

# 水产学报 2010 年 第 34 卷 第 12 期

## 目 次

- 半滑舌鳎家系建立及其生长和抗病性能测定 ..... 陈松林, 杜 民, 杨景峰, 胡乔木, 徐 营, 翟介明(1789)
- 史氏鲟和达氏鳇养殖亲鱼群体遗传多样性分析 ..... 牛翠娟, 胡红霞, 罗 静, 李 陈(1795)
- 人工条件下日本鳗鲡胚胎及早期仔鱼发育的生物学特征 ..... 柳 凌, 张洁明, 郭 峰, 张 涛(1800)
- 亚硝酸盐对红螯光壳螯虾不同组织免疫相关酶活性及超微结构的影响  
..... 吕晓燕, 李嘉尧, 方 燕, 郭占林, 赵云龙, 李 恺(1812)
- 体外诱导日本鳗精子顶体反应的形态变化与诱导条件  
..... 许星鸿, 阎斌伦, 徐加涛, 徐国成, 邵营泽, 吴建新, 戴 钧(1821)
- 汞离子胁迫对红鳍笛鲷抗氧化酶及乙酰胆碱酯酶活性的影响 ..... 王学锋, 陈海刚, 蔡文贵, 秦洁芳, 贾晓平(1829)
- “东优 1 号”杂色鲍及其亲本群体的形态特征和养殖性能比较  
..... 游伟伟, 骆 轩, 王德祥, 林壮炳, 林焕阳, 柯才焕(1837)
- 条斑紫菜 *HSP90* 基因的克隆与表达分析 ..... 周向红, 李信书, 王 萍, 阎斌伦, 滕亚娟, 易乐飞(1844)
- 海带组织降解过程中定殖微生物群落的特征 ..... 许 强, 高 菲, 杨红生(1853)
- 紫外辐射对浒苔孢子附着、萌发和幼苗生长的影响 ..... 李信书, 冯子慧, 霍元子, 徐军田, 何培民(1860)
- 红鼻鱼群体结构的数学建模与仿真可视化 ..... 柳玲飞, 周应祺, 钱卫国, 赵 媛, 王 明(1869)
- 西南大西洋拉氏南美南极鱼生物学特性的初步研究 ..... 朱国平, 许柳雄, 陈新军(1877)
- 日本鳗鲡胶原蛋白和小清蛋白的过敏原性 ..... 刘光明, 史千玉, 蔡秋风, 潘冰青, 翁武银, 苏文金, 曹敏杰(1883)
- 草鱼的两种新型免疫球蛋白基因 *IgZ-2* 和 *IgM-IgZ* ..... 肖凡书, 许巧情, 王欣欣, 聂 品(1891)
- 碳源对反硝化聚磷菌(RC11)磷酸盐代谢的影响 ..... 郑宗林, 叶金明, 刘 波, 杨先乐, 周兴华, 向 泉(1901)
- 鱼源嗜水气单胞菌质粒的指纹图谱及其与耐药性的关系 ..... 洪 经, 潘连德(1908)
- 饲料中菜粕和棉粕的不同配比对异育银鲫生长性能、血浆生化指标和棉酚残留的影响  
..... 蒋春琴, 冷向军, 李小勤, 范 英, 史少奕, 罗运仙(1917)

# JOURNAL OF FISHERIES OF CHINA

Vol. 34, No. 12, 2010

## CONTENTS

- Development and characterization for growth rate and disease resistance of families in half-smooth tongue sole (*Cynoglossus semilaevis*) ..... CHEN Song-lin, DU Min, YANG Jing-feng, HU Qiao-mu, XU Ying, ZHAI Jie-ming(1789)
- Genetic diversity in the reserved parent fish broodstocks of *Asipenser schrenckii* and *Huso dauricus* ..... NIU Cui-juan, HU Hong-xia, LUO Jing, LI Chen(1795)
- Biological characteristics of embryo and larval development in Japanese eel under artificial incubation ..... LIU Ling, ZHANG Jie-ming, GUO Feng, ZHANG Tao(1800)
- Nitrite stress on immune-related enzymes and the ultrastructure in different tissue of redclaw crayfish (*Cherax quadricarinatus*) ..... LV Xiao-yan, LI Jia-yao, FANG Yan, GUO Zhan-lin, ZHAO Yun-long, LI Kai(1812)
- Morphological changes and induced conditions of acrosome reaction *in vitro* induction of sperm from marine crab (*Charybdis japonica*) ..... XU Xing-hong, YAN Bin-lun, XU Jia-tao, XU Guo-cheng, SHAO Ying-ze, WU Jian-xin, DAI Jun(1821)
- Effects of mercury exposure on the antioxidant enzymes and acetylcholinesterase activities in the young crimson snapper (*Lutjanus erythropterus*) ..... WANG Xue-feng, CHEN Hai-gang, CAI Wen-gui, QIN Jie-fang, JIA Xiao-ping(1829)
- Comparisons of morphological characteristics and grow-out performance in new variety "Dongyou No. 1" and its parental populations of small abalone *Haliotis diversicolor* ..... YOU Wei-wei, LUO Xuan, WANG De-xiang, LIN Zhuang-bing, LIN Huan-yang, KE Cai-huan(1837)
- Molecular cloning and expression analysis of *HSP90* gene from *Porphyra yezoensis* Ueda(Bangiales, Rhodophyta) ..... ZHOU Xiang-hong, LI Xin-shu, WANG Ping, YAN Bin-lun, TENG Ya-juan, YI Le-fei(1844)
- Micro organism colonization in different decomposing phases of kelp (*Laminaria japonica*) ..... XU Qiang, GAO Fei, YANG Hong-sheng(1853)
- The influence of UV radiation on the zoospores of the greentide macroalga (*Ulva prolifera*) ..... LI Xin-shu, FENG Zi-hui, HUO Yuan-zi, XU Jun-tian, HE Pei-min(1860)
- Modeling and simulation on schooling structure of *Hemigrammus bleheri* ..... LIU Ling-fei, ZHOU Ying-qi, QIAN Wei-guo, ZHAO Yuan, WANG Ming(1869)
- The biology characteristics of rockcod (*Patagonotothen ramsayi*) in the Southwestern Atlantic Ocean ..... ZHU Guo-ping, XU Liu-xiong, CHEN Xin-jun(1877)
- Allergenicity of collagen and parvalbumin from Japanese eel (*Anguilla japonica*) ..... LIU Guang-ming, SHI Qian-yu, CAI Qiu-feng, PAN Bing-qing, WENG Wu-yin, SU Wen-jin, CAO Min-jie(1883)
- Novel immunoglobulin heavy chain genes, IgZ-2 and IgM-IgZ in grass carp (*Ctenopharyngodon idellus*) ..... XIAO Fan-shu, XU Qiao-qing, WANG Xin-xin, NIE Pin(1891)
- Influence of carbon source on phosphate metabolism characteristics of denitrifying phosphate-accumulating organisms RC11 ..... ZHENG Zong-lin, YE Jin-ming, LIU Bo, YANG Xian-le, ZHOU Xing-hua, XIANG Xiao(1901)
- Analysing plasmid fingerprinting and relationship between plasmids and resistance in *Aeromonas hydrophila* from fish ..... HONG Jing, PAN Lian-de(1908)
- Effects of different proportion of rapeseed meal and cottonseed meal on growth performance, plasma biochemical indicators and gossypol residues of carp (*Carassius auratus gibelio*) ..... JIANG Chun-qin, LENG Xiang-jun, LI Xiao-qin, FAN Ying, SHI Shao-yi, LUO Yun-xian(1917)