

**环境健康与农产品安全(农业农村部产地环境污染防控重点实验室学术支持)**

臭氧浓度升高对大田玉米产量及品质的影响 张丹红 王效科 冯美琪 高艺芹 张 楠 殷宝辉 耿春梅(1135)
CO₂浓度和温度升高下不同类型水稻高光谱特征及叶绿素含量反演对比分析

..... 陈铭杰 何 昊 柯浩楠 曹琰梅 史家宾 屈珂樨 赵 靖 李 琪 胡正华(1148)

硫化氢信号分子介导S-烯丙基-L-半胱氨酸调控水稻镉胁迫

..... 火兴宇 张 宇 王常荣 齐 鳞 刘 斌 黄雁飞 黄永春(1160)

pH对水稻幼苗镉亚细胞分布和阳离子通道选择透性的影响 尚 颖 王常荣 黄永春 张长波 刘仲齐(1169)

镉/铅低积累水稻品种筛选及其人体健康风险评价 陈 婷 龙胜楼 孙媛媛 钟 霖 商成梅 唐 明 秦樊鑫(1178)

不同措施对轻中度镉污染土壤小麦安全生产的影响 王晓晶 刘会茹 李少轩 张东明 曹 阳 吕家珑 代允超(1190)

鲜食玉米籽粒镉累积关键影响因子及其影响途径——基于随机森林模型

..... 王亚楠 刘迎夏 马进川 马军伟 褚军杰 王 强 邹 平(1199)

微塑料-Cd胁迫对蔬菜发芽和幼苗的毒性效应 姚 宇 梁小莹 徐 乔 王小治 许美玲(1208)

叶面喷施L-半胱氨酸对小白菜镉积累及抗氧化系统的影响 林星好 郭小可 龚茹静 徐小逊 杨占彪(1217)

吡噻菌胺对映体在水培黄瓜体系中的选择性吸收与传导行为

..... 王富芸 赵尔成 裴 涛 潘 薇 赵晓军 孟致衡 李 莉(1225)

山东省主栽设施果类蔬菜养分投入与环境代价 管西林 刘传云 王孝忠 陈绪昊 高 明 李 彦 陈新平(1233)

不同新型肥料对西南地区露地甘蓝可持续生长综合评价

..... 申小歌 曾 珍 吴 吉 罗 旭 付 建 詹雪萍 陈 静 陈新平 王孝忠(1245)

土壤环境(中国土壤学会土壤环境专业委员会学术支持)

高砷地下水灌溉对As在盐渍化农田土壤中迁移的影响 郑玉红 罗艳丽 晁 博 董乐乐 宋 振 王美娟(1256)

镉修复微生物菌剂的构建及其作用效果 王 琼 冯雪薇 冯 英(1266)

锰离子胁迫下解淀粉芽孢杆菌A-3代谢响应 敖 静 李 杨 刘晓辉 宋立群 胡琴琴(1276)

土壤容重和有机质对Cr(VI)还原转化的影响 李和平 逯嘉川 吴忆苏 王恒飞(1286)

北京市昌平区农田土壤重金属健康风险评估及来源解析 阚炜杰 徐明泽 左 强 王金凤 田 硕(1294)

基于Py-GCMS定量分析不同覆膜年限土壤中微塑料含量以及微生物群落变化

..... 黄彭鑫悦 刘宇航 吕凤媛 张艳艳 高雪松(1303)

中国农用地微塑料分布及其对土壤环境质量影响的Meta分析 吴汉洲 刘 棋 陈 健 李 明 朱宁远 汪宜敏(1312)

还原性绿脱石氧化驱动施化肥和秸秆还田水稻土溶解性有机质转化机制

..... 符俊宏 肖艳琦 宁雅琪 谢雯静 张 娜 崔浩杰 廖文娟(1323)

生物炭配施木醋液对盐碱土壤养分及冬小麦耐盐能力的影响 张 敏 王广恩 李义红 赵 迎 张月辰 郭 丽(1334)

面源污染

宁夏引黄灌区典型田块-沟渠水中氮素浓度的响应特征

..... 刘晓彤 孙 源 赵 营 罗健航 马 英 张天鹏 刘 欢 张学军 雷秋良(1343)

洱海流域有机肥替代化肥对稻鸭共育下水稻产量和田面水氮磷浓度的影响 续勇波 白采禾 陈 玮 雷宝坤(1353)

水体环境

两种合成施氏矿物对Sb(Ⅲ)的吸附特性 宋文杰 都达古拉 谢志磊 李 浩 李智超 何 江(1365)

球形木质纤维素基阴离子交换剂吸附去除水中Cr(VI)的性能 陈思豪 曹 威 钱政文 李 飞 周真明(1378)

新型磁性生物炭制备及其对水中聚苯乙烯微塑料吸附性能与机制

..... 秦 华 吴娟娟 李巧云 李鹏飞 齐文博 宋凤敏(1387)

废弃物处理及资源化利用

猪场沼液组分特征对土壤镉活性的影响 李世杰 刘 鑫 李世旗 杨志敏 陈玉成(1399)

农业与全球变化

间作对坡耕地红壤呼吸速率的影响 王祺蕊 杨春怀 李永梅 王 婷 李婉婷 赵吉霞(1409)

环境信息

本期推介文章作者团队:中国环境科学研究院环境检测与实验中心 耿春梅 环境检测技术研发与应用研究中心研究团队

(封二) 农业农村部环境保护科研监测所 黄永春 重金属生态毒理与污染修复创新团队(封三)

CONTENTS

(Monthly•Started in 1982)

JOURNAL OF AGRO-ENVIRONMENT SCIENCE

Vol.44 No.5 May 20, 2025

The impact of elevated ozone concentration on the yield and grain quality of maize on field

..... ZHANG Danhong, WANG Xiaoke, FENG Meiqi, GAO Yiqin, ZHANG Nan, YIN Baohui, GENG Chunmei(1135)

Hyperspectral characteristics and chlorophyll content inversion of different rice types under elevated CO₂ concentrations and temperature

..... CHEN Mingjie, HE Hao, KE Haonan, CAO Yanmei, SHI Jiabin, QU Kexi, ZHAO Jing, LI Qi, HU Zhenghua(1148)

Hydrogen sulfide signaling molecules mediate S-allyl-L-cysteine to regulate cadmium stress in rice

..... HUO Xingyu, ZHANG Yu, WANG Changrong, QI Lin, LIU Bin, HUANG Yanfei, HUANG Yongchun(1160)

Effects of pH value on the subcellular distribution of cadmium and selective permeation of cation channels in rice seedling

..... SHANG Ying, WANG Changrong, HUANG Yongchun, ZHANG Changbo, LIU Zhongqi(1169)

Screening and human health risk assessment of rice varieties with cadmium/lead low accumulation

..... CHEN Ting, LONG Shenglou, SUN Yuanyuan, ZHONG Lin, SHANG Chengmei, TANG Ming, QIN Fanxin(1178)

Effects of different measures on safe production of wheat in mild to moderate cadmium contaminated soil

..... WANG Xiaojing, LIU Huiru, LI Shaoxuan, ZHANG Dongming, CAO Yang, LÜ Jialong, DAI Yunchao(1190)

Key influencing factors and pathways of cadmium accumulation in fresh maize grains :based on Random Forest model

..... WANG Yanan, LIU Yingxia, MA Jinchuan, MA Junwei, CHU Junjie, WANG Qiang, ZOU Ping(1199)

Toxic effects of microplastics–cadmium stress on vegetable germination and seedlings

..... YAO Yu, LIANG Xiaoying, XU Qiao, WANG Xiaozhi, XU Meiling(1208)

Effects of leaf spraying L-cysteine on cadmium accumulation and antioxidant system of Chinese cabbage

..... LIN Xingyu, GUO Xiaoke, HU Rujing, XU Xiaoxun, YANG Zhanbiao(1217)

Enantioselectivity uptake and translocation of penthiopyrad enantiomers in hydroponic cucumber system

..... WANG Fuyun, ZHAO Ercheng, PEI Tao, PAN Wei, ZHAO Xiaojun, MENG Zhiheng, LI Li(1225)

Nutrient input and environmental cost of main plastic shed fruit vegetables in Shandong Province

..... GUAN Xilin, LIU Chuanyun, WANG Xiaozhong, CHEN Xuahao, GAO Ming, LI Yan, CHEN Xinping(1233)

Comprehensive evaluation of different new fertilizers on sustainable growth of open field cabbage in southwest China

..... SHEN Xiaoge, ZENG Zhen, WU Ji, LUO Xu, FU Jian, ZHAN Xueping, CHEN Jing, CHEN Xinping, WANG Xiaozhong(1245)

Effects of high arsenic groundwater irrigation on As migration in salinized farmland

..... ZHENG Yuhong, LUO Yanli, CHAO Bo, DONG Lele, SONG Zhen, WANG Meijuan(1256)

Construction of Cd phytoremediation microbial agent and its functional effects WANG Qiong, FENG Xuewei, FENG Ying(1266)

Metabolic response of *Bacillus amyloliquefaciens* A-3 under manganese ion stress

..... AO Jing, LI Yang, LIU Xiaohui, SONG Liqun, HU Qinjin(1276)

Effects of soil bulk density and organic matter on Cr(VI) reduction and transformation

..... LI Heping, LU Jiachuan, WU Yisu, WANG Hengfei(1286)

Health risk assessment and source analysis of heavy metals in farmland soil in Changping District ,Beijing

..... KAN Weijie, XU Mingze, ZUO Qiang, WANG Jinfeng, TIAN Shuo(1294)

Quantitative analysis of microplastic concentration in soil from different mulching years based on Py-GCMS and variation in

microbial community HUANG Pengxinyue, LIU Yuhang, LÜ Fengyuan, ZHANG Yanyan, GAO Xuesong(1303)

- Meta-analysis of the distribution of microplastics on agricultural land in China and their impact on soil environmental quality WU Hanzhou, LIU Qi, CHEN Jian, LI Ming, ZHU Ningyuan, WANG Yimin(1312)
- Mechanism of dissolved organic matter transformation in paddy soil with the application of fertilizer and straw return driven by oxidation of reduced nontronite FU Junhong, XIAO Yanqi, NING Yaqi, XIE Wenjing, ZHANG Na, CUI Haojie, LIAO Wenjuan(1323)
- Effects of biochar combined with wood vinegar on salinity soil nutrients and salt tolerance of winter wheat ZHANG Min, WANG Guang'en, LI Yihong, ZHAO Ying, ZHANG Yuechen, GUO Li(1334)
- Response characteristics of nitrogen concentration in farmland and irrigation ditches in the Yellow River water diversion irrigation area of Ningxia LIU Xiaotong, SUN Yuan, ZHAO Ying, LUO Jianhang, MA Ying, ZHANG Tianpeng, LIU Huan, ZHANG Xuejun, LEI Qiuliang(1343)
- Effects of organic fertilizers replacing chemical fertilizers on rice yield and nitrogen and phosphorus concentrations under rice-duck co-cultivation in the Erhai watershed XU Yongbo, BAI Caihe, CHEN Wei, LEI Baokun(1353)
- Adsorption characteristics of Sb(III) by two types of synthesized schwertmannite SONG Wenjie, Dudagula, XIE Zhilei, LI Hao, LI Zhichao, HE Jiang(1365)
- Adsorption and removal of Cr(VI) from water by spherical lignocellulose-based anion exchanger CHEN Sihao, CAO Wei, QIAN Zhengwen, LI Fei, ZHOU Zhenming(1378)
- Preparation of different magnetic biochar and its adsorption performance on microplastics in water QIN Hua, WU Juanjuan, LI Qiaoyun, LI Pengfei, QI Wenbo, SONG Fengmin(1387)
- Influence of swine farm biogas slurry fractions on soil cadmium activity LI Shijie, LIU Xin, LI Shiqi, YANG Zhimin, CHEN Yucheng(1399)
- Effects of intercropping on respiration rate of red soil in sloping farmland WANG Qirui, YANG Chunhuai, LI Yongmei, WANG Ting, LI Wanting, ZHAO Jixia(1409)