

# 渔业科学进展

YUYE KEXUE JINZHAN

第46卷 第2期

2025年4月

中国科技核心期刊  
中文核心期刊  
全国优秀农业期刊  
中国科学引文数据库(CSCD)核心库来源期刊  
中国科技论文统计源核心期刊  
RCCSE 中国权威学术期刊  
中国期刊全文数据库(CNKI)、万方数据、  
中文科技期刊数据库(维普网)收录期刊  
中国海洋文献数据库(CODS)来源期刊  
英国《动物学记录》(ZR)收录期刊  
《水科学与渔业文摘》(ASF)收录期刊  
《剑桥科学文摘》(CSA)收录期刊  
《乌利希期刊指南》(UPD)收录期刊  
《开放获取期刊指南》(DOAJ)收录期刊

## 目次

### 研究综述

- 水产养殖尾水除磷技术研究进展.....李贤 田文静 张翔宇 徐文杰 李晓林 马腾 田诚 (1)  
鱼菜共生系统中的微生物群落研究进展与展望  
.....徐慧敏 陈曦 孟顺龙 周剑 范丁月 范立民 宋超 裘丽萍 李丹丹 方龙香 张露 (15)

### 研究论文

- 南海西部及珠江口海水和大气单环芳烃(BTEX)的分布、来源及环境效应评估  
.....王祖甜 徐锋 王雪 王健 乔浩 吴谨巍 张洪海 (27)  
夏季北黄海养马岛养殖区溶解甲烷浓度、影响因素及海-气交换通量  
.....周晨霞 温健文 翟方国 宋昌远 宋国栋 张桂玲 (40)  
茅尾海入海河口区柱状沉积物对磷的吸附行为特征  
.....杨斌 冯文慧 周孝萱 彭光煜 李嘉玉 莫小荣 (53)  
浒苔降解过程中颗粒有机碳、氮释放及相关微生物种群丰度变化研究  
.....赵苗苗 毕蓉 李鸿妹 宋欣荣 黄圣荣 冯秀婷 张海龙 李莉 赵美训 (64)  
流清河湾浮游生物群落对近海河口环境变化的不同响应及其关键驱动因素  
.....翁辰施 李志祥 王英哲 丁东生 崔正国 曲克明 胡海燕 魏玉秋 (76)  
基于浮游植物生物完整性的黄河口近岸海域生态健康评价  
.....牛明香 王俊 刘志国 左涛 程兆龙 李永涛 逢志伟 (93)  
江苏如东文蛤滩涂养殖区沉积物重金属分布特征及其与底栖动物的关系  
.....胡浩鹏 李磊 田伟 韩帅 王凤彪 蒋玫 (106)  
长岛附近海域夏秋季贝类毒素污染特征及潜在来源解析  
.....邓宇翔 程玲 吴海燕 袁承旭 谭志军 郑关超 (122)  
全氟辛酸(PFOA)及其醚羧酸替代品在菲律宾蛤仔体内的蓄积差异研究  
.....秦翰林 毕宇杰 姜舒祺 吴成辰 谭志军 耿倩倩 郭萌萌 (133)  
基于 eDNA 技术与传统渔具调查方法的万泉河鱼类多样性的比较研究  
.....雷俊 苏园园 尹连政 曾若菡 黎平 秦永强 蔡杏伟 刁晓平 (147)  
S<sup>0</sup>/牡蛎壳比例对海水硫自养反硝化性能及微生物群落的影响  
.....周瑀 李莹 宋协法 孙佐梁 董登攀 魏元戎 (162)  
基于转录组学探究微塑料与铜暴露对中华绒螯蟹肠道基因表达的影响  
.....徐建 冯广朋 严云志 陈锦辉 吴建辉 杨祖长 (173)  
添加碳源对大口黑鲈养殖池塘水质及细菌群落结构和功能的影响  
.....胡采芹 胡铁焕 刘乾甫 杨婉玲 曾艳艺 高原 李海燕 麦永湛 王超 (189)  
生物絮团模式下大口黑鲈养殖水环境及氮磷收支研究  
.....金渝钦 孟顺龙 徐慧敏 宋超 范立民 裘丽萍 李丹丹 (204)  
金属纳米颗粒对枯草芽孢杆菌和副溶血弧菌的生长毒性  
.....陈诗宇 夏斌 朱琳 李双 李秋芬 孙雪梅 戴伟 (216)  
测定纳米银在河口水体中对副溶血弧菌抑制效应的高效方法  
.....侯向祎 王笑旻 张圆圆 梁若寒 卢峰 杨倩倩 普小丹 张艳 曲克明 张旭志 (228)  
原位探究海水养殖浮漂破碎形成微塑料的特征  
.....刘国顺 赵信国 孙雪梅 朱琳 隋琪 魏曼曼 夏斌 (237)  
北美海蓬子对养殖尾水盐度和营养盐水平的适应能力研究  
.....迟赛赛 李秋芬 罗梓峻 孙波 田文杰 马莹 董志国 崔正国 (248)

# PROGRESS IN FISHERY SCIENCES

## CONTENTS

Vol.46 No.2 April 2025

Research Progress on Water Body Phosphorus Removal Technology Based on Aquaculture Tail Water Treatment .....	(1)
..... LI Xian, TIAN Wenjing, ZHANG Xiangyu, XU Wenjie, LI Xiaolin, MA Teng, TIAN Cheng	
Research Progress and Prospects of Microbial Communities in Aquaponic Systems .....	(15)
..... XU Huimin, CHEN Xi, MENG Shunlong, ZHOU Jian, FAN Dingyue, FAN Limin, SONG Chao, QIU Liping, LI Dandan, FANG Longxiang, ZHANG Lu	
Distribution, Sources, and Environmental Impact Assessment of Monocyclic Aromatic Hydrocarbons (BTEX) in the Western South China Sea and the Pearl River Estuary .....	(27)
..... WANG Zutian, XU Feng, WANG Xue, WANG Jian, QIAO Hao, WU Jinwei, ZHANG Honghai	
Distributions, Influencing Factors and Fluxes of Dissolved Methane in the Coastal Waters Adjacent to Yangma Island Aquaculture Area, North Yellow Sea in Summer .....	(40)
..... ZHOU Chenxia, WEN Jianwen, ZHAI Fangguo, SONG Changyuan, SONG Guodong, ZHANG Guiling	
Adsorption Behaviour Characteristics of Phosphorus in Core Sediments from the Main Estuaries of the Maowei Sea .....	(53)
..... YANG Bin, FENG Wenhui, ZHOU Xiaoxuan, PENG Guangyu, LI Jiayu, MO Xiaorong	
Release Dynamics of Particulate Organic Carbon and Nitrogen and the Related Microbial Abundance Variation during Degradation of <i>Ulva prolifera</i> .....	(64)
..... ZHAO Miaomiao, BI Rong, LI Hongmei, SONG Xinrong, HUANG Shengrong, FENG Xiuting, ZHANG Hailong, LI Li, ZHAO Meixun	
Differential Responses of Plankton Communities to Environmental Changes in the Liuqinghe Bay Estuary .....	(76)
..... WENG Chenshi, LI Zhixiang, WANG Yingzhe, DING Dongsheng, CUI Zhengguo, QU Keming, HU Haiyan, WEI Yuqiu	
Ecological Health Assessment on the Coastal Waters in the Yellow River Estuary Using Phytoplankton Index of Biotic Integrity (P-IBI) .....	(93)
..... NIU Mingxiang, WANG Jun, LIU Zhiguo, ZUO Tao, CHENG Zhaolong, LI Yongtao, PANG Zhiwei	
Distribution Characteristics of Heavy Metals in Sediments and Their Relationship with Benthic Fauna in the Clam Mudflat Aquaculture Area of Rudong, Jiangsu Province, China .....	(106)
..... HU Haopeng, LI Lei, TIAN Wei, HAN Shuai, WANG Fengbiao, JIANG Mei	
Pollution Characteristics and Potential Sources of Shellfish Toxins in Summer and Autumn in the Sea Area near Changdao Island .....	(122)
..... DENG Yuxiang, CHENG Ling, WU Haiyan, YUAN Chengxu, TAN Zhijun, ZHENG Guanchao	
Accumulation Differences in Perfluorooctanoic Acid and Its Ether Carboxylic Acid Alternatives in the Manila Clam ( <i>Ruditapes philippinarum</i> ) .....	(133)
..... QIN Hanlin, BI Yujie, JIANG Shuqi, WU Chengchen, TAN Zhijun, GENG Qianqian, GUO Mengmeng	
Comparative Study of Fish Diversity in Wanquan River Based on Environmental Technology and Traditional Fishing Gear Survey Methods .....	(147)
..... LEI Jun, SU Yuanyuan, YIN Lianzheng, ZENG Ruohan, LI Ping, QIN Yongqiang, CAI Xingwei, DIAO Xiaoping	
The Effect of Different S <sup>0</sup> /Oyster Shell Ratios on the Performance of Seawater Sulfur Autotrophic Denitrification and Microbial Community .....	(162)
..... ZHOU Yu, LI Meng, SONG Xiefa, SUN Zuoliang, DONG Dengpan, WEI Yuanrong	
Microplastic and Copper Exposure Effects on Intestinal Gene Expression in <i>Eriocheir sinensis</i> : A Transcriptomics-Based Investigation .....	(173)
..... XU Jian, FENG Guangpeng, YAN Yunzhi, CHEN Jinhui, WU Jianhui, YANG Zuchang	
Effect of Carbon Sources Addition on Water Quality and Bacterial Community Structure and Function in <i>Micropterus salmoides</i> Aquaculture Ponds .....	(189)
..... HU Caiqin, HU Tiehuan, LIU Qianfu, YANG Wanling, ZENG Yanyi, GAO Yuan, LI Haiyan, MAI Yongzhan, WANG Chao	
Aquatic Environment and Nitrogen and Phosphorus Balance in <i>Micropterus salmoides</i> Culture Under Biofloc Model .....	(204)
..... JIN Yuqin, MENG Shunlong, XU Huimin, SONG Chao, FAN Limin, QIU Liping, LI Dandan	
Growth Toxic Effects of Metal Nanoparticles on <i>Bacillus subtilis</i> and <i>Vibrio parahaemolyticus</i> .....	(216)
..... CHEN Shiyu, XIA Bin, ZHU Lin, LI Shuang, LI Qiufen, SUN Xuemei, DAI Wei	
An Efficient Analytical Method for Determining the Effects of Silver Nanoparticles on <i>Vibrio parahaemolyticus</i> in Estuarine Water .....	(228)
..... HOU Xiangyi, WANG Xiaoyang, ZHANG Yuanyuan, LIANG Ruohan, LU Feng, YANG Qianqian, PU Xiaodan, ZHANG Yan, QU Keming, ZHANG Xuzhi	
<i>In Situ</i> Exploration of the Characteristics of Microplastics Formed by the Fragmentation of Floating Floats in Seawater Aquaculture .....	(237)
..... LIU Guoshun, ZHAO Xinguo, SUN Xuemei, ZHU Lin, SUI Qi, WEI Manman, XIA Bin	
The Adaptability of <i>Salicornia bigelovii</i> to Salinity and Nutrient Levels in Aquaculture Effluent .....	(248)
..... CHI Saisai, LI Qiufen, LUO Zijun, SUN Bo, TIAN Wenjie, MA Ying, DONG Zhiguo, CUI Zhengguo	