

## 目 次

- 旱稻(*Oryza sativa* L.)转 *Ac* 基因后代的筛选与农艺性状变异分析  
..... 郝建琴 方标 黄敏 王腊梅 钟辰 许语辉 赵鹏珂 王向东 王化琪(1)
- 小麦品种 Bogatka 抗白粉病基因的分子标记定位 ..... 张晶 彭福祥 刘祜宇  
耿妙苗 董宏图 李映辉 刘婉辉 刘鑫 李峰 解超杰 孙其信(10)
- 基于线粒体及核 DNA 序列的河南烟草黑胫病菌群体遗传多样性分析  
..... 封松利 蒋士君 宋鹏宇 王海涛 邢国珍 康业斌 李淑君 郑文明(16)
- 烟草类异黄酮还原酶基因家族的分子克隆  
..... 陈伟 林叶春 高维常 李春俭 王三根 吕俊 柴友荣(23)
- 烤烟不同分枝蒴果成熟度和种子活力的差异分析  
..... 李振华 叶定勇 杨贵生 孙娜娜 王建华(35)
- 冬小麦群体参数优化设计方法 ..... 赵姣 廖树华 王璞(41)
- 基于 GreenSeeker 的水稻氮素估测  
..... 陈青春 吴继贤 秦彦博 曾汉超 耿蔓一 郭诗琪 刘冠明(49)
- 基于高光谱优化 NDVI 值反演玉米叶片氮含量 ..... 赵明家 张忠庆 李志洪(56)
- 玉米根系生长特性及氮肥运筹对根系生长的影响  
..... 张玉 秦华东 伍龙梅 张婧 李忠 黄敏 江立庚(62)
- 甘蔗幼苗根系形态结构及保护系统对低温胁迫的响应  
..... 孙波 刘光玲 杨丽涛 李杨瑞(71)
- 农牧交错带油葵光合作用日变化及午休现象的研究  
..... 唐建昭 王靖 潘学标 杨宁 刘哲(81)
- 果胶酶和纤维素酶参与管花肉苁蓉侵入寄主根的研究 ..... 苗中芹 赵东平 郭玉海(88)
- 香叶树作为生物柴油原料树种的研究现状及其开发前景 ..... 董树斌 张志翔 黄佳聪(95)
- 添加烟草废弃物对堆肥腐熟度及抑制线虫作用的影响  
..... 陈飞 杜龙龙 常瑞雪 李彦明 姜平雄(102)
- 农业废弃物还田对土壤团聚体及土壤 C 和 N 的影响  
..... 龙攀 高旺盛 隋鹏 严玲玲 陈源泉(107)
- 山东省滨城区农田土壤重金属来源解析及评价 ..... 咏梅 张漫 王圣伟 刘刚(119)
- 碳晶电热板在日光温室黄瓜冬季育苗中的应用效果  
..... 李衍素 赵云龙 贺超兴 闫妍 于贤昌(126)
- 柿种质资源叶片中黄酮和多酚含量多样性研究 ..... 傅建敏 张嘉嘉 李芳东(134)

<i>Malus asiatica</i> × <i>M. domestica</i> 种间杂种苹果斑点落叶病感病性的 QTL 定位	敬小康 吕松 刘欣颖 王忆 吴婷 张新忠 韩振海 李天红(140)
山桃对根癌病的抗性评价	赵丽君 阿布都外力·木米尼 曲艳华 贾克功 朱立新(148)
鸡胚 NANOG、POUV 和 TWIST2 基因不同发育阶段表达谱分析	邢晋祎 张宁波(155)
鼠伤寒沙门氏菌感染诱导鸡盲肠及脾脏 TLR 基因差异表达	孙钰 吴桂贤 刘丽英 齐玉凯 李显耀(161)
布鲁氏菌病检测技术及检测用靶蛋白抗原筛选的概况	王真 鲁琳 吴清民(168)
冻藏温度对鳙鱼片脂质特性变化的影响	武华 洪惠 罗永康 沈慧星(173)
2.4 GHz 无线信号在苹果园中的衰减模型	郭秀明 周国民 赵春江 王衍安(179)
基于 RTK-GNSS 定位的农田地形快速测量技术	李宏鹏 牛东岭 王岩 李笑 孟庆宽 刘刚(188)
液态地膜拉伸强度和透湿性的试验研究	王维 尹光华 孙仕军 李文惠 许志浩(195)
水泵变频驱动的农田灌溉系统仿真研究	刘宏 瞿庆志(201)
内啮合齿轮泵轴向摩擦副的动压润滑研究	李玉龙 唐茂(208)
基于发展概率差别的耕地保护经济补偿研究——以北京市平谷区为例	奉婷 张凤荣 郭俊梅 李灿 曲衍波(213)
基于农户视角的我国蔬菜生产资源配置评价——兼对三阶段 DEA 模型的修正	王欢 穆月英(221)
消费者对可追溯牛肉的支付意愿及其影响因素分析——基于北京市的实地调研	刘增金 乔娟 李秉龙(232)
畜禽养殖业环境负荷与经济增长动态耦合趋势研究——基于浙江 1978—2012 年的时序数据	姚文捷 赵连阁(242)
多元支持网络对返乡农民工再就业的影响	马男 魏凤(255)
基于旅游功能导向的绿道资源评价指标体系构建及应用	陈永生 李莹莹(265)
我国农用航空植保技术专利信息分析	刘勤 何志文 郑砚砚 檀律科 黄旭 唐耘(272)

(卷终)

## CONTENTS

- Progeny screening and variation of agronomic traits in *Ac* transgenic lines of upland rice  
*(Oryza sativa* L.) ..... HAO Jian-qin, FANG Biao, HUANG Min, WANG La-mei,  
ZHONG Chen, XU Yu-hui, ZHAO Peng-ke, WANG Xiang-dong, WANG Hua-qi (1)
- Molecular mapping of the powdery mildew resistance gene in wheat cultivar Bogatka  
..... ZHANG Jing, PENG Fu-xiang, LIU Hu-yu, GENG Miao-miao, DONG Hong-tu,  
LI Ying-hui, LIU Wan-hui, LIU Xin, LI Feng, XIE Chao-jie, SUN Qi-xin (10)
- Population genetic diversity of *Phytophthora parasitica* var. *nicotianae* in Henan province of  
China revealed by nuclear and mitochondrial DNA sequencing  
..... FENG Song-li, JIANG Shi-jun, SONG Peng-yu, WANG Hai-tao,  
XING Guo-zhen, KANG Ye-bin, LI Shu-jun, ZHENG Wen-ming (16)
- Molecular cloning of isoflavone reductase-like gene family from tobacco ..... CHEN Wei,  
LIN Ye-chun, GAO Wei-chang, LI Chun-jian, WANG San-gen, LÜ Jun, CHAI You-rong (23)
- Variation of capsule maturity and seed vigor for tobacco harvested from different branches  
..... LI Zhen-hua, YE Ding-yong, YANG Gui-sheng, SUN Na-na, WANG Jian-hua (35)
- Design method of optimizing winter wheat population character parameters  
..... ZHAO Jiao, LIAO Shu-hua, WANG Pu (41)
- Nitrogen nutrition estimation of rice base on GreenSeeker ..... CHEN Qing-chun, WU Ji-xian,  
QIN Yan-bo, ZENG Han-chao, GENG Man-yi, GUO Shi-qi, LIU Guan-ming (49)
- NDVI value optimization and nitrogen content inversion of maize leaf based on the high spectrum  
..... ZHAO Ming-jia, ZHANG Zhong-qing, LI Zhi-hong (56)
- Growth characteristics and the effect of nitrogen application on the maize root ..... ZHANG Yu,  
QIN Hua-dong, WU Long-meи, ZHANG Jing, LI Zhong, HUANG Min, JIANG Li-geng (62)
- Response of chilling stress on root morphology and protection systems of sugarcane seedlings  
..... SUN Bo, LIU Guang-ling, YANG Li-tao, LI Yang-rui (71)
- A study on diurnal variation in photosynthesis and midday depression phenomenon of photosynthesis  
of oil sunflower in agro-pastoral ecotone  
..... TANG Jian-zhao, WANG Jing, PAN Xue-biao, YANG Ning, LIU Zhe (81)
- Pectinase and cellulase produced by the parasite plant *Cistanche tubulosa* are involved in  
parasitising its host root ..... MIAO Zhong-qin, ZHAO Dong-ping, GUO Yu-hai (88)
- Research and prospects of *Lindera communis* hemsl as a tree of biodiesel resources  
..... DONG Shu-bin, ZHANG Zhi-xiang, HUANG Jia-cong (95)
- Effect of tobacco waste addition on maturity and nematodes suppression during composting  
..... CHEN Fei, DU Long-long, CHANG Rui-xue, LI Yan-ming, KANG Pyong-ung (102)
- Effects of agricultural organic wastes incorporation on soil water-stable aggregates and C, N contents  
..... LONG Pan, GAO Wang-sheng, SUI Peng, YAN Ling-ling, CHEN Yuan-quan (107)
- Farmland soil heavy metal source analysis and evaluation in Bincheng County of Shandong Province,  
China ..... YONG Mei, ZHANG Man, WANG Sheng-wei, LIU Gang (119)
- Application of electric carbon crystal warming board for seedlings culture of cucumber in greenhouse  
in winter ..... LI Yan-su, ZHAO Yun-long, HE Chao-xing, YAN Yan, YU Xian-chang (126)

- Diversity of flavonoids compounds and polyphenols in leaves of persimmon germplasm ..... FU Jian-min, ZHANG Jia-jia, LI Fang-dong (134)
- Mapping quantitative trait loci associated with *Alternaria* leaf blotch susceptibility in a *Malus asiatica* × *M. domestica* interspecific population ..... JING Xiao-kang, LÜ Song, LIU Xin-ying, WANG Yi, WU Ting, ZHANG Xin-zhong, HAN Zhen-hai, LI Tian-hong (140)
- Resistance evaluation of *Prunus davidiana* (Carr.) Franch to crown gall disease ..... ZHAO Li-jun, Abuduwaili • Mumini, QU Yan-hua, JIA Ke-gong, ZHU Li-xin (148)
- Analysis of NANOG, POUV and TWIST2 gene expression patterns during chicken embryonic development ..... XING Jin-yi, ZHANG Ning-bo (155)
- Differential expression of chicken TLR genes between spleen and cecum following the *Salmonella typhimurium* infection ..... SUN Yu, WU Gui-xian, LIU Li-ying, QI Yu-kai, LI Xian-yao (161)
- Research progress of brucellosis diagnostic techniques and immunogenic proteins ..... WANG Zhen, LU Lin, WU Qing-min (168)
- Effect of frozen storage temperatures on lipids changes of bighead carp fillets ..... WU Hua, HONG Hui, LUO Yong-kang, SHEN Hui-xing (173)
- An attenuation model for 2.4 GHz wireless channel in apple orchards ..... GUO Xiu-ming, ZHOU Guo-min, ZHAO Chun-jiang, WANG Yan-an (179)
- Rapid survey technology of farmland terrain based on RTK-GNSS ..... LI Hong-peng, NIU Dong-ling, WANG Yan, LI Xiao, MENG Qing-kuan, LIU Gang (188)
- Tensile strength and moisture permeability of liquid hydromulching ..... WANG Wei, YIN Guang-hua, SUN Shi-jun, LI Wen-hui, XU Zhi-hao (195)
- Simulation research on irrigation system with pump motor driven by variable frequency ..... LIU Hong, ZHAI Qing-zhi (201)
- Research on hydrodynamic lubrication of axial friction pair in internal gear pump ..... LI Yu-long, TANG Mao (208)
- Differential compensation of farmland protection based on the farmland conversion probability:  
A case study in Pinggu District of Beijing ..... FENG Ting, ZHANG Feng-rong, GUO Jun-mei, LI Can, QU Yan-bo (213)
- Study on vegetable production resource allocation in China based on micro-perspective of farmers:  
With modification of three-stage DEA model ..... WANG Huan, MU Yue-ying (221)
- Analysis on consumers' willingness to pay for traceable beef and its influencing factors:  
Based on the spot investigation in Beijing ..... LIU Zeng-jin, QIAO Juan, LI Bing-long (232)
- Research on the dynamic coupling of environmental load with economy growth in the industry of livestock and poultry breeding: Based on the time-series data of Zhejiang in 1978—2012 ..... YAO Wen-jie, ZHAO Lian-ge (242)
- Influence of multi-support system on the re-employment of returning rural migrant workers ..... MA Nan, WEI Feng (255)
- Based on the tourism function of green resources evaluation index system construction and application ..... CHEN Yong-sheng, LI Ying-ying (265)
- A study on the patent information of agricultural aviation plant protection ..... LIU Qin, HE Zhi-wen, ZHENG Yan-yan, TAN Lü-ke, HUANG Xu, TANG Yun (272)