



中国科技核心期刊  
中国核心学术期刊 (RCCSE)

ISSN 1007-7448  
CN 22-1258/S

# 经济动物学报

JOURNAL OF ECONOMIC ANIMAL



吉林农业大学主办  
万方数据

2023-09  
第27卷 第3期



## 目 次

### 专家论坛

- 157 吉林省鹅种质资源研究、保护与利用

孙永峰, 周宇轩, 宋玉朴, 胡湘曼, 侯嘉惠

### 研究论文

- 165 不同蛋白源饲料对育成期乌苏里貉生长性能、营养物质消化率和碳氮平衡的影响

刘钊, 吴昊, 臧晓, 赵天成, 孙智禹, 尹剑, 刘忠军

- 171 柴芪复方对断奶獭兔生长性能、腹泻率和死亡率的影响

刘宁, 符华林, 张凯, 文斌, 余志菊, 李东波, 徐昌文, 傅祥超, 刘汉中

- 175 基于16S rRNA高通量测序的林下生态养殖鸡肠道微生物菌群的变化

刘妍罕, 张霞, 曾茂芹, 张黔东, 王微, 袁阳, 杨颖, 程振涛, 文明

- 182 罗非鱼2种常见病毒双重RT-PCR检测方法的建立

徐淑菲, 曾韵颖, 朱黄鑫, 刘启霖, 方成俊, 孔凡德, 蔡绍鑫, 林双庆

- 189 猪源植物乳杆菌调节猪肠上皮细胞对鼠伤寒沙门氏菌感染的抑制

刘芮含, 韩永林, 石或萌, 孙安琪, 汤正旭, 胡静涛

- 196 3种中药复方防治鸡柔嫩艾美耳球虫的效果

蒋山翊, 周碧君, 文明, 王开功

- 202 五倍子对乌鸡感染柔嫩艾美耳球虫的疗效

李简, 张园园, 郭丽君, 薛冰, 蔡亚南, 赵权

### 综 述

- 208 L-肉碱在卵母细胞和早期胚胎发育过程中的作用

仲成坤, 郭晶, 马馨, 吕文发

- 214 兔卵母细胞体外成熟影响因素研究进展

任宇尧, 靳荣帅, 赵博昊, 陈阳, 吴信生

- 220 双组分系统调控细菌毒力和耐药性及其抑制剂研究进展

陈淋淋, 谭紫凝, 马红霞, 王一鸣, 向华

- 227 中国主要经济鱼类亲鱼培育及产后护理技术研究进展

魏艳超, 王诗惠, 许云枫, 齐欣, 石艳艳, 王伟

封二 学术名家——孙永峰教授

封三 吉林省鹅种质资源与遗传改良创新团队



## CONTENTS

### Specialist Forum

- 157 Research, Protection and Utilization of Goose Germplasm Resources in Jilin Province  
*SUN Yongfeng, ZHOU Yuxuan, SONG Yupu, HU Xiangman, HOU Jiahui*

### Research Article

- 165 Effect of Different Protein Sources on Growth Performance, Nutrient Digestibility, Carbon and Nitrogen Balances of Growing Raccoon Dogs  
*LIU Zhao, WU Min, ZANG Xiao, ZHAO Tiancheng, SUN Zhiyu, YIN Jian, LIU Zhongjun*
- 171 Effects of Chaqi Compound on Growth Performance, Diarrhea Rate and Mortality of Weaned Rex Rabbits  
*LIU Ning, FU Hualin, ZHANG Kai, WEN Bin, YU Zhiju, LI Dongbo, XU Changwen, FU Xiangchao, LIU Hanzhong*
- 175 Changes of Intestinal Microflora of Understory Ecological Farming Chickens Based on 16S rRNA High-Throughput Sequencing  
*LIU Yanhan, ZHANG Xia, ZENG Maoqin, ZHANG Qiandong, WANG Wei, YUAN Yang, YANG Ying, CHENG Zhentao, WEN Ming*
- 182 Establishment of Duplex RT-PCR for Detection of Tilapia Lake Virus and Viral Nervous Necrosis Virus  
*XU Shufei, ZENG Yunying, ZHU Huangxin, LIU Qilin, FANG Chengjun, KONG Fande, CAI Shaoxin, LIN Shuangqing*
- 189 Primary Study of *Lactobacillus plantarum* from Porcine on Regulating IPEC-J2 Cell Resistance to *Salmonella typhimurium* Infection  
*LIU Ruihan, HAN Yonglin, SHI Yumeng, SUN Anqi, TANG Zhengxu, HU Jingtao*
- 196 Effect of 3 Traditional Chinese Medicine Compound Preparations on Preventing Chicken Infected *Eimeria tenella*  
*JIANG Shanyi, ZHOU Bijun, WEN Ming, WANG Kaigong*
- 202 Therapeutic Effect of Chinese Nutgall on Black-Bone Chicken Infected with *Eimeria tenella*  
*LI Jian, ZHANG Yuanyuan, GUO Lijun, XUE Bing, CAI Yanan, ZHAO Quan*

### Review

- 208 The Role of L-carnitine in the Development of Oocytes and Early Embryos  
*ZHONG Chengkun, GUO Jing, MA Xin, LV Wenfa*
- 214 Research Progress of *in vitro* Maturation of Rabbit Oocytes  
*REN Yuyao, JIN Rongshuai, ZHAO Bohao, CHEN Yang, WU Xinsheng*
- 220 Progress on Two-Component System Regulating Bacterial Virulence and Drug Resistance and Its Inhibitors  
*CHEN Linlin, TAN Zining, MA Hongxia, WANG Yiming, XIANG Hua*
- 227 Research Progress on Parent Fish Breeding and Postpartum Nursing Technology of Main Economic Fishes in China  
*WEI Yanchao, WANG Shihui, XU Yunfeng, QI Xin, SHI Yanyan, WANG Wei*



# 经济动物学报

Jingji Dongwu Xuebao

2023年·第27卷·第3期  
(1979年创刊 季刊)

主 管:吉林省教育厅

主 办:吉林农业大学

主 编:刘忠军

执行主编:鞠善宏

编辑出版:《经济动物学报》编辑部

地址:吉林省长春市新城大街2888号

邮编:130118

电话:0431-84533130

网址:<http://jdxj.jlau.edu.cn>

邮箱:[jjdwxj@163.com](mailto:jjdwxj@163.com)

印刷单位:吉林省优视印务有限公司

发 行:《经济动物学报》编辑部

发行范围:国内外公开发行

Adminstrated by Jilin Province Education Department

Sponsored by Jilin Agricultural University

Chief Editor:Liu Zhongjun

Executive Editor:Ju Shanhong

Edited and Published by Editorial Department of Journal of Economic Animal

Address:2888 Xincheng Avenue,Changchun,Jilin 130118,China

Tel:+86-431-84533130

Http://jdxj.jlau.edu.cn

E-mail:jjdwxj@163.com

Printed by Jilin Province Youshi Printing Co.,Ltd.

Distributed by Editorial Department of Journal of Economic Animal

Distribution Scope: Published Both at Home and Abroad

中国标准连续出版物号: ISSN 1007-7448  
CN 22-1258/S

国内定价: 25.00元

ISSN 1007-7448



9 771007 744235