

# 中文目次

## 综述

### 1511 细菌非编码RNA及其分子伴侣Hfq

徐巧林, 宋艳钊, 郭岩彬

### 1521 革兰氏阴性菌脂多糖运输系统的构成及作用机制

莫婷, 刘马峰, 程安春

### 1531 海绵体动物中 $trans$ -AT聚酮合成酶来源的聚酮化合物的生物合成

杨晓歌, 王国君, 李霄

### 1542 代谢工程改造酿酒酵母合成植物萜类D-柠檬烯的策略

胡智慧, 谌柄旭, 于爱群, 肖冬光

## 研究报告

### 1551 基于比较转录组分析海洋弧菌X511的褐藻胶代谢途径

许超, 熊亚茹, 黄桂媛, 王巧贞, 卢明倩, 张荣灿, 廖威, 张云开, 黄庶识

### 1563 *rpoS*基因缺失突变对荧光假单胞菌胁迫耐受性、群体感应及腐败活性的影响

沈碧妙, 吴淘栩, 朱俊杰, 徐琳娜, 刘小香, 朱军莉

### 1573 花生侵染新赤壳菌果腐病生防芽孢杆菌的分离鉴定及防病效果

孙伟明, 时晨, 张梦涛, 赵丹, 陈璇, 冯丽娜, 罗永松, 郭巍, 邢单润

### 1582 双功能域 $\beta$ -折叠桶碱性植酸酶蛋白序列分析与酶学特性

鲁芳, 张蓓, 刘永, 宋迎, 郭刚兴, 杨培龙, 姚斌, 郭素娟, 高伟

### 1593 绿脓杆菌对鲎素耐受性特点及耐受性机制的研究

洪军, 胡建业, 刘坤, 王超华, 周春云, 闫坤敏, 高双双

### 1605 改造大肠杆菌卟啉代谢途径对重组过氧化物酶活性的影响

黄莘, 丁涛, 黄非, 白林含

### 1614 植物乳杆菌JLK0142胞外多糖对RAW264.7巨噬细胞和免疫抑制小鼠的免疫调节作用

王辑, 房晓彬, 吴彤

### 1625 *Alkalitalea saponilacus*产木聚糖酶的碳源优化及酶学特性

廖子亚, 郭晓萌, 王海胜, 闫艳春, 李俊, 赵百锁

### 1637 贝莱斯芽孢杆菌L-1对梨灰霉和青霉病菌的抑制作用评价及全基因组分析

孙平平, 崔建潮, 贾晓辉, 王文辉

### 1647 循环水养殖系统中凡纳滨对虾肠道微生物对三种复合益生菌制剂的响应

叶海斌, 樊英, 王晓璐, 李乐, 盖春蕾, 刘洪军, 李天保

### 1658 基于Illumina MiSeq测序平台分析长期不同施肥处理对黑土真菌群落的影响

武俊男, 刘昱辛, 周雪, 王天野, 高强, 高云航, 刘淑霞

### 1672 固定化细胞拆分(R,S)- $\alpha$ -乙基-2-氧-1-吡咯烷乙酸甲酯的研究

张利坤, 肖延铭, 钱敏帆, 严燕兵, 李敬亚

## 其他

### 封二 《微生物学报》获奖证书

### 文后I 《微生物学报》征稿简则

### 文后II 《微生物学报》编委会名单

### 封三 欢迎订阅《微生物学报》

封面图片：革兰氏阴性菌脂多糖运输系统的构成及作用机制（第1521–1530页，作者：莫婷, 刘马峰, 程安春）

## 广告

文前 镇江东方生物工程设备技术有限责任公司

# CONTENTS

## REVIEWS

- 1520 Non-coding RNA and RNA chaperone Hfq in bacteria

Qiaolin Xu, Yanzhao Song, Yanbin Guo

- 1530 Component and functions of lipopolysaccharide transport system in Gram-negative bacteria

Ting Mo, Mafeng Liu, Anchun Cheng

- 1541 Advances in the biosynthesis of polyketides derived by *trans*-AT polyketide synthases in marine sponges

Xiaoge Yang, Guojun Wang, Xiao Li

- 1550 Strategies of metabolic engineering *Saccharomyces cerevisiae* to produce plant-derived D-limonene

Zhihui Hu, Bingxu Chen, Aiqun Yu, Dongguang Xiao

## RESEARCH ARTICLES

- 1562 Analysis of the alginate metabolic pathways in the marine *Vibrio* X511 based on comparative transcriptome

Chao Xu, Yaru Xiong, Guiyuan Huang, Qiaozhen Wang, Mingqian Lu, Rongcan Zhang, Wei Liao, Yunkai Zhang, Shushi Huang

- 1572 Effects of *rpoS* deletion on stress resistance, quorum sensing and spoilage potential of *Pseudomonas fluorescens*

Bimiao Shen, Taoxu Wu, Junjie Zhu, Linna Xu, Xiaoxiang Liu, Junli Zhu

- 1581 Isolation and identification of *Bacillus* spp. controlling *Neocosmospora* pod rot of peanut

Weiming Sun, Chen Shi, Mengtao Zhang, Dan Zhao, Xuan Chen, Lina Feng, Yongsong Luo, Wei Guo, Danrun Xing

- 1592 Sequencing and characterization of dual-domain  $\beta$ -propeller alkaline phytase

Fang Lu, Bei Zhang, Yong Liu, Ying Song, Gangxing Guo, Peilong Yang, Bin Yao, Sujuan Guo, Wei Gao

- 1604 Characteristics and resistance of tachyplesin-I resistance in *Pseudomonas aeruginosa*

Jun Hong, Jianye Hu, Kun Liu, Chaohua Wang, Chunyun Zhou, Kunmin Yan, Shuangshuang Gao

- 1613 Effect of porphyrin metabolism pathway modification of *Escherichia coli* on recombinant catalase-peroxidase activity

Shen Huang, Tao Ding, Fei Huang, Linhan Bai

- 1624 Immunoregulatory effect of exopolysaccharide from *Lactobacillus plantarum* JLK0142 on RAW264.7 macrophages and immunosuppressed mice

Ji Wang, Xiaobin Fang, Tong Wu

- 1636 Carbon source optimization and characterization of a xylanase from *Alkalitalea saponilacus* SC/BZ-SP2<sup>T</sup>

Ziya Liao, Xiaomeng Guo, Haisheng Wang, Yanchun Yan, Jun Li, Baisuo Zhao

- 1646 Complete genome analysis of *Bacillus velezensis* L-1 and its inhibitory effect on pear gray and blue mold

Pingping Sun, Jianchao Cui, Xiaohui Jia, Wenhui Wang

- 1657 Effects of three biological agents on intestinal microbiota of white shrimp (*Litopenaeus vannamei*) in a water-recirculating cultivation system

Haibin Ye, Ying Fan, Xiaolu Wang, Le Li, Chunlei Gai, Hongjun Liu, Tianbao Li

- 1671 Effects of long-term different fertilization on soil fungal communities in black soil based on the Illumina MiSeq platform

Junnan Wu, Yuxin Liu, Xue Zhou, Tianye Wang, Qiang Gao, Yunhang Gao, Shuxia Liu

- 1682 Resolution of rac- $\alpha$ -ethyl-2-oxopyrrolidineacetic acid methyl ester by immobilized cell

Likun Zhang, Yanming Xiao, Minfan Qian, Yanbing Yan, Jingya Li

(本期责编：李磊)