

目 次

· 农业与生命科学 ·

- 生姜 *ZoSnRK* 基因家族鉴定及非生物胁迫响应特性研究 周弦, 王靖,
李庚燃, 刘亿静, 吴艳碧, 代怡昕, 孙冲, 张雪梅 (001)
- 基于 PLS-DA 探究不同低温贮藏条件对“大五星”枇杷果实香气的影响 孙海艳, 陈薇薇,
袁婷, 莫钊宇, 李泽冉, 张惠明, 潘莹芳, 向素琼, 党江波, 郭启高, 梁国鲁 (019)
- 基于空间迁移对象的 SAR 特征优化及西南山区冬油菜遥感识别 王克晓,
周蕊, 姚强, 栗超 (029)
- 香榧对高温的适应策略: 解剖结构与生理稳态协同提升耐热性 李菊,
刘亚敏, 张钰林, 李力, 刘玉民 (043)
- 预制菜塑料包装中添加剂的迁移研究及安全评估 任梦梦, 徐丹,
于宛婷, 李啟彬, 詹宇杰, 任春美, 张弛, 李莎 (054)
- 虾蟹放养量对稻田水质、土壤肥力及土壤酶活性的影响 孟文旭, 林小钢,
朱松, 郑永华, 李芹, 唐洪玉 (065)
- 母乳和配方奶喂养引起的猪肝脏代谢功能差异机制分析 黄榆智,
徐兰梦, 黄禹璐, 何航, 章杰 (079)

· 农业经济研究 ·

- 农户缘何言行不一: 行为意向、政府规制与宅基地退出 韩秀丽, 许霁林, 东梅, 班容 (091)
- 社会资本赋能西部脱贫户提升抗风险能力研究 孙晗霖, 蒲彦鑫, 夏钰婷 (105)
- 乡村振兴背景下西部都市郊县农村劳动力回流就业特点及趋势研究
——以成都市郊县为例 张洁, 何田, 吴雪茹, 蔡进, 刘愿理, 廖和平 (118)
- 数字经济对农业碳排放的影响机制与空间效应研究 刘新智, 刘家益, 周韩梅, 王浩力 (131)
- 新型城镇化与乡村全面振兴协调发展水平测度及数据要素驱动效应研究 蒙长玉,
段小力, 杨珂 (146)

· 地球与环境科学 ·

- 湘江流域生态系统服务权衡/协同及驱动因素 杨佳, 刘洪娜, 刘小艳 (164)
- 基于多维度协同机制的平原水网城市滨水空间游憩适宜性研究 范卉, 李问强,
刘晨雨, 曹菲, 陈永生, 李莹莹 (177)
- 紫色土坡耕地土壤温湿度对秸秆覆盖的响应 孙雪妍, 何丙辉, 李天阳, 刘瑾瑜, 冉婷 (194)

· 医学研究 ·

- 基于神经影像学的牙周炎与脑小血管病认知障碍的关联性及其机制研究 苏牟潇,
廖波, 陈莎莎, 徐晓娅, 易倩宇, 骆洋 (203)
- 连翁止痢颗粒的安全性和药效学研究 王欣, 王艳梅, 丁修东, 韩超, 郝智慧 (215)

· 工程与信息技术 ·

- 排种器非线性刚度减振结构参数化设计与性能分析 曾山,
崔朝辉, 卢家欢, 王昱, 李承哲, 苗泉阳 (226)
- 基于 XGBoost 算法的气吸式玉米精密排种器设计 刘海洋,
何辉波, 李华英, 彭星宇, 蒋帅, 朱由雕 (235)
- 航空材料设计许用值的统计方法比较 杨小玉, 谢里阳 (248)

JOURNAL OF SOUTHWEST UNIVERSITY

(NATURAL SCIENCE EDITION)

Vol. 48 No. 7

Total No. 379

Jul. 20, 2026

CONTENTS

Identification of *ZoSnRK* gene family in *Zingiber officinale* and response

characteristics under abiotic stresses Zhou Xian, Wang Jing, Li Gengran,
Liu Yijing, Wu Yanbi, Dai Yixin, Sun Chong, Zhang Xuemei (001)

Effects of low-temperature storage conditions on aroma compounds of

‘Da wuxing’ loquat fruit based on Partial Least Squares-Discriminant
Analysis(PLS-DA)..... Sun Haiyan, Chen Weiwei,
Yuan Ting, Mo Fangyu, Li Zeran, Zhang Huiming, Pan Yingfang,
Xiang Suqiong, Dang Jiangbo, Guo Qigao, Liang Guolu (019)

Optimization of SAR features and remote sensing identification of

winter rapeseed in mountainous areas of Southwest China based on
spatially migration objects Wang Kexiao, Zhou Rui, Yao Qiang, Su Chao (029)

The adaptation strategy of *Torreya grandis* to high temperature:

anatomical structure and physiological homeostasis synergistically
improve heat resistance Li Ju, Liu Yamin, Zhang Yulin, Li Li, Liu Yumin (043)

Migration study of additives in plastic packaging of prepared dishes and

safety assessment Ren Mengmeng, Xu Dan,
Yu Wanting, Li Qibin, Zhan Yujie, Ren Chunmei, Zhang Chi, Li Sha (054)

The influence of shrimp and crab stocking density on the water quality,

soil fertility and soil enzyme activity in paddy fields Meng Wenxu,
Lin Xiaogang, Zhu Song, Zheng Yonghua, Li Qin, Tang Hongyu (065)

Mechanism of metabolic function differences in pig liver caused by

breast-feeding and formula-feeding Huang Yuzhi,
Xu Lanmeng, Huang Yulu, HE Hang, ZHANG Jie (079)

Why do farmers’ wordsand deeds differ: behavioral intention, government

regulation and homestead withdrawal Han Xiuli, Xu Jilin, Dong Mei, Ban Rong (091)

Study on the empowerment of social capital in enhancing risk resilience among poverty-alleviated households in western China	Sun Hanlin, Pu Yanxin, Xia Yuting (105)
Research on the characteristics and trends of rural labor return employment in suburban counties of western chinese cities under rural revitalization ——A case study of Chengdu suburban counties	Zhang Jie, He Tian, Wu Xueru, Cai Jin, Liu Yuanli, Liao Heping (118)
Research on the influence mechanisms and spatial effects of the digital economy on agricultural carbon emissions	Liu Xinzhi, Liu Jiayi, Zhou Hanmei, Wang Haoli (131)
Research on the measurement of coordinated development level between Comprehensive Rural Revitalization and New-type Urbanization and the driving effect of data elements	Meng Changyu, Duan Xiaoli, Yang Ke (146)
Trade-offs and synergies of ecosystem services and their driving factors in the Xiangjiang River Basin	Yang Jia, Liu Hongna, Liu Xiaoyan (164)
Recreation suitability of waterfront spaces in plain river-network cities based on multi-dimensional synergistic mechanisms	Fan Hui, Li Wenqiang, Liu Chenyu, Cao Fei, Chen Yongsheng, Li Yingying (177)
Responses of soil temperature and moisture in purple soil sloping farmland to straw mulching	Sun Xueyan, He Binghui, Li Tianyang, Liu Jinyu, Ran Ting (194)
Study on the correlationand mechanism between periodontitis and cerebral small vessel disease related cognitive impairment based on neuroimaging	Su Mouxiao, Liao Bo, Chen Shasha, Xu Xiaoya, Yi Qianyu, Luo Yang (203)
Study on the safety and pharmacodynamics of Lianweng Zhili Granules	Wang Xin, Wang Yanmei, Ding Xiudong, Han Chao, Hao Zhihui (215)
Parametric design and performance analysis of nonlinear stiffness vibration damping structure for seed-metering device	Zeng Shan, Cui Chaohui, Lu Jiahuan, Wang Yu, Li Chengzhe, Miao Quanyang (226)
Design of an air-suction precision maize metering device based on the XGBoost algorithm	Liu Haiyang, He Huibo, Li Huaying, Peng Xingyu, Jiang Shuai, Zhu Youdiao (235)
Comparison of statistical methods for design allowables of aeronautical materials	Yang Xiaoyu, Xie Liyang (248)