



在线办公系统 LOGIN

▶ 作者投稿

▶ 作者查稿

▶ 专家审稿

▶ 稿件终审

▶ 编辑办公

学报相关信息

▶ **【投、审稿特别注意事项】**

▶ 论文被引情况查询方法

▶ 引用本刊文章的简便方法

▶ 论文中插图的有关要求

▶ 电子版PDF校对稿修改方法

▶ 论文写作要求

▶ 参考文献著录

▶ 最新《核心期刊》

友情连接

北京勤云科技发展有限公司

期刊界

CSCD数据库来源期刊表

中国期刊全文数据库

国外数据库收录中国期刊动态

个人空间

杨 梅,蒲宗君,郑文寅,张文明,姚大年.基因型与环境对小麦戊聚糖含量及RVA黏度的影响[J].麦类作物学报,2011,31(3):487~492

基因型与环境对小麦戊聚糖含量及RVA黏度的影响

Effects of Genotypes and Environments on Pentosan Content and RVA Viscosity of Wheat

DOI:

中文关键词: [小麦](#) [基因型](#) [环境](#) [戊聚糖含量](#) [RVA黏度](#)

英文关键词: [Wheat](#) [Genotype](#) [Environment](#) [Pentosan content](#) [RVA viscosity](#)

基金项目: 国家自然科学基金项目 (31071404)。

作者

单位

[杨 梅](#), [蒲宗君](#), [郑文寅](#), [张文明](#), [姚大年](#) ([1.安徽农业大学农学院, 安徽合肥 230036](#); [2.四川省农科院作物所, 四川成都 610066](#))

摘要点击次数: 31

全文下载次数: 27

中文摘要:

为研究基因型与环境对小麦戊聚糖含量及RVA黏度的影响,选取10个小麦品种(系)和5个生态试验点,测定了小麦籽粒中的总戊聚糖(TP)、水溶性戊聚糖(WSP)、非水溶性戊聚糖含量(WIP)和RVA黏度等共10个性状,探讨了3种戊聚糖含量和7个RVA性状的影响因素及相互关系。结果表明,包括总戊聚糖、水溶性戊聚糖含量在内的10个性状均受到基因型、环境以及基因型与环境互作的影响。其中,基因型方差和环境方差在所有性状上均达到显著或极显著,基因型与环境互作方差在水溶性戊聚糖和7个RVA性状上达到极显著;戊聚糖含量的环境变异>基因型变异>基因型与环境互作变异,而RVA黏度性状的基因型变异均大于环境变异。水溶性戊聚糖含量与高峰黏度呈显著负相关。

英文摘要:

Ten traits in the grains of ten wheat varieties (lines) planted in five environments, including total pentosan (TP), water soluble pentosan (WSP), water insoluble pentosan (WIP) and seven RVA viscosity traits, were determined to investigate their correlation and the effect factors. The results showed that all the ten traits were affected by the genotypes, environments and their interaction. Genotypic (G) variances and environmental (E) variances were significant or greatly significant difference, G×E variances was greatly significant difference for WSP and seven RVA viscosity traits. In pentosan content traits, environmental variation was more than genotypic variation, and G×E variation was the smallest; While, genotypic variations were more than environmental variations for all the seven RVA viscosity traits. WSP content was negatively and significantly correlated with the peak viscosity. The effects of genotype and environment were discussed in grain traits of wheat quality breeding and new wheat varieties selection breeding.

[查看全文](#) [查看/发表评论](#) [下载PDF阅读器](#)

关闭

您是第476618位访问者

版权所有《麦类作物学报》编辑部

技术支持: 本系统由北京勤云科技发展有限公司设计