动 物 营 养 学 报

DONGWU YINGYANG XUEBAO

百种中国杰出学术期刊　期刊数字影响力 100 强(学术类期刊)
中国精品科技期刊　中国科学引文数据库(CSCD)核心库来源期刊　中国科技核心期刊
中文核心期刊　中国科学评价研究中心权威期刊(A⁺级)　荷兰 Scopus 收录期刊
英国 CAB Abstracts 收录期刊　美国 Chemical Abstracts 收录期刊

第 38 卷　第 10 期　2026 年 10 月

目　　次

综述

7171 植物提取物对肝脏 X 受体介导奶牛乳腺炎及乳脂代谢的作用机制　王丽芳　杨　健

7179 奶牛饲料效率的瘤胃微生物调控机制及雌激素-微生物互作研究进展　姜惺伟　张晨光　武圣儒　姚军虎

7187 白色瘤胃球菌的纤维降解体系及其作为营养调控靶点的应用潜力　常帅飞　张佳瑞　张力莉　徐晓锋

7201 血根碱的生理功能及其在动物生产中的应用　赵若含　李永湘　余伟荣　叶妍琳

7215 叶黄素在不同动物源性食品中的富集和应用研究进展　高　珊　周建民　武书庚

7226 氧化应激影响猪卵母细胞质量的机制及营养调控研究进展　唐国程　李洪宇　卓　勇　周　盼

7242 围产期奶牛脂肪组织代谢紊乱及其营养调控　韩诗琳　何盈锐　蒋林树　赵玉超

7254 影响反刍动物饲料转化效率因素的研究进展　孙鑫虎　沙志行　徐晓锋　马玉林

7268 瘤胃微生物定植规律与功能特征以及其在反刍动物生产中的作用研究进展　王　妍　赵　欣　赵小博　蒋林树

7279 犬肥胖发生机制及营养干预研究进展　李　斌　刘成武

7288 蛋氨酸的生理功能及其对动物肠道屏障的影响　卢春如　甘海清　韩　丽　黄兴国

7300 黏膜乳杆菌对动物肠道健康的调控机制及其在动物生产中的应用前景　李小雨　陈　忠　李　华　罗玉衡

7310 补体系统在畜禽免疫调控中的功能及营养干预研究进展　陈凡星　唐志如　王　丽　胡胜兰

7322 白藜芦醇的生物活性及其在畜禽生产中的应用研究进展　刘亚飞　雷梦妮　周建民　武书庚

7333 生物制造饲料添加剂的安全性评价体系及其在畜禽生产中的应用　边志文　韩如意　韩云胜　蒋显仁

研究论文

7347 生长猪小麦消化能和代谢能测定及预测模型建立　周晓容　李厚桦　黄　萍　姚焰础　龙定彪　钟晓霞　刘作华

7360 猪背最长肌肌球蛋白重链亚型表达与肉质性状和能量代谢关键酶活性的相关性分析　李忠秋　刘春龙　吴赛辉　何海娟　田　明　亓美玉　杨海成　何鑫淼　刘　娣　王文涛

7369 吡咯喹啉醌二钠对母猪繁殖性能、抗氧化能力、免疫功能和粪便菌群的影响　杨御涵　罗威才　周仕淳　李　江　罗钧秋

7384 饲粮添加马尾藻多糖对断奶仔猪生长性能、免疫功能、肠道健康和血清代谢物的影响　董春琳　张晨洋　刘淑扬　吴绮雯　顾　方

7400 发酵菜籽饼替代部分豆粕对藏仔猪生长性能、血液指标、粪便微生物及其代谢物的影响　胡晨光　杨　颖　王　江　伍昱成　董伟康　谭凯文　刘锁珠　商　鹏　王乐莅　谭占坤

7420 甘露寡糖和/或唾液乳杆菌对黄羽肉鸡屠宰性能、肉品质和肝肾微量元素稳态的影响　陈大伟　刘茵茵　马丽娜　唐修君　葛庆联　陆俊贤　周　倩　丁红梅　高玉时

7430 不同比例高蛋白质玉米对肉鸡生长性能、屠宰性能、肉品质和肠道健康的影响 燕 磊 安 沙 吕孝国 杨 青 许洁婷 杨立杰 聂 伟 禹爱兵 陶玉岭

7442 菊芋多糖和枸杞多糖复合物对肉鸡生长性能、血清生化指标、抗氧化机能及肝脏抗氧化相关基因表达的影响 宋秀梅 王 会 刘 兵 褚玉红 史雪萍 朱益民 王述柏 周传凤

7453 蓖麻叶粉对白羽肉鸡生长性能、屠宰性能、营养物质表观代谢率及血清指标的影响 丁天宁 王润莲 张文辉 吴培灵 谢颖欣 雍艳红

7468 党参甘草提取物对黄羽肉鸡生长性能、屠宰性能、肉品质、血清指标及肠道健康的影响 杨三行 晁 喆 蔡燕子 王 龙 张丰裕 史 艳 袁子文 魏彦明

7484 太子参参须发酵制剂对白羽肉鸡生长性能、血清激素指标及肝脏、空肠相关激素 mRNA 表达的影响 黄梦豪 刘彩霞 肖婧兮 秦风远 崔红杰 李 健 张炎达 马玉芳

7493 阿魏酸对鸡白痢沙门氏菌感染肉鸡生长性能、肠道形态及抗炎和抗氧化功能的影响 李欣雨 程家乐 廖秀冬 张丽阳 李笑然 王 冲 张变英 吕 林

7503 饲粮硒源和硒添加水平对肉仔鸡组织硒含量和抗氧化能力的影响 秦卓怡 马可盈 程家乐 谢秀兰 吕 林 张丽阳 廖秀冬

7519 产蛋高峰期蛋鸡小麦次粉氨基酸标准回肠消化率测定及其预测方程建立 张 露 丁雪梅 曾秋凤 白世平 刘 艳 张睿楠 张克英 王建萍

7530 红景天苷对高饲养密度条件下肉鸭生长性能、屠宰性能、肉品质及抗氧化能力的影响 徐业琦 燕 磊 张克英 丁雪梅 白世平 王建萍 刘 艳 曾秋凤

7542 1~63 日龄溆浦母鹅净能需要量预测模型研究 吕宗浩 肖艳清 朱传新 陈 灿 向书涵 张智忠 邓 炜 林 谦 陈清华

7552 饲用小黑麦干草与燕麦干草营养成分及其在奶牛瘤胃中的降解特性比较分析 刘婷婷 付玉蓉 彭 朋 陈 曦 梁 爽 石少轻 赵连生 王 昆

7565 紫锥菊提取物对泌乳中期奶牛泌乳性能、血清指标以及瘤胃发酵参数和菌群的影响 马宇飞 马峰涛 郭晓淼 王子辉 栗莹敏 裴雨爽 徐宏建 李建国 高艳霞

7579 包被钴胺素和生物素对奶牛产奶性能、瘤胃发酵、血清指标和肝脏叉头框转录因子 O 信号通路的影响 荆玉倩 张玉杰 冯家欣 孙 楠 王 勇 冯 江 霍文婕 郭 刚 刘 强 王 聪

7591 不同品种阉牛生长性能、养分表观消化率、屠宰性能和肉品质差异的研究 张变英 刘定云 张元庆 李 博 徐 芳 王栋才 王宏浩

7605 舍饲和放牧条件下西门塔尔肉牛瘤胃发酵参数和脂肪酸组成差异的研究 孙梦旭 吴兆海 卜登攀

7616 不同比例白酒糟饲粮对肉牛钙磷代谢、血清指标及血浆代谢组的影响 余胡龙 唐登科 张 进 陈 煜 万 堃 田 可 黄文明

7628 含乳糖开食料对犊牛生长发育、养分表观消化率和瘤胃发酵参数的影响 杜志广 王一强 曹 阳 李婷玉 薛 丰 林雪彦 王春微 辛杭书

7640 饲粮添加过瘤胃葡萄糖和椰油酰胺丙基甜菜碱对运输应激牦牛生长性能、血清指标及瘤胃发酵参数和微生物群落的影响 唐 睿 赵艳飞 曾 钰 王啸林 赵寿培 邵 冲 胡 瑞 彭全辉 肖鉴鑫 王立志 王之盛 薛 白 周 佳

7652 饲粮中联合添加胍基乙酸和酿酒酵母菌与纤维素酶复合物对肉羊小肠发育、消化酶活性、血清生化指标和免疫功能的影响 李秀丽 杨菊凤 苏 丹 李朝云 曹江涛 丁应龙 杨庆利 李 强 何孟莲

7666 饲粮添加茶多酚对湖羊生长性能、屠宰性能、器官发育和肠道菌群结构的影响 占今舜 江浩筠 贾浩滨 钟小军 霍俊宏

7679 有机微量元素替代无机微量元素对文登奶山羊羔羊微量元素表观消化率及组织沉积的影响 李康霞 荆茂展 陈 佳 王 越 沈 硕 郭艺璇 朱风华

7690 黄芪秸秆和鼠李糖乳杆菌单独或联合添加对羔羊生长性能、血清指标及能量代谢的影响 焦 娜 马 驰 丰王妹 李鸿呵 申玉华 李 颖 冯小芳 郭鹏辉 杨四秋 郑娟善

7702 栅藻替代不同比例鱼粉对松浦镜鲤生长性能、血清生化指标及肝脏健康的影响 高一琪 范 泽 吴 迪 李晨辉 姜永杰 王宝震 李延军 程镇燕 王连生

7719 饲料蛋白质水平对光唇鱼生长性能、体组成、肠道消化酶活性及肝胰脏抗氧化指标的影响 张 进 姜建湖 郭建林 孙丽慧 李 倩 陈建明

7729 低鱼粉饲料中不同脂肪源对虹鳟幼鱼生长、脂质代谢及肠道健康的影响 王 帅 王华敏 姜志霖 刘康润 鲁康乐 刘红柏 王常安 杨雨虹

7746 饲粮中添加丁酸钠和纳米氧化锌对肉兔生长性能、血清生化和抗氧化指标及肠道健康的影响 罗劲炜 李 娟 郎 艺 雷 岷 郑 洁 李钰莹 邝良德 李丛艳 柯炎杭 付仕成 郭志强 吕景智

7759 饲粮中添加酵母培养物对育成期乌苏里貉生长性能、血清生化指标及营养物质表观消化率的影响 黄毅然 闫舒心 刘玉箫 刘艺德 罗佩宁 冀成昊 邱 凯 陈良云 张海华 杨童奥

7768 基于蛋白激酶 B/哺乳动物雷帕霉素靶蛋白/磷酸酶与张力蛋白同源物通路解析氨气暴露致白羽肉鸡嗅黏膜细胞自噬与坏死的分子机制 石志芳 韦瑞婷 徐子珂 王晓彤 高水林 石正阳 李丹丹 侯怡菲 刘 健 张春霞 席 磊

7783 饲粮抗性淀粉对育肥绵羊瘤胃上皮形态和炎症反应的影响 田 可 陈亚婷 彭 聪 柳君辉 八代田真人 黄文明 夏耀耀 赵永聚

7797 过氧化氢诱导奶牛乳腺上皮细胞内质网应激模型的建立 宋 岩 田 晔 闫素梅 郭咏梅 赵艳丽 郭晓宇 张清月

7808 不同去势程度对筠连黄牛空肠内脂质代谢、营养物质转运吸收相关基因表达及微生物群落结构的影响 王凯文 姜雅慧 冯恒博 游雨婷 代 鹏 王之盛 胡 瑞 彭全辉 邹华围 肖鉴鑫 李江凌

7827 脂环肽 brevicidine 检测方法与稳定性研究 黄 升 岳亮光 黄浩成 陈 利 丁修良 苏国旗

7839 不同透析膜对离体消化法测定肉鸡玉米代谢能的影响及适用性比较 孙耀威 李 凯 张连华 伊 宝 王 阳 钟儒清 陈 亮 张宏福

7849 毛叶山桐子副产物营养成分分析 陈冬梅 陈光国 陈 耀 申世安

7859 不同品种、诱导剂处理及调制方式对红三叶草异黄酮含量的影响 熊展博 张鹤山 郑 楠 王加启 赵圣国

7870 不同品种肉牛源屎肠球菌的代谢物与其体外益生特性的关联研究 刘 倩 陈晓东 孙庆余 钟荣珍

7894 饲用玉米蛋白粉养分分析及仿生法评定其在黄羽肉鸡上的营养价值 姜亭亭 赵文龙 曹 宁 赵桂苹 王钰明 萨仁娜

7905 正交设计与响应面法联合优化氧化钙处理玉米秸秆工艺参数及瘤胃降解特性评价 王思凯 白 冰 姜松言 祝 冰 侯进焘 黄海豪 李凌岩

7919 菌酶混合发酵对棕榈粕营养价值、瘤胃降解特性和体外发酵的影响 裴雨爽 尹海兵 裴雨婕 马宇飞 王子辉 栗莹敏 牛许达 郭晓淼 徐宏建 马峰涛 李建国 高艳霞

7932 基于逼近理想解排序法的菌酶协同发酵机采棉渣参数优化 蒲喆焕 苏卉欣 杨石红 马 银 陈 栋 袁国宏 许贵善 哈丽代·热合木江

7947 蔬菜尾菜与非常规饲料原料混合发酵条件优化与效果分析 卢宗艳 郭昕格 胡永萍 张志东 胡礼平 何思慧 常 华 项 勋

7963 品种和收割部位对豇豆尾菜营养价值、分子结构及瘤胃体外发酵特性的影响 余 晨 马 静 邱时秀 许祯莹 刘 榕 罗嘉植 张 蒙 锁 虎 史海涛 王 茜

7978 薏仁米提取物对关岭黄牛体外产气量、瘤胃发酵参数及微生物区系的影响 高成成 周 迪 杨 蓉 班一鸣 李培瑶 王 杰 代娅玲 杨颜铭 谢双龙 陈 睿 卢 琦 田兴舟

CHINESE JOURNAL OF ANIMAL NUTRITION

Collected by CSCD Core Library, Scopus Database, CAB Abstracts and Chemical Abstracts

Volume 38 Number 10 October 2026

CONTENTS

REVIEW

7171 Mechanism of Plant Extracts on Liver X Receptor Mediated Mastitis and Milk Fat Metabolism in Dairy Cows — WANG Lifang, YANG Jian

7179 Research Progress on Rumen Microbial Regulatory Mechanisms of Feed Efficiency and Estrogen-Microbiota Interactions in Dairy Cows — JIANG Xingwei, ZHANG Chenguang, WU Shengru, YAO Junhu

7187 Fiber Degradation System of *Ruminococcus albus* and Its Application Potential as a Nutritional Regulation Target — CHANG Shuaifei, ZHANG Jiarui, ZHANG Lili, XU Xiaofeng

7201 Physiological Functions of Sanguinarine and Its Application in Animal Production — ZHAO Ruohan, LI Yongxiang, YU Weirong, YE Yanlin

7215 Research Progress on Enrichment and Application of Lutein in Different Animal-Derived Foods — GAO Shan, ZHOU Jianmin, WU Shugeng

7226 Mechanisms by Which Oxidative Stress Affects Porcine Oocyte Quality and Advances in Nutritional Regulation — TANG Guocheng, LI Hongyu, ZHUO Yong, ZHOU Pan

7242 Adipose Tissue Metabolic Disorders in Periparturient Dairy Cows and Their Nutritional Regulation — HAN Shilin, HE Yingrui, JIANG Linshu, ZHAO Yuchao

7254 Research Progress on Factors Affecting Feed Conversion Efficiency in Ruminants — SUN Xinhu, SHA Zhihang, XU Xiaofeng, MA Yulin

7268 Research Progress on Colonization Patterns and Functional Characteristics of Rumen Microbiota and Their Roles in Animal Production — WANG Yan, ZHAO Xin, ZHAO Xiaobo, JIANG Linshu

7279 Research Progress on Pathogenesis and Nutritional Interventions of Canine Obesity — LI Bin, LIU Chengwu

7288 Physiological Functions of Methionine and Its Effects on Animal Intestinal Barrier — LU Chunru, GAN Haiqing, HAN Li, HUANG Xingguo

7300 Mechanisms of *Limosilactobacillus mucosae* in Regulating Animal Gut Health and Its Application Prospects in Animal Production — LI Xiaoyu, CHEN Zhong, LI Hua, LUO Yuheng

7310 Research Progress on Function of Complement System in Immune Regulation of Livestock and Poultry and Its Nutritional Intervention — CHEN Fanxing, TANG Zhiru, WANG Li, HU Shenglan

7322 Research Progress on Biological Activities of Resveratrol and Its Applications in Livestock and Poultry Production — LIU Yafei, LEI Mengni, ZHOU Jianmin, WU Shugeng

7333 Safety Evaluation System of Bio-Manufacturing Feed Additives and Their Applications in Livestock and Poultry Production — BIAN Zhiwen, HAN Ruyi, HAN Yunsheng, JIANG Xianren

RESEARCH PAPER

7347 Determination and Prediction Model Establishment of Digestible Energy and Metabolizable Energy of Wheat in Growing Pigs — ZHOU Xiaorong, LI Houhua, HUANG Ping, YAO Yanchu, LONG Dingbiao, ZHONG Xiaoxia, LIU Zuohua

7360 Correlation Analysis of Myosin Heavy Chain Isoforms Expression with Meat Quality Traits and Activities of Energy Metabolism Key Enzyme in *Longissimus dorsi* of Pigs — LI Zhongqiu, LIU Chunlong, WU Saihui, HE Haijuan, TIAN Ming, QI Meiyu, YANG Haicheng, HE Xinmiao, LIU Di, WANG Wentao

7369 Effects of Pyrroloquinoline Quinone Disodium on Reproductive Performance, Antioxidant Capacity, Immune Function and Fecal Microbiota of Sows — YANG Yuhan, LUO Weicai, ZHOU Shichun, LI Jiang, LUO Junqiu

7384 Effects of Dietary Supplementation with *Sargassum* Polysaccharide on Growth Performance, Immune Function, Intestinal Health and Serum Metabolites of Weaned Piglets — DONG Chunlin, ZHANG Chenyang, LIU Shuyang, WU Qiwen, GU Fang

7400 Effects of Partial Replacement of Soybean Meal with Fermented Rapeseed Cake on Growth Performance, Blood Indices, Fecal Microbiota and Metabolites of Tibetan Piglets — HU Chenguang, YANG Ying, WANG Jiang, WU Yucheng, DONG Weikang, TAN Kaiwen, LIU Suozhu, SHANG Peng, WANG Leli, TAN Zhankun

7420 Effects of Mannan Oligosaccharides and/or *Lactobacillus salivarius* on Slaughter Performance, Meat Quality and Hepatic and Renal Trace Element Homeostasis of Yellow-Feathered Broilers — CHEN Dawei, LIU Yinyin, MA Li'na, TANG Xiujun, GE Qinglian, LU Junxian, ZHOU Qian, DING Hongmei, GAO Yushi

7430 Effects of Different Proportions of High-Protein Corn on Growth Performance, Slaughter Performance, Meat Quality and Intestinal Health of Broilers — YAN Lei, AN Sha, LYU Xiaoguo, YANG Qing, XU Jieting, YANG Lijie, NIE Wei, YU Aibing, TAO Yuling

7442 Effects of Compound of *Helianthus tuberous* L. Polysaccharide and *Lycium barbarum* Polysaccharide on Growth Performance, Serum Biochemical Indexes, Antioxidant Function and Expression of Antioxidant-Related Genes in Liver of Broilers — SONG Xiumei, WANG Hui, LIU Bing, CHU Yuhong, SHI Xueping, ZHU Yimin, WANG Shubai, ZHOU Chuanfeng

7453 Effects of Castor Leaf Powder on Growth Performance, Slaughter Performance, Nutrient Apparent Metabolic Rates and Serum Indices of White-Feathered Broilers — DING Tianning, WANG Runlian, ZHANG Wenhui, WU Peiling, XIE Yingxin, YONG Yanhong

7468 Effects of *Codonopsis pilosula-Glycyrrhiza uralensis* Extract on Growth Performance, Slaughter Performance, Meat Quality, Serum Indices and Intestinal Health of Yellow-Feathered Broilers — YANG Sanhang, CHAO Zhe, CAI Yanzi, WANG Long, ZHANG Fengyu, SHI Yan, YUAN Ziwen, WEI Yanming

7484 Effects of Fermented Preparation of *Pseudostellaria heterophylla* Fibrous Roots on Growth Performance, Serum Hormone Indices and mRNA Expression of Related Hormone in Liver and Jejunum of White-Feathered Broilers — HUANG Menghao, LIU Caixia, XIAO Jingxi, QIN Fengyuan, CUI Hongjie, LI Jian, ZHANG Yanda, MA Yufang

7493 Effects of Ferulic Acid on Growth Performance, Intestinal Morphology and Anti-Inflammatory and Antioxidant Functions of Broilers Infected with *Salmonella pullorum* — LI Xinyu, CHENG Jiale, LIAO Xiudong, ZHANG Liyang, LI Xiaoran, WANG Chong, ZHANG Bianying, LYU Lin

7503 Effects of Dietary Selenium Source and Selenium Supplemental Level on Tissue Selenium Contents and Antioxidant Capacity of Broilers — QIN Zhuoyi, MA Keying, CHENG Jiale, XIE Xiulan, LYU Lin, ZHANG Liyang, LIAO Xiudong

7519 Evaluation of Standardized Ileal Digestibility of Amino Acids of Wheat Middlings and Establishment of Prediction Equations in Laying Hens during Peak Laying Period — ZHANG Lu, DING Xuemei, ZENG Qiufeng, BAI Shiping, LIU Yan, ZHANG Ruinan, ZHANG Keying, WANG Jianping

7530 Effects of Salidroside on Growth Performance, Slaughter Performance, Meat Quality and Antioxidant Capacity of Meat Ducks under High Stocking Density Conditions — XU Yeqi, YAN Lei, ZHANG Keying, DING Xuemei, BAI Shiping, WANG Jianping, LIU Yan, ZENG Qiufeng

7542 Study on Prediction Model for Net Energy Requirement of *Xupu* Female Geese during 1 to 63 Days of Age — LYU Zonghao, XIAO Yanqing, ZHU Chuanxin, CHEN Can, XIANG Shuhan, ZHANG Zhizhong, DENG Wei, LIN Qian, CHEN Qinghua

7552 Comparative Analysis of Proximate Nutritional Components and Rumen Degradation Characteristics of Forage Triticale Hay and Oat Hay in Dairy Cows — LIU Tingting, FU Yurong, PENG Peng, CHEN Xi, LIANG Shuang, SHI Shaoqing, ZHAO Liansheng, WANG Kun

7565 Effects of *Echinacea purpurea* Extract on Lactation Performance, Serum Indices and Rumen Fermentation Parameters and Microbiota of Dairy Cows in Mid-Lactation — MA Yufei, MA Fengtao, GUO Xiaomiao, WANG Zihui, LI Yingmin, PEI Yushuang, XU Hongjian, LI Jianguo, GAO Yanxia

7579 Effects of Coated Cobalamin and Biotin on Lactation Performance, Rumen Fermentation, Serum Indices and Liver Forkhead Box O Signaling Pathways in Dairy Cows — JING Yuqian, ZHANG Yujie, FENG Jiaxin, SUN Nan, WANG Yong, FENG Jiang, HUO Wenjie, GUO Gang, LIU Qiang, WANG Cong

7591 Study on Differences in Growth Performance, Nutrient Apparent Digestibility, Slaughter Performance and Meat Quality of Steers from Different Breeds — ZHANG Bianying, LIU Dingyun, ZHANG Yuanqing, LI Bo, XU Fang, WANG Dongcai, WANG Honghao

7605 Study on Differences in Rumen Fermentation Parameters and Fatty Acids Composition of Simmental Beef Cattle under Barn Feeding and Grazing Conditions — SUN Mengxu, WU Zhaohai, BU Dengpan

7616 Effects of Diets with Different Proportions of Distiller's Grains on Calcium and Phosphorus Metabolism, Serum Indices and Plasma Metabolome in Beef Cattle — YU Hulong, TANG Dengke, ZHANG Jin, CHEN Yu, WAN Kun, TIAN Ke, HUANG Wenming

7628 Effects of Lactose-Containing Starter on Growth and Development, Nutrient Apparent Digestibility and Rumen Fermentation Parameters of Calves — DU Zhiguang, WANG Yiqiang, CAO Yang, LI Tingyu, XUE Feng, LIN Xueyan, WANG Chunwei, XIN Hangshu

7640 Effects of Dietary Supplementation of Rumen-Protected Glucose and Cocamidopropyl Betaine on Growth Performance, Serum Indices, and Rumen Fermentation Parameters and Microbial Community of Yaks under Transportation Stress — TANG Rui, ZHAO Yanfei, ZENG Yu, WANG Xiaolin, ZHAO Shoupei, SHAO Chong, HU Rui, PENG Quanhui, XIAO Jianxin, WANG Lizhi, WANG Zhisheng, XUE Bai, ZHOU Jia

7652 Effects of Dietary Combined Supplementation of Guanidinoacetic Acid and *Saccharomyces cerevisiae*-Cellulase Complex on Small Intestine Development, Digestive Enzyme Activities, Serum Biochemical Indices and Immune Function of Meat Sheep — LI Xiuli, YANG Jufeng, SU Dan, LI Chaoyun, CAO Jiangtao, DING Yinglong, YANG Qingli, LI Qiang, HE Menglian

7666 Effects of Dietary Tea Polyphenols on Growth Performance, Slaughter Performance, Organ Development and Intestinal Microbiota Structure of *Hu* Sheep — ZHAN Jinshun, JIANG Haoyun, JIA Haobin, ZHONG Xiaojun, HUO Junhong

7679 Effects of Replacing Inorganic Trace Minerals with Organic Trace Minerals on Apparent Digestibility and Tissue Deposition of Trace Elements in *Wendeng* Dairy Goat Kids — LI Kangxia, JING Maozhan, CHEN Jia, WANG Yue, SHEN Shuo, GUO Yixuan, ZHU Fenghua

7690 Effects of Individual or Combined Supplementation of *Astragalus* Straw and *Lactobacillus rhamnosus* on Growth Performance, Serum Indices and Energy Metabolism of Lambs — JIAO Na, MA Chi, FENG Wangmei, LI Honghe, SHEN Yuhua, LI Ying, FENG Xiaofang, GUO Penghui, YANG Siqiu, ZHENG Juanshan

7702 Effects of Replacing Different Proportions of Fish Meal with *Scenedesmus* on Growth Performance, Serum Biochemical Indices and Liver Health of *Songpu* Mirror Carp (*Cyprinus carpio* var. Songpu mirror) — GAO Yiqi, FAN Ze, WU Di, LI Chenhui, JIANG Yongjie, WANG Baozhen, LI Yanjun, CHENG Zhenyan, WANG Liansheng

7719 Effects of Dietary Protein Level on Growth Performance, Body Composition, Intestinal Digestive Enzyme Activities and Hepatopancreas Antioxidant Parameters of *Acrossocheilus fasciatus* — ZHANG Jin, JIANG Jianhu, GUO Jianlin, SUN Lihui, LI Qian, CHEN Jianming
7729 Effects of Different Lipid Sources in Low-Fish Meal Diets on Growth, Lipid Metabolism and Intestinal Health of Juvenile Rainbow Trout (*Oncorhynchus mykiss*) — WANG Shuai, WANG Huamin, JIANG Zhilin, LIU Kangrun, LU Kangle, LIU Hongbai, WANG Chang'an, YANG Yuhong
7746 Effects of Dietary Supplementation of Sodium Butyrate and Nano-Zinc Oxide on Growth Performance, Serum Biochemical and Antioxidant Indices, and Intestinal Health of Meat Rabbits — LUO Jinwei, LI Juan, LANG Yi, LEI Min, ZHENG Jie, LI Yuying, KUANG Liangde, LI Congyan, KE Yanhang, FU Shicheng, GUO Zhiqiang, LYU Jingzhi
7759 Effects of Dietary Yeast Culture Supplementation on Growth Performance, Nutrient Apparent Digestibility and Serum Biochemical Indicators of Ussuri Raccoon Dogs during Growing Period — HUANG Yiran, YAN Shuxin, LIU Yuxiao, LIU Yide, LUO Peining, JI Chenghao, QIU Kai, CHEN Liangyun, ZHANG Haihua, YANG Tongao
7768 Ammonia Exposure Induces Autophagy and Necrosis in Olfactory Mucosal Cells of White-Feathered Broilers via Protein Kinase B/Mammalian Target of Rapamycin/Phosphatase and Tensin Homolog Pathway: A Molecular Mechanism Study — SHI Zhifang, WEI Ruiting, XU Zike, WANG Xiaotong, GAO Shuilin, SHI Zhengyang, LI Dandan, HOU Yifei, LIU Jian, ZHANG Chunxia, XI Lei
7783 Dietary Resistant Starch on Rumen Epithelium Morphology and Inflammatory Response of Fattening Sheep — TIAN Ke, CHEN Yating, PENG Cong, LIU Junhui, YAYOTA Masato, HUANG Wenming, XIA Yaoyao, ZHAO Yongju
7797 Establishment of Hydrogen Peroxide-Induced Endoplasmic Reticulum Stress Model in Bovine Mammary Epithelial Cells — SONG Yan, TIAN Ye, YAN Sumei, GUO Yongmei, ZHAO Yanli, GUO Xiaoyu, ZHANG Qingyue
7808 Effects of Different Degrees of Castration on Expression of Genes Related to Lipid Metabolism, Nutrient Absorption and Transport, and Microbial Community Structure in Jejunum of *Junlian* Cattle — WANG Kaiwen, JIANG Yahui, FENG Hengbo, YOU Yuting, DAI Peng, WANG Zhisheng, HU Rui, PENG Quanhui, ZOU Huawei, XIAO Jianxin, LI Jiangling
7827 Study on Detection Method and Stability of Lipocyclopeptide Brevicidine — HUANG Sheng, YUE Liangguang, HUANG Haocheng, CHEN Li, DING Xiuliang, SU Guoqi
7839 Effects of Different Dialysis Membranes on Determination of Metabolizable Energy of Corn for Broilers Using *in vitro* Digestion Method and Their Applicability Comparison — SUN Yaowei, LI Kai, ZHANG Lianhua, YI Bao, WANG Yang, ZHONG Ruqing, CHEN Liang, ZHANG Hongfu
7849 Analysis of Nutritional Components of *Idesia polycarpa* By-Products — CHEN Dongmei, CHEN Guangguo, CHEN Yao, SHEN Shian
7859 Effects of Different Variety, Elicitor Treatment and Processing Method on Isoflavone Content in Red Clover — XIONG Zhanbo, ZHANG Heshan, ZHENG Nan, WANG Jiaqi, ZHAO Shengguo
7870 Study on Association between Metabolites of *Enterococcus faecium* from Different Beef Cattle Breeds and Their *in Vitro* Probiotic Properties — LIU Qian, CHEN Xiaodong, SUN Qingyu, ZHONG Rongzhen
7894 Nutrient Analysis of Feed Corn Gluten Meal and Evaluation of Its Nutritional Value in Yellow-Feathered Broilers by Biomimetic Method — JIANG Tingting, ZHAO Wenlong, CAO Ning, ZHAO Guiping, WANG Yuming, SA Renna
7905 Optimization of Process Parameters for Calcium Oxide Treatment of Corn Stover by Combined Orthogonal Design and Response Surface Methodology and Evaluation of Its Ruminal Degradation Characteristics — WANG Sikai, BAI Bing, JIANG Songyan, ZHU Bing, HOU Jintao, HUANG Haihao, LI Lingyan
7919 Effects of Mixed Fermentation with Bacteria and Enzyme on Nutritional Value, Rumen Degradation Characteristics and *in Vitro* Fermentation of Palm Kernel Meal — PEI Yushuang, YIN Haibing, PEI Yujie, MA Yufei, WANG Zihui, LI Yingmin, NIU Xuda, GUO Xiaomiao, XU Hongjian, MA Fengtao, LI Jianguo, GAO Yanxia
7932 Parameter Optimization for Bacteria-Enzyme Co-Fermentation of Machine-Harvested Cotton Residue Based on TOPSIS — PU Zhehuan, SU Huixin, YANG Shihong, MA Yin, CHEN Dong, YUAN Guohong, XU Guishan, HALIDAI Rehemujiang
7947 Optimization of Fermentation Conditions and Effect Analysis of Vegetable Waste Mixed with Non-Conventional Feed Ingredients — LU Zongyan, GUO Xinge, HU Yongping, ZHANG Zhidong, HU Liping, HE Sihui, CHANG Hua, XIANG Xun
7963 Effects of Varieties and Harvest Parts on Nutritional Value, Molecular Structure and Rumen *In Vitro* Fermentation Characteristics of Cowpea Residues — YU Chen, MA Jing, QIU Shixiu, XU Zhenying, LIU Rong, LUO Jiazhi, ZHANG Meng, SUO Hu, SHI Haitao, WANG Xi
7978 Effects of Coix Seed Extract on *in Vitro* Gas Production, Rumen Fermentation Parameters and Microbiota of *Guanling* Yellow Cattle — GAO Chengcheng, ZHOU Di, YANG Rong, BAN Yiming, LI Peiyao, WANG Jie, DAI Yaling, YANG Yanming, XIE Shuanglong, CHEN Rui, LU Qi, TIAN Xingzhou