

### 土地资源

陆生植物中微纳塑料来源、吸收途径及毒性效应研究进展

..... 蔺满凤 陈 芳 么 强 王荣吉 周可欣 米世灿 赵 博(553)

基于农作物物候特征的干旱区撂荒耕地识别——以甘肃省凉州区为例

..... 张秀霞 邓灵芝 李旺平 张喜来 汪孝贤 林庆润 程小强(568)

基于SMOTE辅助分区误差控制的随机森林土壤重金属含量预测模型

..... 陈 敏 董泽馨 秦 莉 张晨晨 张彦儒 孙思佳(580)

干旱地区耕地系统韧性水平测度及动态演进——以新疆为例 ..... 吉泽男 王鹏程(592)

协同Sentinel-2和随机森林算法的黄河三角洲冬小麦精细化绘制与时空演化分析

..... 李静娴 刘建涛 王志平 冯权洸 孟 飞 王会蒙 张 冬 彭 玉(602)

园地定级中复杂地貌区位作用分的优化算法研究——基于最小费用路径模型 ..... 胡后峰 郭永龙 王 瑾 刘慧芳(611)

山地丘陵区城乡交错带土地利用功能评价与分区调控 ..... 刘馨怡 杨朝现 信桂新 李让恩 张思颖 梁 韵(623)

甘肃省农田地膜残留特征及影响因素 ..... 李明凯 刘 洋 娜 祖 李崇霄 周 涛 代立兰 熊友才 曹 靖(634)

生物降解地膜在北京典型覆膜作物生产上的应用 ..... 周 洁 王鸿婷 冯 洋 刘晓霞(643)

不同覆膜处理对晋南旱塬麦田土壤微生物功能多样性的影响

..... 吴 敏 任少聪 尚妍萌 谢英荷 李廷亮 孟会生 郝鲜俊 张 杰(652)

赤泥矿泥土壤化处置复垦区土壤理化性状和微生物群落变化研究

..... 曾玉辉 成官文 王云龙 杜诚豪 张正林 农国武 黄振艺(662)

粉煤灰、腐植酸和秸秆复合改良红壤初期的水盐运动特征 ..... 覃超建 盛 丰(674)

外源Mn(II)对吸附于 $\delta$ -MnO<sub>2</sub>表面的Cd迁移转化行为的影响

..... 杜晓菲 樊广萍 黄 琴 张雨婷 童 非 张明超 邱一格 陈金林 高 岩(683)

### 养分资源

不同轮作模式下施氮水平对冬小麦产量和氮素吸收利用的影响

..... 耿赛男 李岚涛 苗玉红 谭金芳 王宜伦(694)

有机氮替代无机氮对旱作马铃薯生长、产量及农田碳排放的影响

..... 魏巧俏 谢军红 付永柯 王 逗 周永杰 田 野 王 康(707)

旱地马铃薯花后高温胁迫下施氮对干物质积累、氮素利用及产量的影响

..... 苏 明 康建宏 吴宏亮 周 甜 洪自强 李翻过 张正珍(716)

花后干旱胁迫下氮素对复播大豆产量、品质及水氮利用效率的影响 ..... 张康旭 李孟姣 何皇成 刘建国(730)

农村生活污水磷回收及资源化利用路径探讨 ..... 卜风云 闫海红 郭红霞 年跃刚 殷 勤 梁 雨(738)

## 生物质资源

|                                       |     |     |     |     |          |
|---------------------------------------|-----|-----|-----|-----|----------|
| 中国农作物秸秆资源产量分布及利用分析 .....              | 刘俊杰 | 严晓斌 | 张美怡 | 刘天舒 | 孙志梅(751) |
| 农村地区可再生能源潜力分析及发展路径研究——以广东省为例<br>..... | 肖子毅 | 成贝贝 | 刘晓俞 | 任松彦 | 陶海(761)  |
| 镉离子对椰壳生物炭吸附水体中壬基酚的影响研究 .....          | 赵利洋 | 陈珍  | 孙颖  | 岳俊杰 | 杜兆林(773) |

## 农业生态与环境

|                                    |     |          |     |     |     |     |     |          |
|------------------------------------|-----|----------|-----|-----|-----|-----|-----|----------|
| “元麦-稻”轮作体系短期温室气体排放及经济效益评价<br>..... | 石 吕 | 石晓旭      | 韩 笑 | 刘旭杰 | 单海勇 | 薛亚光 | 刘 建 | 魏亚凤(781) |
| “双碳”目标下河北省农业生态效率时空演进特征及影响因素 .....  | 刘继为 | 姜安隆(792) |     |     |     |     |     |          |

## 乡村资源与环境

|                                            |     |     |     |     |     |          |
|--------------------------------------------|-----|-----|-----|-----|-----|----------|
| 基于风貌提升视角的乡村全域土地综合整治策略——以和顺县阳光占村为例<br>..... | 梅文静 | 郭青霞 | 李淑红 | 梁纪尧 | 李惠敏 | 闫美霞(804) |
|--------------------------------------------|-----|-----|-----|-----|-----|----------|

## 水资源与水生态

|                                    |    |     |    |     |     |     |         |
|------------------------------------|----|-----|----|-----|-----|-----|---------|
| SWAT与GIS耦合的流域多要素水环境管控单元划分<br>..... | 俞阳 | 闵雪峰 | 王丹 | 刘玉梅 | 闻玲珑 | 王丽桐 | 赵锐(815) |
|------------------------------------|----|-----|----|-----|-----|-----|---------|

## 刊说:封面文章作者团队

河南农业大学资源与环境学院 作物营养与高效施肥科技创新团队（封二）

# JOURNAL OF AGRICULTURAL RESOURCES AND ENVIRONMENT

(Bimonthly • Started in 1984)

Vol.42 No.3 May 10, 2025

---

Research progress on sources ,absorption pathways and toxic effects of micro/nanoplastics in terrestrial plants

..... LIN Manfeng, CHEN Fang, YAO Qiang, WANG Rongji, ZHOU Kexin, MI Shican, ZHAO Bo(553)

Identification of abandoned farmland in arid areas based on crop phenological characteristics :a case study of Liangzhou District ,  
Gansu Province

..... ZHANG Xiuxia, DENG Lingzhi, LI Wangping, ZHANG Xilai, WANG Xiaoxian, LIN Qingrun, CHENG Xiaoqiang(568)

A random forest model for predicting soil heavy metals content based on SMOTE and assisted partition error control

..... CHEN Min, DONG Zexin, QIN Li, ZHANG Chenchen, ZHANG Yanru, SUN Sijia(580)

Measurement and dynamic evolution of resilience of cultivated land system level in arid areas :taking Xinjiang as an example

..... JI Zenan, WANG Pengcheng(592)

Refined mapping and spatiotemporal evolution analysis of winter wheat in the Yellow River Delta using Sentinel-2 and  
the random forest algorithm

..... LI Jingxian, LIU Jiantao, WANG Zhiping, FENG Quanlong, MENG Fei, WANG Huimeng, ZHANG Dong, PENG Yu(602)

Optimization algorithm for the classification of complex landform location in garden grading :based on the least-cost path model

..... HU Houfeng, GUO Yonglong, WANG Jin, LIU Huifang(611)

Functional evaluation and zoning regulation of land use in urban-rural fringe of mountainous and hilly regions

..... LIU Xinyi, YANG Chaoxian, XIN Guixin, LI Rang'en, ZHANG Siying, LIANG Yun(623)

Characteristics of mulching plastic film residue and its influencing factors in farmland of Gansu Province

..... LI Mingkai, LIU Yang, NA Zu, LI Chongxiao, ZHOU Tao, DAI Lilan, XIONG Youcai, CAO Jing(634)

Application of biodegradable films on production of typical mulching crops in Beijing

..... ZHOU Jie, WANG Hongting, FENG Yang, LIU Xiaoxia(643)

Effects of different mulching regimes on soil microbial functional diversity of wheat fields in the dry tableland of south Shanxi Province

..... WU Min, REN Shaocong, SHANG Yanmeng, XIE Yinghe, LI Tingliang, MENG Huisheng, HAO Xianjun, ZHANG Jie(652)

Soil physical and chemical properties and microbial community changes in reclaimed areas of red mud and mineral mud soil treatment

..... ZENG Yuhui, CHENG Guanwen, WANG Yunlong, DU Chenghao, ZHANG Zhenglin, NONG Guowu, HUANG Zhenyi(662)

Characteristics of water and salt movement in soil during the initial stage of composite improvement by fly ash ,humic acid ,and straw

..... QIN Chaojian, SHENG Feng(674)

Effects of exogenous Mn( II ) on the migration and transformation behavior of Cd adsorbed on the surface of  $\delta$ -MnO<sub>2</sub>... DU Xiaofei,

FAN Guangping, HUANG Qin, ZHANG Yuting, TONG Fei, ZHANG Mingchao, QIU Yige, CHEN Jinlin, GAO Yan(683)

Effects of different nitrogen rates on yield ,nitrogen absorption and utilization of winter wheat under different crop rotation systems

..... GENG Sainan, LI Lantao, MIAO Yuhong, TAN Jinfang, WANG Yilun(694)

Effects of organic nitrogen substitution inorganic nitrogen on potato growth ,yield and carbon emission under rainfed area

..... WEI Qiaoqiao, XIE Junhong, FU Yongke, WANG Dou, ZHOU Yongjie, TIAN Ye, WANG Kang(707)

|                                                                                                                                                                                           |                                                                                                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Effects of nitrogen application on dry matter accumulation ,nitrogen utilization and yield under high temperature stress<br>after flowering in dryland potatoes                           | ..... SU Ming, KANG Jianhong, WU Hongliang, ZHOU Tian, HONG Ziqiang, LI Fanguo, ZHANG Zhengzhen(716) |
| Effects of nitrogen on yield,quality ,and water and nitrogen use efficiency of multiple cropping soybean under drought stress<br>after anthesis                                           | ..... ZHANG Kangxu, LI Mengjiao, HE Huangcheng, LIU Jianguo(730)                                     |
| Discussion on the path of phosphorus recovery and utilization for the rural domestic sewage                                                                                               | ..... BU Fengyun, YAN Haihong, GUO Hongxia, NIAN Yuegang, YIN Qin, LIANG Yu(738)                     |
| Analysis of yield distribution and utilization of crop straw resources in China                                                                                                           | ..... LIU Junjie, YAN Xiaobin, ZHANG Meiyi, LIU Tianshu, SUN Zhimei(751)                             |
| Analysis of renewable energy potential and development path in rural areas :a case study of Guangdong Province                                                                            | ..... XIAO Ziyi, CHENG Beibei, LIU Xiaoyu, REN Songyan, TAO Hai(761)                                 |
| Effects of cadmium ions on the adsorption of nonylphenol in waters by coconut shell biochar                                                                                               | ..... ZHAO Liyang, CHEN Zhen, SUN Ying, YUE Junjie, DU Zhaolin(773)                                  |
| Short-term greenhouse gas emission and economic benefit evaluation of ‘naked barley-rice’ rotation system                                                                                 | ..... SHI Lü, SHI Xiaoxu, HAN Xiao, LIU Xujie, SHAN Haiyong, XUE Yaguang, LIU Jian, WEI Yafeng(781)  |
| Characteristics of spatial and temporal evolution of agriculture eco-efficiency and the influencing factors in Hebei Province<br>under the goal of “carbon peaking and carbon neutrality” | ..... LIU Jiwei, JIANG Anlong(792)                                                                   |
| Strategy of comprehensive land improvement in rural areas from the perspective of landscape improvement :a case study<br>of Yangguangzhan Village in Heshun County                        | ..... MEI Wenjing, GUO Qingxia, LI Shuhong, LIANG Jiyao, LI Huimin, YAN Meixia(804)                  |
| Division of multi-factor water environmental control units in watersheds based on the SWAT and GIS coupled models                                                                         | ..... YU Yang, MIN Xuefeng, WANG Dan, LIU Yumei, WEN Linglong, WANG Litong, ZHAO Rui(815)            |