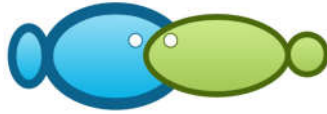


**AACL Bioflux, Volume 15(3)**  
**June, 30, 2022**



**Contents**

Koneri R., Nangoy M. J., Elfidasari D., 2022 Odonata diversity in the Laine Waterfall Area, Sangihe Islands, North Sulawesi, Indonesia. AAAL Bioflux 15(3):1083-1095.

Effendi I., Yoswaty D., Syawal H., Austin B., Lyndon A. R., Kurniawan R., Wahyuni S., 2022 Effects of herbal growth promoters on common carp (*Cyprinus carpio*). AAAL Bioflux 15(3):1096-1103.

Wijayanto D., Wibowo B. A., Setiyanto I., 2022 Characteristics of artisanal fisheries in Rembang Regency, Indonesia. AAAL Bioflux 15(3):1104-1112.

Muis, Melansari N., 2022 Historical aspects and stakeholders' perceptions in the coastal waters of the Spelman Strait, Central Buton Regency, Indonesia. AAAL Bioflux 15(3):1113-1117.

Young B. C., Yeh Y.-C., Cheng W., 2022 Status and cost analysis of giant river prawn (*Macrobrachium rosenbergii*) farming in Taiwan. AAAL Bioflux 15(3):1118-1123.

Hieu T. K., Van V. T. T., Thien P. C., Diep D. X., 2022 Effects of different stocking densities on growth and survival rate of Dau Nhim snakehead (*Channa sp.*) fingerlings. AAAL Bioflux 15(3):1124-1132.

Hien T. T. T., Anh C. T., Onoda S., Duc P. M., 2022 Dietary supplementation with heat-killed *Lactobacillus plantarum* L-137 improves growth, survival rate, and immune response of snakehead (*Channa striata*) in practical Hapa culture. AAAL Bioflux 15(3):1133-1140.

Kamil I., Rustiadi E., Kusumastanto T., Anggraini E., 2022 Sea rent aquaculture based on environmental carrying capacity approach and externality in Lampung Bay, Indonesia. AAAL Bioflux 15(3):1141-1153.

Heltonika B., Sudrajat A. O., Zairin M. Jr., Widanarni, Suprayudi M. A., Manalu W., 2022 Cannibalistic behavior and way of predation among the fry of Asian redbtail catfish *Hemibagrus nemurus* at different stocking densities. AAAL Bioflux 15(3):1154-1161.

Musel J., Anuar A., Hassan M. H., Wan Mustafa W. Z., Paul P. S., Sahidun I., Andrew Chiba S. U., 2022 Population dynamics and the spawning season of the commercial dominant species (*Encrasicholina devisi* and *Sardinella fimbriata*) from the northern region of Sarawak. AAAL Bioflux 15(3):1162-1177.

Salma U., Bengen D. G., Rastina, 2022 Vegetation analysis of mangrove rehabilitation in the BeeJay Bakau Resort, Probolinggo City, East Java, Indonesia. AAAL Bioflux 15(3):1178-1186.

- Rehatta B. M., Kamal M. M., Boer M., Fahrudin A., Zairion, 2022 Bioeconomic assessment for the utilization of shared small pelagic fish stock in the Ombai Strait. *AACL Bioflux* 15(3):1187-1198.
- Gushchin V., Polishchuk O., Hrytsyniak I., 2022 Growing of fingerlings of the largemouth bass (*Micropterus salmoides*) in Ukrainian fish farms during the first year of life. *AACL Bioflux* 15(3):1199-1214.
- Puspitawati D., Susilo E., Cahyandari D., Maharani D. P., Fadli M., Lutfi M., Anggoro S. A., Liemanto A., 2022 The design of regulatory reform in aquaculture in Indonesia: opportunities and threats of the implementation of SDGs in fisheries governance. *AACL Bioflux* 15(3):1215-1225.
- Yeka A., Monika D., Rahmani R. M., Sarianto D., Fitri Y., Nurlaela E., Kusmedy B., Nugraha E., Hutajulu J., 2022 The effect of chlorophyll-a on the catches of skipjack tuna (*Katsuwonus pelamis*) in Banda Sea, Maluku, Indonesia. *AACL Bioflux* 15(3):1226-1237.
- Truong Q. P., Nyabuto K. N., Phan T. C. T., Nguyen T. K. L., Vu N. U., Huynh T. G., 2022 Bacterial population in intensive striped catfish *Pangasianodon hypophthalmus* ponds. *AACL Bioflux* 15(3):1238-1250.
- Gusman E., Yahya, Sulistyawati T. D., Nursyam H., 2022 Selection of proteolytic *Vibrio* from mangrove sediments. *AACL Bioflux* 15(3):1251-1260.
- Elyakoubi M., Fettach S., Idhalla M., Errhif A., 2022 Effects of different diets based on newly isolated microalgae from the Moroccan coastline on the growth and survival of *Crassostrea gigas* spat. *AACL Bioflux* 15(3):1261-1275.
- Mendoza D. M., Aquino M. G. B., Mendoza G. C., Rosario G. R., 2022 Edible crustacean fishery resources in Infanta, Pangasinan, Philippines: An assessment. *AACL Bioflux* 15(3):1276-1292.
- Inel L., Minggawati I., Ardianor, 2022 Study of aquatic biota and riparian vegetation in the Sebangau River, Central Kalimantan, Indonesia. *AACL Bioflux* 15(3):1293-1301.
- Ha L. M., Iguchi K., 2022 An abnormal specimen of threatened Ryukyu-ayu (*Plecoglossus altivelis ryukyuensis*) with an additional pelvic fin. *AACL Bioflux* 15(3):1302-1307.
- Yulfiperius, Ighwerb M. I., Hutabarat J., 2022 The economic development parameters and shrimp culture sustainability: Granger causality approach. *AACL Bioflux* 15(3):1308-1321.
- Zainuddin M., Pringgenies D., Radjasa O. K., Haeruddin, 2022 Protease enzymes of sponge-associated bacteria (Porifera: Demospongiae) in seagrass ecosystems at Nusa Lembongan Bali, Indonesia. *AACL Bioflux* 15(3):1322-1332.
- Oanh D. T. H., Phu T. Q., 2022 Occurrence of diseases and selected water quality parameters in cultured striped catfish (*Pangasianodon hypophthalmus*) ponds in the Mekong Delta of Vietnam. *AACL Bioflux* 15(3):1333-1343.
- Thanh L. T., Dinh Q. M., Phan G. H., Viet K. L., Hong N. D. T., 2022 The chemical resistances of pesticides in some agriculture production regions in Kien Giang province. *AACL Bioflux* 15(3):1344-1354.

Gelsano M. L., Demayo C. G., 2022 Population variability in *Poecilia reticulata* based on morphological character measurements, length-weight and length-length relationships. *AACL Bioflux* 15(3):1355-1370.

Nguyen T. K. L., Au V. H., Tran T. G., Vu N. U., Huynh T. G., 2022 Seasonal fluctuation of water quality parameters and zooplankton composition in the Hau River and its tributaries, Vietnam. *AACL Bioflux* 15(3):1371-1388.

Reyes A. T., Raymundo A. K., Baldrias L. R., Paller V. G. V., Dalmacio I. F., 2022 Antibiotic susceptibility and pathogenicity of *Streptococcus spp.* isolated from tilapia grow-out farms in Lubao, Pampanga, Philippines. *AACL Bioflux* 15(3):1389-1402.

Karang I. W. G. A., Dharma I. G. B. S., Astaman I. D. M. K. P., 2022 Mapping of shallow-water benthic habitats in Nusa Lembongan, Bali using Sentinel-2B and Landsat 8 satellite data. *AACL Bioflux* 15(3):1403-1412.

Setiawan A., Lutfiah R., Juliasih N. L. G. R., Setiawan W. A., Hendri J., Arai M., 2022 Antibacterial activity of EtOAc extract from marine-derived fungus *Aspergillus nomiae* A12-RF against clinical pathogen bacteria, *Staphylococcus aureus*. *AACL Bioflux* 15(3):1413-1421.

Fauziah N., Mulya M. B., Barus T. A., 2022 Density, length-frequency distribution and growth pattern of *Penaeus monodon* in Karang Gading estuary. *AACL Bioflux* 15(3):1422-1434.

Rifardi, Mubarak, 2022 Profile of suspended sediment concentration in narrow channel. *AACL Bioflux* 15(3):1435-1443.

Zainathan S. C., Akhber N. N. M., Basib N. A. W. A., Johan C. A. C., 2022 Molecular characterization of infectious spleen and kidney necrosis virus (ISKNV) in Malaysian brown-marbled grouper (*Epinephelus fuscoguttatus*) from West Malaysia. *AACL Bioflux* 15(3):1444-1452.

Rifai R., Jusadi D., Suprayudi M. A., Alimuddin A., Nuryati S., 2022 Evaluation of dietary  $\alpha$ -lipoic acid on growth and antioxidative responses of striped catfish (*Pangasianodon hypophthalmus*). *AACL Bioflux* 15(3):1453-1460.

Cahyani R. T., Serliana, Hutapea T. P. H., Alawiyah T., Yulma, Laga A., Hildayani S. Z., 2022 Chemical composition of bio calcium powders from pressure-cooked Indo-Pacific tarpon (*Megalops cyprinoides*) bone from Tarakan, North Kalimantan, Indonesia. *AACL Bioflux* 15(3):1461-1469.

Rachmawati D., Nurhayati D., 2022 Effect of fish meal replacement with earthworm and maggot meals on feed utilization and growth of banana shrimp (*Penaeus merguensis*). *AACL Bioflux* 15(3):1470-1478.

Anggoro, A. D., Zaidy, A. B., Mihardja, A. S., 2022 The application of nanobubbles and charcoal in the closed transportation of *Litopenaeus vannamei* seeds. *AACL Bioflux* 15(3):1479-1491.

Rostika R., Haetami K., Pratiwy F. M., Putra F. A., Dewanti L. P., 2022 A comparison of the drying techniques for maggot of the black soldier fly (*Hermetia illucens*) as an insect-based protein source for the feed of juvenile tilapia fish (*Oreochromis niloticus*). *AACL Bioflux* 15(3):1492-1498.

Thien F. Y., Sanudin N., Yong A. S. K., 2022 Survival and growth performance of the purple mud crab (*Scylla tranquebarica*) instar fed with commercial formulated feed and minced fish diets. *AACL Bioflux* 15(3):1499-1506.

Laily N., Ambarwati R., Rahayu D. A., Isnaningsih N. R., 2022 Structure of gastropod communities in the mangrove area of Kutang Beach, Lamongan, Indonesia. *AACL Bioflux* 15(3):1507-1519.

Thai L. T., Le B. H., Dinh Q. M., Nguyen H. X., Dang H. T., Le T. M., Dang N. T. H., 2022 Pollution by wastewater from aquaculture in some coastal zone in the Mekong Delta, Vietnam. *AACL Bioflux* 15(3):1520-1530.

de Fretes C. E., Sohilait M. R., 2022 Plastic-degrading bacteria in deep-sea ecosystems: A review. *AACL Bioflux* 15(3):1531-1540.

Fajardo L. J., Lebeng R. S., Morales M. L., Reyes A. T., 2022 Plankton abundance and diversity in Pantabangan Reservoir, Pantabangan, Nueva Ecija, Philippines. *AACL Bioflux* 15(3):1541-1552.

Lennard W. A., 2022 A comparison of the effect of starting nitrate concentration on fish growth, plant production and water quality within a research-scale, recirculating aquaponics system. *AACL Bioflux* 15(3):1553-1569.

Roesma D. I., Tjong D. H., Janra M. N., Rahmawati D., Maulidia S., Aidil D. R., 2022 Scientific name confirmation of freshwater pufferfish (buntal) in Singkarak Lake, West Sumatra, Indonesia, based on cytochrome b and cytochrome oxidase subunit I gene. *AACL Bioflux* 15(3):1570-1585.

Potrokhov A. S., Zin'kovskiy O. G., Khudiiash J. M., Prychepa M. V., Kovalenko Y. O., Shevchenko T. F., 2022 Peculiarities of the prolonged effect of a high concentration of ammonium on the physiological and biochemical state of *Carassius auratus* (L.). *AACL Bioflux* 15(3):1586-1597.

Kangkan A. L., Semedi B., Bintoro G., 2022 Coastal area spatial modelling using water ecological parameters, regarding the utilization zone development of Kupang Bay, Indonesia. *AACL Bioflux* 15(3):1598-1605.

Puspito G., Hartono S., Ghiffari R., 2022 Simplification of trammel net construction to increase catch results. *AACL Bioflux* 15(3):1606-1616.

**International Standard Serial Number**  
**Online ISSN 1844–9166; Print ISSN 1844-8143**

**Published by Bioflux – six issues/year (bimonthly); in cooperation with The Natural Sciences Museum Complex (Constanta, Romania)**

The journal includes original papers, short communications, and reviews on Aquaculture (Biology, Technology, Economics, Marketing), Fish Genetics and Improvement, Aquarium Sciences, Fisheries, Ichthyology, Aquatic Ecology, Conservation of Aquatic Resources and Legislation (in connection with aquatic issues) from wide world.

**Editor-in-Chief**

Petrescu-Mag I. Valentin: USAMV Cluj, Cluj-Napoca, University of Oradea (Romania)  
Gavriloaie Ionel-Claudiu (alternate): SC Bioflux SRL, Cluj-Napoca (Romania).

**Editors**

Abdel-Rahim Mohamed M.: National Institute of Oceanography and Fisheries, Alexandria (Egypt)  
Adascalitei Oana: Maritime University of Constanta, Constanta (Romania)  
Amira Aicha Beya: Badji Mokhtar Annaba University, Annaba (Algeria)  
Arockiaraj A. Jesu: SRM University, Chennai (India)  
Appelbaum Samuel: Ben-Gurion University of the Negev (Israel)  
Baharuddin Nursalwa: Universiti Malaysia Terengganu, Terengganu (Malaysia)  
Balint Claudia: USAMV Cluj, Cluj-Napoca (Romania)  
Boaru Anca: USAMV Cluj, Cluj-Napoca (Romania)  
Bora Florin D.: Research Station for Viticulture & Enology Tg.Bujor, Galați (Romania)  
Breden Felix: Simon Fraser University (Canada)  
Burny Philippe: Universite de Liege, Gembloux (Belgium)  
Caipang Christopher M.A.: Temasek Polytechnic (Singapore)  
Chapman Frank: University of Florida, Gainesville (USA)  
Creanga Steofil: USAMV Iasi, Iasi (Romania)  
Cristea Victor: Dunarea de Jos University of Galati, Galati (Romania)  
Das Simon Kumar: Universiti Kebangsaan Malaysia, Bangi, Selangor (Malaysia)  
Dimaggio Matthew A.: University of Florida (USA)  
Georgescu Bogdan: USAMV Cluj, Cluj-Napoca (Romania)  
Ionescu Tudor: University of Oradea, Oradea (Romania)  
Karayucel Ismihan: University of Sinop, Sinop (Turkey)  
Khamesipour Faham: Shiraz University, Shiraz (Iran)  
Kosco Jan: Presov University, Presov (Slovakia)  
Kovacs Eniko: USAMV Cluj, Cluj-Napoca (Romania)  
Kucska Balázs: Hungarian University of Agriculture and Life Sciences, Kaposvár (Hungary)  
Mehrad Bahar: Gorgan University of Agricultural Sciences and Nat. Res. (Iran)  
Miclaus Viorel: USAMV Cluj, Cluj-Napoca (Romania)  
Molnar Kalman: Hungarian Academy of Sciences, Budapest (Hungary)  
Muchlisin Zainal Abidin: Universiti Sains (Malaysia), Syiah Kuala University (Indonesia)  
Muntean George Catalin: USAMV Cluj, Cluj-Napoca (Romania)  
Nowak Michal: University of Agriculture in Krakow (Poland)  
Nyanti Lee: Universiti Malaysia Sarawak, Sarawak (Malaysia)  
Odagiu Antonia: USAMV Cluj, Cluj-Napoca (Romania); BENA, Thessaloniki (Greece)  
Olivotto Ike: Universita Politecnica delle Marche, Ancona (Italy)  
Oroian Firuta Camelia: USAMV Cluj, Cluj-Napoca (Romania)  
Papuc Tudor: USAMV Cluj, Cluj-Napoca (Romania)  
Parvulescu Lucian: West University of Timisoara (Romania)  
Pasarín Benone: USAMV Iasi, Iasi (Romania)  
Pattikawa Jesaja Ajub: Pattimura University, Ambon (Indonesia)  
Petrescu Dacinia Crina: Babes-Bolyai University, Cluj-Napoca (Romania), Universite de Liege, Gembloux (Belgium)  
Petrescu-Mag Ruxandra Malina: Babes-Bolyai University, Cluj-Napoca (Romania), Universite de Liege, Gembloux (Belgium)  
Petrovici Milca: West University of Timisoara (Romania)  
Pratasik Silvester Benny: Sam Ratulangi University, Manado (Indonesia)  
Proorocu Marian: USAMV Cluj, Cluj-Napoca (Romania)  
Putri A. R. Sahni: Hasanuddin University, Makassar (Indonesia)  
Ray Sunuram: Khulna University (Bangladesh)  
Rhyne Andrew: Roger Williams University; New England Aquarium, Boston (USA)  
Ruchin Alexander B.: Joint Directorate of the Mordovia State Nature Reserve and National Park «Smolny», Saransk (Russia)  
Safirescu Calin: USAMV Cluj, Cluj-Napoca (Romania)  
Sándor Zsuzsanna J.: National Agriculture Research and Innovation Center, Gödöllő (Hungary)  
Serrano Jr. Augusto E.: University of the Philippines Visayas (Philippines)  
Sima Nicusor-Flavius: USAMV Cluj, Cluj-Napoca (Romania); BENA, Thessaloniki (Greece)  
Tlusty Michael F.: New England Aquarium, Boston (USA)

Vesa Stefan Cristian: Iuliu Hatieganu UMF, Cluj-Napoca (Romania)  
Vintila Iuliana: Dunarea de Jos University of Galati, Galati (Romania)  
Wariaghli Fatima: University Mohammed V in Rabat, Rabat (Morocco)  
Yusli Wardiatno: Bogor Agricultural University, Bogor (Indonesia).

#### Contact Publisher

SC Bioflux SRL, 54 Ceahlău Street, Cluj-Napoca, 400488, Romania, European Union.

Ioan Valentin Petrescu-Mag, e-mail: zoobiomag2004@yahoo.com

Note that there is also an electronic version of the journal. You may download the fulltext version of AACL Bioflux – Volume 15/2022 from <http://www.bioflux.com.ro/aac/> – open access.

All articles included in AACL Bioflux are peer reviewed (double blind peer-review is used). Each published article was seen before by two reviewers; the two peer-reviews are made independently.

#### AACL Bioflux has a publishing agreement, or is indexed, abstracted or full text reproduced by/in the following scholar/scientific databases, search engines, libraries, publishers:

ISI Web of Science – via CABI and Zoological Record

Zoological Record (direct submission/coverage)

Scopus - Elsevier; Sciverse

Scimago - Journal Rank

CAB International - CAB Abstracts

ProQuest

China Educational Publications Import & Export Corporation - SOCOLAR

Ulrich's Periodicals Directory

CAB Direct (as part of CABI)

Wolters Kluwer - Ovid LinkSolver

Polish Ministry of Science and Higher Education – 2.00 pts/article

The National Science Digital Library - NSDL

The University of Hong Kong Libraries – HKUL Database

Deutsche Nationalbibliothek - ZDB Database

State Library of Ohio - OhioLINK Database

Smithsonian Institution Libraries

Biblioteka Główna Uniwersytetu Medycznego w Poznaniu

Google Scholar, Academic

Athabasca University - ICAAP Database

University of Southampton - ROAR

Georgetown University Library - NewJour

Universita degli Studi di Modena e Reggio Emilia – SBA, Risorse Elettroniche

Simon Fraser University - PKP

University of Tsukuba - Tulips Database

Teikyo Scientific University- NTU Database

LIS Links: Link Library of Open Access English Language Journals

Fayetteville State University - Charles W. Chesnutt Library

Vrije Universiteit Brussel - VUB e-journal list

Russian CJDB

Universitat Giessen - Digitale Bibliothek

Pace University Library

Tel Aviv University. Gitter-Smolatz Library of Life Sciences and Medicine

MALMAD – Israel Center for Digital Information Services

California State University – Monterey Bay Library

Réseau des Bibliothèques de l'Université Joseph Fourier et de l'Institut National Polytechnique de Grenoble

University of Saskatchewan – University Library (Electronic Journals)

YanXue Resource – YXRES

Feng Chia University – Electronic Library

Main Library of the University of Agriculture in Krakow

SUMMON Database

uOttawa Library

Universita di Roma Tor Vergata - Digital Library

UTC Lupton Library

University of Notre Dame - Hesburgh Libraries

Guilford College - Hege Library

Eastern Michigan University Library - Periodicals locator

Universiteitsbibliotheek Gent - Tijdschriften

Chung Yuan Christian University Library

ArgosBiotech

Ecole Polytechnique Federale de Lausanne - Library

Rowan University – Library Services

James Cook University Library – Australia

Ministerstwo Nauki i Szkolnictwa Wyższego Warszawa

Kun Shan University Library

CCG-IBT Biblioteca

Reference Zone – Nigeria



THOMSON REUTERS



Dayang Journal System  
Riley-Hickingbotham Library  
Politechnika Wroclawska  
Universite Paris Diderot – Revues Electroniques  
ERSA – Chinese Library.

## Our collaborators



SciVerse Scopus is the world's largest abstract and citation database of peer-reviewed literature and quality web sources. Contains 41 million records, 70% with abstracts; Nearly 18,000 titles from 5,000 publishers worldwide; 70% of content is pulled from international sources; Includes over 3 million conference papers; Provides 100% Medline coverage; Offers sophisticated tools to track, analyze and visualize research.

## Socolar

The free scholastic search engine is established by China Educational Publications Import and Export Corporation (CEPIEC). Under the leadership of China Ministry of Education, CEPIEC is the only company dealing with publication ex-im business in the education field. CEPIEC has been serving colleges and universities, research institutions and public libraries in China for more than 20 years, providing them with excellent academic resources from all over the world. Contact: No 41 Zhong Guan Cun Street, Haidian District, Beijing, P.R.China 100080. Tel: +86 (0)10 6251 4068; e-mail: li\_yanxia@cepiec.com.cn Fax: +86 (0)10 6251 4068 [www.cepiec.com.cn](http://www.cepiec.com.cn)



CABI is a not-for-profit international organization that improves people's lives by providing information and applying scientific expertise to solve problems in agriculture and the environment. Their mission and direction is influenced by their member countries who help guide the activities they undertake. These include scientific publishing, development projects and research, and microbial services. 2010 marked 100 years of CABI. Since its beginnings as an entomological committee in 1910, it then developed into a Commonwealth organization before becoming a truly international service in agricultural information, pest identification and biological control in the mid 1980s.

## Zoological Record (part of Biosis)

ION contains the organism names related data gathered from the scientific literature for Thomson Reuters' *Zoological Record*® database. Viruses, bacteria and plant names will be added from other Thomson Reuters databases such as *BIOSIS Previews*® and *Biological Abstracts*®



THOMSON REUTERS

## Index to Organism Names (ION)



## ELSEVIER PRODUCTS

Elsevier B.V., Bibliographic Databases, Radarweg 29, 1043 NX Amsterdam, The Netherlands.



