

微生物学通报

(Weishengwuxue Tongbao)

1974 年创刊

第 52 卷 第 5 期

2025 年 5 月 20 日出版

月刊

目 次



专论与综述

- 1921 素食对人类肠道菌群及其代谢产物作用的研究进展
王涔宇, 贾洁, 沈秀华
- 1929 人类疱疹病毒 8 型的免疫逃逸分子机制
石静艺, 康晓静
- 1939 病理共生菌的研究进展
蔡亚玮, 徐文娇, 沈建忠, 朱奎
- 1955 胆汁酸代谢调节肠道菌群在遗传性球形红细胞增多症合并胆汁淤积中的作用
黄楚, 廖林, 黄运花, 吴阳洋, 林发全
- 1967 黑木耳多糖分离纯化及生物活性研究进展
马晟, 罗先群, 黄雪星, 蒋永强, 卿朕, 王翠坚, 欧娜
- 1987 效应-免疫蛋白对所介导细菌接触依赖型拮抗作用研究进展
李潇丁, 吴欢, 关洪鑫
- 2001 液滴微流控分析技术在细菌快速检测中的应用
黄子鸣, 刘明, 周露萍, 吴文捷
- 2018 运动细菌的趋化性及其对微生物群落的影响
李孝丹, 吴浪涛, 方芳
- 2033 植物内生菌分离培养技术研究进展
黄霜叶, 潘小霞, 杨明擎

研究报告

工业微生物学

- 2046 潮滩发光杆菌中关键海藻酸裂解酶 AlgPg1 的挖掘及其对裙带菜的降解
阙乃猛, 张海龙, 李洁, 黄金枝, 王楠, 彭惠
- 2059 一株兼具产淀粉酶活性的产角蛋白酶菌株的筛选及产酶条件的优化
陈涛华, 姚吉祥, 张春明, 郭胜豪, 孙晓东, 吕国忠, 杨红

环境微生物学

- 2071 神府矿区高效解磷菌的分离及其对煤矸石养分的活化作用
孙爱娣, 白雪蕊, 毕银丽
- 2087 一种最适碳源-氨基酸复配培养基对新疆典型生境土壤微生物分离培养的影响
李畅, 许苗, 游国浩, 匡丹, 罗晓霞

基因克隆及功能研究

- 2107 Tn5 转座子插入 α -酮戊二酸脱氢酶基因 *sucA* 对香蕉细菌性软腐病菌毒力的影响
蒋尚伯, 孙大元, 沈会芳, 蒲小明, 刘平平, 林壁润, 杨祁云, 张景欣

农业微生物学

- 2123 新疆鼠尾草内生细菌多样性及功能菌株筛选
张晓烨, 崔磊, 周德龙, 连海婷, 孙燕飞, 李丽
- 2140 四株滇牡丹内生木霉的鉴定及促生抗病功能分析
张丽丽, 巫雨蓝, 钟秀玥, 王俊威, 王娟, 潘悦

2156 抑水绵枯草芽孢杆菌的分离、鉴定及代谢组学特征

滕晨皓, 王会聪, 王友红, 曹海鹏, 盖春蕾

2172 烟草疫霉生防放线菌的分离鉴定、功能探究及培养条件优化

程康, 何勇, 李迪, 闵艳艳, 许淑雅, 卢云亮, 齐永霞, 陈方新

食品微生物学

2189 高温大曲中大曲慢生芽孢杆菌的分离鉴定与特性分析

刘续, 陆震鸣, 张晓娟, 柴丽娟, 王松涛, 张宿义, 沈才洪, 龚劲松, 史劲松, 许正宏

2203 假蜜环菌醛酮还原酶 *AtAKR297* 克隆表达及对 AFB₁ 转化作用

谢春芳, 李菲菲, 蒋天扬, 姚冬生

2216 莲雾采后病原菌的分离鉴定及抑制剂的筛选

姚欢格, 胡宇欣, 惠欣雨, 牛晓敏, 邵远志

兽医微生物学

2230 梅花鹿源奇异变形杆菌的分离鉴定及生物学特性

曹润来, 王奇林, 孙春庆, 薛竹青, 刘子瑜, 胡盼, 王晓旭, 刘志杰

2244 基于统计学方法分析季节对大肠杆菌耐药性的影响

周倩, 唐梦君, 张小燕, 陆俊贤, 唐修君, 陈薇, 高玉时

微生物工程与药物研究

2260 金环胡蜂虫草来源短密青霉(*Penicillium brevicompactum*) VMFST24 次生代谢产物的分离鉴定及抗炎活性评价

赵巧, 崔贵志, 朱萧露, 蒋抒锦, 杨大松, 杨银河

2276 杀鱼假交替单胞菌 P3 胞外产物抗紫菜腐霉机制及其对紫菜赤腐病防治效果评价

吴蕾, 李杰, 莫照兰, 翁佩文, 茅云翔, 唐磊

2291 富硒酵母的筛选优化及其对心肌肥大的影响

刘龙兴, 付丹, 伍友玉, 何艺林, 徐力, 石佳, 葛子杰, 邹小已, 马毓, 丁耀成, 钱凯

微生物功能基因组研究

2302 稗草生防真菌稗属炭疽菌(*Colletotrichum echinochloae*) B-48 的生物学特性及基因组测序分析

顾琼楠, 褚世海, 沈静, 黄启超, 李林, 陈安安, 李儒海

2315 羊源肺炎克雷伯氏菌 KPHN001 的全基因组测序和比较基因组分析

兰凤, 杨映雪, 徐乐, 李世元, 李素雅, 焦玉清, 陈思, 陈巧玲, 满初日嘎, 杜丽, 王凤阳, 高宏岩

医学微生物学

2331 假结核耶尔森氏菌硫氧还蛋白系统相关基因参与抗氧化胁迫的机制

严伯涵, 何照, 范俊凤, 陶文曦, 张子衿, 万芬

技术与方法

2344 猪繁殖与呼吸综合征病毒抗体化学发光检测方法的建立与应用

黄亦奇, 温肖会, 宋帅, 向国庆, 吕殿红, 罗胜军, 李家奎

高校教改纵横

2359 新质生产力视域下打造微生物制造产教融合人才培养模式的探索与实践

王浩绮, 刘兆星, 江凌

2368 “海洋微生物学”一流本科课程教学改革与实践

贾坤同, 李春荣, 宁曦, 郭长军, 易梅生

2381 基于优慕课教学平台进行的“兽医微生物学与免疫学” SPOC 混合式教学探索

万学瑞, 王川, 张小丽, 刘果, 康棣, 彭婕, 宋洋铭

2392 基于应用型人才培养的“食品微生物学实验”课程教学实践与探索

秦红玉, 梁丽琨, 赵玉平, 林剑, 高娜, 姜倩倩, 李静, 张语澎



REVIEWS

- 1921 Effects of vegetarian diets on human gut microbiota and metabolites: a review
WANG Cenyu, JIA Jie, SHEN Xiuhua
- 1929 The molecular mechanism of immune evasion of human herpesvirus 8
SHI Jingyi, KANG Xiaojing
- 1939 Definition and progress of pathobiont
CAI Yawei, XU Wenjiao, SHEN Jianzhong, ZHU Kui
- 1955 Role of bile acid metabolism-gut microbiota interactions in hereditary spherocytosis associated with cholestasis
HUANG Chu, LIAO Lin, HUANG Yunhua, WU Yangyang, LIN Faquan
- 1967 Research progress in isolation, purification, and biological activities of *Auricularia heimuer* polysaccharides
MA Sheng, LUO Xianqun, HUANG Xuexing, JIANG Yongqiang, QING Zhen, WANG Cuijian, OU Na
- 1987 Research progress in bacterial contact-dependent antagonism mediated by effector-immunity pairs
LI Xiaoding, WU Huan, GUAN Hongxin
- 2001 Application of droplet microfluidic analysis technology in rapid detection of bacteria
HUANG Ziming, LIU Ming, ZHOU Luping, WU Wenjie
- 2018 Chemotaxis of motile bacteria and its impact on microbial communities
LI Xiaodan, WU Langtao, FANG Fang
- 2033 Technological advances in isolation and culture of plant endophytes
HUANG Shuangye, PAN Xiaoxia, YANG Mingzhi

RESEARCH ARTICLES

Industrial Microbiology

- 2046 Alginate lyases from *Photobacterium gaetbulicola*: screening and application in degrading *Undaria pinnatifida*
KAN Naimeng, ZHANG Hailong, LI Jie, HUANG Jinzhi, WANG Nan, PENG Hui
- 2059 Screening of a keratinase- and amylase-producing strain and optimization of its fermentation conditions for enzyme production
CHEN Taohua, YAO Jixiang, ZHANG Chunming, GUO Shenghao, SUN Xiaodong, LYU Guozhong, YANG Hong

Environmental Microbiology

- 2071 Isolation of efficient phosphorus-solubilizing bacteria capable of activating the nutrients of coal gangue from Shenfu mining area
SUN Aidi, BAI Xuerui, BI Yinli
- 2087 Effect of an optimal carbon source-amino acid compound medium on the isolation and culture of soil microorganism from typical habitats in Xinjiang, China
LI Chang, XU Miao, YOU Guohao, KUANG Dan, LUO Xiaoxia

Microbial Genetics

- 2107 Tn5 transposon insertion of α -ketoglutarate dehydrogenase gene *sucA* affects the virulence of the pathogen causing bacterial soft rot of banana
JIANG Shangbo, SUN Dayuan, SHEN Huifang, PU Xiaoming, LIU Pingping, LIN Birun, YANG Qiyun, ZHANG Jingxin

Agricultural Microbiology

- 2123 Diversity and functional strain screening of endophytic bacteria isolated from the medicinal plant *Salvia deserta* Schangin
ZHANG Xiaoye, CUI Lei, ZHOU Delong, LIAN Haiting, SUN Yanfei, LI Li
- 2140 Identification and characterization of four endophytic *Trichoderma* strains capable of promoting plant growth and inhibiting plant pathogens from *Paeonia delavayi*
ZHANG Lili, WU Yulan, ZHONG Xiuyue, WANG Junwei, WANG Juan, PAN Yue
- 2156 Isolation, identification, and metabolomic characterization of an anti-*Spirogyra* strain of *Bacillus subtilis*
TENG Chenhao, WANG Huicong, WANG Youhong, CAO Haipeng, GAI Chunlei

Microbiology China

- 2172 Isolation, identification, functional investigation, and culture condition optimization of biocontrol actinomycetes against *Phytophthora nicotianae*

CHENG Kang, HE Yong, LI Di, MIN Yanyan, XU Shuya, LU Yunliang, QI Yongxia, CHEN Fangxin

Food Microbiology

- 2189 Isolation and characterization of *Lentibacillus daqui* from high-temperature *Daqu*

LIU Xu, LU Zhenming, ZHANG Xiaojuan, CHAI Lijuan, WANG Songtao, ZHANG Suyi, SHEN Caihong, GONG Jinsong, SHI Jinsong, XU Zhenghong

- 2203 *Armillariella tabescens* aldo-keto reductase AtAKR297: cloning, expression, and application in reduction of aflatoxin B₁

XIE Chunfang, LI Feifei, JIANG Tianyang, YAO Dongsheng

- 2216 Isolation and identification of pathogens from post-harvest fruits of *Syzygium samarangense* and screening of effective inhibitors

YAO Huang, HU Yuxin, HUI Xinyu, NIU Xiaomin, SHAO Yuanzhi

Veterinary Microbiology

- 2230 Isolation, identification, and characterization of sika deer-derived *Proteus mirabilis*

CAO Runlai, WANG Qilin, SUN Chunqing, XUE Zhuqing, LIU Ziyu, HU Pan, WANG Xiaoxu, LIU Zhijie

- 2244 Statistical analysis of the impact of seasons on antibiotic resistance of *Escherichia coli*

ZHOU Qian, TANG Mengjun, ZHANG Xiaoyan, LU Junxian, TANG Xiujun, CHEN Wei, GAO Yushi

Microbial Engineering and Medicine

- 2260 Isolation, identification, and anti-inflammatory activity evaluation of secondary metabolites of *Penicillium brevicompactum* VMFST24 from *Vespa mandarinia* *Cordyceps sensu lato*

ZHAO Qiao, CUI Guizhi, ZHU Xiaolu, JIANG Shujin, YANG Dasong, YANG Yinhe

- 2276 Extracellular products of *Pseudoalteromonas piscicida* P3: mechanism of inhibiting *Pythium porphyrae* and control effect on red rot disease of *Neopyropia yezoensis*

WU Lei, LI Jie, MO Zhaolan, WENG Peiwen, MAO Yunxiang, TANG Lei

- 2291 A selenium-rich yeast strain: screening, culture condition optimization, and protecting effect against myocardial hypertrophy

LIU Longxing, FU Dan, WU Youyu, HE Yilin, XU Li, SHI Jia, GE Zijie, ZOU Xiaoyi, MA Yu, DING Yaocheng, QIAN Kai

Microbial Functional Genomics

- 2302 Biological characterization and genomic sequencing of a biocontrol fungal strain *Colletotrichum echinochloae* B-48 for *Echinochloa crus-galli*

GU Qiongnan, CHU Shihai, SHEN Jing, HUANG Qichao, LI Lin, CHEN An'an, LI Ruhai

- 2315 Whole genome sequencing and comparative genomic analysis of goat-derived *Klebsiella pneumoniae* KPHN001

LAN Feng, YANG Yingxue, XU Le, LI Shiyuan, LI Suya, JIAO Yuqing, CHEN Si, CHEN Qiaoling, Manchuriga, DU Li, WANG Fengyang, GAO Hongyan

Medical Microbiology

- 2331 Role of the thioredoxin system in response to oxidative stress in *Yersinia pseudotuberculosis*

YAN Bohan, HE Zhao, FAN Junfeng, TAO Wenxi, ZHANG Zijin, WAN Fen

TECHNOLOGY AND METHOD

- 2344 Establishment and application of a chemiluminescence detection method for antibodies against porcine reproductive and respiratory syndrome virus

HUANG Yiqi, WEN Xiaohui, SONG Shuai, XIANG Guoqing, LV Dianhong, LUO Shengjun, LI Jiakui

EDUCATION

- 2359 Exploration and practice of building a talent training mode characterized by integration of production and education in microbial manufacturing from the perspective of new quality productive forces

WANG Haoqi, LIU Zhaoxing, JIANG Ling

- 2368 Teaching reform and practice of the first-class undergraduate course Marine Microbiology

JIA Kuntong, LI Chunrong, NING Xi, GUO Changjun, YI Meisheng

- 2381 Exploration of SPOC blended teaching of Veterinary Microbiology and Immunology based on UMOOC platform

WAN Xuerui, WANG Chuan, ZHANG Xiaoli, LIU Guo, KANG Di, PENG Jie, SONG Yangming

- 2392 Teaching practice and exploration of Food Microbiology Experiment targeting the cultivation of applied talents

QIN Hongyu, LIANG Likun, ZHAO Yuping, LIN Jian, GAO Na, JIANG Qianqian, LI Jing, ZHANG Yupeng