

**LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : PROSIDING**

Judul Prosiding Ilmiah (Artikel) : Application of Environmental Management On The Farming Practice of Mud Crab Scylla Serrata at Coastal Area of ujung Alang, Cilacap, Indonesia: Efforts Toward Sustainable Aquaculture

Nama/Jumlah Penulis : Sapto P. Putro, Haikal H. Fahrian, **Widowati**, Suhartana/ 4 orang

Status Pengusul : penulis ke- 3

Identitas Prosiding : a. Nama Prosiding : Procedia Environmental Sciences
b. Nomor ISSN : 00002011, 00002010
c. Volume, nomor, bulan tahun : Volume 23, 2015, Pages 297-306
d. Penerbit : Elsevier
e. DOI artikel (jika ada) : <https://doi.org/10.1016/j.proenv.2015.01.044>
f. Alamat web

URL PROSIDING : <https://www.sciencedirect.com/science/article/pii/S1878029615000456>

URL ARTIKEL : <https://eprints2.undip.ac.id/1955/1/ARTIKELC37-WIDOWATI.pdf>

g. Science direct : <https://www.sciencedirect.com/science/article/pii/S1878029615000456>

Kategori Publikasi Prosiding : Prosiding Internasional Terindeks
(beri ✓ pada kategori yang tepat) Prosiding Internasional
 Prosiding Nasional

Hasil Penilaian *Peer Review* :

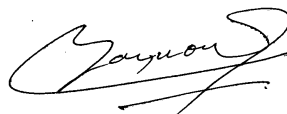
Komponen Yang Dinilai	Nilai Reviewer		Nilai Rata-rata
	Reviewer I	Reviewer II	
a. Kelengkapan unsur isi jurnal (10%)	2	1.88	1.94
b. Ruang lingkup dan kedalaman pembahasan (30%)	5.7	4.88	5.29
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	5.7	4.88	5.29
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	4.8	5.63	5.24
Total = (100%)	18.20	17.27	17.74
Nilai Pengusul = 40%\times1/3	2.43	2.30	2.36

Reviewer 2



Prof. Dr. St. Budi Waluya, M.Si
NIP. 196809071993031002
Unit kerja : Matematika FMIPA UNNES

Semarang, April 2020
Reviewer 1



Prof. Dr. Basuki Widodo, M.Sc
NIP. 19650506 1989031002
Unit kerja : Matematika FSAD ITS

**LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : PROSIDING**

Judul Prosiding Ilmiah (Artikel) : Application of Environmental Management On The Farming Practice of Mud Crab Scylla Serrata at Coastal Area of ujung Alang, Cilacap, Indonesia: Efforts Toward Sustainable Aquaculture

Nama/Jumlah Penulis : Sapto P. Putro, Haikal H. Fahrian, **Widowati**, Suhartana/ 4 orang

Status Pengusul : penulis ke- 3

Identitas Prosiding : a. Nama Prosiding : Procedia Environmental Sciences
b. Nomor ISSN : 00002011, 00002010
c. Volume, nomor, bulan tahun : Volume 23, 2015, Pages 297-306
d. Penerbit : Elsevier
e. DOI artikel (jika ada) : <https://doi.org/10.1016/j.proenv.2015.01.044>
f. Alamat web

URL PROSIDING : <https://www.sciencedirect.com/science/article/pii/S1878029615000456>

URL ARTIKEL : <https://eprints2.undip.ac.id/1955/1/ARTIKELC37-WIDOWATI.pdf>

g. Science direct : <https://www.sciencedirect.com/science/article/pii/S1878029615000456>

Kategori Publikasi Prosiding : Prosiding Internasional Terindeks
(beri ✓ pada kategori yang tepat) Prosiding Internasional
 Prosiding Nasional

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah			Nilai Akhir Yang Diperoleh
	Prosiding Internasional Terindeks <input checked="" type="checkbox"/>	Prosiding Internasional <input type="checkbox"/>	Prosiding Nasional <input type="checkbox"/>	
a. Kelengkapan unsur isi Prosiding (10%)	2			2
b. Ruang lingkup dan kedalaman pembahasan (30%)	6			5.7
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	6			5.7
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	6			4.8
Total = (100%)	20			18.20

Nilai Pengusul = $40\% \times 1/3 \times 18.20 = 2.43$

Catatan Penilaian artikel oleh Reviewer :

1. Kesesuaian dan kelengkapan unsur isi jurnal:

Penulisan artikel sudah bagus dan mengikuti standard penulisan artikel di Prosiding International Conference on Tropical and Coastal Region Eco-Development 2014 (ICTCRED 2014) – Procedia Environmental Sciences, yaitu Introduction, Methodology, Result and Discussion (IMRaD), Conclusion, Acknowledgement dan didukung dengan referensi yang sesuai.

2. Ruang lingkup dan kedalaman pembahasan:

Lingkup bahasan dari artikel ini adalah bidang matematika terapan, khususnya pada bidang statistika dasar. Dalam artikel ini dibahas dengan cukup baik tentang perlakuan penghapusan bagian lokomotif dan proses molting pada kepiting bakau agar mencapai ukuran komersial (200 g / ind.). Relevansi hasil terkait dengan dampak positif perlakuan tersebut pada pemulihan fungsi ekologis kawasan hutan bakau.

3. Kecukupan dan kemutakhiran data/informasi dan metodologi :

Informasi yang disajikan cukup baru dan hasil yang diperoleh memuat substansi orisinal dengan aspek aplikasi yang penting Sumber gagasan penulis untuk artikel ini cukup banyak, komprehensif dan update, yang lebih sepuluh tahun terakhir hanya 2 paper dari 10 sumber yang dirujuk. Metodologinya baik dan tertulis terstruktur.

4. **Kelengkapan unsur dan kualitas terbitan:**

Artikel memenuhi standard penulisan dan isi untuk journal internasional. Makalah diterbitkan di journal internasional yang belum terindeks di Scopus.

Surabaya, 16 April 2020
Reviewer 1



Prof. Dr. Basuki Widodo, M.Sc
NIP. 19650506 1989031002
Unit kerja : Matematika FSAD ITS

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : PROSIDING

Judul Prosiding Ilmiah (Artikel) : Application of Environmental Management On The Farming Practice of Mud Crab Scylla Serrata at Coastal Area of ujung Alang, Cilacap, Indonesia: Efforts Toward Sustainable Aquaculture

Nama/Jumlah Penulis : Sapto P. Putro, Haikal H. Fahrian, **Widowati**, Suhartana/ 4 orang

Status Pengusul : penulis ke- 3

Identitas Prosiding : a. Nama Prosiding : Procedia Environmental Sciences
b. Nomor ISSN : 00002011, 00002010
c. Volume, nomor, bulan tahun : Volume 23, 2015, Pages 297-306
d. Penerbit : Elsevier
e. DOI artikel (jika ada) : <https://doi.org/10.1016/j.proenv.2015.01.044>
f. Alamat web

URL PROSIDING : <https://www.sciencedirect.com/science/article/pii/S1878029615000456>

URL ARTIKEL : <https://eprints2.undip.ac.id/1955/1/ARTIKELC37-WIDOWATI.pdf>
g. Science direct : <https://www.sciencedirect.com/science/article/pii/S1878029615000456>

Kategori Publikasi Prosiding : Prosiding Internasional Terindeks
(beri ✓ pada kategori yang tepat) Prosiding Internasional
 Prosiding Nasional

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Prosiding			Nilai Akhir Yang Diperoleh
	Prosiding Internasional Terindeks <input checked="" type="checkbox"/>	Prosiding Internasional <input type="checkbox"/>	Prosiding Nasional <input type="checkbox"/>	
a. Kelengkapan unsur isi jurnal (10%)	2			1.88
b. Ruang lingkup dan kedalaman pembahasan (30%)	6			4.88
c. Kecukupan dan kemutahiran data/informasi dan metodologi (30%)	6			4.88
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	6			5.63
Total = (100%)	20			17.27

Nilai Pengusul = $40\% \times 1/3 \times 17.27 = 2.30$

Catatan Penilaian artikel oleh Reviewer :

1. Kesesuaian dan kelengkapan unsur isi jurnal:

Kesesuaian dan kelengkapan unsur isi jurnal sudah cukup baik terdiri atas 4 bagian: Introduction, Method, Result and Discussion, Conclusions. Didukung 10 referensi, 5 diantaranya tidak up to date Artikel sesuai dengan kaidah penulisan karya ilmiah.

2. Ruang lingkup dan kedalaman pembahasan:

Lingkup dan kedalaman pembahasan cukup baik. Di pendahuluan kurang literatur review sehingga nilai novelty tidak nampak jelas. Ruang lingkup jurnal dengan area subyek dan kategori Matematika terapan. Pembahasan berkaitan dengan Application of Environmental Management on the Farming Practice of Mud Crab Scylla Serrata. Lingkup artikel Matematika Terapan Biologi sesuai dengan bidang ilmu pengusul. Kedalaman pembahasan baik

3. Kecukupan dan kemutakhiran data/informasi dan metodologi :

Kemutahiran data/informasi dan metodologi cukup baik. Terdapat 10 buah referensi yang digunakan (30 % jurnal, 50% referensi tidak up to date). Metodologi sudah disampaikan cukup baik.

4. **Kelengkapan unsur dan kualitas terbitan:**

Artikel memenuhi standard penulisan dan isi untuk journal internasional. Makalah diterbitkan di journal internasional yang terindeks di Scimagojr dan Scopus .SJR (2015) 0.216. Masih terdapat proses editorial yang kurang teliti.

Semarang,
Reviewer 2



Prof. Dr. St. Budi Waluya, M.Si
NIP. 196809071993031002
Unit kerja : Matematika FMIPA Unnes



Document details

< Back to results | < Previous 22 of 23 Next >

[📄 Export](#) [📄 Download](#) [🖨 Print](#) [✉ E-mail](#) [📄 Save to PDF](#) [★ Add to List](#) [More... >](#)

AACL Bioflux [Open Access](#)

Volume 9, Issue 4, 30 August 2016, Pages 815-822

Application of polyculture using stratified double net cage: A case study at Awerange Gulf, Barru, South Sulawesi, Indonesia (Article)

Putro, S.P.^a [✉](#), **Widowati^b** [✉](#), Rahmansyah, R.^c [✉](#), Suminto, S.^d [✉](#) [👤](#)

^aCenter of Marine Ecology and Biomonitoring for Sustainable Aquaculture (Ce-MEBSA), Integrated Laboratory, Diponegoro University, 2nd floor, Jl. Prof. Soedarto, SH, Tembalang, Semarang, 50275, Indonesia

^bDepartment of Mathematics, Faculty of Sciences and Mathematics, Diponegoro University, Jl. Prof. Soedarto, SH, Tembalang, Semarang, 50275, Indonesia

^cResearch Institute for Coastal Aquaculture, Maros, South Sulawesi, Jl. Makmur Daeng Sittaka, Maros, South Sulawesi 90512, Indonesia

[View additional affiliations](#) [v](#)

Abstract

[v](#) View references (18)

This research is aimed to develop aquaculture techniques, particularly the use of stratified double floating net cage (SDFNC) for polyculture to increase productivity, and maintain a healthy water ecosystem for sustainable aquaculture. Installation of SDFNC was done at the Gulf Awerange, Barru, South Sulawesi. The polyculture system consisted of macro algae (*Euchema cottoni*), rabbitfish (*Siganus sp.*), black tiger shrimp (*Penaeus monodon*), and Pacific white shrimp (*Litopenaeus vannamei*). Macroalgae was cultivated by binding to the algae using polyethylene strap transversely from the water surface to a depth of 5 m along the edge cage. A number of 50 ind. m⁻³ of rabbit fish were farmed in the bottom net cage, 100 ind. m⁻³ of 12 m³ in total of PL30 Pacific white shrimp and 50 individuals m⁻³ of 12 m³ in total of PL30 black tiger shrimps were located in the upper net cage. Biomonitoring was carried out by observing the structure of macrobenthic community. The condition of the water at the farmed area was still within the normal range, both at a depth of 1 m and 5 m from the surface, and 1 m of bottom waters. There was a significantly difference between polyculture and reference site, implying that there was a slight environmental disturbance of sedimentary habitat underneath the farm cage. Overall, the area is considerably suitable for the application of SDFNC, with water current range up to 14.1 cm sec⁻¹. The growth of main biotas represented by *Siganus sp.* and *L. vannamei* farmed using SDFNC exhibited faster compared to monoculture farm, owing to the relatively high values of the relative growth rate (RGR) (2.3-6.2%) and specific growth rate (SGR) (1.05-1.4%). © 2016 BIOFLUX SRL. All rights reserved.

SciVal Topic Prominence [i](#)

Topic: Bioaccumulation | Water Pollutants, Chemical | Trace metals

Prominence percentile: 37.923 [i](#)

Author keywords

[Biomonitoring](#) [Euchema cottoni](#) [Growth rate](#) [Polyculture](#) [Siganus sp](#)

Metrics [?](#) [View all metrics](#) >

1 Citation in Scopus

0.12 Field-Weighted Citation Impact



PlumX Metrics [v](#)

Usage, Captures, Mentions, Social Media and Citations beyond Scopus.

Cited by 1 document

Stability analysis of the phytoplankton effect model on changes in nitrogen concentration on integrated multi-trophic aquaculture systems

Widowati , Putro, S.P. , Silfiana (2018) *Journal of Physics: Conference Series*

[View details of this citation](#)

Inform me when this document is cited in Scopus:

[Set citation alert >](#)

[Set citation feed >](#)

Related documents

Macrobenthic functional groups in Laizhou Bay, East China

Li, S.-W. , Liu, Y.-J. , Li, F. (2013) *Chinese Journal of Ecology*

Environmental assessment of polyculture farming practice based on macrobenthic assemblages: A study case at coastal area of Kaliwungu, Kendal (Central Java, Indonesia)

Putro, S.P. , Widowati , Febri, I.J.



Source details

AACL Bioflux

Open Access ⓘ

Scopus coverage years: 2006, from 2009 to 2019

Publisher: Bioflux Publishing House

ISSN: 1844-8143 E-ISSN: 1844-9166

Subject area: Environmental Science: Water Science and Technology

Environmental Science: Management, Monitoring, Policy and Law

Agricultural and Biological Sciences: Ecology, Evolution, Behavior and Systematics

Agricultural and Biological Sciences: Aquatic Science

CiteScore 2018

0.56 ⓘ

SJR 2018

0.232 ⓘ

SNIP 2018

0.760 ⓘ

[View all documents >](#)

[Set document alert](#)

[Save to source list](#)

CiteScore CiteScore rank & trend CiteScore presets Scopus content coverage

CiteScore 2018 ▾

Calculated using data from 30 April, 2019

0.56 =

Citation Count 2018

245 Citations >

Documents 2015 - 2017*

435 Documents >

*CiteScore includes all available document types

[View CiteScore methodology >](#)

[CiteScore FAQ >](#)

CiteScoreTracker 2019 ⓘ

Last updated on 06 February, 2020

Updated monthly

0.83 =

Citation Count 2019

420 Citations to date >

Documents 2016 - 2018

508 Documents to date >

Metrics displaying this icon are compiled according to Snowball Metrics ↗, a collaboration between industry and academia.

CiteScore rank ⓘ

Category Rank Percentile

Environmental Science #141/203 30th

Water Science and Technology

Environmental Science #206/288 28th

Management, Monitoring

[View CiteScore trends >](#)

[Add CiteScore to your site ↗](#)

About Scopus

[What is Scopus](#)

[Content coverage](#)

[Scopus blog](#)

[Scopus API](#)

[Privacy matters](#)

Language

[日本語に切り替える](#)

[切换到简体中文](#)

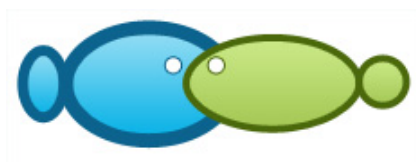
[切换到繁體中文](#)

[Русский язык](#)

Customer Service

[Help](#)

[Contact us](#)



[Aquaculture, Aquarium, Conservation & Legislation](#)

You are here > [Home](#) · [AACL](#)

AACL Bioflux

[Instructions to authors](#)

[Submission letter](#)

[Model of paper](#)

[Reviewer information pack](#)

[Editorial Board Expanded](#)

[Coverage / databases](#)

[Volume 13\(6\)/2020](#)

[Volume 13\(5\)/2020](#)

[Volume 13\(4\)/2020](#)

[Volume 13\(3\)/2020 \(June, 30\)](#)

[Volume 13\(2\)/2020 \(April, 30\)](#)

[Volume 13\(1\)/2020 \(February, 28\)](#)

[Volume 12\(6\)/2019 \(December, 30\)](#)

[Volume 12\(5\)/2019 \(October, 30\)](#)

[Volume 12\(4\)/2019 \(August, 30\)](#)

[Volume 12\(3\)/2019 \(June, 30\)](#)

[Volume 12\(2\)/2019 \(April, 30\)](#)

[Volume 12\(1\)/2019 \(February, 28\)](#)

[Volume 11\(6\)/2018 \(December, 30\)](#)

[Volume 11\(5\)/2018 \(October, 30\)](#)

[Volume 11\(4\)/2018 \(August, 30\)](#)

[Volume 11\(3\)/2018 \(June, 30\)](#)

[Volume 11\(2\)/2018 \(April, 30\)](#)

[Volume 11\(1\)/2018 \(February, 28\)](#)

[Volume 10\(6\)/2017 \(December, 30\)](#)

[Volume 10\(5\)/2017 \(October, 30\)](#)

[Volume 10\(4\)/2017 \(August, 30\)](#)

[Volume 10\(3\)/2017 \(June, 30\)](#)

Aquaculture, Aquarium, Conservation & Legislation - International Journal of the Bioflux Society

ISSN 1844-9166 (online)

ISSN 1844-8143 (print)

Published by Bioflux - bimonthly -

in cooperation with The Natural Sciences Museum Complex (Constanta, Romania)

Peer-reviewed (each article was independently evaluated before publication by two specialists)

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.

The manuscripts should be submitted to zoobiomag2004@yahoo.com

Editor-in-Chief:

Petrescu-Mag I. Valentin: USAMV Cluj, Cluj-Napoca, University of Oradea (Romania)

Gavriloaie Ionel-Claudiu (reserve): 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)

Boaru Anca: USAMV Cluj, Cluj-Napoca (Romania)

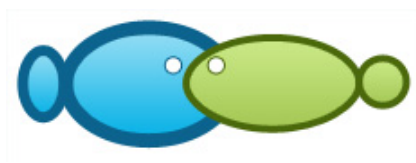
Volume 10(2)/2017 (April, 30)	Botha Miklos: Bioflux SRL, Cluj-Napoca (Romania)
Volume 10(1)/2017 (February, 28)	Breden Felix: Simon Fraser University (Canada)
Volume 9(6)/2016 (December, 30)	Burny Philippe: Universite de Liege, Gembloux (Belgium)
Volume 9(5)/2016 (October, 30)	Caipang Cristopher M.A.: Temasek Polytechnic (Singapore)
Volume 9(4)/2016 (August, 30)	Chapman Frank: University of Florida, Gainesville (USA)
Volume 9(3)/2016 (June, 30)	Coroian Cristian: USAMV Cluj, Cluj-Napoca (Romania)
Volume 9(2)/2016 (April, 30)	Creanga Steofil: USAMV Iasi, Iasi (Romania)
Volume 9(1)/2016 (February, 28)	Cristea Victor: Dunarea de Jos University of Galati, Galati (Romania)
Volume 8(6)/2015 (December, 30)	Das Simon Kumar: Universiti Kebangsaan Malaysia, Bangi, Selangor (Malaysia)
Volume 8(5)/2015 (October, 30)	Dimaggio Matthew A.: University of Florida (USA)
Volume 8(4)/2015 (August, 30)	Firica Cristian Manuel: Spiru Haret University Bucharest, Craiova (Romania)
Volume 8(3)/2015 (June, 30)	Georgescu Bogdan: USAMV Cluj, Cluj-Napoca (Romania)
Volume 8(2)/2015 (April, 30)	Karayucel Ismihan: University of Sinop, Sinop (Turkey)
Volume 8(1)/2015 (February, 28)	Khamesipour Faham: Shiraz University, Shiraz (Iran)
Volume 7(6)/2014 (December, 30)	Kosco Jan: Presov University, Presov (Slovakia)
Volume 7(5)/2014 (October, 30)	Kovacs Eniko: USAMV Cluj, Cluj-Napoca (Romania)
Volume 7(4)/2014 (August, 30)	Mehrad Bahar: Gorgan University of Agricultural Sciences and Nat. Res. (Iran)
Volume 7(3)/2014 (June, 30)	Miclaus Viorel: USAMV Cluj, Cluj-Napoca (Romania)
Volume 7(2)/2014 (April, 15)	Mihociu Tamara: R&D National Institute for Food Bioresources (Romania)
Volume 7(1)/2014 (February, 15)	Molnar Kalman: Hungarian Academy of Sciences, Budapest (Hungary)
Volume 6(6)/2013 (November, 15)	Muchlisin Zainal Abidin: Universiti Sains (Malaysia), Syiah Kuala University (Indonesia)
Volume 6(5)/2013 (September, 15)	Muntean George Catalin: USAMV Cluj, Cluj-Napoca (Romania)
Volume 6(4)/2013 (July, 25)	Nowak Michal: University of Agriculture in Krakow (Poland)
Volume 6(3)/2013 (May, 15)	Nyanti Lee: Universiti Malaysia Sarawak, Sarawak (Malaysia)
Volume 6(2)/2013 (March, 15)	Olivotto Ike: Universita Politecnica delle Marche, Ancona (Italy)
Volume 6(1)/2013 (January, 15)	Oroian Firuta Camelia: USAMV Cluj, Cluj-Napoca (Romania)
Volume 5(5)/2012 (December, 30)	Papuc Tudor: USAMV Cluj, Cluj-Napoca (Romania)
Volume 5(4)/2012 (September, 30)	Parvulescu Lucian: West University of Timisoara (Romania)
Volume 5(3)/2012 (July, 30)	Pasarini Benone: USAMV Iasi, Iasi (Romania)
Volume 5(2)/2012 (June, 30)	Pattikawa Jesaja Ajub: Pattimura University, Ambon (Indonesia)
Volume 5(1)/2012 (March, 15)	Petrescu Dacinia Crina: Babes-Bolyai University, Cluj-Napoca (Romania)
Volume 4(5)/2011 (December, 30)	
Volume 4(4)/2011 (October, 30)	
Volume 4(3)/2011 (July, 30)	

Volume 4(2)/2011 (April, 30)	Petrescu-Mag Ruxandra Malina: Babes-Bolyai University, Cluj-Napoca (Romania)
Volume 4(1)/2011 (January, 30)	Petrovici Milca: West University of Timisoara (Romania)
Volume 3(5)/2010 (December, 5)	Pratasik Silvester Benny: Sam Ratulangi University, Manado (Indonesia)
Volume 3(4)/2010 (December, 1)	Proorocu Marian: USAMV Cluj, Cluj-Napoca (Romania)
Volume 3(3)/2010 (November, 15)	Ray Sunuram: Khulna University (Bangladesh)
Volume 3(2)/2010 (July, 30)	Rhyne Andrew: Roger Williams University; New England Aquarium, Boston (USA)
Volume 3(1)/2010 (February, 28)	Ruchin Alexander B.: Joint Directorate of the Mordovia State Nature Reserve and National Park «Smolny», Saransk (Russia)
Volume 2(4)/2009 (October, 30)	Safirescu Calin: USAMV Cluj, Cluj-Napoca (Romania)
Volume 2(3)/2009 (July, 30)	Serrano Jr. Augusto E.: University of the Philippines Visayas (Philippines)
Volume 2(2)/2009 (April, 30)	Sima Nicusor Flaviu: USAMV Cluj, Cluj-Napoca (Romania)
Volume 2(1)/2009 (January, 30)	Tlusty Michael F.: New England Aquarium, Boston (USA)
Volume 1(2)/2008 (December, 30)	Vesa Stefan Cristian: Iuliu Hatieganu UMF, Cluj-Napoca (Romania)
Volume 1(1)/2008 (September, 30)	Vintila Iuliana: Dunarea de Jos University of Galati, Galati (Romania)
Volume Pilot/2007 (December, 30) - available printed only	Wariaghli Fatima: University Mohammed V in Rabat, Rabat (Morocco)
Pontus Euxinus, Volume 1 (1980) - Parent Journal	Yusli Wardiatno: Bogor Agricultural University, Bogor (Indonesia).



design: www.simple-webdesign.com

Home | Archive | Volume 1 (1) / 2008 | CEEX 140 | Volume 1 (2) / 2008 | Volume 2 (1) / 2009 | Volume 2 (2) / 2009 | Volume 2 (3) / 2009 | Volume 2 (4) / 2009 | Pilot | Volume 3 (1) / 2010 | Volume 3(2)/2010 (July, 30) | Volume 3(3)/2010 | Volume 3(4)/2010 | Volume 3(5)/2010 - ACVAPEDIA 2010 | Volume 4(1)/2011 | Volume 4(2)/2011 - ACVAPEDIA 2010 | Volume 4(3)/2011 | Volume 4(4)/2011 | Volume 4(5)/2011 | Volume 5(1)/2012 (March, 15) | Volume 5(2)/2012 | Volume 5(3)/2012 | Volume 5(4)/2012 | Volume 5(5)/2012 (December, 30) | Volume 6(1)/2013 - ACVAPEDIA 5th edn., Hungary, Szarvas (HAKI), 27-29th of November, 2012 | Volume 6(2)/2013 - ACVAPEDIA 5th edn., Hungary, Szarvas (HAKI), 27-29th of November, 2012 | Volume 6(3)/2013 | Volume 6(4)/2013 | Volume 6(5)/2013 | Volume 6(6)/2013 | Volume 7(1)/2014 | Volume 7(2)/2014 | Volume 7(3)/2014 | Volume 7(4)/2014 | Volume 7(5)/2014 | Volume 7(6)/2014 | Volume 8(1)/2015 | Volume 8(2)/2015 | Volume 8(3)/2015 | Volume 8(4)/2015 | Volume 8(5)/2015 | Volume 8(6)/2015 | Volume 9(1)/2016 | Volume 9(2)/2016 | Volume 9(3)/2016 | Volume 9(4)/2016 | Volume 9(5)/2016 | Volume 9(6)/2016 | Volume 10(1)/2017 | Volume 10(2)/2017 | Volume 10(3)/2017 | Volume 10(4)/2017 | Volume 10(5)/2017 | Volume 10(6)/2017 | Volume 11(1)/2018 | Volume 11(2)/2018 | Volume 11(3)/2018 | Volume 11(4)/2018 | Pontus Euxinus, Volume 1, 1980 | Volume 11(5)/2018 | Volume 11(6)/2018 | Volume 12(1)/2019 | Volume 12(2)/2019 | Volume 12(3)/2019 | Volume 12(4)/2019 | Volume 12(5)/2019 | Volume 12(6)/2019 | Volume 13(1)/2020 | Volume 13(2)/2020 | Volume 13(3)/2020 | Contact | Site Map



[Aquaculture, Aquarium, Conservation & Legislation](#)

You are here > [Home](#) · [Volume 9\(4\)/2016](#)

AACL Bioflux

[Instructions to authors](#)

[Submission letter](#)

[Model of paper](#)

[Reviewer information pack](#)

[Editorial Board Expanded](#)

[Coverage / databases](#)

[Volume 13\(6\)/2020](#)

[Volume 13\(5\)/2020](#)

[Volume 13\(4\)/2020](#)

[Volume 13\(3\)/2020 \(June, 30\)](#)

[Volume 13\(2\)/2020 \(April, 30\)](#)

[Volume 13\(1\)/2020 \(February, 28\)](#)

[Volume 12\(6\)/2019 \(December, 30\)](#)

[Volume 12\(5\)/2019 \(October, 30\)](#)

[Volume 12\(4\)/2019 \(August, 30\)](#)

[Volume 12\(3\)/2019 \(June, 30\)](#)

[Volume 12\(2\)/2019 \(April, 30\)](#)

[Volume 12\(1\)/2019 \(February, 28\)](#)

[Volume 11\(6\)/2018 \(December, 30\)](#)

[Volume 11\(5\)/2018 \(October, 30\)](#)

[Volume 11\(4\)/2018 \(August, 30\)](#)

[Volume 11\(3\)/2018 \(June, 30\)](#)

[Volume 11\(2\)/2018 \(April, 30\)](#)

[Volume 11\(1\)/2018 \(February, 28\)](#)

[Volume 10\(6\)/2017 \(December, 30\)](#)

[Volume 10\(5\)/2017 \(October, 30\)](#)

[Volume 10\(4\)/2017 \(August, 30\)](#)

[Volume 10\(3\)/2017 \(June, 30\)](#)

Volume 9(4)/2016

First pages, 2016 AAAL Bioflux 9(4):i-vi.

Hamsiah, Herawati E. Y., Mahmudi M., Sartimbul A., 2016 Seasonal variation of bivalve diversity in seagrass ecosystem of Labakkang coastal water, Pangkep, South Sulawesi, Indonesia. AAAL Bioflux 9(4):775-784.

Purnama A. A., Yolanda R., 2016 Diversity of freshwater fish (Pisces) in Kumu River, Rokan Hulu District, Riau Province, Indonesia. AAAL Bioflux 9(4):785-789.

Sriwulan, Anshary H., 2016 Occurrence of infectious and non infectious Decapod Penstyldensovirus 1 (PstDV-1) from tiger shrimp (*Penaeus monodon*) in South Sulawesi, Indonesia. AAAL Bioflux 9(4):790-801.

Rizal M., Wiryawan B., Wisudo S. H., Solihin I., Haluan J., 2016 Institutional development strategy through Interpretive Structural Modelling (ISM) for gillnet fisher group in Barsela Aceh, Indonesia. AAAL Bioflux 9(4):802-814.

Putro S. P., Widowati, Rahmansyah R., Suminto S., 2016 Application of polyculture using stratified double net cage: a case study at Awerange Gulf, Barru, South Sulawesi, Indonesia. AAAL Bioflux 9(4):815-822.

Effendi I., Suprayudi M. A., Surawidjaja E. H., Supriyono E., Zairin M. Jr., Sukenda, 2016 Production performance of white shrimp (*Litopenaeus vannamei*) under sea floating net cages with biofloc and periphyton juvenile. AAAL Bioflux 9(4):823-832.

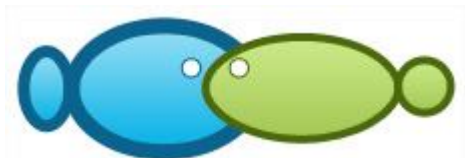
Yudha I. G., Rahardjo M. F., Djokosetiyanto D., Batu D. T. F. L., 2016 Some aspects of the reproductive biology of *Labiobarbus ocellatus* in Tulang Bawang River, Lampung, Indonesia. AAAL Bioflux 9(4):833-844.

Manan H., Moh J. H. Z., Kasan N. A., Suratman S., Ikhwanuddin M., 2016 Study on carbon sinks by classified biofloc phytoplankton from marine shrimp pond water. AAAL Bioflux 9(4):845-853.

Gigentika S., Nurani T. W., Wisudo S. H., Haluan J., 2016 Fishing capacity and technical efficiency of tuna fisheries in Kupang, Indonesia. AAAL Bioflux 9(4):854-863.

Jumawan J. C., Estano L. A., Siega G. H., Maghinay K. A., Santillan M. M., Jumawan J. H., 2016 Gastropod fauna in key habitats surrounding Lake Mainit, Philippines with notes on snail-associated diseases. AAAL Bioflux 9(4):864-876.

- Volume 10(2)/2017 (April, 30)
- Volume 10(1)/2017 (February, 28)
- Volume 9(6)/2016 (December, 30)
- Volume 9(5)/2016 (October, 30)
- Volume 9(4)/2016 (August, 30)
- Volume 9(3)/2016 (June, 30)
- Volume 9(2)/2016 (April, 30)
- Volume 9(1)/2016 (February, 28)
- Volume 8(6)/2015 (December, 30)
- Volume 8(5)/2015 (October, 30)
- Volume 8(4)/2015 (August, 30)
- Volume 8(3)/2015 (June, 30)
- Volume 8(2)/2015 (April, 30)
- Volume 8(1)/2015 (February, 28)
- Volume 7(6)/2014 (December, 30)
- Volume 7(5)/2014 (October, 30)
- Volume 7(4)/2014 (August, 30)
- Volume 7(3)/2014 (June, 30)
- Volume 7(2)/2014 (April, 15)
- Volume 7(1)/2014 (February, 15)
- Volume 6(6)/2013 (November, 15)
- Volume 6(5)/2013 (September, 15)
- Volume 6(4)/2013 (July, 25)
- Volume 6(3)/2013 (May, 15)
- Volume 6(2)/2013 (March, 15)
- Volume 6(1)/2013 (January, 15)
- Volume 5(5)/2012 (December, 30)
- Volume 5(4)/2012 (September, 30)
- Volume 5(3)/2012 (July, 30)
- Volume 5(2)/2012 (June, 30)
- Volume 5(1)/2012 (March, 15)
- Volume 4(5)/2011 (December, 30)
- Volume 4(4)/2011 (October, 30)
- Volume 4(3)/2011 (July, 30)
- Alam M. T., Hussain M. A., Sultana S., Hasan M. T., Das S. K., Ghaffar M. A., Mazumder S. K., 2016 Impact of agrochemicals on fish production in two important beels of Bangladesh. AACL Bioflux 9(4):877-888.**
- Rahmani R., Mansouri B., Azadi N. A., Davari B., Johari S. A., Maleki A., Pordel M. A., 2016 Histopathological alterations in the gill of zebrafish (*Danio rerio*) exposed to Cr and Ba doped TiO₂ nanoparticles. AACL Bioflux 9(4):889-900.**
- Gunaisah E., Saleh Y. B., Nayan N. B., Caropeboka R. M., 2016 Socio-economic and cultural sustainability in local wisdom management at local marine conservation area (KKLD) of Mayalibit Bay, Raja Ampat Regency, West Papua Province. AACL Bioflux 9(4):901-909.**
- Karim N. U., Othman R., Bolong A. M. A., Hassan M., 2016 Effects of electroshock on climbing perch (*Anabas testudineus*) microbiological and physicochemical quality. AACL Bioflux 9(4):910-914.**
- Siwat V., Ambariyanto A., Widowati I., 2016 Biometrics of bigeye scad, *Selar crumenophthalmus* and shrimp scad, *Alepes djedaba* from Semarang waters, Indonesia. AACL Bioflux 9(4):915-922.**
- Nurhatijah N., Muchlisin Z. A., Sarong M. A., Supriatna A., 2016 Application of biofloc to maintain the water quality in culture system of the tiger prawn (*Penaeus monodon*). AACL Bioflux 9(4):923-928.**
- Samson N. L., Jumawan J. C., Abastillas S. O. M. A. L., Eviota M. P., 2016 Fluctuating asymmetry in the body shape of flathead grey mullet, *Mugil cephalus* (Linnaeus, 1758) from Masao river, Butuan city, Agusan del Norte, Philippines. AACL Bioflux 9(4):929-936.**



Gastropod fauna in key habitats surrounding Lake Mainit, Philippines with notes on snail-associated diseases

¹Joycelyn C. Jumawan, ¹Leonardo A. Estaño, ¹Gemma H. Siega, ¹Kariza A. Maghinay, ²Meriam M. Santillan, ¹Jess H. Jumawan

¹Biology Department College of Arts and Sciences, Caraga State University; ² College of Engineering and Information Technology, Caraga State University, Ampayon, Butuan City, Philippines. Corresponding author: J. C. Jumawan, joycejumawan@gmail.com

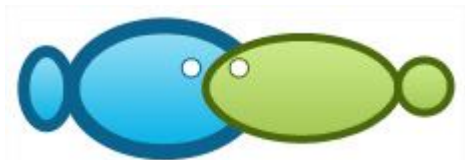
Abstract. Lake Mainit is the deepest lake in the Philippines. Nonetheless, cases of schistosomiasis were also reported in several communities surrounding the lake adding to concern to the tourism in the area. This gastropod survey was conducted in ten barangays surrounding Lake Mainit to provide an inventory of gastropods and their possible preference to habitats surrounding the lake. Collection of samples was done monthly from February to November 2014. A total of fifteen gastropod species from nine families were identified, with four species endemic to the country. Of these species, only one, *Vivipara angularis*, was utilized for food, and is collected abundantly in the lake. Other species were either considered agricultural pests (*Ampullaria luzonica*, *Pomacea luzonica*) while others were known vectors of zoonotic diseases such as *Oncomelania hupensis quadrasi*, *Melanooides tuberculata*, and *Radix rubiginosa*. Notably, known vectors of schistosomiasis were found in rice fields and creeks but not in the lakeshore study stations. This study is the first documentation of gastropods in five habitats surrounding Lake Mainit and will be helpful as baseline data for researches on snail-associated zoonotic diseases in this area.

Key Words: schistosomiasis, zoonosis, diversity, Caraga region.

Introduction. Lake Mainit is the fourth largest lake in the Philippines, and the deepest in the country (LMDA 2005). Twenty-eight river tributaries contribute to the lake and flows into Butuan Bay (De Guzman et al 2008). The lake is divided almost equally shared between the provinces of Agusan del Norte and Surigao del Norte in Northeastern Mindanao. The lake is known in the region for its rich fish resources. About 31 barangays in the four-lakeshore municipalities are dependent on the lake for food and livelihood (LMDA 2005). There are various points around the lake with potential tourist attractions. Nonetheless, persistent reports of schistosomiasis cases of some residents near the lake communities have hampered the lake tourism and economy in general (LMDA 2010). *Schistosoma japonicum* was reported to be endemic in Lake Mainit as early as 1947 (Pesigan 1947). Over the years, studies has continuously confirmed transmission of the disease in areas surrounding the lake at different prevalence rates (Cassion et al 2013; DOH 2004a,b).

Early studies on the ecology of the lake reported a high diversity of aquatic fauna, most especially on the aspect of fisheries (Galicia & Lopez 2000). De Guzman et al (2008) described biodiversity and fisheries in the lake and has identified declining fish catch, declining quality of lake water and resource use conflicts as major concerns of lakeshore communities. A preliminary list of aquatic invertebrates from the lake was reported; however, nearby habitats surrounding the lake was not explored.

This study aimed to conduct a gastropod survey in 10 lakeshore barangays of Lake Mainit with noted prevalence of schistosomiasis. Identification of the snails was performed up to the lowest possible taxon. Information from this study would be vital for updates on the resource utilization of gastropods in the different habitats surrounding the



Impact of agrochemicals on fish production in two important beels of Bangladesh

¹M. Tariqul Alam, ²M. Afzal Hussain, ³Sabina Sultana, ¹M. Tawheed Hasan, ^{4,5}Simon K. Das, ^{4,6}Mazlan A. Ghaffar, ^{5,7}Sabuj K. Mazumder

¹ Department of Aquaculture, Sylhet Agricultural University, Sylhet, Bangladesh; ² Department of Fisheries, Rajshahi University, Bangladesh; ³ Department of Zoology, Rajshahi University, Bangladesh; ⁴ Marine Ecosystem Research Centre, Faculty of Science and Technology, Universiti Kebangsaan, Malaysia; ⁵ School of Environmental and Natural Resource Sciences, Faculty of Science and Technology, University Kebangsaan Malaysia, 43600 UKM Bangi Selangor, D.E., Malaysia; ⁶ School of Fisheries and Aquaculture Sciences, University Malaysia Terengganu, 21030 Kuala Nerus, Terengganu, Malaysia; ⁷ Department of Aquatic Resource Management, Sylhet Agricultural University, Sylhet, Bangladesh. Corresponding author: S. K. Das, skdas_maa@yahoo.com, simon@ukm.edu.my

Abstract. Water bodies often receive agrochemicals indiscriminately, but we know little about the effects of agrochemicals on the flora and fauna of the water bodies. In this study we assess the direct effects of pesticides and fertilizer on the fish production and biodiversity of two important beels; Hilna beel and Kumari beel of Rajshahi district, Bangladesh from July 2007 to June 2009. The result shows that in Hilna beel 2.92 kg ha⁻¹ and Kumari beel 2.95 kg ha⁻¹ pesticide was used. The amount was found to be increased 1.41 times for Hilna beel and 1.44 times for Kumari beel from 2005 to 2009. The results documented that fish production in both beels was decreased with the increment of pesticides used. The results obtained from this study will improve the understanding of the influence of agrochemicals on the important small indigenous fishes.

Key Words: agrochemical, fertilizer, beel, biodiversity, fish.

Introduction. Beels are parts of a riverine complex, being generally formed due to changes in the course of a river or strengthening of river embankments for flood control (Saha et al 1990), these potentially rich inland fishery resources are known as “floodplain wetland” (Das 2002). Locally, these floodplain wetlands are known as beels in Bangladesh and India especially in the states of Assam, West Bengal, Arunachal Pradesh, Manipur, Meghalaya and Tripura (Sugunan & Sinha 2001; Bandyopadhyay & Hassan 2002). These aquatic bodies are usually rain fed and may possess a completely separate ecosystem than pond or river and other wetlands. These open water habitats are naturally rich in various species of fishes and provide considerable fish production of the country.

The beels generally poses high potential for its high production. The vast open water bodies provide natural habitats for various aquatic resources including wild fishes and prawns (Das et al 1990). The open water fisheries resources are declining day by day due to lack of proper management policy, over fishing, unplanned establishment of flood controlled drainage (FCD) and flood control drainage and irrigation dams (FCDI). Every year about 8000 mt. of pesticides are used in agriculture fields of Bangladesh (BFRI 2005). As a result about 54 indigenous species among 260 fresh water species is about to extinct which are born in floodplains and beels and these are main nutrition source of poor people (Haque et al 2010). Among many beels of Rajshahi district, Hilna beel and Kumari beel are two of the most important beels contributing to the adjacent people’s livelihood. In recent years fish production from these sources has alarmingly declined (Haque et al 2010; Sultana et al 2003). Although the culture fisheries sector has