

目 次

专论与综述

梯度扩散薄膜技术(DGT)的理论及其在环境中的应用 I:工作原理、特性与在土壤中的应用

..... 罗军 王晓蓉 张昊 William Davison(205)

研究报告

污染生态

华南地区不同品系水稻积累砷特征及其影响因素 董飞 卢瑛 王兴祥 闫秋艳 张琳 潘琦(214)

东北地区不同水稻品种对 Cd 的累积特性研究

..... 刘侯俊 梁吉哲 韩晓日 李军 芦俊俊 张素静 冯璐 马晓明(220)

利用冠层和叶片水平的反射光谱研究模拟酸雨对小麦的影响 薛忠财 高辉远 刘鹏 柳洁(228)

外源重金属对杏鲍菇生长发育的影响研究 胡清秀 杨昕 杨小红 曹凤明(236)

姬松茸⁶⁰Co 辐射新菌株 J₃ 营养成分与农药残留分析 翁伯琦 江枝和 肖淑霞 雷锦桂 王义祥 唐翔虬(244)

京郊越冬植被叶片滞尘效应研究 杜玲 张海林 陈阜(249)

土壤环境

不同磷酸盐对污染土壤中镉生物有效性的影响 陈苗苗 徐明岗 周世伟 张文菊 吴曼(255)

北京城郊污灌土壤-小麦(*Triticum aestivum*)体系重金属潜在健康风险评价

..... 朱宇恩 赵烨 李强 陈志凡 乔捷娟 吉艳琴(263)

云南个旧市郊农作物重金属污染现状及健康风险 肖青青 王宏镔 赵宾 叶志鸿(271)

沈阳地区河流灌渠沿岸农田表层土壤中重金属的污染现状评价

..... 吴学丽 杨永亮 徐清 黄园英 路国慧 何俊 刘晓端(282)

赤泥颗粒对韭菜吸收污染土壤中铅锌的抑制效应研究 刘艳 罗琳 罗惠莉 田杰 魏建宏(289)

1,1,2,2-四氯乙烷在土壤中的吸附解吸研究及解吸后的新型模型模拟 王方 张承东(295)

磺胺嘧啶在黑土及其不同粒径组分中的吸附行为研究 张娟 郭文录 孙成(301)

两种基于芦苇秸秆还田的改良措施对崇明东滩围垦土壤理化性质和微生物呼吸的影响

..... 陈金海 李艳丽 王磊 张文佺 王红丽 付小花 乐毅全 管永健 邱忠虹(307)

包膜尿素减量化施用对大白菜产量品质及土壤硝酸盐含量的影响

..... 董亮 张玉凤 于淑芳 杨力 陈广思(316)

水体环境

巢湖沉积物-水界面磷酸盐释放通量研究 夏守先 杨丽标 张广萍 王煌 高亮 晏维金 李玉成(322)

海河流域水稻田氮磷地表径流流失特征初探 陈颖 赵磊 杨勇 孙春元 张晓岚(328)

渭河宝鸡段表层沉积物重金属污染研究 王利军 卢新卫 雷凯 瞿雨翔 黄静(334)

达里诺尔湖表层沉积物中腐殖质的分布特征 赵万苍 何江 宋文杰 吕昌伟 刘华琳 王凤娇(341)

- 秦岭神安沟矿区沟道地表水和沉积物中重金属分布形态研究 薛喜成 王 攀 何 勇 张 蕊 毕吉嵩(347)
山东省地下水硝酸盐含量状况及影响因素研究 林海涛 江丽华 宋效宗 郑福丽 谭德水 高新昊 刘兆辉(353)
美人蕉(*Canna indica* Linn.)和芦苇(*Phragmites australis* L.)人工湿地对含铬生活污水的净化效果及植物的生理生态变化
..... 李志刚 李素丽 梅利民 万雪芹 梁 和 陈伟刚 陈 玘 周宙兴(358)

废弃物处理及资源化

- 沼液对植物病害的防治效果及机理研究 I: 对植物病原真菌的抑制效果及抑菌机理初探
..... 马 艳 李 海 常志州 徐跃定 张建英(366)
重金属 Cu 对堆肥过程中微生物群落代谢和水解酶活性的影响
..... 郭星亮 谷 洁 高 华 秦清军 张卫娟 李海龙 陈胜男 刘 江 张洪宾 陈 琳 邵 丽(375)
重金属锌对猪粪堆肥过程中氧化还原类酶活性的影响 张卫娟 谷 洁 高 华 张洪宾 刘 强 李海龙(383)
微生物菌剂对油枯堆肥过程中理化性质的影响研究 李成学 郭建芳 何忠俊 王 晶 谢春琼(389)

碳氮循环

- 西柏店村级养殖种植园区氮素流和能量流分析
..... 黄治平 郝 利 高尚宾 周连第 张克强 王 凤 钟春艳 刘 刚(395)

分析方法

- 石墨炉原子吸收光谱法测定土壤铝的条件优化 刘 星 尤江峰 谢忠雷 丁 岩 蔡 靖 杨振明(404)

环境信息

- 《农业环境科学学报》2010 年审稿专家名录(294) 《农业环境与发展》入选中国科技核心期刊(248)

JOURNAL OF AGRO-ENVIRONMENT SCIENCE

(Monthly·Started in 1982)

Vol.30 No.2 Feb. 20, 2011

CONTENTS

- Theory and Application of Diffusive Gradients in Thin Films in Soils LUO Jun, WANG Xiao-rong, ZHANG Hao, William Davison(205)
- Characteristics of Arsenic Accumulation in Different Rice(*Oryza sativa L.*) Cultivars and Its Influencing Factors in South China DONG Fei, LU Ying, WANG Xing-xiang, YAN Qiu-yan, ZHANG Lin, PAN Qi(214)
- Accumulation and Distribution of Cadmium in Different Rice Cultivars of Northeastern China LIU Hou-jun, LIANG Ji-zhe, HAN Xiao-ri, LI Jun, LU Jun-jun, ZHANG Su-jing, FENG Lu, MA Xiao-ming(220)
- Study on the Effects of Simulated Acid Rain on Wheat Using the Spectral Reflectance at Canopy and Leaf Level XUE Zhong-cai, GAO Hui-yuan, LIU Peng, LIU Jie(228)
- Effect of Exogenous Heavy Metals on Growth and Development of *Pleurotus eryngii* HU Qing-xiu, YANG Xin, YANG Xiao-hong, CAO Feng-ming(236)
- Analysis on Nutrients and Pesticide Residues in Strain J₃ *Agaricus blazei* Murill Irradiated by ⁶⁰Co WENG Bo-qi, JIANG Zhi-he, XIAO Shu-xia, LEI Jin-gui, WANG Yi-xiang, TANG Xiang-qiu(244)
- Dust-retention Ability of Winter Vegetations' Leaves in Beijing Suburb, China DU Ling, ZHANG Hai-lin, CHEN Fu(249)
- Effect of Different Phosphate on Bio-availability of Cadmium in Contaminated Soils CHEN Miao-miao, XU Ming-gang, ZHOU Shi-wei, ZHANG Wen-ju, WU Man(255)
- Potential Influences of Heavy Metal in "Soil-Wheat(*Triticum aestivum*)" System on Human Health: A Case Study of Sewage Irrigation Area in Beijing, China ZHU Yu-en, ZHAO Ye, LI Qiang, CHEN Zhi-fan, QIAO Jie-juan, JI Yan-qin(263)
- Heavy Metal Pollution in Crops Growing in Suburb of Gejiu City, Yunnan Province, China: Present Situation and Health Risk XIAO Qing-qing, WANG Hong-bin, ZHAO Bin, YE Zhi-hong(271)
- Evaluations of Heavy Metal Pollution Status in Surface Soils Adjacent to the Rivers and Irrigation Channel in Shenyang, China WU Xue-li, YANG Yong-liang, XU Qing, HUANG Yuan-ying, LU Guo-hui, HE Jun, LIU Xiao-duan(282)
- Inhibition Effect of Granulated Red Mud to Leeks Absorption in Lead and Zinc Polluted Soil LIU Yan, LUO Lin, LUO Hui-li, TIAN Jie, WEI Jian-hong(289)
- Sorption and Desorption of 1,1,2,2-Tetrachloroethane in Soils and New Model Prediction of Desorption Hysteresis WANG Fang, ZHANG Cheng-dong(295)
- Adsorption Behavior of Sulfadiazine on Black Soil and Its Different Particle Sizes ZHANG Juan, GUO Wen-lu, SUN Cheng(301)
- Effect of Two Improving Measures Based on Returning *Phragmites communis* Straw on Soil Phy-chemical Properties and Microbial Respiration of the Reclaimed Lands in Chongming Dongtan, China CHEN Jin-hai, LI Yan-li, WANG Lei, ZHANG Wen-quan, WANG Hong-li, FU Xiao-hua, LE Yi-quan, GUAN Yong-jian, QIU Zhong-hong(307)
- Effects of Decreasing Coated Urea Application on Chinese Cabbage's Yield, Quality and Soil Nitrate DONG Liang, ZHANG Yu-feng, YU Shu-fang, YANG Li, CHEN Guang-si(316)

- Benthic Flux of Phosphate Across Sediment–water Interface in Lake Chaohu XIA Shou-xian, YANG Li-biao, Zhang Guang-ping, WANG Yu, GAO liang, YAN Wei-jin, LI Yu-cheng(322)
- Preliminary Study on Characteristics of Nitrogen and Phosphorus Runoff Losses from Rice Fields in Hai River Basin, China CHEN Ying, ZHAO Lei, YANG Yong, SUN Chun-yuan, ZHANG Xiao-lan(328)
- Heavy Metal Pollution in Surface Sediment of Wei River(Baoji), China WANG Li-jun, LU Xin-wei, LEI Kai, ZHAI Yu-xiang, HUANG Jing(334)
- The Spatial Distribution of Humus Components and Species and the Pollution Characters of the Surface Sediments in the Dailinuoer Lake, China ZHAO Wan-cang, HE Jiang, SONG Wen-jie, LV Chang-wei, LIU hua-lin, WANG feng-jiao(341)
- Distribution and Configuration of Heavy Metals in Surface Water Sediments: A Case Study of the Mining Area in Qinling,Shenangou, China XUE Xi-cheng, WANG Pan, HE Yong, ZHANG Rui, BI Ji-song(347)
- Nitrate Concentration of Groundwater and Its Affecting Factors in Shandong Province, China LIN Hai-tao, JIANG Li-hua, SONG Xiao-zong, ZHENG Fu-li, TAN De-shui, GAO Xin-hao, LIU Zhao-hui(353)
- Chromium Purification Effects on Domestic Wastewater and Physiological Changes of *Canna indica* Linn. and *Phragmites australis* L. in Constructed Wetlands LI Zhi-gang, LI Su-li, MEI Li-min, WAN Xue-qin, LIANG He, CHEN Wei-gang, CHEN Hong, ZHOU Zhou-xing(358)
- Biocontrol Effect and Mechanism of Biogas Slurry on Plant Disease: I Primary Study of Growth Inhibition Effects and Mechanism on Phytopathogen Fungi MA Yan, LI Hai, CHANG Zhi-zhou, XU Yue-ding, ZHANG Jian-ying(366)
- Effect of Heavy Metal Cu on Microbial Community Metabolic Profiles and Hydrolytic Enzyme Activities in Composting GUO Xing-liang, GU Jie, GAO Hua, QIN Qing-jun, ZHANG Wei-juan, LI Hai-long, CHEN Sheng-nan, LIU Jiang, ZHANG Hong-bin, CHEN Lin, SHAO Li(375)
- Effects of Heavy Metals Zn on Oxidoreductase Activity During Co-composting of Pig Manure and Straw ZHANG Wei-juan, GU Jie, GAO Hua, ZHANG Hong-bin, LIU Qiang, LI Hai-long(383)
- Microbial Strains Affect the Physical and Chemical Properties When Composting Canola Meal LI Cheng-xue, GUO Jian-fang, HE Zhong-jun, WANG Jing, XIE Chun-qiong(389)
- Material Flow Analysis on Nitrogen Cycle and Energy Flow Analysis of Planting and Breeding Park of Village Scale at Xibaidian Village HUANG Zhi-ping, HAO Li, GAO Shang-bin, ZHOU Lian-di, ZHANG Ke-qiang, WANG Feng, ZHONG Chun-yan, LIU Gang(395)
- Optimizing the Conditions for Soil Aluminum Determination with Graphite Furnace Atomic Absorption Spectrometry LIU Xing, YOU Jiang-feng, XIE Zhong-lei, DING Yan, CAI Jing, YANG Zhen-ming(404)