

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : JURNAL INTERNASIONAL

Judul Jurnal Ilmiah (Artikel) : *Synergism and Antagonism among Indigenous Hydrolytic Bacteria from Biomedical Wastes for the Generation of Bacterial Consortium Used as Bioremediation Agent*

Nama Penulis : 1. Stalis Norma Ethica, 2. Rifki Muslim, 3. RM Bagus Widyawardhana, 4. Sakti Imam Muchlissin, 5. Akbar Firmansyah, **6. Sri Darmawati**

Jumlah Penulis : 6 (enam) orang

Status Pengusul : penulis pertama / penulis ke-6 / penulis korespondensi **

Identitas Jurnal Ilmiah : a. Nama Jurnal : International Journal of Environmental Science and Development

g. Nomor ISSN : 2010-0264

h. Volume, nomor, bulan, tahun : Vol. 10, No. 12, December 2019, hal: 440-444,

i. Penerbit : IJESD <http://www.ijesd.org>

j. DOI artikel (Jika ada) : <http://dx.doi.org/10.18178/ijesd.2019.10.12.1213>

k. Terindeks di : Scopus
<https://www.scopus.com/sourceid/21100920640>

Kategori Publikasi Jurnal Ilmiah:

(beri pada kategori yang tepat)

- Jurnal Ilmiah Internasional bereputasi (terindeks pada database internasional bereputasi dan berfaktor dampak)
- Jurnal Ilmiah Internasional terindeks pada database internasional bereputasi
- Jurnal Ilmiah Internasional terindeks pada database internasional diluar kategori bereputasi

Hasil Penilaian Peer Review :

Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah			Nilai Yang Diperoleh
	Internasional Bereputasi dan berfaktor dampak	Internasional terindeks database internasional bereputasi	Internasional terindeks pada database internasional diluar kategori bereputasi	
a. Kelengkapan unsur isi Artikel (10%)	<input checked="" type="checkbox"/> 4,0	<input type="checkbox"/>	<input type="checkbox"/>	4,0
b. Ruang lingkup dan kedalaman pembahasan (30%)	12,0			11,0
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	12,0			11,0
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	12,0			12,0
Total = (100%)	40			38,0
Nilai Pengusul	$0,4 \times 38/5 = 3,4$			3,4
Nilai rata-rata Reviewer 1 dan 2	$(3,4+3,09)/2=3,25$			3,25

Catatan penilai artikel oleh Reviewer 2:

- Kesesuaian dan kelengkapan unsur isi jurnal:** Aturan "Guide for Author" (Title, abstract, Introduction, Materials and methods, Results and Discussion, Conclusion, Acknowledgement, References) sudah sesuai. Substansi artikel sesuai dan terkait bidang ilmu pengusul (Mikrobiologi/Bioteknologi). Format lengkap, ada benang merah dalam struktur penulisannya (skor=4,00).
- Ruang lingkup dan kedalaman pembahasan:** Substansi artikelnya sudah sesuai dengan ruang lingkup jurnal (International Journal of Environmental Science and Development). Kedalaman pembahasan hanya melibatkan 5 dari 16 bh rujukan (skor=11,00).
- Kecukupan dan kemutakhiran data/informasi dan metodologi:** Data-data hasil penelitian sudah menunjukkan ada kebaruan informasi. Dari 16 buah rujukannya, terdapat 15 buah pustaka acuan yang mutakhir (kurang dari 10 th terakhir). Sebanyak 12 dari 16. pustaka berupa Jurnal, (menunjukkan proses review dan kecukupan pustaka sudah memenuhi) (skor = 11,00).
- Kelengkapan unsur dan kualitas terbitan:** Jurnal ini tergolong J. Internasional Bereputasi (Editorial board lebih dari 5 negara, Jurnal terbit secara teratur 12vkali dalam satu tahun. Kontributor lebih dari 2 negara, pISSN 2010-0264, terindeks di Scopus/SJR=0,15 (2020)/Q4, H Index 3; proses editorial sudah sempurna) (skor=12,00).

Semarang, 10 November 2021
 Reviewer 2



Prof. Dr. Suwarno Hadikusanto, SU
 NIP/NIDN : 19541116 19830331002/0016115402
 Unit kerja : Universitas Gadjah Mada Yogyakarta
 Jab. Fungsional : Guru Besar

Prosentase Angka Kredit Penulis untuk:

- **Jurnal dan Prosiding:**
 1. Penulis Pertama sekaligus korespondensi = 60%
 2. Terdiri dari : Penulis pertama; Korespondensi; Pendamping = 40%, 40%, 20%
 3. Terdiri dari: Penulis Pertama, Korespondensi = 50%, 50%
- **Karya Ilmiah lain:** Penulis Pertama; Pendamping = 60%.

* coret yang tidak perlu

LEMBAR
HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : JURNAL INTERNASIONAL

Judul Jurnal Ilmiah (Artikel) : *Synergism and Antagonism among Indigenous Hydrolytic Bacteria from Biomedical Wastes for the Generation of Bacterial Consortium Used as Bioremediation Agent*

Nama Penulis : 1. Stalis Norma Ethica, 2. Rifki Muslim, 3. RM Bagus Widyawardhana, 4. Sakti Imam Muchlissin, 5. Akbar Firmansyah, 6. **Sri Darmawati**

Jumlah Penulis : 6 (enam) orang

Status Pengusul : ~~penulis pertama~~ / ~~penulis ke-6~~ / ~~penulis korespondensi~~ **

Identitas Jurnal Ilmiah : a. Nama Jurnal : International Journal of Environmental Science and Development
 b. Nomor ISSN : 2010-0264
 c. Volume, nomor, bulan, tahun : Vol. 10, No. 12, December 2019, hal: 440-444,
 d. Penerbit : IJESD <http://www.ijesd.org>
 e. DOI artikel (Jika ada) : <http://dx.doi.org/10.18178/ijesd.2019.10.12.1213>
 f. Terindeks di : Scopus
<https://www.scopus.com/sourceid/21100920640>

Kategori Publikasi Jurnal Ilmiah: Jurnal Ilmiah Internasional bereputasi (terindeks pada database internasional bereputasi dan berfaktor dampak)
 (beri pada kategori yang tepat) Jurnal Ilmiah Internasional terindeks pada database internasional bereputasi
 Jurnal Ilmiah Internasional terindeks pada database internasional diluar kategori bereputasi

Hasil Penilaian *Peer Review* :

Komponen Yang Dinilai	Nilai Maksimal Jurnal Ilmiah			Nilai Yang Diperoleh
	Internasional Bereputasi dan berfaktor dampak	Internasional terindeks database internasional bereputasi	Internasional terindeks pada database internasional diluar kategori bereputasi	
a. Kelengkapan unsur isi Artikel (10%)	<input checked="" type="checkbox"/> 4,0	<input type="checkbox"/>	<input type="checkbox"/>	4,0
b. Ruang lingkup dan kedalaman pembahasan (30%)	12,0			12,0
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	12,0			11,0
d. Kelengkapan unsur dan kualitas terbitan/jurnal (30%)	12,0			11,7
Total = (100%)	40			38,7
Nilai Pengusul	(40 % x 38,7)/5 = 3,09			3,09
Nilai rata-rata Reviewer 1 dan 2				

Catatan penilai artikel oleh Reviewer 2:

- Kesesuaian dan kelengkapan unsur isi jurnal:** Penulisan sudah sesuai dengan "Guide for Author" (Title, abstract, Introduction, Materials and methods, Results and Discussion, Conclusion, Acknowledgement, References) dengan sistem Author. Substansi artikel sesuai dan terkait bidang ilmu pengusul (kesehatan). Format lengkap, ada benang merah dalam struktur penulisannya (skor=4,00).
- Ruang lingkup dan kedalaman pembahasan:** Substansi artikel sesuai dengan ruang lingkup jurnal (International Journal of Environmental Science and Development). Kedalaman pembahasan kurang baik (hanya 5 dari 16 bh rujukkannya dilibatkan dalam proses membahas hasil) (skor=11,00).
- Kecukupan dan kemutakhiran data/informasi dan metodologi:** Data-data hasil penelitian sudah menunjukkan ada kebaruan informasi. Dari 16 buah rujukkannya, terdapat 15 buah pustaka acuan yang mutakhir (kurang dari 10 th terakhir). Sebanyak 12 dari 16. pustaka berupa Jurnal, (menunjukkan proses review dan kecukupan pustaka sudah memenuhi) (skor = 12,00).
- Kelengkapan unsur dan kualitas terbitan:** Jurnal ini tergolong J. Internasional Bereputasi (Editorial board lebih dari 5 negara, Jurnal terbit secara teratur 12xkali dalam satu tahun. Kontributor lebih dari 2 negara, pISSN 2010-0264, terindeks di Scopus/SJR=0,15 (2020)/Q4, H Index 3) proses editorial sudah baik namun author yang dicantumkan di halaman terakhir ada yang bukan merupakan anggota tim penulis (skor=11,70).

Semarang,
 Reviewer 2

Prof. Dr. Hermin Pancasakti Kusumaningrum, S.Si, M.Si

NIP/NIDN : 197002081994032001/0008027003

Unit kerja : Fak. Sains dan Matematika UNDIP

Jab. Fungsional : Guru Besar

Bidang Ilmu : Biologi

Prosentase Angka Kredit Penulis untuk:

- **Jurnal dan Prosiding:**

1. Penulis Pertama sekaligus korespodensi = 60%

2. Terdiri dari : Penulis pertama; Korespodensi; Pendamping = 40%, 40%, 20%

3. Terdiri dari: Penulis Pertama, Korespondensi = 50%, 50%

- **Karya Ilmiah lain:** Penulis Pertama; Pendamping = 60%,

* coret yang tidak perlu



This author profile is generated by Scopus Learn more

Darmawati, Sri

📍 Universitas Muhammadiyah Semarang, Semarang, Indonesia Show all author info

📄 57195936353 ⓘ Connect to ORCID

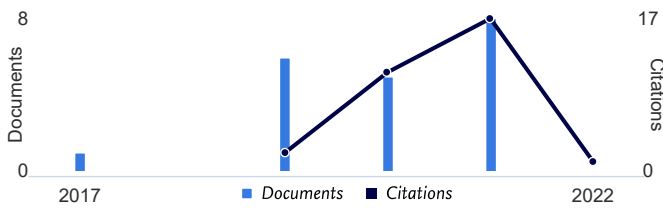
👤 Is this you? Connect to Mendeley account

Edit profile Set alert Potential author matches Export to SciVal

Metrics overview

- 20 Documents by author
- 31 Citations by 24 documents
- 3 *h*-index: [View *h*-graph](#)

Document & citation trends



[Analyze author output](#) [Citation overview](#)

Most contributed Topics 2016–2020 ⓘ

Plasma Jets; Atmospheric Pressure; Reactive Nitrogen Species

4 documents

Meat Tenderness; Longissimus Muscle; Tenderizing

1 document

Tuberculosis; Antiretroviral Therapy; Human Immunodeficiency Virus 1

1 document

[View all Topics](#)

20 Documents Cited by 24 Documents 0 Preprints ^{New} 80 Co-Authors Topics
0 Awarded grants

[Export all](#) [Add all to list](#)

Sort by Date (newest) ▼

> [View list in search results format](#)

> [View references](#)

[Set document alert](#)

Conference Paper • [Open access](#)

Potential of fibrinolytic protease enzyme from tissue of sand sea cucumber (*Holothuria scabra*) as thrombolysis agent

Hidayati, N., Fuad, H., Munandar, H., ...Darmawati, S., Ethica, S.N.

IOP Conference Series: Earth and Environmental Science, 2021, 743(1), 012007

[Show abstract](#) ▼ [View at Publisher](#) ↗ [Related documents](#)

0

Citations

Conference Paper • [Open access](#)



< Back to results | 1 of 1

↗ Export ↕ Download 🖨 Print ✉ E-mail 📄 Save to PDF ☆ Add to List More... >

International Journal of Environmental Science and Development • Open Access • Volume 10, Issue 12, Pages 440 - 444 • 2019

Document type

Article • Gold Open Access

Source type

Journal

ISSN

20100264

DOI

10.18178/ijesd.2019.10.12.1213

View more ▾

Synergism and antagonism among indigenous hydrolytic bacteria from biomedical wastes for the generation of bacterial consortium used as bioremediation agent

Ethica S.N.^{a,b} ✉ , Muslim R.^c ✉ , Widyawardhana R.M.B.I.^d ✉ , Firmansyah A.^e ✉ , Muchlissin S.I.^f ✉ , Darmawati S.^{a,b} ✉

📁 Save all to author list

^a Medical Laboratory Technology Study Program, Faculty of Nursing and Health Sciences, Universitas Muhammadiyah, Semarang, 50273, Indonesia

^b Magister Program of Medical Laboratory Science, Universitas Muhammadiyah, Semarang, 50273, Indonesia

^c Medical Faculty, Universitas Muhammadiyah, Semarang, 50273, Indonesia

^d Mechanical Engineering Study program, Faculty of Engineering, Universitas Muhammadiyah, Semarang, 50273, Indonesia

View additional affiliations ▾

3

Citations in Scopus

5

Views count ⓘ

View all metrics >

📄 View PDF Full text options ▾

Abstract

Author keywords

SciVal Topics

Metrics

Funding details

Abstract

Cited by 3 documents

Potential of fibrinolytic protease enzyme from tissue of sand sea cucumber (*Holothuria scabra*) as thrombolysis agent

Hidayati, N. , Fuad, H. , Munandar, H. (2021) *IOP Conference Series: Earth and Environmental Science*

Degradation performance and microencapsulation of hydrolytic bacterial consortium formulated as bioremediation agent of liquid biomedical waste

Ethica, S.N. , Firmansyah, A. , Purwaningrum, E. (2021) *IOP Conference Series: Earth and Environmental Science*

Prevalence of antibiotic-resistant, toxic metal-tolerant and biofilm-forming bacteria in hospital surroundings

Nath, S. , Sinha, A. , Suchitra Singha, Y. (2020) *Environmental Health and Toxicology*

View all 3 citing documents

Inform me when this document is cited in Scopus:

Set citation alert >

Related documents

Degradation performance and microencapsulation of hydrolytic bacterial consortium formulated as bioremediation agent of liquid biomedical waste

Ethica, S.N. , Firmansyah, A. , Purwaningrum, E. (2021) *IOP Conference Series: Earth and Environmental Science*

Proteolytic and clot lysis activity screening of crude proteases extracted from tissues and bacterial isolates of *Holothuria scabra*

Hidayati, N. , Fuad, H. , Munandar, H. (2021) *IOP Conference Series: Earth and Environmental Science*

Protease producers predominate cultivable hydrolytic bacteria isolated from liquid biomedical waste

Ethica, S.N. , Muchlissin, S.I. , Saptaningtyas, R. (2018) *Asian Journal of Chemistry*

Submit Manuscript

(<http://ojs.ejournal.net/index>)



Current Issue: Volume 13 Number 1

(<http://www.ijesd.org/list-177-1.html>)

About IJESD

International Journal of Environmental Science and Development

International Journal of Environmental Science and Development (IJESD) is an international academic open access journal which gains a foothold in Singapore, Asia and opens to the world. It aims to promote the integration of Environmental Science and Development. The focus is to publish papers on state-of-the-art Environmental Science and Development. Submitted papers will be reviewed by technical committees of the Journal and Association. The audience includes researchers, managers and operators for innovation, management and technology as well as designers and developers.

All submitted articles should report original, previously unpublished research results, experimental or theoretical, and will be peer-reviewed. Articles submitted to the journal should meet these criteria and must not be under consideration for publication elsewhere. Manuscripts should follow the style of the journal and are subject to both review and editing. The topics covered by *IJESD* can be found at Aims and Scope (<http://www.ijesd.org/list-15-1.html>).

Important Notice: *IJESD* will only accept new submissions through online submission system (<http://ojs.ejournal.net/index.php/ijesd/about/submissions>).

Submit Manuscript

(<http://ois.ejournal.net/index>)

Home (<http://www.ijesd.org>) > Editorial Board (<http://www.ijesd.org/list-11-1.html>) >

Editor-in-Chief



Prof. Richard Haynes

The University of Queensland, Australia

Editorial Board Members

Prof. Miklas Scholz

Division of Water Resources Engineering (TVRL), Department of Building and Environmental Technology, Faculty of Engineering, Lund University, 22100 Lund, **Sweden**

Website (<http://www.tvrl.lth.se/personal/teachers-researchers/miklas-scholz/>) | Email (<mailto:miklas.scholz@tvrl.lth.se>)

Interest: environmental engineering; environmental science; water resources; water quality; agricultural water management; pollution control; wastewater treatment; decision support systems; treatment wetlands; integrated constructed wetlands; hydrology; sustainable flood retention basins; sustainable drainage systems; ponds

Contribution: Special Issue "Wetlands for Wastewater Treatment (<http://www.ijesd.org/show-125-1620-1.html>)"

Assoc. Prof. Paulo Mendonça

School of Architecture, University of Minho, Azurém Campus, **Portugal**

Email (mailto:mendonca@arquitectura.uminho.pt)

Interest: lightweight and mixed weight buildings; energy efficient envelopes; new materials and technologies in design and construction; hygrothermal comfort evaluation in buildings and urban environments; natural lighting in buildings; solar passive strategies; prefabrication; flexibility in housing partitions; social housing; eco-design in architecture

Contribution: Special Issue "Functional Rehabilitation of Built Environment (<http://www.ijesd.org/show-125-1618-1.html>)"

Prof. Solomon Leung

Department of Civil and Environmental Engineering, Idaho State University, Pocatello, Idaho 83209, USA

Email (mailto:leunsolo@isu.edu)

Interest: water and wastewater treatments; air pollution control; biosensors; nanotechnology applications; environmental health and risk assessments

Prof. Berrin Tansel

Department of Civil and Environmental Engineering, Florida International University, Miami, FL 33174, USA

Email (mailto:tanselb@fiu.edu)

Interest: waste management; coastal impacts; fate and transport of contaminants; solid waste; wastewater

Prof. Abdelazim Mohamed Negm

Water and Water Structures Engineering Dept., Faculty of Engineering, Zagazig University, Zagazig 44519, Egypt

Email (mailto:amnegg@zu.edu.eg)

Interest: water resources; RS/GIS applications in water resources; hydrology and groundwater; environmental engineering; sustainable and green environment; hydrodynamic, modeling, irrigation engineering; hydraulics and environmental hydraulics

Assoc. Prof. Xinling Li

School of Mechanical, Shanghai Jiao Tong University, Shanghai, China

Email (mailto:lxl@sjtu.edu.cn)

Interest: emission of vehicle; air pollution; aerosol

Prof. Kevin Liu

Department of Safety, Health and Environmental Engineering, Ming Chi University of Technology, New Taipei, Taiwan

Website (http://igtplus.mcut.edu.tw/sections/121/pages/376?locale=zh_tw) | Email (<mailto:kevinliu@mail.mcut.edu.tw>)

Interest: environmental sustainability

Prof. H. L. Koh

Jeffrey Sachs Center on Sustainable Development, Sunway University, Malaysia

Website (<http://jci.edu.my/koh-hock-lye/>) | Email (<mailto:hocklyek@sunway.edu.my>)

Interest: mathematical modelling; sustainable lake management

Dr. Mitsuo Yoshida

1. Environmental Research Laboratory, International Network for Environmental and Humanitarian Cooperation, Nonprofit Inc., Tokyo, Japan

2. Global Environment Department, Japan International Cooperation Agency (JICA), Tokyo, Japan

Website (<https://mitsuoyoshida.academia.edu/>) | Email (<mailto:mitsuoyoshida@inehc.com>)

Interest: environmental management; environmental geology

Dr. Irvan Dahlan

School of Chemical Engineering, Universiti Sains Malaysia, Malaysia

Website (<http://chemical.eng.usm.my/staff/47-academic/267-irvan-dahlan>) | Email (<mailto:chirvan@usm.my>)

Interest: adsorption; wastewater and air pollution treatment

Dr. Violeta Mugica-Alvarez

Department of Basic Sciences, Universidad Autónoma Metropolitana Azcapotzalco, Mexico

Website (<http://www.uam.mx>) | Email (<mailto:vma@azc.uam.mx>)

Interest: Environmental sciences, air pollution, soil pollution and remediation

Dr. Hamed Niroumand

Faculty of civil engineering, Universiti Teknologi Malaysia, Malaysia

Email (<mailto:niroumandh@gmail.com>)

General Information

Submit Manuscript

(http://ojs.ejournal.net/index.php/ijesd)

Home (<http://www.ijesd.org>) > Archive (<http://www.ijesd.org/list-6-1.html>) > 2019
(<http://www.ijesd.org/list-115-1.html>) > Volume 10 Number 12 (Dec. 2019) (<http://www.ijesd.org/list-140-1.html>) >

Volume 10 Number 12 (Dec. 2019)

 **CONTENT**

Article#	Type	Article Title & Authors (Volume 10 Number 12 (Dec. 2019))	Page
1208	Article	An Assessment of CO ₂ Emission and Absorption in Response to Land-Cover Changes in the Seoul Metropolitan Area (http://www.ijesd.org/show-140-1688-1.html) <i>Sangheon Lee</i>	410
1209	Article	Changes in the Content of Chemical Elements in the Muscle Tissue of Broilers on the Background of Plant Extract and Tetracyclines (http://www.ijesd.org/show-140-1689-1.html) <i>Olga Kvan, Galimzhan Duskaev, Shamil Rakhmatullin, and Dianna Kosyan</i>	419
1210	Article	Effects of the Horizontal Elements on Windward Wall of Buildings on Natural Ventilation and Pollutant Dispersion (http://www.ijesd.org/show-140-1690-1.html) <i>Yuya Xiong and Hong Chen</i>	424
1211	Article	Phosphorus- and Iron-Deficiency Stresses Affect Arsenic Accumulation and Root Exudates in <i>Pteris vittata</i> (http://www.ijesd.org/show-140-1691-1.html) <i>Chongyang Yang, Mei-Fang Chien, Ying-Ning Ho, and Chihiro Inoue</i>	430
1212	Article	Appliance of Simulation Modelling in Wastewater Treatment (http://www.ijesd.org/show-140-1692-1.html) <i>Lovorka Gotal Dmitrović, Mario Lešina, and Hrvoje Selec</i>	435

1213	Article	Synergism and Antagonism among Indigenous Hydrolytic Bacteria from Biomedical Wastes for the Generation of Bacterial Consortium Used as Bioremediation Agent (http://www.ijesd.org/show-140-1693-1.html) <i>Stalis Norma Ethica, Rifki Muslim, RM Bagus Irawan Widyawardhana, Akbar Firmansyah, Sakti Imam Muchlissin, and Sri Darmawati</i>	440
1214	Article	Chemical Contamination in a Typical Independent Water Scheme (IWS) Catchment (http://www.ijesd.org/show-140-1694-1.html) <i>T. Imo, P. Amosa, V. Vaurasi, and F. Latu</i>	445
1215	Article	Risk Assessment and Source Analysis of Heavy Metal in Agricultural Soil of a Township in Wuxi County (http://www.ijesd.org/show-140-1695-1.html) <i>Hengchang Zhang, Chuan Fu, Tingzhen Li, Bin Yan, and Yan Wu</i>	450
1216	Article	Using Plastic Bags in Roadways (http://www.ijesd.org/show-140-1696-1.html) <i>Gabriela Kuran, Catarina Figueiredo Mendes, and Gautham Das</i>	456

General Information

ISSN: 2010-0264 (Print)

Abbreviated Title: Int. J. Environ. Sci. Dev.

Frequency: Bimonthly(Since 2022); Monthly

DOI: 10.18178/IJESD

Editor-in-Chief: Prof. Richard Haynes

Executive Editor: Ms. Nancy Y. Liu

Indexing: Scopus (<http://www.scopus.com/sourceid/21100920640#tabs=0>) (since 2019), Google Scholar (https://scholar.google.com/scholar?q=site:http://www.ijesd.org&hl=en&as_sdt=1,5&as_vis=1), CNKI (<https://scholar.cnki.net/journal/index/c9185761-e6db-44db-9a63-12244ea791a1>), Crossref, ProQuest, EBSCO, etc.

E-mail: ijesd@ejournal.net

[Submit Manuscript](#)

(<http://ojs.ejournal.net/index>)

Home (<http://www.ijesd.org>) > Archive (<http://www.ijesd.org/list-6-1.html>) > 2019
(<http://www.ijesd.org/list-115-1.html>) > Volume 10 Number 12 (Dec. 2019) (<http://www.ijesd.org/list-140-1.html>) >

IJESD 2019 Vol.10(12): 410-418 ISSN: 2010-0264

doi: 10.18178/ijesd.2019.10.12.1208

An Assessment of CO₂ Emission and Absorption in Response to Land-Cover Changes in the Seoul Metropolitan Area

Sangheon Lee

Abstract—In order to cope with climate change, which has been becoming a global issue, there are measures such as fundamentally reducing energy use or converting energy sources into renewable energy, but this is difficult to apply due to limitations on human activities. Based on the guidelines provided by the IPCC, this study drew a countermeasure to climate change considering the emission and absorption of CO₂ by land use or land cover. Especially, by using the land-use change simulation technique to predict future land use, expected problems which are caused by urban development were prevented in advance. In addition, CO₂ emissions sources are classified into direct emissions and indirect emissions, and the extent to which each region contributes to greenhouse gas emissions is analyzed to provide alternatives that meet the characteristics of each region. Moreover, to calculate greenhouse gas emissions in the transportation sector, the network analysis of ArcGIS was used to calculate CO₂ emissions from vehicle's movements and to propose alternatives.

Index Terms—Climate change adaptation, CO₂ emission and absorption, direct-indirect emission, land use change simulation.

Snagheon Lee is with Changwon Research Institute, Changwon, Gyeongsangnam-do, **South Korea** (e-mail: shlee0901@gmail.com).

[PDF] (vol10/1208-A054.pdf)

Cite: Sangheon Lee, "An Assessment of CO₂ Emission and Absorption in Response to Land-Cover Changes in the Seoul Metropolitan Area," *International Journal of Environmental Science and Development* vol. 10, no. 12, pp. 410-418, 2019.

Copyright © 2019 by the authors. This is an open access article distributed under the Creative Commons Attribution License which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited (CC BY 4.0 (<https://creativecommons.org/licenses/by/4.0/>)).

PREVIOUS PAPER

First page

NEXT PAPER

Changes in the Content of Chemical Elements in the Muscle Tissue of Broilers on the Background of Plant Extract and Tetracyclines (<http://www.ijesd.org/show-140-1689-1.html>)

General Information

ISSN: 2010-0264 (Print)

Abbreviated Title: Int. J. Environ. Sci. Dev.

Frequency: Bimonthly(Since 2022); Monthly

DOI: 10.18178/IJESD

Editor-in-Chief: Prof. Richard Haynes

Executive Editor: Ms. Nancy Y. Liu

Indexing: Scopus (<http://www.scopus.com/sourceid/21100920640#tabs=0>) (since 2019), Google Scholar (https://scholar.google.com/scholar?q=site:http://www.ijesd.org&hl=en&as_sdt=1,5&as_vis=1), CNKI (<https://scholar.cnki.net/journal/index/c9185761-e6db-44db-9a63-12244ea791a1>), Crossref, ProQuest, EBSCO, etc.

E-mail: ijesd@ejournal.net

Submit Manuscript

(<http://ojs.ejournal.net/index>)

Home (<http://www.ijesd.org>) > Archive (<http://www.ijesd.org/list-6-1.html>) > 2019
(<http://www.ijesd.org/list-115-1.html>) > Volume 10 Number 12 (Dec. 2019) (<http://www.ijesd.org/list-140-1.html>) >

IJESD 2019 Vol.10(12): 419-423 ISSN: 2010-0264

doi: 10.18178/ijesd.2019.10.12.1209

Changes in the Content of Chemical Elements in the Muscle Tissue of Broilers on the Background of Plant Extract and Tetracyclines

Olga Kvan, Galimzhan Duskaev, Shamil Rakhmatullin, and Dianna Kosyan

Abstract—The article provides information on the mineral metabolism in the body of an agricultural bird. Studies have shown that when incorporating biologically active substances along with plant extracts, they help to improve the immunity of the birds. This article is devoted to the study of the effect of antibiotic and oak bark extract on mineral metabolism in the body of broiler chickens. During the study it was revealed that the pectoral muscles of the bird contain an excess of such trace elements as cobalt, silicon, vanadium, copper, zinc, and iodine. Oak bark extract in the pectoral muscles and in the muscles of the thigh contributed to the elimination of toxic elements, so the level of aluminum in absolute terms was significantly reduced. The inclusion of antibiotics also led to a significant decrease with respect to aluminum control. The maximum decrease in the level of toxic elements was observed in the group that was additionally co-administered with an antibiotic and oak bark extract. It has been found that extracts of these herbs enhance broiler immunity and help balance the intestinal flora necessary for digestion and for protection against pathogenic microorganisms.

Index Terms—Broiler muscle tissue, mineral metabolism, macronutrient composition, muscles of the bird, tetracycline antibiotic, toxic elements.

The authors are with Federal Research Center of Biological Systems and Agrotechnologies of the Russian Academy of Sciences, 9 Yanvarya, 29, Orenburg 460000, **Russia** (e-mail: kwan111@yandex.ru, gduskaev@mail.ru, Shahm2005@rambler.ru, kosyan.diana@mail.ru).

[PDF] (vol10/1209-B3004.pdf)

Cite: Olga Kvan, Galimzhan Duskaev, Shamil Rakhmatullin, and Dianna Kosyan, "Changes in the Content of Chemical Elements in the Muscle Tissue of Broilers on the Background of Plant Extract and Tetracyclines," *International Journal of Environmental Science and Development* vol. 10, no. 12, pp. 419-423, 2019.

Copyright © 2019 by the authors. This is an open access article distributed under the Creative Commons Attribution License which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited (CC BY 4.0 (<https://creativecommons.org/licenses/by/4.0/>)).

PREVIOUS PAPER

An Assessment of CO₂ Emission and Absorption in Response to Land-Cover Changes in the Seoul Metropolitan Area (<http://www.ijesd.org/show-140-1688-1.html>)

NEXT PAPER

Effects of the Horizontal Elements on Windward Wall of Buildings on Natural Ventilation and Pollutant Dispersion (<http://www.ijesd.org/show-140-1690-1.html>)

General Information

ISSN: 2010-0264 (Print)

Abbreviated Title: Int. J. Environ. Sci. Dev.

Frequency: Bimonthly(Since 2022); Monthly

DOI: 10.18178/IJESD

Editor-in-Chief: Prof. Richard Haynes

Executive Editor: Ms. Nancy Y. Liu

Indexing: Scopus (<http://www.scopus.com/sourceid/21100920640#tabs=0>) (since 2019), Google Scholar (https://scholar.google.com/scholar?q=site:http://www.ijesd.org&hl=en&as_sdt=1,5&as_vis=1), CNKI (<https://scholar.cnki.net/journal/index/c9185761-e6db-44db-9a63-12244ea791a1>), Crossref, ProQuest, EBSCO, etc.

E-mail: ijesd@ejournal.net