



ISSN 1002-2481  
CN 14-1113/S

# 山西農業科學

JOURNAL OF SHANXI AGRICULTURAL SCIENCES

SHANXI NONGYE KEXUE

第41卷第2期（总第324期）

- 中国科技核心期刊
- 中国科学引文数据库（CSCD）来源期刊
- 中国学术期刊综合评价数据库（CAJCED）统计源期刊
- 中国期刊全文数据库（CJFD）全文收录
- 中国核心期刊（遴选）数据库全文上网
- 中文科技期刊数据库全文收录

2013 2  
Vol.41 No.2

ISSN 1002-2481

万方数据

山西省农业科学院 主办

## 目 次

**生物技术**

- NaCl 和 PEG6000 胁迫下枣组培苗中 *ZjAPX* 的表达 ..... 孟玉平, 曹秋芬, 郭慧娜, 等(107)  
枣结果枝核糖体蛋白的生物信息学分析 ..... 戎宏立, 王长彪, 李倩, 等(110)  
不同激素对补血草器官分化的影响 ..... 温银元, 冯文新, 尹美强, 等(115)

**遗传育种**

- 玉米新品种晋单 73 号的选育与高效栽培 ..... 徐青松, 徐劲松, 车星星, 等(119)

**生理生化**

- 水分胁迫对不同品种小麦幼芽抗氧化酶活性的影响 ..... 张述义, 刘玲玲(122)  
杂交大豆光合特性与产量的关系 ..... 韩俊梅, 卫保国, 张海平(126)  
核桃内生菌 HT3 对番茄和黄瓜的促生作用 ..... 王美琴, 卢海波, 赵立娟, 等(130)  
不同外界因素对花生果针膨大的影响 ..... 张树伟, 郑泽宇, 高泽文, 等(133)  
自然条件下美国红栌的叶色表达 ..... 张超(136)  
变异玉米的补偿性生长研究 ..... 马丹, 侯彦龙, 郭金耀(140)  
模拟土壤环境下测量小麦胚芽鞘长度的方法 ..... 曹勇, 姬虎太, 宁东贤, 等(143)

**耕作与栽培**

- 不同种植密度对青贮玉米生物产量及主要农艺性状的影响 ..... 孙贵臣, 任元, 马晓磊, 等(146)

**资源与环境**

- 不同施肥量及养分配比对马铃薯和结球甘蓝产量及其硝酸盐含量的影响 ..... 褚清河, 潘根兴, 李晋陵(149)  
山西省矿区土地复垦与生态重建现状及发展对策 ..... 卢朝东, 李建华, 靳东升, 等(152)  
不同土壤肥力条件下高产玉米氮肥最佳用量研究 ..... 张佳, 王永亮, 郭彩霞, 等(155)  
晋南县域农田生态系统土壤碳氮时空变化特征 ..... 李新民, 杨萍果, 邓树元(160)  
灵丘县蔬菜产地土壤重金属污染评价 ..... 葛元英, 崔旭, 张小红, 等(163)

**植物保护**

- 黄河流域棉花落叶型黄萎病发生消长与气象因子的关系 ..... 孙旭霞, 王娇娟, 黄雪民, 等(167)  
山西棉田黄萎病菌致病力差异研究 ..... 许爱玲, 段国琪, 张战备, 等(172)  
甜高粱玉米螟虫害调查及防治技术研究 ..... 罗峰, 裴忠有, 高建明, 等(175)

**贮藏与加工**

- 冰温结合气调技术在肉品保鲜中的应用 ..... 李暮春, 李沛军, 孔保华(178)

**畜牧兽医**

- 中药添加剂对断奶仔猪小肠黏膜形态和养分消化率的影响 ..... 曹日亮, 车向荣, 王红妍, 等(183)

**农业经济**

- 用品牌建设促进“一村一品”发展的对策建议——以山西省大同市为例 ..... 杜明(188)  
盐湖区农业资源条件及区域布局发展研究 ..... 降云峰, 马宏斌, 白文斌(191)

**综 述**

- 几丁寡糖在木霉菌生物防治中的作用 ..... 姚艳平, 王建明, 张作刚, 等(194)  
植物检疫辐照处理的研究进展 ..... 程瑜, 张瑞峰, 杨菲, 等(197)

## CONTENTS

**● Biotechnology**

Expression of *ZjAPX* in vitro Jujube Plant Tissue Culture by Salt and Drought Stress ..... MENG Yu-ping, CAO Qiu-fen, GUO Hui-na, et al(107)

Bioinformatics Analysis on Ribosomal Protein of the Fruit bearing Shoot in *Ziziphus jujuba* ..... RONG Hong-li, WANG Chang-biao, LI Qian, et al(110)

Effect of Hormons on Organogenesis of *Limonium sinuatum* ..... WEN Yin-yuan, FENG Wen-xin, YIN Mei-qiang, et al(115)

**● Genetics and breeding**

Selection and Efficient Cultivation of New Maize Varieties Jindan 73 ..... XU Qing-song, XU Jin-song, CHE Xing-xing, et al(119)

**● Physiology and biochemistry**

Influence of Water Stress to Activity of Antioxidant Enzymes in Wheats ..... ZHANG Shu-yi, LIU Ling-ling(122)

The Relationship between Photosynthetic Characteristics and Production of Hybrid Soybean ..... HAN Jun-mei, WEI Bao-guo, ZHANG Hai-ping(126)

Growth-promoting Action on Tomato and Cucumber By Walnut Endophytic HT3 ..... WANG Mei-qin, LU Hai-bo, ZHAO Li-juan, et al(130)

Effect of Different External Factors on the Enlargement of Peanut Needles ..... ZHANG Shu-wei, ZHENG Ze-yu, GAO Ze-wen, et al(133)

Leaf Color Expression of *Cotinus coggygria* 'Royal purple' in Natural Environment ..... ZHANG Chao(136)

Study on Compensation Growth of Variation Maize ..... MA Dan, HOU Yan-long, GUO Jin-yao(140)

Method to Measure Wheat Coleoptiles Length under Simulated Soil Environment ..... CAO Yong, JI Hu-tai, NING Dong-xian, et al(143)

**● Cultivation**

Influence of Sowing Densities on Biological Yield and Main Agronomic Characters for Ensilage Maizes ..... SUN Gui-chen, REN Yuan, MA Xiao-lei, et al(146)

**● Resources and environment**

Yield and Nitrate Contents of Potato and *Brassica Oleracea* L.var. *capitata* L under Different Rates and N : P : K

Ratios of Fertilization ..... CHU Qing-he, PAN Gen-xing, LI Jin-ling(149)

Current Situation of Land Reclamation and Ecosystem Reconstruction in Shanxi Mining Area and Its Development Measures ..... LU Chao-dong, LI Jian-hua, JIN Dong-sheng, et al(152)

Optimum N Application Rate at Different Soil Fertility Levels in Spring Maize ..... ZHANG Jia, WANG Yong-liang, GUO Cai-xia, et al(155)

Spatial and Temporal Variability of Agro-ecosystem Soil Carbon and Nitrogen in Southern Shanxi ..... LI Xin-min, YANG Ping-guo, DENG Shu-yuan(160)

Investigation and Assessment of Heavy Metal Content in Vegetable Fields Soil in Lingqiu County ..... GE Yuan-ying, CUI Xu, ZHANG Xiao-hong, et al(163)

**● Plant protection**

Analysis on the Relationship between Defoliating Type of *Verticillium* Wilt of Cotton and Meteorological

Factors in the Yellow River Valley ..... SUN Xu-xia, WANG Jiao-juan, HUANG Xue-min, et al(167)

Research on Virulence Difference of *Verticillium* Wilt in Shanxi ..... XU Ai-ling, DUAN Guo-qi, ZHANG Zhan-bei, et al(172)

Investigation and Control Techniques of *Ostrinia furnacalis* in Sweet Sorghum Fields ..... LUO Feng, PEI Zhong-you, GAO Jian-ming, et al(175)

**● Storage and procession**

Review on Application of Superchilling Combined with Modified Atmosphere Packaging on Preservation of Meat Products ..... LI Mu-chun, LI Pei-jun, KONG Bao-hua(178)

**● Animal husbandry and veterinary**

Influence of Chinese Medical Herbs Additive on the Structure of the Small Intestinal Mucosa and Nutrient

Digestibility in Weaned Piglets ..... CAO Ri-liang, CHE Xiang-rong, WANG Hong-yan, et al(183)

**● Agri-economy**

Suggestions to Brand building to promote the development of the One Village One Agricultural Product

Brand—A Case Study of Datong City in Shanxi Province ..... DU Ming(188)

Study on the Agricultural Resources Conditions and Development of the Regional Distribution in Yanhu Region ..... JIANG Yun-feng, MA Hong-bin, BAI Wen-bin(191)

**● Review**

Role of N-acetyl-chito-oligosaccharides in Plant Diseases Biological Control of *Trichoderma* spp.

..... YAO Yan-ping, WANG Jian-ming, ZHANG Zuo-gang, et al(194)

Study Advance of Irradiation Treatment in Plant Quarantine ..... CHENG Yu, ZHANG Rui-feng, YANG Fei, et al(197)