

中文目次

综述

- 3821** 军团菌肺炎病原体诊断策略研究进展
吴靖渝, 黄丽娜, 欧阳松应, 王冬梅
- 3834** 蛋白质甲基化修饰对视黄酸诱导基因I样受体家族信号通路分子调控作用
雷佳, 李乐, 董芙蓉, 惠丽霞, 李艾欣
- 3848** 参与表观遗传调控的细菌 DNA 甲基转移酶 CcrM 的研究进展
王浩, 王尔雅, 郭敏亮
- 3859** 肠道菌群在非酒精性脂肪性肝病中的研究进展
邓萧琴, 姜润秋, 李祥云
- 3869** 链霉菌在作物病害生物防治中的应用研究进展
吕昂, 张凯, 陈鑫, 朱坤森, 李国庆, 刘军
- 3889** 嗜黏蛋白阿克曼氏菌与糖脂代谢研究进展
赵月双, 肖铁刚, 张扬, 吕佳璐, 杜翔宇, 卫嘉华, 刘凯利, 张力, 徐俊, 王兵

研究报告

- 3899** 食料对烟草甲体内真菌群落结构及多样性的影响
李艳青, 万子凌, 李昂, 彭琛, 梁增发, 黄嘉杰, 许小霞, 金丰良
- 3921** QIIME 2 整合分析发酵饲料对不同动物肠道微生物群落的影响
钟小忠, 张昊霖, 胡明茜, 许涛, 刘晓彤, 胡莞浩, 张馨予, 周瑞, 雷舒涵
- 3935** 宿主线粒体通道蛋白促进干扰素应答抑制口蹄疫病毒复制的分子机制
蔡镇远, 陈文哲, 杨发誉, 魏衍全, 何继军, 郑海学, 包世俊, 朱紫祥
- 3946** 单增李斯特菌 *lmo2300* 介导的氧化应激和感染生物学作用
张晓芸, 高宇杰, 葛同鑫, 王温馨, 许浩男, 宋若非, 宋厚辉, 程昌勇, 韩月
- 3959** 内生假单胞菌 NWSUAF303 对棉花黄萎病的生物防治作用及其机制
杨奥伟, 廖俊, 史圆, 尹雁玲, 王瑶, 沈锡辉, 潘君凤
- 3975** 发酵豆粕对盐酸洛哌丁胺诱导小鼠便秘的缓解作用
房舒琪, 刘静宇, 杨小雁, 卢艳波, 毛银, 邓禹
- 3992** 抗口蹄疫病毒分泌型 IgA 抗体的构建表达及特性分析
刘锋, 李坤, 马雪青, 欧阳一凡, 孙普, 章兴蹊, 曹轶梅, 白兴文, 袁红, 李凤娟, 刘在新, 卢普军, 李平花
- 4001** 具核梭杆菌促进肺癌发展及其对肺部微生态的影响
李东, 童江辉, 李奕彤, 孙一凡, 李俭杰, 王子平, 谭亚芳, 杨瑞霞, 毕玉晶
- 4014** 毕赤酵母高效间接表面展示系统的构建及在固定有机磷水解酶上的应用
赵梓萱, 王淋, 王艳丽, 袁慧, 贺妮莎, 张桂敏, 周玉玲

- 4029** 侵染守宫木的曼陀罗黄脉病毒的分离鉴定及其基因组序列分析
刘珊羽, 张添宏, 池毓斌, 徐钟天, 谌星, 朱丽娟
- 4042** 微囊藻的原噬藻体基因组特征分析
洪彬鑫, 潘灵婷, 谭隆, 张靖昊, 杨佳豪, 徐舒燕, 徐锦鹏, 景晓盈, 李登峰, 童贻刚
- 4060** ABC 转运透性酶 DppC2 的缺失有利于鼠疫耶尔森氏菌在巨噬细胞内的生存
申雷鸣, 魏雨萌, 崔一鸣, 赵彦婷, 姚文武, 刘瑾萍, 郭阳云, 李嘉敏, 石佳丽, 宋凯, 宋亚军
- 4075** 唾液酸和 6'-唾液酸乳糖对仔猪肠道微生物体外发酵特性的影响
刘晓英, 李轩, 吴海琴, 许来鹏, 赵德辉, 马季祥, 慕春龙, 朱伟云, 潘龙
- 4088** 阿魏酸诱导污叉丝孔菌漆酶活性提升
吴洁, 李静, 罗锋, 常鹏
- 4101** 硒代蛋氨酸对猪 δ 冠状病毒感染小鼠肠道损伤的保护作用及机制
李海艳, 张同军, 郭鑫, 郭永鹏
- 4119** 添加烟酰胺单核苷酸/烟酰胺核苷对小鼠肠道微生物及代谢物的影响
倪冰, 朱莉莉, 陈好, 史新娥, 靳建军
- 4136** 基于 *rpsD* 功能基因测序分析家族成员肠道拟杆菌群落组成及其跨代传递
李珑珑, 张雪玲, 褚宇欣, 孙海龙, 倪永清
- 4151** 以糖蜜为碳源在真菌灰盖伞中高效表达碱性漆酶 PIE5
孟新悦, 王先华, 赵慧芳, 刘娟娟, 方泽民
- 4162** 副溶血弧菌 *uvrY* 基因缺失株的生物学特性及致病性分析
卢淑淇, 芮闯, 郭容, 吴佩洁, 邱素平, 方维焕, 李婷婷, 韩先干, 蒋蔚
- 4174** 藿香耐盐碱内生细菌的筛选及其对盐胁迫下植株的促生作用
翟子佳, 宋雨潭, 马晓楠, 杨炳友, 刘艳, 张丽莉, 吴秀菊
- 4188** 单核增生李斯特氏菌 LPXTG 基序锚定蛋白 Lmo0130 的感染生物学作用
邓思敏, 葛泓睿, 单葵, 毛敏杰, 徐加呖, 夏菁, 宋厚辉, 程昌勇

技术与方法

- 4198** 牛支原体、多杀性巴氏杆菌、溶血性曼氏杆菌三重 qPCR 方法的建立与流行病学调查
马彦颖, 高磊, 宫枫举, 吴雨伦, 李旭雯, 张志, 孙学强, 潘子豪, 姚火春
- 4211** 链霉菌基质辅助激光解吸电离飞行时间质谱数据库的建立及测试分析
孙伟, 罗倩, 许杰, 李雷, 蒋海霞

数据论文

- 4224** 江苏地区旺兹沃思沙门菌耐药和毒力基因及同源进化分析
李成超, 吴心悦, 王福众, 徐瑞阳, 徐正中, 郑成坤, 焦新安, 陈祥

CONTENTS

REVIEW

- 3821 Advances in diagnostic strategies for the pathogens of Legionnaires' disease
WU Jingyu, HUANG Lina, OUYANG Songying, WANG Dongmei
- 3834 Molecular regulation of the retinoic acid-inducible gene-1-like receptor signaling pathway by protein methylation
LEI Jia, LI Le, DONG Furuo, HUI Lixia, LI Aixin
- 3848 Research progress of bacterial DNA methyltransferase CcrM involved in epigenetic regulation
WANG Hao, WANG Erya, GUO Minliang
- 3859 Research progress of gut microbiota in non-alcoholic fatty liver disease
DENG Xiaoqin, JIANG Runqiu, LI Xiangyun
- 3869 Progress in research on application of *Streptomyces* in biocontrol of plant diseases
LYU Ang, ZHANG Kai, CHEN Xin, ZHU Kunmiao, LI Guoqing, LIU Jun
- 3889 Research progress in *Akkermansia muciniphila* and glucose and lipid metabolism
ZHAO Yueshuang, XIAO Tiegang, ZHANG Yang, LYU Jialu, DU Xiangyu, WEI Jiahua, LIU Kaili, ZHANG Li, XU Jun, WANG Bing

RESEARCH ARTICLE

- 3899 Diets influence the structure and diversity of the fungal community in the tobacco beetle *Lasioderma serricorne*
LI Yanqing, WAN Ziling, LI Ang, PENG Chen, LIANG Zengfa, HUANG Jiajie, XU Xiaoxia, JIN Fengliang
- 3921 QIIME 2-based integrative analysis of the effect of fermented feed on the gut microbiota of different animals
ZHONG Xiaozhong, ZHANG Haolin, HU Mingxi, XU Tao, LIU Xiaotong, HU Wanhao, ZHANG Xinyu, ZHOU Rui, LEI Shuhan
- 3935 Voltage dependent anion-selective channel 2 promotes interferon response to inhibit foot-and-mouth disease virus replication
CAI Zhenyuan, CHEN Wenzhe, YANG Fayu, WEI Yanquan, HE Jijun, ZHENG Haixue, BAO Shijun, ZHU Zixiang
- 3946 Oxidative stress resistance and infection mediated by *lmo2300* of *Listeria monocytogenes*
ZHANG Xiaohui, GAO Yujie, GE Tongxin, WANG Wenxin, XU Haonan, SONG Ruofei, SONG Houhui, CHENG Changyong, HAN Yue
- 3959 Biocontrol efficacy and mechanism of endophytic *Pseudomonas* sp. NWSUAF303 against cotton *Verticillium* wilt
YANG Aowei, LIAO Jun, SHI Yuan, YIN Yanling, WANG Yao, SHEN Xihui, PAN Junfeng
- 3975 Fermented soybean meal relieves constipation induced by loperamide hydrochloride in mice
FANG Shuqi, LIU Jingyu, YANG Xiaoyan, LU Yanbo, MAO Yin, DENG Yu
- 3992 Construction, expression, and characterization of secretory IgA antibody against foot-and-mouth disease virus
LIU Feng, LI Kun, MA Xueqing, OUYANG Yifang, SUN Pu, ZHANG Xingze, CAO Yimei, BAI Xingwen, YUAN Hong, LI Fengjuan, LIU Zaixin, LU Zengjun, LI Pinghua
- 4001 *Fusobacterium nucleatum* promotes lung cancer development and influences the lung microbiota
LI Dong, TONG Jianghui, LI Yitong, SUN Yifan, LI Jianjie, WANG Ziping, TAN Yafang, YANG Ruifu, BI Yujing
- 4014 An efficient indirect surface display system in *Pichia pastoris*: construction and application in immobilization of organophosphorus hydrolase
ZHAO Zixuan, WANG Lin, WANG Yanli, YUAN Hui, HE Nisha, ZHANG Guimin, ZHOU Yuling

- 4029 Isolation, identification, and genomic sequence analysis of datura yellow vein virus infecting *Sauropus androgynus*
LIU Shanyu, ZHANG Tianhong, CHI Yubin, XU Zhongtian, CHEN Xing, ZHU Lijuan
- 4042 Genomic characterization of the procyanophages in *Microcystis* spp.
HONG Binxin, PAN Lingting, TAN Long, ZHANG Jinghao, YANG Jiahao, XU Shuyan, XU Jinpeng, JING Xiaoying, LI Dengfeng, TONG Yigang
- 4060 Deficiency of the ABC transporter permease-like protein DppC2 facilitates the survival of *Yersinia pestis* in macrophages
SHEN Leiming, WEI Yumeng, CUI Yiming, ZHAO Yanting, YAO Wenwu, LIU Jinping, GUO Yangyun, LI Jiamin, SHI Jiali, SONG Kai, SONG Yajun
- 4075 Effects of sialic acid and 6'-sialyllactose on *in vitro* fermentation characteristics of gut microbiota in weaned piglets
LIU Xiaoying, LI Xuan, WU Haiqin, XU Laipeng, ZHAO Dehui, MA Jixiang, MU Chunlong, ZHU Weiyun, PAN Long
- 4088 Ferulic acid enhances the laccase activity of *Dichomitus squalens*
WU Jie, LI Jing, LUO Feng, CHANG Peng
- 4101 Protective effect and mechanism of selenomethionine on intestinal injury in mice infected with porcine deltacoronavirus
LI Haiyan, ZHANG Tongjun, GUO Xin, GUO Yongpeng
- 4119 Effects of nicotinamide mononucleotide/nicotinamide riboside supplementation on gut microbiota and metabolites in mice
NI Bing, ZHU Lili, CHEN Hao, SHI Xin'e, JIN Jianjun
- 4136 Amplicon sequencing of *rpsD* reveals the community composition and transgenerational transmission of *Bacteroides* in family members
LI Longlong, ZHANG Xueling, CHU Yuxin, SUN Hailong, NI Yongqing
- 4151 Efficient expression of the alkaline laccase PIE5 in *Coprinopsis cinerea* with molasses as a carbon source
MENG Xinyue, WANG Xianhua, ZHAO Huifang, LIU Juanjuan, FANG Zemin
- 4162 Biological characteristics and pathogenicity of a *uvrY*-deleted mutant of *Vibrio parahaemolyticus*
LU Shuqi, RUI Chuang, GUO Rong, WU Peijie, QIU Suoping, FANG Weihuan, LI Tingting, HAN Xiangnan, JIANG Wei
- 4174 Screening of salt-alkali-tolerant endophytic bacteria from *Agastache rugosa* and assessment of their plant growth-promoting effects under salt stress
ZHAI Zijia, SONG Yutan, MA Xiaonan, YANG Bingyou, LIU Yan, ZHANG Lili, WU Xiuju
- 4188 Infection ability of LPXTG motif-anchored protein Lmo0130 in *Listeria monocytogenes*
DENG Simin, GE Hongrui, SHAN Yan, MAO Minjie, XU Jiali, XIA Jing, SONG Houhui, CHENG Changyong

TECHNOLOGY AND METHOD

- 4198 Establishment of a triplex qPCR detection method for *Mycoplasma bovis*, *Pasteurella multocida*, *Mannheimia haemolytica* and an epidemiological investigation
MA Yanying, GAO Lei, GONG Fengju, WU Yulun, LI Xuwen, ZHANG Zhi, SUN Xueqiang, PAN Zihao, YAO Huochun
- 4211 Establishment and testing of a MALDI-TOF MS database for the identification of *Streptomyces*
SUN Wei, LUO Qian, XU Jie, LI Lei, JIANG Haixia

DATA PAPER

- 4224 Antimicrobial resistance, virulence genes, and evolution of *Salmonella* Wandsworth isolates from Jiangsu
LI Chengchao, WU Xinyue, WANG Fuzhong, XU Ruiyang, XU Zhengzhong, ZHENG Chengkun, JIAOXin'an, CHEN Xiang