



全国中文核心期刊
中国科技核心期刊
中国科学引文数据库来源期刊

ISSN 0366-6964
CODEN CMHPAI

畜牧兽医学报

ACTA VETERINARIA ET ZOOTECHNICA SINICA

CHINESE JOURNAL
OF ANIMAL AND VETERINARY SCIENCES

Vol.47 No.1

2016

中国畜牧兽医学会

CHINESE ASSOCIATION OF ANIMAL
SCIENCE AND VETERINARY MEDICINE

ISSN 0366-6964



9 770366 696162

畜牧兽医学报

XUMU SHOUYI XUEBAO

第47卷 第1期 2016年1月

目 次

综 述

- 全基因组选择在猪育种中的应用 王晨, 秦珂, 薛明, 莫德林, 陈瑶生, 刘小红(1)
非洲猪瘟疫苗研究进展 戈胜强, 吴晓东, 张志诚, 张永强, 赵永刚, 王志亮(10)

遗传繁育

- F₁代转CuZnSOD基因猪的制备与研究 王守栋, 房国锋, 曾勇庆, 陈伟, 李川皓, 王延东(16)
基于表达谱芯片挖掘清远麻鸡和科宝肉鸡比目鱼肌差异表达基因 束婧婷, 章明, 宋迟, 单艳菊, 徐文娟, 宋卫涛, 李慧芳(25)
寿光鸡GPR147基因5'调控区多态性与产蛋性状的关联分析 贾美婷, 李显耀, 康丽, 姜运良, 樊新忠, 唐辉(34)
狼山鸡NLRC5基因启动子区SNP及其在先天免疫中的效应分析 刘向萍, 郭晓敏, 李志腾, 朱静, 盛中伟, 马腾, 常国斌, 窦新红, 王克华, 陈国宏(41)
水牛STAT1基因多态与产奶性状关联分析 邓廷贤, 庞春英, 朱鹏, 段安琴, 陆杏蓉, 杨炳壮, 梁贤威(48)
牦牛卵巢小RNA高通量测序及生物信息学分析 熊显荣, 兰道亮, 李键, 孙向东, 林亚秋, 马力(55)
FSH及Wnt信号通路对绵羊卵泡颗粒细胞的增殖及雌激素分泌的影响 赵妙妙, 姜晓龙, 陈建伟, 黄洋, 姚晓磊, 曹霞, 李鹏飞, 吕丽华(64)
不同月龄高原型藏绵羊睾丸组织中蛋白基因产物9.5和神经肽Y的分布比较 袁莉刚, 曲亚玲, 鲁玉荣, 李聪(71)
LPS通过TLR4影响绵羊输卵管上皮细胞SBD-1的表达 李琦, 智达夫, 延沁, 刘默宁, 郑欣欣, 曹贵方(79)
基于红外设备的母猪发情状态下体温变化研究 秦永孝, 王玉梁, 高雪峰, 弥世荣, 邱小田, 张勤, 丁向东(85)
梅花鹿致敏与休眠鹿茸干细胞差异蛋白表达的2D-DIGE分析 董振, 王权威, 刘振, 孙红梅, 李春义(92)

动物营养

- 喷雾干燥鸡血浆蛋白粉在仔猪上的营养价值评定 张勇, 陈代文, 郑萍, 余冰, 何军, 毛湘冰, 黄志清, 虞洁, 罗钧秋, 王建霞(105)

| | |
|---------------------------------|-----------------------------|
| 瘤胃保护葡萄糖对围产后期荷斯坦奶牛生产性能及血清生化指标的影响 | 李妍,薛倩,高艳霞,陈子宁,李秋凤,李建国(113) |
| 不同锰水平对雄性水貂生产性能、血清生化指标及脏器指数的影响 | 张海华,周宁,王士勇,南韦肖,张铁涛,李光玉(120) |

预防兽医

| | |
|---------------------------------------|---|
| 马立克病病毒与禽网状内皮增生病病毒的混合感染及在传代过程中的重组 | 宿靖伟,滕蔓,罗俊,迟佳琦,余祖华,禹乐乐,胡博,张改平(128) |
| 细胞传代致弱的鹅细小病毒 YG 毒株致病性变化的研究 | 邵周伍林,李晨曦,刘明,张青山,张云(135) |
| I型鸭甲肝病毒 VP3 蛋白的抗血清中和活性分析及 B 细胞表位鉴定 | 沈友林,汪铭书,程安春,贾仁勇,朱德康,陈舜,刘马峰,刘菲,杨乔,孙昆峰,陈孝跃(141) |
| 猪源产新德里金属 β -内酰胺酶-1 大肠埃希菌的感染特性研究 | 常世恺,赵战勤,薛云,龙塔,丁轲,程相朝(149) |
| phoP/Q 双组分系统对禽致病性大肠杆菌的毒力调控作用 | 李春晓,张宇曦,祁克宗,韩先干,涂健,薛挺,周秀红(157) |
| 进口奶牛十二指肠贾第虫感染情况及其多位点基因序列研究 | 王臣荣,张振杰,李俊强,余复昌,曹建科,张龙现(165) |

基础兽医

| | |
|---|-----------------------------|
| 携带 $bla_{CTX-M-65}$ 、 $rmtB$ 和 $fosA3$ 多重耐药质粒 pHN7A8 的适应性研究 | 何良英,刘兰平,曾振灵,刘健华(172) |
| 宁夏地区奶牛乳房炎大肠杆菌毒力基因检测和耐药性分析 | 张金宝,马春芳,余婷,李晓娜,魏小平,王桂琴(177) |
| 炎症相关 miRNAs 在 LPS 诱导的小鼠乳腺上皮细胞炎性反应中的表达及 miR-223 真核表达载体的构建 | 郝俊芳,黄凯,王月影,杜丽丽,钟凯(183) |

临床兽医

| | |
|--------------------------|-------------------------------------|
| 基于核磁共振技术的卵巢静止奶牛血浆代谢谱分析 | 许楚楚,夏成,孙雨航,肖鑫焕,王刚,舒适,张洪友,徐闯,杨威(190) |
| 奶牛产后血浆 1H -NMR 代谢组学分析 | 陶金忠,郭延生(198) |

研究简报

| | |
|-----------------------------------|-----------------------|
| 利用 CRISPR-Cas9 系统定点突变猪 MSTN 基因的研究 | 张冬杰,刘娣,张旭,汪亮,杨国伟(207) |
|-----------------------------------|-----------------------|

ACTA VETERINARIA ET ZOOTECHNICA SINICA
CHINESE JOURNAL OF ANIMAL AND VETERINARY SCIENCES

Published Monthly:

Chinese Association of Animal Science and Veterinary Medicine

Beijing, China

Vol. 47 No. 1 (Jan. 2016)

CONTENTS

REVIEW

Application of Genomic Selection in Swine Breeding

..... WANG Chen, QIN Ke, XUE Ming, MO De-lin, CHEN Yao-sheng, LIU Xiao-hong(1)
Progress in Development of African Swine Fever Vaccine

..... GE Sheng-qiang, WU Xiao-dong, ZHANG Zhi-cheng, ZHANG Yong-qiang,
ZHAO Yong-gang, WANG Zhi-liang(10)

ANIMAL GENETICS & REPRODUCTION

Preparation and Study of *CuZnSOD* Gene Transgenic Pigs in F₁ Generation

..... WANG Shou-dong, FANG Guo-feng, ZENG Yong-qing, CHEN Wei, LI Chuan-hao, WANG Yan-dong(16)
Identification of Differentially Expressed Genes for Myofiber Characteristics in Soleus Muscles between Qingyuan Partridge Chickens and Cobb Broilers

..... SHU Jing-ting, ZHANG Ming, SONG Chi, SHAN Yan-ju, XU Wen-juan, SONG Wei-tao, LI Hui-fang(25)
Association of Polymorphisms in the 5' Regulatory Region of *GPR147* with Laying Performance in Shouguang Chickens

..... JIA Mei-ting, LI Xian-yao, KANG Li, JIANG Yun-liang, FAN Xin-zhong, TANG Hui(34)
SNPs of Promoter Region of *NLRC5* Gene and Its Genetic Effect on Innate Immune Traits in Langshan Chicken Breeds

..... LIU Xiang-ping, GUO Xiao-min, LI Zhi-teng, ZHU Jing, SHENG Zhong-wei, MA Teng,
CHANG Guo-bin, DOU Xin-hong, WANG Ke-hua, CHEN Guo-hong(41)

Association between Polymorphism of *STAT1* Gene and Milk Production Traits in Buffalo (*Bubalus bubalis*)

..... DENG Ting-xian, PANG Chun-ying, ZHU Peng, DUAN An-qin, LU Xing-rong,
YANG Bing-zhuang, LIANG Xian-wei(48)

Solexa Sequencing of Small RNAs in Yak (*Bos grunniens*) Ovaries and Bioinformatics Analysis

..... XIONG Xian-rong, LAN Dao-liang, LI Jian, ZI Xiang-dong, LIN Ya-qiu, MA Li(55)

Effects of FSH and Wnt Signaling Pathway on Proliferation and Estrogen Secretion of Sheep Granulosa Cells

..... ZHAO Miao-miao, JIANG Xiao-long, CHEN Jian-wei, HUANG Yang,
YAO Xiao-lei, CAO Xia, LI Peng-fei, LÜ Li-hua(64)

Distribution of Protein Gene Product 9.5 and Neuropeptide Y in Tibetan Plateau Sheep Testis at Different Ages

..... YUAN Li-gang, QU Ya-ling, LU Yu-rong, LI Cong(71)

LPS Induces SBD-1 Expression via TLR4 in Ovine Oviduct Epithelial Cells

..... LI Qi, ZHI Da-fu, YAN Qin, LIU Mo-ning, ZHENG Xin-xin, CAO Gui-fang(79)

Temperature Changes during Estrus in Swine Was Studied by Infrared Temperature Measurement Device

..... QIN Yong-xiao, WANG Yu-liang, GAO Xue-feng, MI Shi-rong, QIU Xiao-tian,
ZHANG Qin, DING Xiang-dong(85)

Analysis of Differentially Expressed Proteins in the Potentiated and Dormant Antler Stem Cells through 2D-DIGE

..... DONG Zhen, WANG Quan-wei, LIU Zhen, SUN Hong-mei, LI Chun-yi(92)

ANIMAL NUTRITION

Nutritional Value Evaluation of Spray-dried Chicken Plasma in the Diet for Piglets

..... ZHANG Yong, CHEN Dai-wen, ZHENG Ping, YU Bing, HE Jun, MAO Xiang-bing,
HUANG Zhi-qing, YU Jie, LUO Jun-qiu, WANG Jian-xia(105)

Effects of Rumen-protected Glucose on Performance and Blood Biochemical Parameters during Postpartum Period in Dairy Cows LI Yan, XUE Qian, GAO Yan-xia, CHEN Zi-ning, LI Qiu-feng, LI Jian-guo(113)

Effects of Diet with Different Manganese Levels on Production Performance, Blood Serum Biochemical Parameters and Organ Index of Male Mink ZHANG Hai-hua, ZHOU Ning, WANG Shi-yong, NAN Wei-xiao, ZHANG Tie-tao, LI Guang-yu(120)

PREVENTIVE VETERINARY MEDICINE

Co-infection of Field Marek's Disease Virus with Reticuloendotheliosis Virus Prevalent in Vaccinated Chicken Flocks SU Jing-wei, TENG Man, LUO Jun, CHI Jia-qi, YU Zu-hua, YU Le-le, HU Bo, ZHANG Gai-ping(128)

Pathogenicity Changes of Cell Attenuated Goose Parvovirus YG Strain SHAOZHOU Wu-lin, LI Chen-xi, LIU Ming, ZHANG Qing-shan, ZHANG Yun(135)

Neutralizing Activity Analysis of VP3 Antiseraums and B-cell Epitopes Identification of VP3 Protein form Duck Hepatitis A Virus Type 1 SHEN You-lin, WANG Ming-shu, CHENG An-chun, JIA Ren-yong, ZHU De-kang, CHEN Shun, LIU Ma-feng, LIU Fei, YANG Qiao, SUN Kun-feng, CHEN Xiao-yue(141)

Transmissibility of New Delhi Metallo- β -lactamase-1-Producing *Escherichia coli* Isolate from Pig CHANG Shi-kai, ZHAO Zhan-qin, XUE Yun, LONG Ta, DING Ke, CHENG Xiang-chao(149)

The Role of phoP/Q Two-component System in Virulence of Avian Pathogenic *Escherichia coli* LI Chun-xiao, ZHANG Yu-xi, QI Ke-zong, HAN Xian-gan, TU Jian, XUE Ting, ZHOU Xiu-hong(157)

The Investigation of Infection and Multilocus Sequence of *Giardia duodenalis* in Dairy Cattle from an Imported Farm WANG Chen-rong, ZHANG Zhen-jie, LI Jun-qiang, YU Fu-chang, CAO Jian-ke, ZHANG Long-xian(165)

BASIC VETERINARY MEDICINE

Fitness Cost of a Multidrug Plasmid Carrying *bla*_{CTX-M-65}, *rmtB*, and *fosA3* HE Liang-ying, LIU Lan-ping, ZENG Zhen-ling, LIU Jian-hua(172)

Detection of Virulence Genes and Antimicrobial Resistance Analysis of *Escherichia coli* Isolated from Dairy Cow Mastitis in Ningxia ZHANG Jin-bao, MA Chun-fang, YU Ting, LI Xiao-na, WEI Xiao-ping, WANG Gui-qin(177)

Expression of Inflammation-related miRNAs in the LPS-induced Inflammation in Murine Mammary Epithelial Cells and Construction of miR-223 Eukaryotic Expression Vector HAO Jun-fang, HUANG Kai, WANG Yue-ying, DU Li-li, ZHONG Kai(183)

CLINICAL VETERINARY MEDICINE

¹H-NMR-based Plasma Metabolic Profiling of Postpartum Dairy Cows with Ovarian Inactivity XU Chu-chu, XIA Cheng, SUN Yu-hang, XIAO Xin-huan, WANG Gang, SHU Shi, ZHANG Hong-you, XU Chuang, YANG Wei(190)

Study on the Plasma Metabolism Using ¹H-NMR in Postpartum Cows TAO Jin-zhong, GUO Yan-sheng(198)

RESEARCH NOTES

Study of Pig *MSTN* Gene Point Mutation Based on the CRISPR-Cas9 System ZHANG Dong-jie, LIU Di, ZHANG Xu, WANG Liang, YANG Guo-wei(207)

《畜牧兽医学报》第六届编辑委员会成员

顾问 张子仪 熊远著 刘守仁 吴常信 夏咸柱 [旭日干] 刘秀梵

主任委员 陈焕春

副主任委员 阎汉平 汪明 苏振环 时建忠

编委成员 (按姓名英文字母/汉字笔画排序)

Chris Anderson David Lindsay Graham Gardner W.Bruce Currie
马月辉 王加启 方维焕 宁宜宝 卢德勋 朱士恩 朱兴全 刘湘涛 余锐萍
辛朝安 杜立新 房于明 陆承平 陈溥言 陈瑶生 李奎 李庆章 李学伟
李德发 沙玉圣 张涌 张仲秋 张家骅 沈建忠 杨宁 罗绪刚 孟庆翔
郑友民 周继勇 姜平 赵兴绪 赵茹茜 夏国良 涂长春 郭万柱 黄维义
崔治中 童光志 蒋小松 舒鼎铭

名誉主编 陈幼春 蒋金书

主编 文杰

副主编 张沅 时建忠 汪明 李宁 杨汉春 于康震 王立贤 任鹏

编辑部主任 任鹏

主编 文杰

广告部主任 程金华 本期责任编辑 郭云雁

畜牧兽医学报

(月刊,1956年创刊)

2016年 第47卷 第1期

2016年1月出版

主 管 中国科学技术协会
主 办 中国畜牧兽医学会
编 辑 《畜牧兽医学报》编委会
地 址 中国农业科学院北京畜牧兽医研究所
邮 编 100193
电 话 010-62815987 62816996 62893836
网 址 <http://www.xmsyxb.com>
电子邮箱 xmsyxb@263.net
出版单位 《中国畜牧兽医杂志》有限公司
印 刷 北京科信印刷有限公司
国内总发行 北京报刊发行局
国外总发行 中国国际图书贸易总公司
(中国国际书店)北京399信箱
订 购 全国各地邮局
刊 号 ISSN 0366-6964
CN 11-1985/S

ACTA VETERINARIA ET ZOOTECHNICA SINICA

(Monthly, Started in 1956)

Vol. 47 No. 1 Jan. 2016

Supervised by China Association for Science and Technology
Sponsored by Chinese Association of Animal Science and Veterinary Medicine
Edited by Editorial Board of the ACTA VETERINARIA ET ZOOTECHNICA SINICA
Address Institute of Animal Science,Chinese Academy of Agricultural Sciences
Telephone 010-62815987 62816996 62893836
Website <http://www.xmsyxb.com>
E-mail xmsyxb@263.net
Published by Chinese Journal of Animal Science and Veterinary Medicine Co.,Ltd
Printed by Beijing Kexin Printing Co.,Ltd
Distributed by Domestic Beijing Post Office
Overseas China International Book Trading Corporation,P.O.Box 399