

江苏农业科学

第 45 卷 第 8 期 2017 年 4 月 20 日

目 次

● 专论与综述

- 我国农产品物流研究进展 张立国,程国辉(1)
- 多年生植物芽休眠研究进展 王 武,孙 龙,陶建敏(6)
- 蝉花的研究进展 蒋 宁,高大伟,林金盛,等(11)
- 滇茶资源有效利用研究进展 周玉忠,邓少春,浦绍柳,等(15)

● 生物技术

- 新疆油鸡禽流感病毒 Xj14 分离株 PA 基因的克隆与序列分析 武军元,黄忠武,康 强,等(20)
- 绿豆 SSR-PCR 反应体系的建立与优化 赵雅楠,王 颖,张东杰(23)
- 绵羊 Toll 样受体 7 基因多态性分析 梁 田,杨 霞,张 勋,等(26)
- 生物制品中牛病毒性腹泻病毒 RT-PCR 及套式 RT-PCR 检测方法的建立及应用
..... 顾蓓蓓,王妍鳕,李双洁,等(30)
- 拟南芥 ERA-1 蛋白的原核表达及多克隆抗体制备 付世英,刘夏燕(33)
- 拟南芥铵转运蛋白 AtAMT1.3 的电生理功能 郝东利,杨顺瑛,黄亚楠,等(36)
- 地高辛标记对旱稻进行 southern 杂交分析主要影响因素的优化和验证 邢文岳,苏乐乐,李朝炜,等(41)

● 遗传育种与耕作栽培

- 氮肥施用深度对玉米苗期植株生长及养分吸收的影响 俞洪燕,钱晓刚,罗绪强,等(44)
- 苏北沿海滩涂盐肥对油菜产量及离子分布的效应 黄志勇,顾闽峰,王乃顶,等(48)
- 不同耕作方式对土壤物理性状及玉米生长发育的影响 刘红亮,李凤海,步蕴法,等(52)
- 水杨酸和 NO 联合浸种对 NaCl 胁迫下油菜种子萌发和幼苗生长的影响 吕旭才,王金玲,王 劲,等(55)
- 花生叶鲜生物量的高光谱估算模型 颜丙国,侯学会,梁守真,等(59)
- 在不同生育期不同持续时间遮阴对冬小麦产量及其构成的影响 刘 杨,石春林,宣守丽,等(62)
- 壳聚糖对水稻幼苗抗冷性的影响 朱云林,顾大路,王伟中,等(66)
- 盐胁迫对荞麦幼苗生长及结构的影响 郭爱华(68)
- 梯度密度有机介质分选烟草种子的质量比较 潘 威,马文广,郑昀晔(71)

● 植物保护

- 致病疫霉 ATP6 基因单倍型与地理因素的相关性分析 张佳峰,吴娥娇,罗桂火,等(75)
- 葡萄叶提取物对葡萄生单轴霉菌游动孢子释放、萌发和游动性的影响 杨佳瑶,申红妙,贾招闪,等(79)
- 芝麻枯萎病菌毒素主成分结构与特性分析 李海玲,苗红梅,张海洋,等(82)
- 吡唑醚菌酯与戊唑醇及其复配剂对葡萄炭疽病菌的毒力测定及田间防效
..... 刘吉祥,吉沐祥,芮东明,等(87)

反应温度对台湾乳白蚁内外源纤维素酶活力的差异影响	曾文慧,钟俊鸿,李秋健,等(91)
玉米螟对夏玉米果穗的危害及产量的影响	王红军,郭书亚(95)
1株死谷芽孢杆菌的分离、鉴定及防治西瓜枯萎病的效果	张 猛,王 琼,万东光,等(97)
1株生防芽孢杆菌对黄瓜根结线虫的防治、促生作用及其鉴定	邢芳芳,高明夫,胡兆平,等(101)

●园艺与林学

籐竹属 10 个竹种净光合速率和固碳释氧能力分析	万 娟,王 舒,罗 睿,等(104)
合江方竹竹笋培育施肥研究	马 师,苟光前(107)
关于发展早园竹产业的思考与建议——以江苏省丰县为例	何绍平,侯本民,刘自强,等(111)
遮光对西洋杜鹃花期、光合参数、叶绿素荧光参数的影响	吴玉香,魏建康,沈少炎,等(113)
哈尔滨市 12 种常见树木的滞尘能力比较	黄靖懿,黄 泽,刘慧婧,等(117)
不同连作年限对白术光合生理特性的影响	熊鹏飞,郑 听,李金玲,等(121)
观赏藤本植物在园林景观中的应用	唐登明(127)
模拟雾霾对三角梅光合特性的影响	杨万红(129)
盆栽迷你玫瑰水胁迫声发射信号的检测及分析	周 桥,陈 钊,刘存瑞,等(133)
ABT1 处理对降香黄檀硬枝扦插生根及其关联酶活性的影响	王宏信,李向林,王 楠,等(138)
乌饭树生境土壤理化性质及矿质元素研究	代 慧,陈庆生,张 敏,等(142)
河北坝上农田防护林带结构配置——以康保地区为例	邱梦如,彭 帅,郭中领,等(145)

●畜牧兽医与水产蚕桑

己烯雌酚人工抗原的合成及抗血清的制备	杨兴东,胡晓飞,王方雨,等(149)
肉杂鸡肺炎克雷伯菌耐药菌株的分离鉴定	司振书,张海涛,邵 丹,等(152)
鸡血藤总黄酮乙酸乙酯部位对大肠杆菌脂多糖(LPS)刺激 RAW264.7 免疫细胞氧化应激的调节作用	陈海兰,蒙西南,赵尉丹,等(154)
接种菌剂对发酵床垫料中微生物数量与酶活性的影响	肖 翰,雷 平,刘 标,等(157)
黑麦草幼苗对冻融及酸沉降的生理响应特征	李 晨,包国章,成文革,等(159)
产有机酸芽孢杆菌对玉米秸秆青贮品质及有氧稳定性的影响	郭晓军,郭 威,周 贤,等(163)
蒸汽爆破和化学处理对玉米秸秆化学成分的影响	韩浩然,常 娟,尹清强,等(166)

●贮藏加工与检测分析

高效毛细管电泳-二极管阵列检测法测定微生物代谢产物中的植物激素含量	马晓颖,杨 镇,宋艳雨,等(169)
大孔吸附树脂分离纯化金丝小枣总黄酮工艺研究	师仁丽,于文龙,梁 娜,等(172)
聚乙烯包装对白菜常温贮藏保鲜的影响	汪 敏,赵永富,侯喜林,等(176)
石榴蜜中多酚类成分测定及其抗氧化活性的研究	谭洪波,王丽华,张红城,等(179)

●农业工程与信息技术

基于 GA-BP 神经网络的耕地自然质量计算模型研究	杭艳红,杨 林(183)
保温被外设 PE 黑膜对日光温室保温性的影响	禹夏青,张亚红(187)
基于 STM32 和 ZigBee 的小型温室环境控制系统设计	陈高锋,熊 刚,龙建明,等(191)
山羊坡地行走的步态分析	张 伏,王 唯,张国英,等(196)
河套蜜瓜跌落冲击特性	王 芳,韩媛媛,魏 星,等(199)

农用车空气悬架的混沌振动特性 丁 鹏,田学锋,葛如海,等(202)

农产品产业链安全溯源体系设计与实现 刘 芳,薛 莲(206)

基于主题爬虫算法的养殖投入品质量信息监管系统 李 辉,张 标,吴文良(210)

AquaCrop 模型在北疆滴灌春小麦生产中的校准及验证 柴顺喜,陈 锐,李 杰,等(215)

●资源与环境

江苏省雷电强度等级空间分布及其与土地利用类型的关系 潘 健,毕硕本,沈 香,等(219)

国家级新区建设用地扩展的景观格局特征分析——以重庆市两江新区为例 冯应斌,慕卫东(224)

1996—2014 年贵州省土地利用结构演变及空间差异分析 陈远云,罗海波,张莉娟,等(228)

旱作条件下盐分冲洗试验对盐碱土的改良洗盐效果 夏 婷,杨建国,魏玉清,等(235)

不同降雨条件下红壤坡地养分垂向流失规律 陈 志,王伟峰,孙 丽(241)

玛纳斯河流域中下游地区不同土地利用类型的水盐特征 楚 杨,刘韬韬(245)

天然胶清基液肥的配备与应用研究 杨 燕,延晓惠,唐文浩(249)

高效溶磷菌的筛选、鉴定及其溶磷特性 邵 锴,邱业先,徐 婧(253)

水稻秸秆降解菌系的筛选及其菌群组成分析 张蕴琦,徐凤花,张书敏,等(257)

模拟利用太阳能预处理玉米秸秆压缩成型试验 郑 胜,王佳欣,张同开(261)

大型海藻营养元素的区域性差异及其修复生态环境的潜在模式 刘嘉伟,洪春来,刘会萍,等(264)

重金属处理下萱草的富集能力和生理生态响应 梁明霞,郭 英,何云晓,等(269)

吉林省黑土区土壤重金属元素的生物有效性转化效率特征及相互关系
..... 王柳茜,余 丹,王冬艳,等(274)

滴灌条件下林草间作系统土壤的盐分分布 李 丹,潘旭东,蒙元永,等(279)

有机肥对溶液中铅铜的吸附 张家玮,潘运舟,朱治强,等(282)

●农业经济与管理

微观尺度下的农村居民点空间重构——以重庆市统筹城乡示范村江津区燕坝村为例
..... 张 列,王 成(287)

特色产业农区农户土地转出程度影响因素分析 冯正阳,张 雯(293)

新型城镇化背景下发达地区宅基地流转困境与对策——以苏州市为例 杜荣华,范凌云(297)

农户土地依赖性对农地经营权退出与进入意愿的影响 韩晓宇,曹 波,王晓刚(303)

不同补偿方式下失地农民福利状况研究——以江苏省淮安市为例 王寻寻,苗 齐(308)

家庭农场正规和非正规信贷可获性及其影响因素——基于四川省 86 户家庭农场的实地调研
..... 李芸梦,罗天娅,苟均林,等(313)

新型城镇化及其协调发展测度——以京津冀城市群为例 倪维秋(317)

粮食主产区农田水利投资绩效与政府干预效应分析——基于 Malmquist - FGLS 两阶段模型
..... 罗 芳,孙彩虹,田 苗,等(323)

基于 POT 模型的鸡蛋价格风险的 VaR 与 ES 度量 刘 伟,朱新颜,张爱华,等(330)

内蒙古贫困人口分布、成因及其贫困县退出典型案例分析 潘 斌,钟 敏,王志娟(333)

“互联网 +”农村社会治理创新发展对策 杜永红(338)

果农选择经营组织模式的影响因素分析——基于四川省苍溪县猕猴桃产业调研
..... 顾 颖,杨锦秀,傅雪梅(342)

《江苏农业科学》投稿须知 (346)

JIANGSU AGRICULTURAL SCIENCES

Vol. 45 No. 8 April 20 2017

CONTENTS

Monograph and Review

Research progress of China's agricultural products logistics	Zhang Liguo, et al(1)
Research progress of bud dormancy of perennial plant	Wang Wu, et al(6)
Research progress of <i>Cordyceps cicadae</i>	Jiang Ning, et al(11)
Research progress of effective utilization of Yunnan tea resources	Zhou Yuzhong, et al(15)

Bio-technology

Cloning and sequence analysis of <i>PA</i> gene of avian influenza virus Xj14 isolate from Xinjiang oil chicken	Wu Junyuan, et al(20)
Establishment and optimization of SSR – PCR reaction system for <i>Vigna radiata</i> L.	Zhao Ya'nan, et al(23)
Polymorphism of Toll – like receptor 7 gene in sheep	Liang Tian, et al(26)
Establishment and application of RT – PCR and nest RT – PCR detection method for bovine viral diarrhea virus in biologic products	Gu Beibei, et al(30)
Prokaryotic expression of <i>Arabidopsis</i> protein ERA – 1 and preparation of its polyclonal antibodies	Fu Shiyong, et al(33)
Electrophysiological study on <i>Arabidopsis</i> ammonium transporter AtAMT1.3	Hao Dongli, et al(36)
Optimization and validation of main factors influencing southern hybridization analysis of upland rice using digoxin labeling	Xing Wenye, et al(41)

Genetics and Breeding · Tillage and Cultivation

Effects of nitrogen placement depth on plant growth and nutrient uptake of maize seedling	Yu Hongyan, et al(44)
Influences of salt fertilizer on yield and ion distribution of rape in northern Jiangsu	Huang Zhiyong, et al(48)
Effects of different tillage methods on soil physical properties and maize growth	Liu Hongliang, et al(52)
Influences of seed soaking with salicylic acid and NO on seed germination and seedling growth of <i>Brassica napus</i> under NaCl stress	Lü Xucai, et al(55)
Hyperspectral estimation model of fresh biomass of peanut leaves	Yan Bingdun, et al(59)
Effects of shading stress with different lasting time at different growth stages on yield and its component of winter wheat	Liu Yang, et al(62)
Effects of chitosan on cold resistance of rice seedlings	Zhu Yunlin, et al(66)
Influences of salt stress on growth and structure of <i>Fagopyrum esculentum</i> seedlings	Guo Aihua(68)
Effects of screening method using organic medium with different density on quality of tobacco seed	Pan Wei, et al(71)

Plant Protection

Correlation analysis between <i>ATP6</i> gene haplotype and geographical factors of <i>Phytophthora infestans</i>	Zhang Jiafeng, et al(75)
Effects of grape leaf extracts on release, germination and mobility of zoospores of <i>Plasmopara viticola</i>	Yang Jiayao, et al(79)
Structure and characteristics analysis of main toxin components of <i>Fusarium oxysporum</i> f. sp. Sesami	Li Hailing, et al(82)
Toxicity test and field control effect of pyraclostrobin, tebuconazole and their mixtures on grape anthracnose	Liu Jixiang, et al(87)
Differential effect of reacting temperature on endogenous and exogenous cellulose activities of <i>Coptotermes formosanus</i> Shiraki (Rhinotermitidae)	Zeng Wenhui, et al(91)
Effects of corn borer <i>Ostrinia furnacalis</i> on corn ears and yield of summer corn	Wang Hongjun, et al(95)
Isolation and identification of a <i>Bacillus vallismortis</i> strain and its control effect on watermelon fusarium wilt	Zhang Meng, et al(97)

Prevention and control of cucumber root – knot nematode by a bio – control bacillus strain and its identification
..... Xing Fangfang ,et al(101)

Horticulture and Forestry

Analysis of fixing carbon and releasing oxygen ability of ten bamboo species of *Bambusa* Wan Juan ,et al(104)

Cultivation and fertilization of bamboo shoot of *Chimonobambusa hejiangensis* Ma Shi ,et al(107)

Thoughts and suggestions on developing early garden bamboo industry—Taking Fengxian County of Jiangsu Province as an example
..... He Shaoping ,et al(111)

Effects of different sun – shading treatments on flowering phase , photosynthetic parameters, chlorophyll fluorescence parameters of
western rhododendron Wu Yuxiang ,et al(113)

Comparison of dust – retention ability of twelve common tree species in Harbin City Huang Jingyi ,et al(117)

Effects of different continuous cropping years on photosynthetic physiological characteristics of *Atractylodes macrocephala* Koidz
..... Xiong Pengfei ,et al(121)

Application of ornamental vines in landscape architecture Tang Dengming(127)

Effect of simulated haze on photosynthetic characteristics of *Bougainvillea spectabilis* Willa Yang Wanhong (129)

Detection and analysis of acoustic emission signal of potted mini rose under water stress Zhou Qiao ,et al(133)

Effects of ABT1 on rooting characteristics of hard branch cuttage and related enzyme activity of *Dalbergia odorifera* T. Chen
..... Wang Hongxin ,et al(138)

Study on habitat soil physical and chemical properties and mineral elements of *Vaccinium bracteatum* Dai Hui ,et al(142)

Study on structure configuration of farmland shelterbelts in Bashang region of Hebei Province—Taking Kangbao area as an example
..... Qiu Mengru ,et al(145)

Husbandry and Veterinary • Aquaculture and Sericulture

Synthesis of artificial antigen of diethylstilbestrol and preparation of antiserum Yang Xingdong ,et al(149)

Isolation and identification of drug – resistant strains of *Klebsiella pneumoniae* Si Zhenshu ,et al(152)

Regulatory effect of ethyl acetate parts of total flavonoids from *Caulis spatholobi* on lipopolysaccharide induced oxidative
stress in RAW264. 7 cells Chen Hailan ,et al(154)

Effects of inoculating bacteria on microbial quantity and enzyme activity in fermented bedding Xiao Han ,et al(157)

Physiological characteristics of ryegrass seedlings in response to acid deposition and freezing – thawing stresses
..... Li Chen ,et al(159)

Effects of organic acid – producing *Bacillus* sp. on silage quality and aerobic stability of corn stalk Guo Xiaojun ,et al(163)

Effects of steam explosion and chemical treatments on chemical compositions of corn stover Han Haoran ,et al(166)

Storage and Processing • Detection

Determination of plant hormones contents from microbial metabolites by high performance capillary electrophoresis – diode array
detector Ma Xiaoying ,et al(169)

Study on separation and purification of total flavonoids from *Ziziphus jujuba* Mill. cv. Jinsixiaozao with macroporous resin
..... Shi Renli ,et al(172)

Effect of polythene film packaging on preservation and freshness of Chinese cabbage at room temperature Wang Min ,et al(176)

Study on determination of polyphenols in pomegranate honey and its antioxidant activity Tan Hongbo ,et al(179)

Agricultural Engineering and Information Technology

Study on calculation model of cultivated land natural quality based on GA – BP neural network Hang Yanhong ,et al(183)

Effect of insulation cover coated with black film on heat preservation of sunlight greenhouse Yu Xiaqing ,et al(187)

Design of small greenhouse environment control system based on STM32 and ZigBee Chen Gaofeng ,et al(191)

Gait analysis of sloping walking of goat Zhang Fu ,et al(196)

Drop impact characteristics of Hetao melon Wang Fang ,et al(199)

Chaotic vibration characteristics of air suspension of agricultural vehicle Ding Peng ,et al(202)

Design and implementation of safety traceability system of agricultural products industrial chain Liu Fang ,et al(206)

Supervision system of quality information of aquacultural inputs based on focused crawler algorithm *Li Hui, et al* (210)

Calibration and validation of AquaCrop model for drip irrigated spring wheat production in northern Xinjiang
..... *Chai Shunxi, et al* (215)

Resources and Environment

Spatial distribution of lightning intensity grade in Jiangsu Province and its relationship with land use types *Pan Jian, et al* (219)

Analysis of landscape pattern characteristics of construction land expansion in national new district—Taking Liangjiang New
Area of Chongqing City as an example *Feng Yingbin, et al* (224)

Analysis of evolution and spatial differences of land – use structure in Guizhou Province during 1996—2014
..... *Chen Yuanyun, et al* (228)

Effect of salt washing on saline – alkali soil under dry cultivation *Xia Ting, et al* (235)

Nutrient vertical loss regulation of red soil sloping field under different precipitation conditions *Chen Zhi, et al* (241)

Water and salt characteristics of land with different use types in the middle and lower reaches of Manasi River basin
..... *Chu Yang, et al* (245)

Study on preparation and application of natural gum base liquid fertilizer *Yang Yan, et al* (249)

Selection and identification of efficient phosphorus – solubilizing strain and its phosphorus – solubilizing characteristics
..... *Shao Kai, et al* (253)

Screening of rice straw degradation bacteria and analysis of its microbial composition *Zhang Yunqi, et al* (257)

Experimental study on processing of compressed straw using solar energy *Zheng Sheng, et al* (261)

Regional differences of seaweed nutrient elements contents and its potential model in eco – environmental modification
..... *Liu Jiawei, et al* (264)

Phytoremediation potential and eco – physiological responses of ornamental daylily(*Hemerocallis citrine* Baroni) subjected to
different heavy metal treatments *Liang Mingxia, et al* (269)

Bioavailability of heavy metal elements in black soil region of Jilin Province and their relationships *Wang Liuxi, et al* (271)

Soil salt distribution of forest – grass intercropping system under drip irrigation *Li Dan, et al* (279)

Adsorption of Pb²⁺ and Cu²⁺ in solution by organic fertilizer *Zhang Jiawei, et al* (282)

Agricultural Economy and Management

Spatial reconstruction of rural residential area at microscale—Taking Yanba Village in Jiangjin District of Chongqing City as an
example *Zhang lie, et al* (287)

Analysis of factors affecting farmers’ land transfer degree in characteristic agricultural region *Feng Zhengyang, et al* (293)

Difficulties and countermeasures of homestead circulation in developed areas under the background of new urbanization
—Taking Suzhou City as an example *Du Ronghua, et al* (297)

Effects of farmers’ land dependence on intention of exit and entry of land management right *Han Xiaoyu, et al* (303)

Study on welfare level of land – lost peasants under different compensation modes—Taking Huaian City of Jiangsu Province
as an example *Wang Xunxun, et al* (308)

Regular and informal credit access to family farms and its influencing factors—Based on field research of 86 family farms in
Sichuan Province *Li Yunmeng, et al* (313)

New type of urbanization and its coordinated development measuring—Taking Beijing – Tianjin – Hebei urban agglomeration
as an example *Ni Weiqiu* (317)

Analysis of performance of farmland water investment and effect of government intervention in main grain – producing areas
—Based on two – step model of Malmquist – FGLS *Luo Fang, et al* (323)

VaR and ES risk measurement of egg price based on POT model *Liu Wei, et al* (330)

Distribution and causes of poverty population and withdrawal analysis of typical cases of poverty counties in Inner Mongolia
..... *Pan Bin, et al* (333)

Countermeasures of “Internet + ” innovation and development of rural social governance *Du Yonghong* (338)

Analysis of factors influencing orchard workers’ choice of organizational modes—Based on industry investigation of kiwi fruit
in Cangxi County of Sichuan Province *Gu Ying, et al* (342)