

水产学报 2018 年 第 42 卷 第 5 期

目 次

黄颡鱼 FZD 家族 4 个基因的克隆、组织表达及对铜的响应 张丽晗, 罗 智, 有文静, 李丹丹, 吴 坤, 潘亚雄 (625)	
中国明对虾 <i>Dscam</i> 基因的克隆及其在免疫致敏 (类免疫) 诱导反应中的表达分析 曹家旺, 孟宪红, 孔 杰, 史晓丽, 栾 生, 罗 坤, 董丽君, 陈宝龙 (633)	
日本沼虾 N- 乙酰 - β -D- 氨基葡萄糖苷酶基因克隆及 KK-42 对其表达的影响 吕艳杰, 关建议, 杜 娟, 宁黔冀 (646)	
雌激素拮抗剂对三疣梭子蟹卵巢发育及相关基因表达的影响 陆 洋, 吴旭干, 柳梅梅, 巩 杰, 成永旭 (653)	
菲律宾蛤仔不同发育时期及成体不同组织中内参基因筛选 牟政强, 闫路路, 王化敏, 霍忠明, 闫喜武 (663)	
岛礁海域保护型人工鱼礁选址适宜性评价 曾 旭, 章守宇, 林 军, 钟佳明 (673)	
莱州湾头足类的群落结构及其与环境因子的关系 吴 强, 陈瑞盛, 左 涛, 关丽莎, 金显仕 (684)	
带鱼保护区春秋季鱼类群落特征及与环境因子的关系 胡翠林, 张洪亮, 张亚洲, 潘国良, 徐开达, 毕远新, 梁 君, 王好学, 周永东 (694)	
基于海表温因子的太平洋褶柔鱼冬生群资源丰度预测模型比较 张 硕, 李 莉, 陈新军 (704)	
基于 Ecopath 模型的复合养殖池塘构建 曾宪磊, 魏宝成, 刘兴国, 顾兆俊, 陆诗敏, 车 轩 (711)	
养殖蟹的引入对稻田土壤细菌群落结构的影响 罗 衡, 赵良杰, 李 丰, 郭海松, 沈 斌, 刘其根 (720)	
小麦蛋白粉替代鱼粉对大黄鱼幼鱼生长、血清生化指标及抗氧化能力的影响 王 萍, 娄宇栋, 冯 建, 何娇娇, 竺俊全, 周歧存 (733)	
复合蛋白源替代鱼粉对杂交鳢生长、体组成与生化指标的影响 林仕梅, 马卉佳, 徐 韬, 陈拥军, 黄先智 (744)	
n-3/n-6 HUFA 对大菱鲆幼鱼生长性能、全鱼脂肪酸组成和血清生化指标的影响 谭 青, 王际英, 李宝山, 李学丽, 郝甜甜, 张利民 (754)	
不同糖及糖水平对松浦镜鲤养殖过程中糖代谢相关基因表达的影响 李晋南, 王常安, 王连生, 赵志刚, 罗 亮, 徐奇友 (766)	
不同碳水化合物和蛋白质水平膨化饲料对大规模草鱼生长、肠道消化酶及血清指标的影响 胡 毅, 陈云飞, 张德洪, 陈 团, 刘 波, 高启平 (777)	
杜仲对草鱼生长、肌肉品质和胶原蛋白基因表达的影响 许晓莹, 李小勤, 孙文通, 姜维波, 潘雯倩, 汪军鹏, 土志涵, 冷向军 (787)	
天津市周边地区养殖凡纳滨对虾肠道菌株的分离鉴定及耐药性分析 左志晗, 李艳红, 邵迎春, 耿绪云, 董学旺, 孙金生 (797)	
· 综述 ·	
南极磷虾生物量估算方法 许柳雄, 王 腾, 朱国平, 童剑锋 (808)	

JOURNAL OF FISHERIES OF CHINA

Vol.42, No.5, 2018

CONTENTS

- Molecular characterization and tissue distribution of Frizzled (FZD) in yellow catfish (*Pelteobagrus fulvidraco*) by copper exposure ZHANG Lihan, LUO Zhi, YOU Wenjing, LI Dandan, WU Kun, PAN Yaxiong(625)
- Cloning and expression analysis of the *Dscam* gene during the inducing immune priming (Quasi-immune) response in *Fenneropenaeus chinensis* CAO Jiawang, MENG Xianhong, KONG Jie, SHI Xiaoli, LUAN Sheng, LUO Kun, DONG Lijun, CHEN Baolong(633)
- Molecular cloning of N-acetyl- β -D-glucosaminidase (*NAGase*) gene and the effect of KK-42 on *NAGase* gene in *Macrobrachium nipponense* LÜ Yanjie, GUAN Jianyi, DU Juan, NING Qianji(646)
- Effects of estrogen antagonist on ovarian development and expression of related genes to ovarian development of *Portunus trituberculatus* LU Yang, WU Xugan, LIU Meimei, GONG Jie, CHENG Yongxu(653)
- The selection of reference genes in different development stages and different tissues of *Ruditapes philippinarum* MU Zhengqiang, YAN Lulu, WANG Huamin, HUO Zhongming, YAN Xiwu(663)
- Site selection suitability assessment for protective artificial reefs in island area ZENG Xu, ZHANG Shouyu, LIN Jun, ZHONG Jiaming(673)
- Community structure of Cephalopods and its relationships with environmental factors in Laizhou Bay, Bohai Sea WU Qiang, CHEN Ruisheng, ZUO Tao, GUAN Lisha, JIN Xianshi(684)
- Fish community structure and its relationship with environmental factors in the Nature Reserve of *Trichiurus japonicus* HU Cuilin, ZHANG Hongliang, ZHANG Yazhou, PAN Guoliang, XU Kaida, BI Yuanxin, LIANG Jun, WANG Haoxue, ZHOU Yongdong(694)
- A comparative study on forecasting model of the stock abundance index for the winter-spawning cohort of *Todarodes pacificus* in the Pacific Ocean based on the factor of SST ZHANG Shuo, LI Li, CHEN Xinjun(704)
- Analysis of compound culturing pond build based on Ecopath model ZENG Xianlei, WEI Baocheng, LIU Xingguo, GU Zhaojun, LU Shimin, CHE Xuan(711)
- Effects of the introduction of cultured turtle on soil bacterial community structure in paddy field LUO Heng, ZHAO Liangjie, LI Feng, GUO Haisong, SHEN Hong, LIU Qigen(720)
- Effects of replacing fish meal with wheat gluten meal on growth, serum biochemical indexes and antioxidant enzyme activity of juvenile large yellow croaker (*Larimichthys crocea*) WANG Ping, LOU Yudong, FENG Jian, HE Jiaojiao, ZHU Junquan, ZHOU Qicun(733)
- Effects of replacing fish meal with compound proteins on the growth, body composition and biochemical indices of hybrid snakehead LIN Shimei, MA Huijia, XU Tao, CHEN Yongjun, HUANG Xianzhi(744)
- Effects of dietary n-3/n-6 HUFA on growth performance, fatty acid composition of whole fish and serum biochemical indices in turbot (*Scophthalmus maximus*) TAN Qing, WANG Jiying, LI Baoshan, LI Xueli, HAO Tiantian, ZHANG Limin(754)
- Effects of different carbohydrates and different carbohydrate levels on mRNA expression of glucose metabolism related genes in different feeding stages of Songpu mirror carp (*Cyprinus carpio*) LI Jinnan, WANG Chang'an, WANG Liansheng, ZHAO Zhigang, LUO Liang, XU Qiyu(766)
- Effects of different dietary carbohydrate and protein levels on growth, intestinal digestive enzymes and serum indexes in large-size grass carp (*Ctenopharyngodon idella*) HU Yi, CHEN Yunfei, ZHANG Dehong, CHEN Tuan, LIU Bo, GAO Qiping(777)
- Effects of dietary *Eucommia ulmoides* on growth, flesh quality, and collagen gene expression of grass carp (*Ctenopharyngodon idella*) XU Xiaoying, LI Xiaoqin, SUN Wentong, JIANG Weibo, PAN Wenqian, WANG Junpeng, TU Zhihan, LENG Xiangjun(787)
- Isolation, identification and antibiotic resistance analysis of intestinal strains of aquaculture *Litopenaeus vannamei* in surrounding areas of Tianjin ZUO Zhihan, LI Yanhong, SHAO Yingchun, GENG Xuyun, DONG Xuewang, SUN Jinsheng(797)
- ROUNDUP •
- Methods for biomass estimation of Antarctic krill(*Euphausia superba*): a review XU Liuxiong, WANG Teng, ZHU Guoping, TONG Jianfeng(808)