



中文核心期刊  
中国科技核心期刊  
中国科学引文数据库(CSCD)来源期刊  
RCCSE中国核心学术期刊(A)  
中国农林核心期刊

ISSN 2095-1191  
CODEN NNXAAB

# 南方农业学报

Nanfang Nongye Xuebao

第54卷 第3期 2023年3月

Journal of Southern Agriculture

Vol.54 No.3 Mar. 2023

3

2023



广西壮族自治区农业科学院 主办  
Sponsored by Guangxi Academy of Agricultural Sciences

科学出版社 出版  
Published by Science Press

# 南方农业学报

Nanfang Nongye Xuebao

第54卷 第3期 2023年3月

## 目次

### 优秀青年学者论坛

- 647 田埂功能植物组合配置对稻田害虫和天敌数量的影响  
.....岳 骞,凌学林,鲍海波,盛 婧,李晓峰,王舒悦,朱普平,郭 智,杨晨晨,沈 阳

### 专题:转录组测序

- 657 雌雄罗氏沼虾脑和胸神经节的转录组比较分析  
.....张雨阳,赵 莉,桂 朗,王余德,孙盛明,李名友,刘 东
- 669 基于转录组测序的摘除卵巢藏姜母猪背最长肌脂代谢相关基因筛选与分析  
.....袁 建,敖 政,曾素梅,王智伟,赵中龙,季 全,张 勇
- 681 基于转录组测序分析白藜芦醇促进山羊肌肉脂肪沉积的机制  
.....宋 颖,张叁保,徐健健,邹剑伟,连子童,邹菊红,黄艳娜,蒋钦杨
- 691 晒田环境胁迫下克氏原螯虾卵巢的转录组学分析  
.....袁 畅,李 蔚,何莘萍,陆专灵,黄彬胜,王大鹏,李文红
- 704 基于转录组测序分析枸杞多糖对免疫抑制雏鸡脾脏基因表达的影响  
.....王建东,唐玉林,王 敏,张宝锁,杨富强,高海慧,于 洋,郭延生
- 715 基于转录组测序分析鹅毛早期形态发育差异机制  
.....马雪惠,胡雪文,李绍梅,刘安芳,牟春燕
- 724 基于转录组分析干扰 *FABP1* 基因对猪肌肉脂肪沉积的影响  
.....熊 讯,阮 涌,许厚强
- 735 不同生长速度的雌性罗氏沼虾肌肉组织转录组测序分析  
.....姜建萍,曾 兰,吕 敏,杨学明,蒋和生,蒋钦杨,卢小花,陈泳先,黄光华
- 743 杜洛克和二花脸猪耳软骨组织的差异比较分析  
.....张 震,伍仲平,邓雅鑫,唐军旺,李 慧,蔡妙灵,王丽萍,季久秀
- 755 绍兴鸭血清生殖激素及下丘脑开产相关基因的鉴定分析  
.....饶琳洁,张危红,魏 岳,黎观红,谢金防,韦启鹏,黄江南
- 764 斑节对虾肌肉中虾青素积累的转录组测序分析  
.....彭 超,陈中元,吴水清,邵立业,韩 庆
- 774 非复制型尿嘧啶营养缺陷型弓形虫刺激雏鸡脾脏的转录组学分析  
.....吴绿怡,刘思勤,廖艳鹏,任 超
- 784 2个发育阶段的克氏原螯虾卵巢转录组学分析  
.....黄 瑾,陈晓汉,闭显达,吴铁军,梁 正,高雪梅,陈田聪,王 卉,李 旻,陈秀荔
- 797 不同光色条件下京海黄鸡垂体转录组功能分析  
.....王 莹,李扶石,张杨扬,王金玉
- 806 基于高通量转录组测序的斑重唇鱼 SSR 分布及序列特征分析  
.....葛 锐,强 壮,聂竹兰,李 丽,魏 杰

- 815 水稻响应白叶枯病菌侵染的转录组分析  
..... 张宇,王金开,陈小林,李其利,唐利华,黄穗萍,郭堂勋,玉延华
- 829 亚洲柑橘木虱响应高效氯氰菊酯胁迫的转录组分析  
..... 宋晓兵,崔一平,凌金锋,黄峰,陈霞,彭埃天
- 839 油茶响应不同光照强度的转录组分析  
..... 吴杨,郑亿磊,罗志强,朱智国,严鑫,王海浪
- 849 河八王转录组 SSR 和 SNP 序列特征及系统发育分析  
..... 李海碧,吴杨,祝开,桂意云,韦金菊,周会,张荣华,唐利球,覃天贤,刘昔辉

## 生理生化·土壤肥料·农业生态环境

- 859 南方双季稻区冬闲期绿肥对田间养分固持和减排的影响  
..... 李海露,唐友云,李微艳,董春华,孙玉桃
- 867 烟秆生物质炭基肥对烤烟生理特性及土壤主要环境因子的影响  
..... 朱德伦,周文瑾,贾孟,朱宣全,杜宇,王娜,周鹏,杨焕文,白羽祥,王戈
- 877 油橄榄果渣部分替代锯末糠壳对猪粪污异位发酵的影响  
..... 陆肖宇,唐明凤,熊燕红,吴洋楨,程飞,肖国生
- 887 水培条件下连作对苦荞幼苗植株形态和生理特性的影响  
..... 杨雪,王晓静,唐卓磊,闵江艳,黄凯丰,黄小燕
- 894 优质稻+优质鱼综合种养模式的优质稻品种筛选与效益分析  
..... 李经成,戴高兴,曾华忠,覃钦博,肖俊,王剑,陈韦韦,罗永巨,邓国富,刘少军

## 植物保护·农业气象

- 902 水稻长护颖基因 *OsIsl1* 的遗传分析和序列鉴定  
..... 程玲,黄福钢,王雅宣,李定国,邱永福
- 910 丁香菌酯与咪鲜胺对水稻纹枯病菌的协同作用  
..... 郭雪,张昕淳,欧菊,胡珂,李荣玉,李明,廖逊
- 919 不同宿主植物对天敌益蝽生长发育及繁殖的影响  
..... 孙淦琳,杨韵,何艳艳,付玉飞,郭朴原,陈斌,杜广祖

## 园艺·园林·林业

- 928 广西野生灵芝生物学特性及遗传多样性分析  
..... 韦娇君,王灿琴,胡秀月,王晓国,韦仕岩,唐军,罗阳兰
- 938 基于 MaxEnt 模型的贵州特有植物普定杜鹃花潜在适生区预测  
..... 王浩东,袁丛军,杨瑞,赵宏玖,马觉兵,郭家瑞,戴晓勇,丁访军
- 948 辣椒苗期耐紫外性综合评价及预测  
..... 陈艳,张文娟,邓昌蓉,任延靖,文君琴,刘敏,邵登魁
- 957 葡萄花芽分化研究进展  
..... 王博,罗惠格,覃富强,陈祥飞,朱维,谢太理,曹雄军,白先进

# Journal of Southern Agriculture

Vol.54 No.3, 2023

## Contents

### Outstanding Young Scholars Forum

- 647 Effects of functional plant configuration of field ridges on the quantity of rice pests and natural enemies in paddy field  
..... YUE Qian, LING Xue-lin, BAO Hai-bo, SHENG Jing, LI Xiao-feng, WANG Shu-yue,  
ZHU Pu-ping, GUO Zhi, YANG Chen-chen, SHEN Yang

### Special Subject: Transcriptome Sequencing

- 657 Comparative transcriptome analysis of brain and thoracic ganglion in female and male *Macrobrachium rosenbergii*  
..... ZHANG Yu-yang, ZHAO Li, GUI Lang, WANG Yu-de, SUN Sheng-ming, LI Ming-you, LIU Dong
- 669 Screening and analysis of genes related to lipid metabolism of longissimus dorsi muscle of ovary-removed Zangjiang sows based on transcriptome sequencing..... YUAN Jian, AO Zheng, ZENG Su-mei, WANG Zhi-wei,  
ZHAO Zhong-long, JI Quan, ZHANG Yong
- 681 Mechanism of resveratrol promoting intramuscular fat deposition in goats based on transcriptome sequencing analysis  
..... SONG Ying, ZHANG San-bao, XU Jian-jian, ZOU Jian-wei, LIAN Zi-tong,  
ZOU Ju-hong, HUANG Yan-na, JIANG Qin-yang
- 691 Transcriptomic analysis of ovary of *Procambarus clarkii* under sun-drying environmental stress  
..... YUAN Chang, LI Wei, HE Ping-ping, LU Zhuan-ling, HUANG Bin-sheng,  
WANG Da-peng, LI Wen-hong
- 704 Effects of *Lycium barbarum* polysaccharide on genes expression in spleen of immunosuppressed chicks based on transcriptome sequencing ..... WANG Jian-dong, TANG Yu-lin, WANG Min, ZHANG Bao-suo,  
YANG Fu-qiang, GAO Hai-hui, YU Yang, GUO Yan-sheng
- 715 Mechanism of differences in early morphological development of goose feathers based on transcriptome sequencing  
..... MA Xue-hui, HU Xue-wen, LI Shao-mei, LIU An-fang, MOU Chun-yan
- 724 Transcriptome-based analysis of the effects of interference with *FABP1* gene on intramuscular fat deposition in pigs  
..... XIONG Xun, RUAN Yong, XU Hou-qiang
- 735 Transcriptome sequencing analysis of muscle tissues of female *Macrobrachium rosenbergii* with different growth rates  
..... JIANG Jian-ping, ZENG Lan, LYU Min, YANG Xue-ming, JIANG He-sheng,  
JIANG Qin-yang, LU Xiao-hua, CHEN Yong-xian, HUANG Guang-hua
- 743 Comparative analysis of the differences in ear cartilage tissues between Duroc and Erhualian pigs  
..... ZHANG Zhen, WU Zhong-ping, DENG Ya-xin, TANG Jun-wang, LI Hui,  
CAI Miao-ling, WANG Li-ping, JI Jiu-xiu
- 755 Identification and analysis of serum reproductive hormones and genes related to laying in hypothalamus of Shaoxing Ducks..... RAO Lin-jie, ZHANG Wei-hong, WEI Yue, LI Guan-hong,  
XIE Jin-fang, WEI Qi-peng, HUANG Jiang-nan
- 764 Transcriptome sequencing analysis on astaxanthin accumulation in muscle of *Penaeus monodon*  
..... PENG Chao, CHEN Zhong-yuan, WU Shui-qing, SHAO Li-ye, HAN Qing
- 774 Transcriptome analysis of chick spleens stimulated by nonreplicating *Toxoplasma uracil* auxotrophs  
..... WU Lü-yi, LIU Si-qin, LIAO Yan-peng, REN Chao
- 784 Transcriptomic analysis of *Procambarus clarkii* ovary at two development stages  
..... HUANG Jin, CHEN Xiao-han, BI Xian-da, WU Tie-jun, LIANG Zheng, GAO Xue-mei,  
CHEN Tian-cong, WANG Hui, LI Min, CHEN Xiu-li
- 797 Transcriptome analysis of pituitary gland of Jinghai Yellow Chicken under different light color conditions  
..... WANG Ying, LI Fu-shi, ZHANG Yang-yang, WANG Jin-yu

- 806 SSR distribution and sequence characteristics analysis of *Diptychus maculates* based on high-throughput transcriptome sequencing..... GE Rui, QIANG Zhuang, NIE Zhu-lan, LI Li, WEI Jie
- 815 Transcriptome analysis of rice in response to the infection by *Xanthomonas oryzae* pv. *oryzae* ..... ZHANG Yu, WANG Jin-kai, CHEN Xiao-lin, LI Qi-li, TANG Li-hua, HUANG Sui-ping, GUO Tang-xun, YU Yan-hua
- 829 Transcriptome analysis of *Diaphorina citri* Kuwayama in response to beta-cypermethrin stress ..... SONG Xiao-bing, CUI Yi-ping, LING Jin-feng, HUANG Feng, CHEN Xia, PENG Ai-tian
- 839 Transcriptome analysis of *Camellia oleifera* in response to different light intensities ..... WU Yang, ZHENG Yi-lei, LUO Zhi-qiang, ZHU Zhi-guo, YAN Xin, WANG Hai-lang
- 849 Analysis of SSR, SNP sequence features and phylogeny of the transcriptome of *Narenga porphyrocoma* (Hance) Bor. .... LI Hai-bi, WU Yang, ZHU Kai, GUI Yi-yun, WEI Jin-ju, ZHOU Hui, ZHANG Rong-hua, TANG Li-qiu, QIN Tian-xian, LIU Xi-hui

## Physiology & Biochemistry · Soil & Fertilizer · Agroecology Environment

- 859 Effects of green manure on field nutrient retention and emission reduction in double cropping rice area of southern China during winter fallow period ..... LI Hai-lu, TANG You-yun, LI Wei-yan, DONG Chun-hua, SUN Yu-tao
- 867 Effects of tobacco straw biochar-based fertilizer on physiological characteristics of flue-cured tobacco and main soil environmental factors ..... ZHU De-lun, ZHOU Wen-jin, JIA Meng, ZHU Xuan-quan, DU Yu, WANG Na, ZHOU Peng, YANG Huan-wen, BAI Yu-xiang, WANG Ge
- 877 Effects of partial replacement of sawdust and bran by olive pomace on ectopic fermentation of swine manure ..... LU Xiao-yu, TANG Ming-feng, XIONG Yan-hong, WU Yang-zhen, CHENG Fei, XIAO Guo-sheng
- 887 Effects of continuous cropping on plant morphology and physiological characteristics of tartary buckwheat seedlings under hydroponics ..... YANG Xue, WANG Xiao-jing, TANG Zhuo-lei, MIN Jiang-yan, HUANG Kai-feng, HUANG Xiao-yan
- 894 Screening of rice varieties for the high-quality hybrid rice+high-quality hybrid crucian carp comprehensive cultivation and the benefit analysis ..... LI Jing-cheng, DAI Gao-xing, ZENG Hua-zhong, QIN Qin-bo, XIAO Jun, WANG Jian, CHEN Wei-wei, LUO Yong-ju, DENG Guo-fu, LIU Shao-jun

## Plant Protection · Agrometeorology

- 902 Genetic analysis and sequence identification of *long sterile lemma*(*Oslsl*) gene in rice ..... CHENG Ling, HUANG Fu-gang, WANG Ya-xuan, LI Ding-guo, QIU Yong-fu
- 910 Synergistic effects of coumoxystrobin and prochloraz on *Rhizoctonia Solani* Kühn ..... GUO Xue, ZHANG Xin-chun, OU Ju, HU Ke, LI Rong-yu, LI Ming, LIAO Xun
- 919 Influence of host plants on growth, development and fecundity of natural enemy *Picromerus lewisi* ..... SUN Gan-lin, YANG Yun, HE Yan-yan, FU Yu-fei, GUO Pu-yuan, CHEN Bin, DU Guang-zu

## Horticulture · Landscape Architecture · Forestry

- 928 Biological characteristics and genetic diversity of wild *Ganoderma lucidum* in Guangxi ..... WEI Jiao-jun, WANG Can-qin, HU Xiu-yue, WANG Xiao-guo, WEI Shi-yan, TANG Jun, LUO Yang-lan
- 938 Prediction of the potential suitable area of endemic plant *Rhododendron pudingense* in Guizhou Province based on MaxEnt model ..... WANG Hao-dong, YUAN Cong-jun, YANG Rui, ZHAO Hong-jiu, MA Jue-bing, GUO Jia-rui, DAI Xiao-yong, DING Fang-jun
- 948 Comprehensive evaluation and prediction of ultraviolet radiation resistance of pepper at seedling stage ..... CHEN Yan, ZHANG Wen-juan, DENG Chang-rong, REN Yan-jing, WEN Jun-qin, LIU Min, SHAO Deng-kui
- 957 Research progress of grape flower bud differentiation ..... WANG Bo, LUO Hui-ge, QIN Fu-qiang, CHEN Xiang-fei, ZHU Wei, XIE Tai-li, CAO Xiong-jun, BAI Xian-jin

## 被国际和国内重要数据库收录情况:

- 英国《国际农业与生物科学研究中心(全文库)》(CABI) 来源期刊
- 美国《化学文摘(网络版)》(CA) 来源期刊
- 俄罗斯《文摘杂志》PЖ(AJ) 来源期刊
- 美国《艾博思科数据库》(EBSCOhost) 来源期刊
- 英国《动物学记录》(ZR) 来源期刊
- 英国《食品科技文摘》(FSTA) 来源期刊
- 美国《乌利希期刊指南(网络版)》(Ulrichsweb) 收录期刊
- 日本《日本科学技术振兴机构数据库》(JST) 来源期刊
- 国际原子能机构《国际核信息系统》(INIS) 来源期刊
- 波兰《哥白尼索引》(IC) 来源期刊
- 中文核心期刊
- 中国科技核心期刊(中国科技论文统计源期刊)
- 中国科学引文数据库(CSCD) 来源期刊
- RCCSE中国核心学术期刊(A)
- 中国农林核心期刊(A类)
- 《国家科技学术期刊开放平台》收录期刊
- 中国科学文献计量评价数据库(ASPT) 来源期刊
- 中国期刊全文数据库(CJFD) 全文来源期刊
- 中国知网、万方数据库、维普数据库、博看网、龙源期刊网、超星数字化期刊群来源期刊

主 编 邓国富  
常务副主编 覃泽林  
副 主 编 罗廷荣 顾明华 石德顺  
编辑部主任 兰宗宝  
责任编辑 麻小燕 兰宗宝 思利华 罗 丽 王 晖 陈 燕 邓慧灵 陈德元(英文)  
英文审校 Ghulam Sarwar Solangi Muskesh Kumar Malviya Prakash Lakshmanan

## 南方农业学报

(月刊, 1940年创刊)

第54卷第3期(总第450期)

## Journal of Southern Agriculture

(Monthly, Started in 1940)

Vol.54 No.3 (Tot.450)

主管单位: 广西壮族自治区农业科学院  
主办单位: 广西壮族自治区农业科学院  
编辑单位: 《南方农业学报》编辑部  
通信地址: 南宁市西乡塘区大学东路174号  
邮政编码: 530007  
电话号码: 0771-3240518 3243905 3244920  
传真号码: 0771-3244701  
电子信箱: nfnxyb@163.com  
网络地址: <http://www.nfnxyb.com>

出版日期: 2023年3月25日

出版单位: 科学出版社

北京市东黄城根北街16号 邮编: 100717  
电话: 010-64017032

印刷单位: 广西瑞丰印务有限公司

总发行: 科学出版社

订购单位: 全国各地邮政局

国内发行: 南宁市邮政局

海外发行: 中国国际图书贸易集团有限公司  
发行代号: M03350

**Supervised by** Guangxi Academy of Agricultural Sciences  
**Sponsored by** Guangxi Academy of Agricultural Sciences  
**Edited by** Editorial Department of Journal of Southern Agriculture  
Add.: No.174, Daxue East Road, Xixiangtang District, Nanning, China  
Postcode: 530007  
Tel: 86-771-3240518 3243905 3244920  
Fax: 86-771-3244701  
E-mail: nfnxyb@163.com  
Website: <http://www.nfnxyb.com>

**Published on** March 25, 2023

**Published by** Science Press

Add.: No.16, Donghuangchenggen North Street, Beijing, China  
Postcode: 100717 Tel: 86-10-64017032

**Printed by** Guangxi Ruifeng Printing Co., Ltd.

**Distributed by** Science Press

**Subscription** All Local Post Offices in China

**Issued Abroad by** China International Book Trading Corporation  
(P.O. Box 399, Beijing 100044, China)

**Abroad Issue No.** M03350

ISSN 2095-1191

CN 45-1381/S

Dewey# 630

CODEN NNXAAB

邮发代号: 48-3 定价: 45.00元

