



ISSN 1008-505X
CN 11-3996/S

植物营养与肥料学报

JOURNAL OF
PLANT NUTRITION AND FERTILIZERS

中国科技核心期刊
中文核心期刊
中国农林核心期刊



Vol. 29 No. **2**
2023年2月



中国植物营养与肥料学会 主办
Sponsored by Chinese Society
of Plant Nutrition and Fertilizer Sciences



植物营养与肥料学报

Zhiwu Yingyang Yu Feiliao Xuebao

第 29 卷 第 2 期

目 次

- 201 我国新型肥料产业发展战略研究 丁文成 何 萍 周 卫
- 220 施氮方式与添加脲酶/硝化抑制剂对稻季NH₃挥发和 N₂O 排放的影响 曾 科 王书伟 朱文彬 田玉华 尹 斌
- 232 有机物料配合深耕混合还田快速提升砂质棕壤农业生产力的效果和机理 陈 旭 韩晓增 王晓辉 郭振希 陆欣春
严 君 邹文秀
- 242 稻壳及稻壳生物炭对土壤团聚体稳定性及有机碳分布的影响 朱 玲 周 蓉 沈玉叶 陈有超 唐荣贵
叶桂萍 蔡延江
- 253 黑土累积磷的释放动力学特征及主要影响因素 李佳琪 孙凤霞 孙 楠 李 然 周宝库
马星竹 徐明岗
- 264 近 40 年江苏农田土壤 pH 时空变化特征及驱动因素 毛 伟 郁 洁 李文西 左文刚 仇美华
张 丽 范新会 陈 明 王绪奎 柏彦超
- 273 影响我国主要麦区小麦籽粒硫含量的品种(系)与土壤因素 牟文燕 罗一诺 张学美 张露露 黄 宁
郭子糠 黄 翠 孙利谦 魏 蕾 王朝辉
田 汇
- 287 磷钾肥施用量和方法对弱筋小麦籽粒产量和蛋白质含量及养分吸收利用的影响 钱晨诚 陈 立 马 泉 李春燕 朱 敏
朱新开 丁锦峰 郭文善
- 300 关中塬土区冬小麦-夏玉米体系磷肥减施增效技术研究 李海强 祁 帅 李改民 于艳梅 柴泽宇
高明霞 杨学云 冯 浩 孙本华
- 308 不同分子量黄腐酸对冬小麦生长和养分吸收利用的影响 梁媛媛 王泽平 史秋哲 姜 瑛 李培培
韩燕来 王 祎
- 323 黄腐酸添加量对低氮胁迫下小麦生长和根系形态的影响 于晟玥 牛银星 王泽平 李福贵 柴龙行
冯 彪 韩燕来 王 祎
- 334 湖南怀化花洋溪村“贡田”稻米品质的影响因素 赵紫薇 欧张丹 田茂平 赵书慧 陈玉梅
张振华
- 345 施钾时期对葡萄转色和品质及钾吸收基因表达的影响 李文涛 王令宇 杨毓贤 余文彬 刘卫春
房经贵 上官凌飞
- 353 脐橙幼苗新老叶片养分含量对大、中量元素短期缺乏的差异性响应 张圆圆 马金龙 管 冠 姚锋先 周高峰
刘桂东
- 363 秸秆添加对土壤微生物-根系形态介导的番茄磷吸收的影响 何 怡 高 伟 诸海焘 蔡树美 徐四新
张德闪

研究简报

- 372 猪血蛋白水解物对盆栽樱桃番茄生长和品质的影响 王维轩 金 晓 寇俊彤 王振业 孙奉良
吕昊峰 梁 斌 李俊良 周伟伟
- 382 采用综合评价模型优化樱桃番茄的灌溉与钙镁肥组合 李 瑞 贺代伟 刘杰成 王 正 姜 煜
王 玮 张 智 裘莉娟

JOURNAL OF PLANT NUTRITION AND FERTILIZERS

Vol. 29 No. 2

CONTENTS

- 201 Development strategies of the new-type fertilizer industry in China DING Wen-cheng HE Ping ZHOU Wei
- 220 Effects of nitrogen application methods combined with urease/nitrification inhibitor on decreasing NH₃ volatilization and N₂O emission in rice season ZENG Ke WANG Shu-wei ZHU Wen-bin TIAN Yu-hua YIN Bin
- 232 Application of manure and straw by deep plough rapidly improves fertility and productivity of brown sandy soil CHEN Xu HAN Xiao-zeng WANG Xiao-hui GUO Zhen-xi LU Xin-chun YAN Jun ZOU Wen-xiu
- 242 Effects of rice husk and its derived biochar on soil properties and stability of aggregates ZHU Ling ZHOU Rong SHEN Yu-ye CHEN You-chao TANG Rong-gui YE Gui-ping CAI Yan-jiang
- 253 Release kinetics characteristics and the main drivers of phosphorous accumulated in black soil LI Jia-qi SUN Feng-xia SUN Nan LI Ran ZHOU Bao-ku MA Xing-zhu XU Ming-gang
- 264 Spatial and temporal variation of cropland pH and the driving factors in Jiangsu over the past 40 years MAO Wei YU Jie LI Wen-xi ZUO Wen-gang QIU Mei-hua ZHANG Li FAN Xin-hui CHEN Ming WANG Xu-kui BAI Yan-chao
- 273 Cultivar (lines) and soil factors affecting wheat grain sulfur concentration in the major wheat-producing regions of China MU Wen-yan LUO Yi-nuo ZHANG Xue-mei ZHANG Lu-lu HUANG Ning GUO Zi-kang HUANG Cui SUN Li-qian WEI Lei WANG Zhao-hui TIAN Hui
- 287 Effects of phosphorus and potassium fertilizer on grain yield, nutrient uptake and utilization in low-gluten wheat QIAN Chen-cheng CHEN Li MA Quan LI Chun-yan ZHU Min ZHU Xin-kai DING Jin-feng GUO Wen-shan
- 300 Techniques to reduce P application rate and improve its efficiency in winter wheat-summer maize system on Eum-Orthic Anthrosols in Guanzhong area LI Hai-qiang QI Shuai LI Gai-min YU Yan-mei CHAI Ze-yu GAO Ming-xia YANG Xue-yun FENG Hao SUN Ben-hua
- 308 Effects of fulvic acid with different molecular weights on growth and nutrient utilization of winter wheat LIANG Yuan-yuan WANG Ze-ping SHI Qiu-zhe JIANG Ying LI Pei-pei HAN Yan-lai WANG Yi
- 323 Effects of fulvic acid addition rate on wheat growth and root morphology under low nitrogen stress YU Sheng-yue NIU Yin-xing WANG Ze-ping LI Fu-gui CHAI Long-hang FENG Biao HAN Yan-lai WANG Yi
- 334 Factors related to rice taste and nutritional quality in the “Gongtian” of Huayangxi Village, Huaihua, Hunan ZHAO Zi-wei OU Zhang-dan TIAN Mao-ping ZHAO Shu-hui CHEN Yu-mei ZHANG Zhen-hua

- 345 Effects of potassium fertilizer application time on the coloration and quality of grape fruit and the expression of potassium-absorbing genes
LI Wen-tao WANG Ling-yu YANG Yu-xian
YU Wen-bin LIU Wei-chun FANG Jing-gui
SHANGGUAN Ling-fei
- 353 Differential response of nutrient content of new and old leaves of young navel orange to short-term deficiency of macrolelements and secondary elements
ZHANG Yuan-yuan MA Jin-long
GUAN Guan YAO Feng-xian
ZHOU Gao-feng LIU Gui-dong
- 363 Effects of straw addition on soil microbes-root morphology governing phosphorus-acquisition of *Solanum lycopersicum*
HE Yi GAO Wei ZHU Hai-tao
CAI Shu-mei XU Si-xin ZHANG De-shan

Short communication

- 372 Foliar spraying of pig blood-derived protein hydrolysates increases growth and quality of cherry tomato
WANG Wei-xuan JIN Xiao KOU Jun-tong
WANG Zhen-ye SUN Feng-liang
LÜ Hao-feng LIANG Bin LI Jun-liang
ZHOU Wei-wei
- 382 Optimizing the combination of Ca and Mg and water levels in cherry tomato production using comprehensive evaluation model
LI Rui HE Dai-wei LIU Jie-cheng
WANG Zheng JIANG Yu WANG Wei
ZHANG Zhi QIU Li-juan