

ISSN 1672-2043

CN 12-1347/S

农业环境科学学报

JOURNAL OF AGRO-ENVIRONMENT SCIENCE

中文核心期刊
CODEN NHKXA7



关注微信公众平台请扫二维码

万方数据

2018 年 4 月

第37卷第4期 Vol.37 No.4

农业部环境保护科研监测所 主办
中国农业生态环境保护协会



污染生态

UV-B 辐射与稻瘟病菌复合胁迫对元阳梯田水稻生长和光合特性的影响

..... 李 想 谢春梅 何永美 祖艳群 王 灿 李虹茹 李 元(613)

间作对莎草与蚕豆体内铅镉锌化学形态分布的影响

..... 于保港 秦 丽 湛方栋 祖艳群 李 博 王吉秀 李 元(621)

应用水培方法筛选砷低吸收生菜的比较研究 张 霖 曾希柏 白玲玉 王亚男 苏世鸣 吴翠霞(632)

磷镉交互作用对白骨壤幼苗体内镉的亚细胞分布和生理特性的影响 王 岚 戴闽玥 严重玲(640)

Pb、Cd 和酸胁迫对枫香种子萌发、幼苗生长及体内抗氧化酶活性的影响

..... 陈顺钰 韩 航 薛凌云 张 韵 侯晓龙 蔡丽平 周垂帆(647)

铅胁迫对金丝草 AsA-GSH 循环及铅积累的影响

..... 韩 航 陈顺钰 赵雅曼 侯晓龙 蔡丽平 刘爱琴 周垂帆(656)

纳米二氧化钛对佳乐麝香所引起的沙蚕(*Perinereis aibuhitensis*)神经毒性的影响

..... 张倩茹 姜丽思 牟文燕 王建美 李斯雯(665)

塑化剂 DEHP 暴露对小鼠巨噬细胞的免疫毒性作用 韩佳荣 苏伊玲 熊 丽 耿 辉(673)

北太平洋公海中心渔场海域放射性核素 ^{137}Cs 的生态环境监测与风险评估 唐峰华 张胜茂 吴祖立 崔雪森(680)

土壤环境

基于文献计量的我国农地重金属研究热点分析 帅 鸿 欧阳迪庆 陈玉成(688)

生物炭耦合水分管理对稻田土壤 As-Cd 生物有效性及稻米累积的影响

..... 李国星露 叶长城 刘玉玲 杨蕊嘉 何钟响 刘孝利 铁柏清 孙 健(696)

不同有机物料的 Cd²⁺吸附特性及其对 Cd 污染土壤的修复效果研究 刘媛媛 刘 超 陈卓君 徐 智 汤 利(705)

菌粉、两性黏土复合活性硅酸钙对 Cu²⁺的吸附和阻滞效应

..... 李文斌 邓红艳 李雪连 刘 伟 雷刚刚 孟昭福 罗 川 王 腾(711)

阳离子强度及类型对生物质炭吸附土霉素的影响 闫聪聪 符博敏 罗吉伟 黄 鹏 葛成军 俞花美(718)

BS-12+CTMAB 复配修饰黄棕壤对菲的吸附 刘 伟 李文斌 孟昭福 杭朝曦 王 腾 胡啸龙 任 爽(725)

咸水灌溉棉田休耕期土壤胞外酶活性和微生物多样性研究

..... 梁悦萍 李科江 张俊鹏 王广帅 高 阳 孙景生 段爱旺(732)

面源污染

- 太湖稻麦轮作区减施磷肥对土壤供磷和小麦吸收磷的影响 陈 浩 汪 玉 袁佳慧 朱文彬 王慎强(741)
基于 CLUE-S 的香溪河土地利用变化预测与总磷污染负荷分析 王清睿 刘瑞民 门 聰 郭力嘉(747)
喀斯特地区坡面不同土地利用方式水土流失及磷素输出对次降雨特征的响应
..... 彭宏佳 吴起鑫 任斐鹏 安艳玲 付宇文 刘瑞禄 吕婕梅(756)

水体环境

- 三峡支流消落带表层沉积物氮矿化动力学参数估算
..... 刘 丹 张 帅 唐玉姣 尹 静 谭兴伶 陈 苗 于志国 林俊杰(766)
辽河口湿地沉积物中汞含量变化特征的模拟研究 李 航 郑冬梅 马欢驰(774)
蒙脱石矿物材料絮凝剂的制备、絮凝效果及机理研究 王 翳 胡文红 张 颖 李 丽 曾 明(780)

废弃物处理及资源化利用

- 基于水培技术的沼液净化及生菜品质提升 梁飞虹 崔秋芳 涂 特 余 歌 王文超 晏水平(788)
狐尾藻净化生猪养殖场沼液的研究 吴晓梅 叶美锋 吴飞龙 黄 薇 林代炎(796)
磷脂脂肪酸生物标记法分析养猪发酵床微生物群落结构的空间分布
..... 郑雪芳 刘 波 朱育菁 王阶平 陈倩倩 魏云华(804)
pH 调控对瘤胃液接种稻秸厌氧消化中水解菌及产甲烷菌的影响 邓玉营 阮文权 郁 莉 黄一波(813)
农村垃圾小型焚烧炉烟气污染物排放特征及影响因素研究 严 骁 贾 燕 王美欢 许榕发 郑 晶 任明忠(820)

碳氮循环

- 不同灌溉方式对设施菜地 N₂O 排放的影响及其年际差异
..... 谢海宽 李贵春 徐 驰 丁武汉 江雨倩 王立刚 李 虎(825)

环境影响评价

- 基于 LCA 的黄土高原沼气生态果园环境影响研究 张丛光 邱 凌 王 飞 邓媛方 韩建聪(833)

CONTENTS

(Monthly • Started in 1982)

Vol.37 No.4 Apr. 20, 2018

JOURNAL OF AGRO-ENVIRONMENT SCIENCE

- Effects of complex UV-B radiation and *Magnaporthe oryzae* stresses on the growth and photosynthetic characteristics of rice in Yuanyang Terrace, China LI Xiang, XIE Chun-mei, HE Yong-mei, ZU Yan-qun, WANG Can, LI Hong-ru, LI Yuan(613)
- Effects of intercropping on Pb, Cd, and Zn compounds in *Cyperus glomeratus* and *Vicia faba* YU Bao-gang, QIN Li, ZHAN Fang-dong, ZU Yan-qun, LI Bo, WANG Ji-xiu, LI Yuan(621)
- Comparison of three types of hydroponics methods in screening for low arsenic uptake lettuces ZHANG Qian, ZENG Xi-bai, BAI Ling-yu, WANG Ya-nan, SU Shi-ming, WU Cui-xia(632)
- Effects of phosphorus and cadmium interaction on cadmium subcellular distribution and physiological characteristics in *Avicennia marina*(Forsk.) Vierh seedlings WANG Lan, DAI Min-yue, YAN Chong-ling(640)
- Effects of Pb, Cd, and acid stress on seed germination, seedling growth, and antioxidant enzyme activities of *Liquidambar formosana* CHEN Shun-yu, HAN Hang, XUE Ling-yun, ZHANG Yun, HOU Xiao-long, CAI Li-ping, ZHOU Chui-fan(647)
- Influence of lead stress on the ascorbate–glutathione cycle and subcellular distribution in leaves and roots of *Polygonatum crinitum* HAN Hang, CHEN Shun-yu, ZHAO Ya-man, HOU Xiao-long, CAI Li-ping, LIU Ai-qin, ZHOU Chui-fan(656)
- Influences of nano-TiO₂ on the neurotoxicity induced by galaxolide in the polychaeta *Perinereis aibuhitensis* ZHANG Qian-ru, JIANG Li-si, MU Wen-yan, WANG Jian-mei, LI Si-wen(665)
- Immunotoxicity of di(2-ethylhexyl) phthalate to macrophages HAN Jia-ying, SU Yi-ling, XIONG Li, GENG Hui(673)
- Ecological environment monitoring and risk assessment of radioactive element ¹³⁷Cs in central fishing grounds of the North Pacific Ocean TANG Feng-hua, ZHANG Sheng-mao, WU Zu-li, CUI Xue-sen(680)
- Hotspot issues of heavy metals in China's farmland based on bibliometrics SHUAI Hong, OUYANG Di-qing, CHEN Yu-cheng(688)
- Bioavailability of arsenic and cadmium, and their cumulative control in rice grown on arsenic–cadmium–contaminated paddy soils LIYUAN Xing-lu, YE Chang-cheng, LIU Yu-ling, YANG Rui-jia, HE Zhong-xiang, LIU Xiao-li, TIE Bo-qing, SUN Jian(696)
- Effects of three organic materials on Cd²⁺ adsorption capacity and remediation of Cd contaminated soil LIU Yuan-yuan, LIU Chao, CHEN Zhuo-jun, XU Zhi, TANG Li(705)
- Cu²⁺ adsorption and retardation effect of compound adsorbent by adding bacterium powder and amphoteric modified clay in active calcium silicate LI Wen-bin, DENG Hong-yan, LI Xue-lian, LIU Wei, LEI Gang-gang, MENG Zhao-fu, LUO Chuan, WANG Teng(711)
- Effects of cation strength and species on adsorption of oxytetracycline by biochars YAN Cong-cong, FU Bo-min, LUO Ji-wei, HUANG Peng, GE Cheng-jun, YU Hua-mei(718)
- Adsorption of phenanthrene on amphoteric–cationic modified yellow–brown soil LIU Wei, LI Wen-bin, MENG Zhao-fu, HANG Zhao-xi, WANG Teng, HU Xiao-long, REN Shuang(725)

- Extracellular enzyme activity and microbial diversity of saline-irrigated cotton field soil during the fallow period LIANG Yue-ping, LI Ke-jiang, ZHANG Jun-peng, WANG Guang-shuai, GAO Yang, SUN Jing-sheng, DUAN Ai-wang(732)
- The effect of phosphorus-reduction on soil phosphorus supply and wheat phosphorus uptake in a rice-wheat rotation system in the Taihu Lake Region CHEN Hao, WANG Yu, YUAN Jia-hui, ZHU Wen-bin, WANG Shen-qiang(741)
- Land use change predictions based on the CLUE-S model and total phosphorus load analysis WANG Qing-rui, LIU Rui-min, MEN Cong, GUO Li-jia(747)
- Response of soil erosion and phosphorus losses to individual rainfall under different land uses at Karst slopes PENG Hong-jia, WU Qi-xin, REN Fei-peng, AN Yan-ling, FU Yu-wen, LIU Rui-lu, LÜ Jie-mei(756)
- Parameter estimates of sediment nitrogen mineralization kinetics in the water level fluctuation zone of a Three Gorges Reservoir tributary LIU Dan, ZHANG Shuai, TANG Yu-jiao, YIN Jing, TAN Xing-ling, CHEN Xi, YU Zhi-guo, LIN Jun-jie(766)
- Simulation of total mercury content variability in wetland sediments in the Liaohe Estuary LI Hang, ZHENG Dong-mei, MA Huan-chi(774)
- Study on preparation, flocculation effect, and mechanism of montmorillonite mineral material flocculant WANG Chang, HU Wen-hong, ZHANG Ying, LI Li, ZENG Ming(780)
- Benign treatment of biogas slurry and improvement in lettuce quality using hydroponics LIANG Fei-hong, CUI Qiu-fang, TU Te, YU Ge, WANG Wen-chao, YAN Shui-ping(788)
- Purification capacity of *Myriophyllum spicatum* for biogas slurry from pig farms WU Xiao-mei, YE Mei-feng, WU Fei-long, HUANG Wei, LIN Dai-yan(796)
- Spatial distribution of microbial communities in a fermentation bed based on phospholipid fatty acid biomarkers ZHENG Xue-fang, LIU Bo, ZHU Yu-jing, WANG Jie-ping, CHEN Qian-qian, WEI Yun-hua(804)
- The effect of pH adjustment on hydrolytic bacteria and methanogens during rumen fluid derived anaerobic digestion of rice straw DENG Yu-ying, RUAN Wen-quan, YU Li, HUANG Yi-bo(813)
- Emission characteristics and the environmental influence of pollutants in flue gas from small waste incinerators YAN Xiao, JIA Yan, WANG Mei-huan, XU Rong-fa, ZHENG Jing, REN Ming-zhong(820)
- Effect of irrigation pattern on soil N₂O emissions and interannual variability in greenhouse vegetable fields XIE Hai-kuan, LI Gui-chun, XU Chi, DING Wu-han, JIANG Yu-qian, WANG Li-gang, LI Hu(825)
- Environmental effects of the Loess Plateau biogas eco-orchard based on life cycle assessment(LCA) ZHANG Cong-guang, QIU Ling, WANG Fei, DENG Yuan-fang, HAN Jian-cong(833)