文信息

- ▶ Supporting info
- ▶ PDF (282KB)
- ▶ [HTML全文]
- ▶ 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
- ▶ 引用本文
- ▶ Email Alert
- ▶ 文章反馈
- ▶ 浏览反馈信息

本文关键词相关文章

- ▶ 大豆籽粒
- ▶ 异黄酮
- ▶ 基因型
- ▶ 生态环境
- ▶ 黑龙江

本文作者相关文章

PubMed

HTTP Status 404 - /zwxb/CN/comment/listCommentInfo.jsp

type Status report

Copyright 2008 by 作物学报