

1st-2023 EVENT REPORT

International Education for Promoting International Collaboration

Keynote Lecture

Organized by



Faculty of Regional Environment Science
Tokyo University of Agriculture



HOCHSCHULE OSNABRÜCK
UNIVERSITY OF APPLIED SCIENCES

Osnabrück University of Applied Sciences

May 17, 2023

地域環境科学部国際化推進における国際教育の連携

基調講演

東京農業大学地域環境科学部

学部長 大林 宏也

国際教育専門委員 トウ ナロン

地域環境科学部の国際化推進活動の一環として、東京農業大学地域環境科学部はオスナブリュック応用科学大学の教員を招き、**持続可能な農業生産**のテーマで基調講演を下記の通り開催します。教員のみならず、大学院生、学部生のご参加をお待ちしております。

記

日時：2023年5月17日（水曜日）日本時間 16：20～17：30を予定

場所：世田谷キャンパス 1号館 344教室

題目：Sustainable Agriculture: A path towards better future

講師：オスナブリュック応用科学大学 **Prof. Dr. Dieter Trautz**



1989-1993 Senior expert for Nature Conservation and Landscape Planning, Kiel/Germany

1993～ Full Professorship Osnabrueck University of Applied Sciences/Germany

Research fields: Agroecology, Plant Production, Organic Farming, Precision Farming, Tropical Plant Production

プログラム(日本時間)：

16:20-16:25 : 開会挨拶

16:25-17:10 : 特別講演

17:10-17:25 : 質疑応答

17:25-17:30 : 写真撮影

以上

Faculty of Regional Environmental Science
International Education for Promoting International Collaboration

Keynote Lecture

It is our honor to **invite you to participate in the Keynote Lecture** organized by the Faculty of Regional Environmental Science, Tokyo University of Agriculture, Japan.

As part of the international cooperation related to educational and research activities, the faculty will organize the
Keynote Lecture on the topic of
[Sustainable Agriculture]

Date *17 May 2023, at 16:20 (JST)*
Place *Setagaya Campus, Building No. 1, Room 344*
Title *Sustainable Agriculture: A path towards better future*
Speaker *Prof. Dr. Dieter Trautz (Osnabrück University of Applied Sciences, Germany)*



1989-1993 Senior expert for Nature Conservation and Landscape Planning, Kiel/Germany
1993~ Full Professorship Osnabrueck University of Applied Sciences/Germany
Research fields: Agroecology, Plant Production, Organic Farming, Precision Farming, Tropical Plant Production

All faculty members and undergraduate/master/doctoral students are welcome to join this keynote lecture!

Program (JST):

16:20-16:25 : Opening remarks
16:25-17:10 : Keynote lecture
17:10-17:25 : Q &A
17:25-17:30 : Group photo

That's all

List of Participants

- | | |
|-----------------------------------|----------------------------|
| 1. Abdallah Sabra Yusuf | 21. Narong Touch |
| 2. Ayaka Nishimura | 22. Nathali Quintero |
| 3. Ayano Shindo | 23. Ognen Onchevski |
| 4. Buddhika Bandara | 24. Ohta Tsubaru |
| 5. Chizuko Mizuniwa | 25. Orujov Orujo |
| 6. Daichi Akiyama | 26. Renon Rosalis |
| 7. Endo | 27. Rintaro Ohashi |
| 8. Hiroaki Nakajima | 28. Ruth N. Maru |
| 9. Hiromu Okazawa | 29. Ryogo Tsuchiya |
| 10. Hiroya Ohbayashi | 30. Simon Mahmmmed Shybani |
| 11. Haruka Shibata | 31. Suzuki Shinji |
| 12. Itaru Ishida | 32. Takahiko Nakamura |
| 13. Kakeru Ideno | 33. Takamori Fukuoka |
| 14. Kako Matsunaga | 34. Taichi Kuramitsu |
| 15. Kazuha Wakazuki | 35. Tomoya Nishino, |
| 16. KisekiKurashina | 36. Tanakorn Kaewplik |
| 17. Kota Shigetomi | 37. Uego Perez Juan |
| 18. Mazibuko Dickson Mgangathweni | 38. Vicenie Lopez Sanchez |
| 19. Macha Jimmy | 39. Yogendra Gharti Magar |
| 20. Machito Mihara | 40. Yumiko Kanazawa |

7 participants unregistered.

Photo Gallery



Opening Remarks



Keynote lecture



Free talk



2nd-2023 EVENT REPORT

International Education for Promoting International Collaboration

Keynote Lecture

Organized by



Faculty of Regional Environment Science
Tokyo University of Agriculture



Cranfield University

September 14, 2023

地域環境科学部国際化推進における国際教育の連携

第2回 特別講演会

東京農業大学地域環境科部

学部長 大林 宏也

国際教育専門委員 トウ ナロン

地域環境科学部の国際化推進活動の一環として、東京農業大学地域環境科学部は克蘭フィールド大学の教員を招き、**持続可能な土壌管理**のテーマで招待講演を下記の通り開催します。教員のみならず、大学院生、学部生のご参加をお待ちしております。

記

日時：2023年9月14日（木曜日）日本時間 16：00～17：00を予定

場所：世田谷キャンパス 1号館 313教室 & Zoom オンライン

<https://us02web.zoom.us/j/89529753039?pwd=d0k0cDh5V1phNVBveUMxbHpsK1RoQT09>

ミーティングID：895 2975 3039

パスコード：534463

題目：A solution for mitigating soil surface crusting and soil splash.

講師：克蘭フィールド大学 **Dr. Robert Simmons**



2003-2005 Researcher: International Water Management Institute, Southeast Asia Regional Office, Bangkok, Thailand.

2005-2008 Senior Researcher: International Water Management Institute, South Asia Regional Office, Hyderabad, India.

2008-2012 Lecturer in Soil Erosion and Conservation, Cranfield University.

2012 ~ Senior Lecturer / Reader in Sustainable Soil Management, Cranfield University.

Research fields: Soil Resources, Water Science and Engineering

Faculty of Regional Environmental Science
International Education for Promoting International Collaboration

2nd Lecture

It is our honor to **invite you to participate in the 2nd Lecture** organized by the Faculty of Regional Environmental Science, Tokyo University of Agriculture, Japan.

As part of the international cooperation related to educational and research activities, the faculty will organize the
2nd Lecture on the topic of
[Sustainable Soil management]

Date *14 Sep 2023, at 16:00 (JST)*

Place *Setagaya Campus, Building No. 1, Room 313 & Zoom Online*

<https://us02web.zoom.us/j/89529753039?pwd=d0k0cDh5VlphNVBveUMxbHpsK1RoQT09>

Meeting ID: *895 2975 3039*

Passcord: *534463*

Title *A solution for mitigating soil surface crusting and soil splash.*

Speaker *Dr. Robert Simmons (Cranfield University, UK)*



2003-2005 Researcher: International Water Management Institute,
Southeast Asia Regional Office, Bangkok, Thailand.
2005-2008 Senior Researcher: International Water Management
Institute, South Asia Regional Office, Hyderabad, India.
2008-2012 Lecturer in Soil Erosion and Conservation, Cranfield
University.
2012 ~ Senior Lecturer / Reader in Sustainable Soil
Management, Cranfield University.
Research fields: Soil Resources, Water Science and Engineering

All faculty members and undergraduate/master/doctoral students are welcome to join this lecture!

List of Participants

- | | |
|-----------------------------------|-----------------------------|
| 1. Abdallah Sabra | 21. Misa Takahashi |
| 2. Ai Tsuchisawa | 22. Morimo Kawasaki |
| 3. Ayaka Nishimura | 23. Narong Touch |
| 4. Ayako Sekiyama | 24. Perez Fuentes Antonio |
| 5. Chizuko Mizuniwa | 25. Reo Odagiri |
| 6. Fuji kurisu | 26. Rinka Hirobe |
| 7. Fumio Watanabe | 27. Ryogo Tsuchiya |
| 8. Gladness Kische | 28. Ryosuke Nakano |
| 9. Hana Ogawa | 29. Shinji Suzuki |
| 10. Haruka Shibata | 30. Somara Oum |
| 11. Haruya Namiki | 31. Takanori Fukuoka |
| 12. Kakeru Ideno | 32. Taichi Kuramitsu |
| 13. Kiyoshi Hasegawa | 33. Tomoe Hotori |
| 14. Kiyoshi Tajima | 34. Tomoya Nishino |
| 15. Kota Shigetomi | 35. Toru Nakajima |
| 16. Lioba Renoh | 36. Uego Perez Juan |
| 17. Luweya Kenword Aeron Banda | 37. Yano |
| 18. Machito Mihara | 38. Youta Ito |
| 19. Manato Kanezaki | 39. Yuji Umehara |
| 20. Mazibuko Dickson Mgangathweni | 40. Yusufi Mohammad Mirwais |

Photo Gallery



3rd-2023 EVENT REPORT

International Education for Promoting International Collaboration

Online Colloquium

Organized by



Faculty of Regional Environment Science
Tokyo University of Agriculture



اُنِيُو تِكْنُوْلُوجِي مَارَا
UNIVERSITI
TEKNOLOGI
MARA

November 27, 2023



اَوْنُو تِكْنُوْلُوجِي مَارَا
UNIVERSITI
TEKNOLOGI
MARA



TOKYO UNIVERSITY OF AGRICULTURE

地域環境科学部における教育研究の連携に向けた オンラインコロキウム

東京農業大学地域環境科部

学部長 大林 宏也

学部国際化推進委員長 トウ ナロン

国際教育専門委員 亀山 翔平

地域環境科学部の国際連携の一環として、東京農業大学大学環境科学部はマラ工科大学（マレーシア）と共同で、双方の大学院生が発表するオンライン・コロキウムを開催します。教員、大学院生、学部生のご参加をお待ちしています。

日時：2023年11月27日（月曜日）日本時間 18：00から約1時間半を予定

Zoom connection:

<https://us02web.zoom.us/j/89385109378?pwd=RTZ4cnRlNm5VVVtdPRmdTOXBZWGQydz09>

ミーティング ID: 893 8510 9378

パスコード: 832201

プログラム：

1. 開会挨拶（東京農業大学）
2. 東京農業大学の大学院生による研究発表 2件
3. マラ工科大学の大学院生による研究発表 2件
4. フリーディスカッション（参加者）
5. 閉会挨拶（マラ工科大学）

※皆様からのご質問やコメントはZoom中のChatでも受け付けます



**International Online Colloquium for Education and Research Collaboration in the
Faculty of Regional Environment Science, Tokyo University of Agriculture
&
MARA University of Technology**

As part of the international collaboration activities relating to education and research in the Faculty of Regional Environment Science, Tokyo University of Agriculture (Japan), and Universiti Teknologi MARA (Malaysia) will hold an Online Colloquium. Graduate students at both universities will deliver research presentations and discuss. Faculty members as well as undergraduate / graduate school students are welcome to join this colloquium.

Date and time: From 19:00 in Malaysia (18:00 JST) to 20:30 (19:30 JST) on November 27, 2023

Zoom

connection:

<https://us02web.zoom.us/j/89385109378?pwd=RTZ4cnRlNm5VVldPRmdTOXBZWGQydz09>

Meeting ID: 893 8510 9378

Pass code: 832201

Program :

- 1 . Opening remarks (Tokyo University of Agriculture)
- 2 . Research Presentations from Tokyo University of Agriculture
Graduate students
- 3 . Research Presentations from Universiti Teknologi MARA
Graduate students
- 4 . Open Discussion (All participants)
- 5 . Closing remarks (Universiti Teknologi MARA)

Participants from both sides can also give comments and ask questions via Zoom Chat.

Participants

参加者 (40)

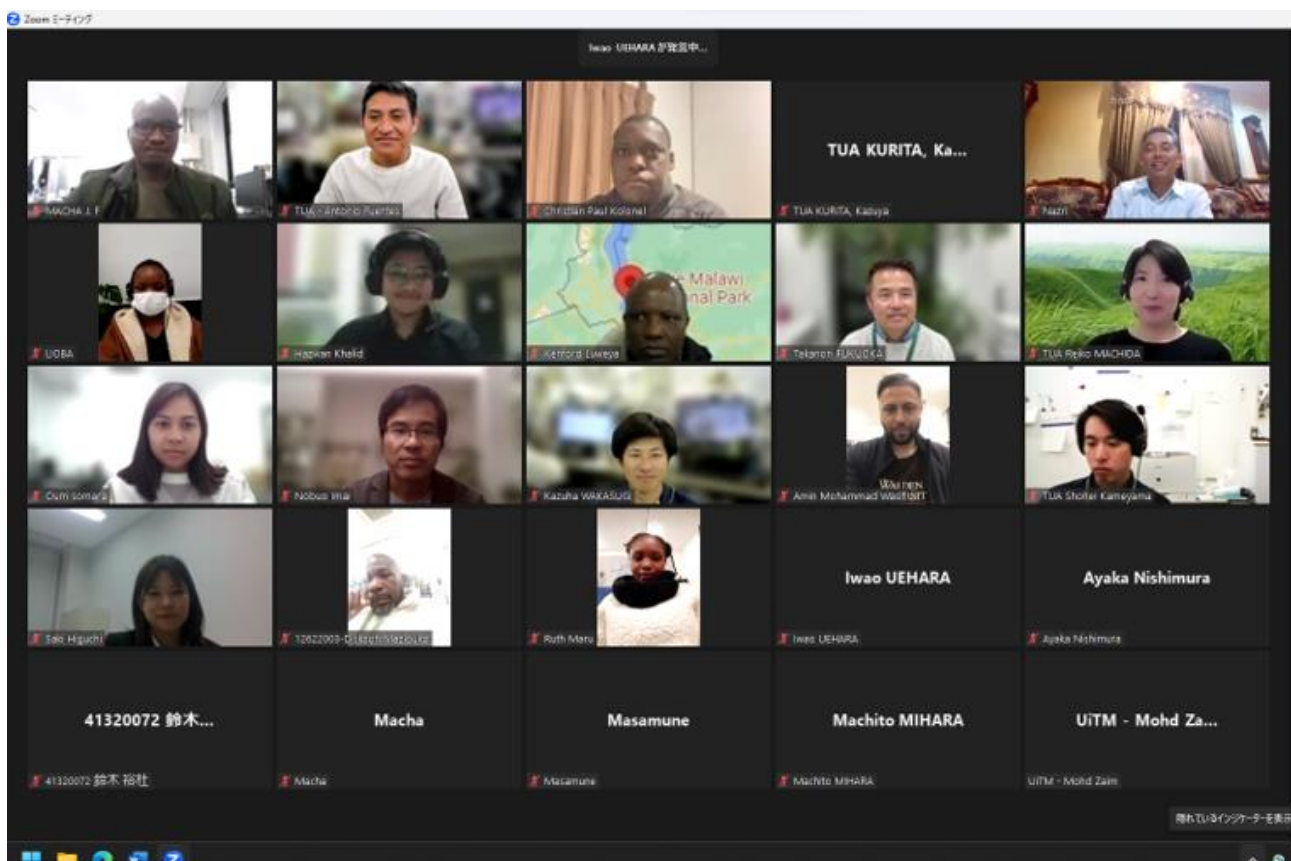
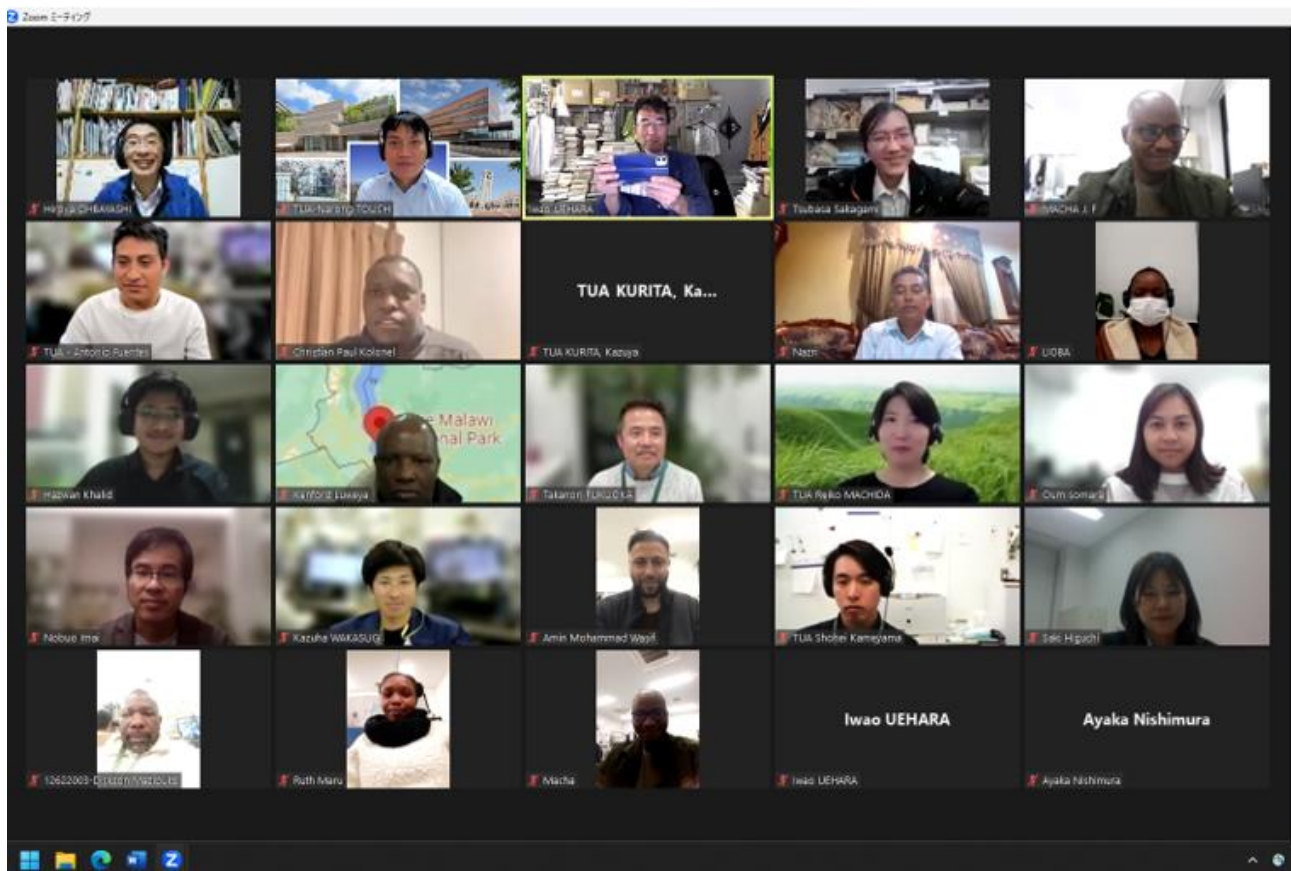


参加者の検索

	TUA-Narong TOUCH (自分)		
	Iwao UEHARA (ホスト)		
	Iwao UEHARA		
	TUA Saki Higuchi		
	12622003-Dickson Mazibuko		
	12623002 Uego Perez Juan		
	41320072 鈴木 裕杜		
	Ayaka Nishimura		
	Christian Paul Kolonel		
	Hiromu OKAZAWA		
	Hiroya OHBAYASHI		
	Kakeru Ideno		
	Kazuha WAKASUGI		
	Kenford Luweya		
	Koji Yamazaki		
	LIIBA		
	Macha		
	MACHA J. F		
	Machito MIHARA		

	Masamune		
	Nobuo Imai		
	Oum somara		
	Ramin		
	Ruth Maru		
	Sora WATANABE		
	Taichi Kuramitsu		
	Takanori FUKUOKA		
	Tsubasa Sakagami		
	Tsuchiya Ryogo		
	TUA - Antonio Fuentes		
	TUA FUMIO WATANABE		
	TUA KURITA, Kazuya		
	TUA Reiko MACHIDA		
	TUA Sarvesh Maskey (工学)		
	TUA Shohei Kameyama		
	TUA Yumiko KANAZAWA		
	TUA_ Kiseki KURASHINA		
	Yu Hirano		
	柴田理佳 (しばたはるか)		
	竹内 将俊		
	Tokyo university of agriculYusufi M...		

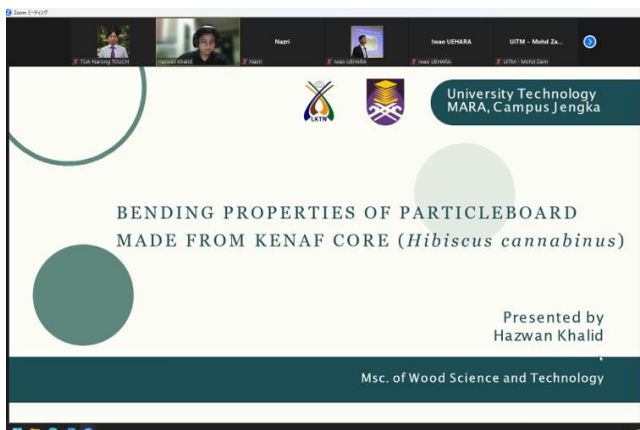
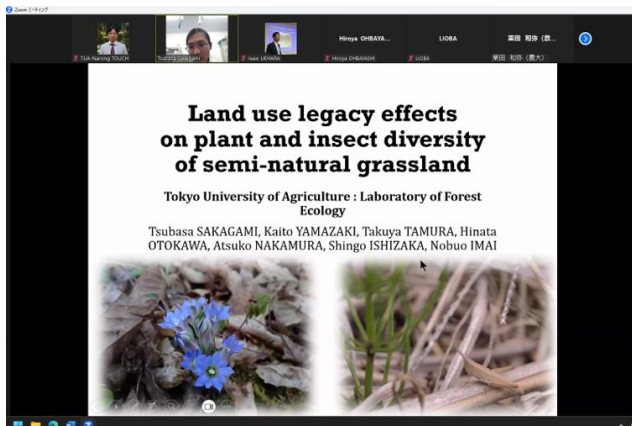
Photo Gallery



Opening Remarks



Research Presentation



Open Discussion and Closing Remarks

Zoom ミーティング

TUA-NARING TOUCH MAO UENARA Nazim HIZWAN KHAILD HIRIYA CHEAHASHI LIOBA

Open Discussion



Windows taskbar icons are visible at the bottom.

Zoom ミーティング

TUA-NARING TOUCH MAO UENARA Nazim HIZWAN KHAILD HIRIYA CHEAHASHI LIOBA

Thank you very much ! See you in Malaysia or in Japan !



Windows taskbar icons are visible at the bottom.

4th-2023 EVENT REPORT

International Education for Promoting International Collaboration

Online Colloquium

Organized by



Faculty of Regional Environment Science
Tokyo University of Agriculture



December 11, 2023

地域環境科学部における教育研究の連携に向けた オンラインコロキウム

東京農業大学地域環境科部

学部長 大林 宏也

学部国際化推進委員長 トウ ナロン

地域環境科学部の国際化推進活動の一環として、東京農業大学・地域環境科学部はコンケン大学（タイ）・農学部と共同で、「持続可能な農業生産に向けた技術革新」のテーマでオンラインコロキウムを開催します。教員のみならず、大学院生、学部生のご参加をお待ちしております。

日時：2023年12月11日（月曜日）日本時間 16：30～17：30を予定

Zoom connection:

<https://us02web.zoom.us/j/81856835765?pwd=TmRCOGVXb1RMcVlQTHRzVCsvQ2IvZz09>

Meeting ID : 818 5683 5765

Password : 20231211

プログラム(日本時間)：

- 16:30-16:35 : 開会挨拶
- 16:35-17:15 : 研究発表と質疑応答
- 17:15-17:25 : 今後の協定連携活動
- 17:25-17:30 : 閉会挨拶&写真撮影

以上

**Online Colloquium for Education and Research Collaboration between
Faculty of Regional Environmental Science, Tokyo University of Agriculture (Japan)
&
Faculty of Agriculture, Khon Kaen University (Thailand)**

Online Colloquium

It is our honor to **invite you to participate in the Online Colloquium** of the Faculty of Regional Environmental Science, Japan and the Faculty of Agriculture, Thailand.

As part of the international cooperation related to educational and research activities, the three faculties will
organize the Online Colloquium on the topic of

[Technology Innovations for Sustainable Agriculture]

The colloquium will be held on 11 December 2023, at 4:30 pm (JST) [2:30 pm (Thailand)]

zoom connection:

<https://us02web.zoom.us/j/81856835765?pwd=TmRCOGVXb1RMcVlQTHRzVCsvQ2IvZz09>

Meeting ID : 818 5683 5765

Password : 20231211

All faculty members and undergraduate/master/doctoral students are welcome to join this meeting!

Program (JST):

16:30-16:35 : Opening remarks

16:35-17:55 : Reserch presentations

17:15-17:25 : Discussion on future activities relating to MOU

17:25-17:30 : Closing remarks & Group photo

That's all.

Participants

参加者 (30)

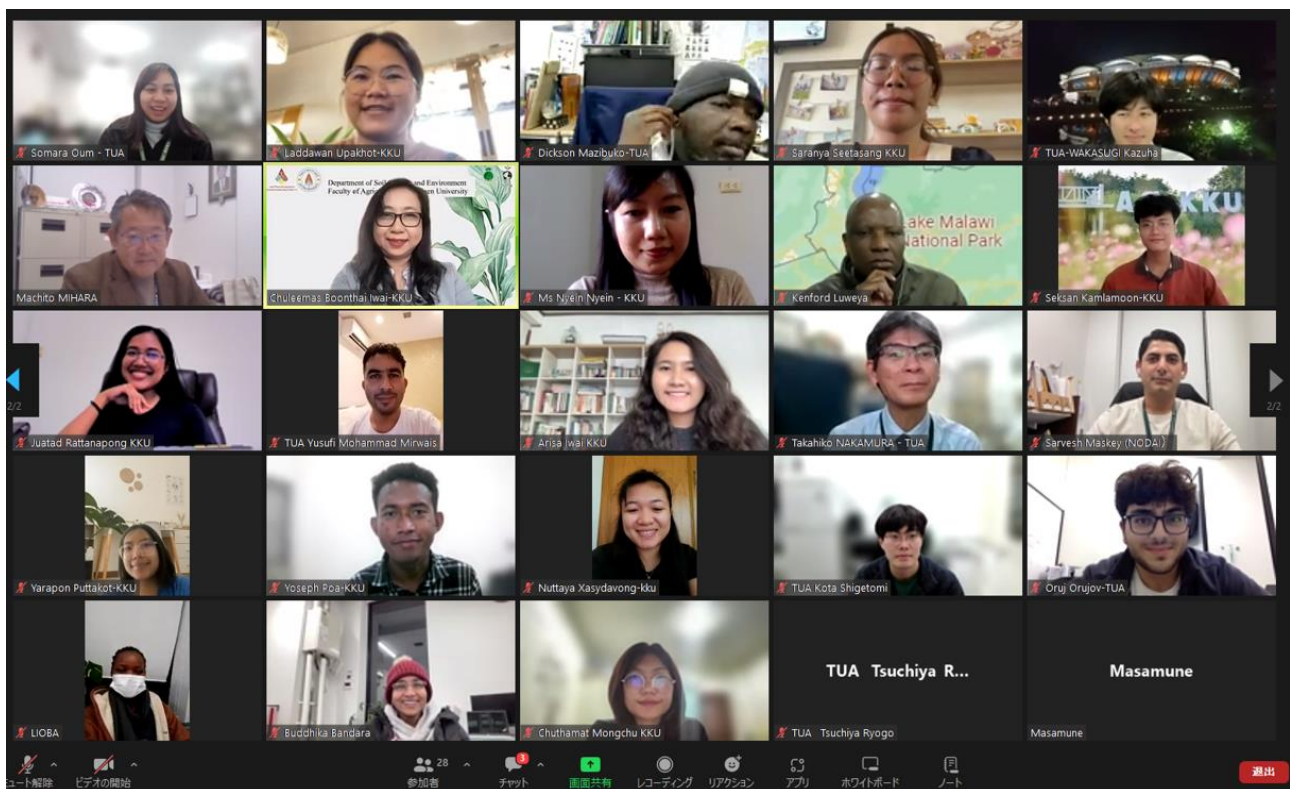
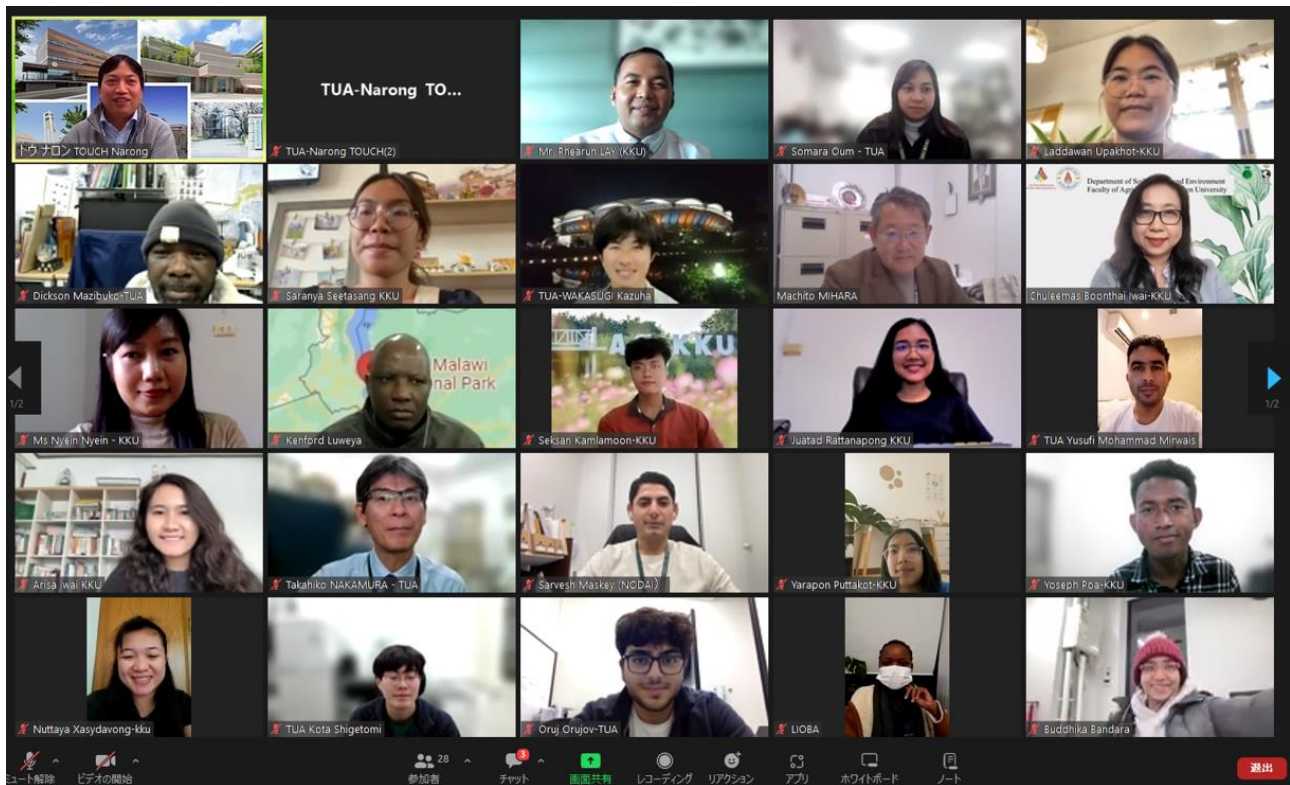


参加者の検索

TT	TUA-Narong TOUCH(2) (自分)		
	トウナロン TOUCH... (ホスト)		
SO	Somara Oum		
M	Masamune		
	Chuleemas Boonthai Iwai-KKU		
CM	Chuthamat Mongchu KKU		
DM	Dickson Mazibuko-TUA		
JR	Juatad Rattanapong KKU		
KL	Kenford Luweya		
LU	Laddawan Upakhot-KKU		
L	LIOBA		
MM	Machito MIHARA		
MP	Mr. Phearun LAY (KKU)		
	Ms Nyein Nyein - KKU		
N	Nuttaya		
O	Ognen		
OO	Oruj Orujov		
RN	Ruth N. Maru- TUA		
SS	Saranya Seetasang KKU		

SM	Sarvesh Maskey (NODAI)		
SK	Seksan Kamlamoon-KKU		
TN	Takahiko NAKAMURA - TUA		
宏太	TUA Kota Shigetomi		
TR	TUA Tsuchiya Ryogo		
TY	TUA Yusufi Mohammad Mirwais		
TK	TUA-Kiseki KURASHINA		
TK	TUA-WAKASUGI Kazuha		
YP	Yoseph Poa-KKU		
ญ	ญาราทรรณ์ AG soil		
TK	Thanakorn Kaewplik- TUA		

Photo Gallery



TUA-Narong TO...

12622003-Dicks... | Saranya Seetasa...

TUA-Narong TOUCHCHI **Sathasith Boonlualai** **トウナロウ TOUCH Narong** **12613020** **12622003-Dickson Mazuboko** **Saranya Seetasing**

東京大学農学科学部

TOKYO UNIVERSITY OF AGRICULTURE

Online Colloquium for Education and Research Collaboration between
Faculty of Regional Environmental Science, Tokyo University of Agriculture (Japan)
&
Faculty of Agriculrue, Khon Kaen university (Thailand)

Online Colloquium

It is our honor to invite you to participate in the Online Colloquium of the Faculty of Regional Environmental Science, Japan and the Faculty of Agriculture, Thailand.

As part of the international cooperation related to educational and research activities, the three faculties will organize the online colloquium on the topic of:
[Technology Innovations for Sustainable Agriculture]

The colloquium will be held on **11 December 2023, at 4:30 pm (JST) (3:30 pm (Thailand))**

zoom connection:
<https://usfwebwork.zoom.us/j/8165687705?pwd=cmk0QVZkdjRmNmNldzBwZWdUWDRvclFudDZkdz09>
Meting ID : 813 5683 3745
Password : 18031615

All faculty members and undergraduate/master doctoral students are welcome to join this meeting!

Program (JST)
 16:30-16:45 : Opening remarks
 16:45-17:15 : Research presentations
 17:15-17:25 : Discussion on future activities relating to MOU
 17:25-17:30 : Closing remarks & Group photo

That's all.

Zoom: 1-742-77

Somara Oum (国研水産研) [15] ビデオオフ

TUA-Narong TO...

TUA-Narong TOUCH2

Somara Oum (国研水産研) [15]

YOT (EJONN KAY KKK)

Somara Oum

Dickson Mazibu...

Dickson Mazibu: TUA

THE DEVELOPMENT OF NEW ABSORBENT FOR NUTRIENT REMOVAL AND FERTILIZER REPRODUCTION

Oum Somara

Laboratory of Land and Water Use Engineering

Supervisor : Prof. Dr. Machito MIHARA

Advisors: Associate Prof. Dr. Narong TOUCH
Prof. Dr. Takahiko NAKAMURA

Recycling of Piggery Effluent for *Azolla microphylla* Production and Application in Vermiculture for Enhancing Nutrients Quality and Driving BCG Economy Model

Present by **Mr. Phairun Lay**¹
 Supervisor Assoc. Prof. Dr. Chuleemas Boonthai Iwai^{1,2}

Affiliation:
¹ Department of Soil Science and Environment, Faculty of Agriculture, Khon Kaen University
² Integrated Land and Water Resource Management Research and Development Center in Northeast Thailand, Khon Kaen University

Open Discussion and Closing Remarks

Zoom ミーティング

Mr. Phearun LAY (KKU) の画面を拡大しています ビュー オプション

TUA-Narong TO...
TUA-Narong TOUCH(2)
トウ ナロン TOUCH Narong
Chuleemas Boonthai Iwai-KKU
Mr. Phearun LAY (KKU)
Machito MIHARA
Somara Oum - T...

AutoSave ON

Mr.Phearun Lay • Saved to this PC

File Home Insert Draw Design Transitions Animations Slide Show Record Review View Help

Clipboard Paste New Slide Reuse Slides Section Layout Reset

Font Paragraph Drawing Editing Voice Sensitivity Add-ins Designer

1
2
3
4

Recycling of Piggery Effluent for *Azolla microphylla* Production and Application in Vermiculture for Enhancing Nutrients Quality and Driving BCG Economy Model

Present by Mr. Phearun Lay¹
Supervisor Assoc. Prof. Dr. Chuleemas Boonthai Iwai^{1,2}

Affiliation:
¹ Department of Soil Science and Environment, Faculty of Agriculture, Khon Kaen University
² Integrated Land and Water Resource Management Research and Development Center in Northeast Thailand, Khon Kaen University

Click to add notes

Step 1 of 31 English (United States) Accessibility: Investigate

ミュート解除 ビデオの開始

参加者 チャット 画面共有 レコーディング リアクション アプリ ホワイトボード ノート

退出

Zoom ミーティング

TUA-Narong TO...
TUA-Narong TOUCH(2)
Mr. Phearun LAY (KKU)
Ms Nyein Nyein - KKU
Machito MIHARA
Somara Oum - TUA
Kenford Luweya

Department of Soil Science and Environment
Faculty of Agriculture
Khon Kaen University

Chuleemas Boonthai Iwai-KKU

退出

5th-2023 EVENT REPORT

BOOK OF ABSTRACTS

International Conference on Agro-Environmental Science

14th December 2023 at Yokoi Hall of Setagaya Campus,
Tokyo University of Agriculture, Japan



International Conference on Agro-Environmental Science

BOOK OF ABSTRACTS

14th December 2023, Tokyo NODAI, Japan

at Yokoi Hall of Setagaya Campus, Tokyo University of Agriculture, Japan

Organized by: International Society of Environmental and Rural Development



Co-organized by: Graduate School of Agro-Environmental Science, Tokyo University of Agriculture



Collaborated with:

- Center for Global Initiatives, Tokyo University of Agriculture, Japan
- Research Center, Institute of Environmental Rehabilitation and Conservation, Japan



PREFACE

It is very gratefully to hold the International Conference on Agro-Environmental Science under the collaboration between the International Society of Environmental and Rural Development, ISERD, and the Graduate School of Agro-Environmental Science, Tokyo University of Agriculture, Japan.

ISERD holds the official conference annually, which is the International Conference on Environmental and Rural Development, shortly ICERD, around in March every year. The hosts as well as venues are rotating among the collaborative organizations, so far 6 times were held in Cambodia, 5 times in Thailand including coming the 15th ICERD in March 2024, 2 times in Philippines, and once in Myanmar and Tokyo, respectively. Even during the Covid Pandemic in 2020 and 2021, ISERD held the 12th ICERD online hosted by the Bohol Islands State University in Philippines in 2020, and the 13th ICERD online by the Research Center, Institute of Environmental Rehabilitation and Conservation in Tokyo in 2021. We have been prioritizing to have an academic interactions/communication through holding ICERD for discussing the effective connection between research outcomes and agricultural and rural development in each site, in addition to the directions of the society for deepening further collaboration among the collaborative organizations.

Separately from the official conference, ICERD, it is the first time for ISERD to hold the International Conference on Agro-Environmental Science with the Graduate School of Agro-Environmental Science, Tokyo University of Agriculture, Japan. Tokyo University of Agriculture, shortly Tokyo NODAI founded in 1989, is one of the long historic and strong universities in Japan. Tokyo NODAI has wide and deep educational and research fields in agriculture and related fields with 23 departments in 6 faculties/graduate schools.

With the collaboration of the Graduate School of Agro-Environmental Science, Tokyo University of Agriculture, we do believe this event would offer more international academic experiences to the graduate school students and scientists.

December 14, 2023

Prof. Dr. Machito MIHARA,
Executive Secretary,
International Society of Environmental and Rural Development

TABLE OF CONTENTS

PROGRAM	4
PRESENTATIONS.....	5
ABSTRACTS.	
Autonomous Rural Innovations and Environmental Sustainability in Lake Malawi National Park's Ecosystems: The Case of Chembe Enclaved Villages.....	6
Synergistic Sheep Manure and Di-ammonium Phosphate: . Countering Nutrient Deficiencies, Enhancing Soybean Photosynthesis and Yield ..	7
Relationship between Natural Soil Area and Tree Species Richness in Urban Green Spaces.....	8
Effect of LED Lighting on Growth, Vitamin C and Phenols in Ethiopian Kale (<i>Brassica carinata</i>) Microgreens	9
Understanding the Diversity and Status of Urban Trees and Herbaceous Plants of Setagaya Ward.....	10
The Dynamics of Physical, Chemical Properties and Greenhouse Gas Emission in Food Waste Composting	11
Long-term Hydrologic Analysis of Malawian River Basins; A Case Study of Diamphwe Basin	12
Assessment of Hydroponic Suitability for Malawian Indigenized Vegetables: <i>Amaranthus retroflexus</i> and <i>Phaseolus vulgaris</i> (common bean).....	13
Recycling of Nitrogen and Phosphorus from Urban Wastewater using Calcium- silicate-hydrate (CSH): Case Study in Cambodia.....	14
INTRODUCTION OF ISERD.....	15

PROGRAM

Thursday, 14th December, 2023

13:00-13:10 Opening Remarks

Prof. Dr. Hiroya OBAYASHI,

Dean, Graduate School of Agro-Environmental Science,
Tokyo University of Agriculture, Japan

Associate Prof. Dr. Narong TOUCH,

Secretary for International Affairs,
Graduate School of Agro-Environmental Science,
Tokyo University of Agriculture, Japan

13:10-13:30 Keynote Presentation

Associate Prof. Dr. Placid Mpeketula

School of Natural and Applied Sciences,
University of Malawi, Malawi

13:30-14:30 **Presentation Session 1**

14:30-15:00 Coffee Break

15:00-16:00 **Presentation Session 2**

16:00-16:15 Closing Remarks

Prof. Dr. Machito MIHARA,

Executive Secretary, International Society of Environmental
and Rural Development

PRESENTATIONS

Session 1 13:10-14:30		
Time	Title and Presenter	Page
13:10-13:30	<u>Keynote presentation</u> Autonomous Rural Innovations and Environmental Sustainability in Lake Malawi National Park's Ecosystems: The Case of Chembe Enclaved Villages Presenter: Associate Prof. Dr. Placid Mpeketula	6
13:30-13:45	Synergistic Sheep Manure and Di-ammonium Phosphate: Countering Nutrient Deficiencies, Enhancing Soybean Photosynthesis and Yield Presenter: Abdul Alim Osmani	7
13:45-14:00	Relationship between Natural Soil Area and Tree Species Richness in Urban Green Spaces Presenter: Victor Agagi	8
14:00-14:15	Effect of LED Lighting on Growth, Vitamin C and Phenols in Ethiopian Kale (<i>Brassica carinata</i>) Microgreens Presenter: Ruth N. Maru	9
14:15-14:30	Understanding the Diversity and Status of Urban Trees and Herbaceous Plants of Setagaya Ward Presenter: Kibalama Marvin	10
14:30-15:00	Coffee Break	
Session 2 15:00-16:00		
15:00-15:15	The Dynamics of Physical, Chemical Properties and Greenhouse Gas Emission in Food Waste Composting Presenter: Lioba Chelangat	11
15:15-15:30	Long-term Hydrologic Analysis of Malawian River Basins; A Case Study of Diamphwe Basin Presenter: Kenford Luweya	12
15:30-15:45	Assessment of Hydroponic Suitability for Malawian Indigenized Vegetables: Amaranthus retroflexus and Phaseolus vulgaris (common bean) Presenter: Dickson M. Mazibuko	13
15:45-16:00	Recycling of Nitrogen and Phosphorus from Urban Wastewater using Calcium-silicate-hydrate (CSH): Case Study in Cambodia Presenter: Somara OUM	14

Keynote presentation

**Autonomous Rural Innovations and Environmental Sustainability in
Lake Malawi National Park's Ecosystems:
The Case of Chembe Enclaved Villages**

Placid MPEKETULA^a

^a School of Natural and Applied Sciences, University of Malawi, Malawi

**Corresponding email: pmpeketula@unima.ac.mw*

Abstract

Farmer-led agricultural innovations are increasingly viewed as a potential approach to sustainable agriculture especially promoting rural revitalization, soil fertility improvement and mitigating agricultural non-point source pollution. The complex nature and formidable challenges that characterize social-ecological systems especially in developing countries and rural landscapes, demands a transformation towards sustainable futures. Improving the well-being of vulnerable people in rural areas while simultaneously promoting sustainable resource management and building resilience to shocks, are global challenges that require identification of sustainable pathways, effective processes and trajectories with the potential to facilitate the transformation of the social-ecological systems. Autonomous agricultural innovations that are immersing in rural areas can help in achieving sustainable agriculture and enhance ecosystem services by improving multiple indicators of human well-being while creating synergies among various ecosystem components and enhancing their supporting services. Despite the potential role of autonomous agricultural innovations, very few cases have documented on their impact on various natural resources, and wider environmental ramifications. Using data from Lake Malawi National Park's enclaved villages of Chembe in Mangochi District, Southern Malawi, we investigated the role of an autonomous innovation in agriculture, a community garden and evaluated its impacts on one of the key natural resources, soil and consequential implications of the innovation on wider ecosystem components. We analyzed soils for micronutrients to obtain baseline data and provide a benchmark study for long term monitoring and management. A selected panel of micronutrients in soils were measured using Atomic Absorption Spectrometry (AAS) after acid block digestion with a mixture of concentrated nitric acid (70% HNO₃) and Hydrogen peroxide (30% H₂O₂). Measured micronutrients included zinc (Zn), manganese (Mn), copper (Cu), iron (Fe) and selenium (Se) from soil samples obtained from the autonomous innovation and contrasted with other ecosystem types within the study area namely; continuous maize farm, dambo wetland, bare land and forest land. Our findings indicated that mean soil Zn and Mn concentration from the autonomous innovation were significantly high (1.51, 663 mg/kg respectively) compared to the rest of the ecosystem types ($p < 0.0001$). Soils of the community garden also showed remarkable improvements in pH (5.6) compared to the maize farm and bare land (4.6, 4.8 respectively). Apart from improving the quality of life of the community through routine distribution of vegetables to vulnerable households, thereby offsetting the burden to overharvest resources from the forest or lake ecosystems, there were apparent benefits of the innovation on wider ecosystem components. While different forms of agricultural innovation have radically different outcomes in diverse landscapes, our findings on the autonomous innovation in Chembe indicate positive outcomes and underscore the relevance of similar innovations as potential pathways for sustainable and positive farmer-led agro-environmental initiatives.

Keywords: Autonomous innovation, micronutrient, ecosystem, soil management, social-ecological systems

Scientific presentation

**Synergistic Sheep Manure and Di-ammonium Phosphate:
Countering Nutrient Deficiencies, Enhancing Soybean Photosynthesis
and Yield**

**Abdul Alim Osmani^a, Mohammad Wasif Amin^{a,e}, Zabihullah Farid^a,
Shafiqullah Aryan^b, Naveedullah Sediqui^{d,e}, Khalid Joya^a, Habibullah Hazim^c,
Hakimullah Amini^a**

^a*Faculty of Agriculture, Parwan University, Parwan, 1102, Afghanistan*

^b*Faculty of Agriculture, Nangarhar University, Nangarhar, 2601, Afghanistan*

^c*Faculty of Education, Parwan University, Parwan, 1102, Afghanistan*

^d*Faculty of Agriculture, Alberoni University, Kohistan 1254, Afghanistan*

^e*Graduate School of Agriculture, Tokyo University of Agriculture, 156-8502, Japan*

Corresponding email: wasifamin1991@gmail.com

Abstract

Severe climate changes in arid and semi-arid regions, for example rising summer temperatures, lowering winter temperatures, and a lack of rainfall, have made calcareous soils' fertility concerns, more specifically nitrogen and phosphorus deficits, progressively worse. This study investigated the effects of sole and combined application of SM and DAP fertilizer namely FT1 (SM = 0%, DAP= 0%), FT2 (SM= 100%, DAP= 0%), FT3 (SM = 0%, DAP= 100%), FT4 (SM = 50%, DAP= 75%), FT5 (SM = 50%, DAP= 50%), and FT6 (SM = 50%, DAP= 0%) on growth, photosynthesis, and yield parameters of soybean cultivar (LD 04-13265 USD) in calcareous soil of a semiarid region in Parwan, Afghanistan. The results indicated that plant height and nodule number were unaffected by fertilization treatments, however growth features including leaf number, root length, and shoot biomass affected significantly. The photosynthesis parameters except intercellular CO₂ concentration were found to be significantly higher in FT4 and FT5, compared to FT1 (control). As a result, combined application of SM and DAP fertilizations such as FT4 and FT5 revealed better growth performance, higher photosynthesis efficiency as well as producing more seed yield compared to sole fertilizations. Ongoing studies can investigate the long-term effects of combining SM and DAP fertilizer on soil health parameters in calcareous soils. This can include assessing changes in soil pH, organic matter content, microbial activity, and nutrient cycling processes. Understanding these dynamics will contribute to sustainable agricultural practices and long-term soil fertility improvement.

Keywords: Sheep manure, di ammonium phosphate, soybean; photosynthesis, soil fertility, seed yield

Relationship between Natural Soil Area and Tree Species Richness in Urban Green Spaces

**Victor Agagi^{1*}, Nanako Suzuki², Kako Matsunaga², Satoru Tanaka²,
Aggrey Adimo¹, Kojiro Suzuki², John Bosco Mukundi¹, Annika Keeley³,**

*¹Department of Horticulture and Food Science,
School of Agriculture and Environmental Sciences,*

Jomo Kenyatta University of Agriculture and Technology, Kenya

*²Department of Landscape Architecture, Faculty of Regional Environmental
Science, Tokyo University of Agriculture, Japan*

³Centre for Large Landscape Conservation, Bozeman, USA

**Corresponding Email: agagiv@yahoo.com*

Abstract

Urban green spaces (UGS) remain significant refuge for biodiversity conservation in highly urbanized areas. However, the invariable anthropogenic interference in the UGSs driven by economic incentives and partial interdisciplinary implications have led to increased soil sealing. We examined the extent of soil sealing, natural soil area, tree canopy cover, and tree species number of 26 UGSs in Tokyo Metropolitan Area, Japan, and established the are-species relationships. The number of tree species across the UGSs were intermediate and strikingly similar across the UGSs, ranging from 143 – 19. Compared to other UGS types, The proportion of sealed surfaces was significantly different across the different UGS types ($<.000$), ranging from 58.82% - 0%. Japanese style gardens and conservation areas exemplified low proportion of sealed surface. Correlations between natural soil area, tree canopy cover, and tree species richness were highly significant at $p<0.01$; natural soil area and tree species ($\rho = 0.754$ **, $n=26$), tree canopy cover and tree species richness ($\rho = 0.766$ **, $n=26$), natural soil area and tree canopy cover ($\rho = 0.986$ **, $n=26$). These findings have significant implication on urban planning policy and biodiversity conservation.

Keywords: Urban green spaces, soil sealing, tree species richness, tree canopy, biodiversity conservation, urban planning

Effect of LED Lighting on Growth, Vitamin C and Phenols in Ethiopian Kale (*Brassica carinata*) Microgreens

Ruth Nyambura Maru^a, John Wesonga^a, Dickson Mazibuko^b, Satoko Akiyama^c,
Ayako Sekiyama^d, Shotaro Kawakami^d, Sarvesh Maskey^d, Agnes Kavoo^a,
Johnstone Neondo^a and Hiromu Okazawa^{d*}

^a School of Agriculture and Environmental Sciences,
Jomo Kenyatta University of Agriculture and Technology, Kenya

^b Graduate School of Agro-Environmental Science,
Tokyo University of Agriculture, Japan

^c Faculty of Applied Bio-science, Tokyo University of Agriculture, Japan

^d Faculty of Regional Environmental Science, Tokyo University of Agriculture, Japan

*Corresponding email: h1okazaw@nodai.ac.jp

Abstract

Microgreens are innovative vegetable products due to their novelty and health-promoting benefits. However, media and light conditions affect microgreens' growth and nutritional content, which may limit their production in rural community settings. *Brassica carinata* is an essential local Kenyan vegetable, but its production and full utilization are limited by its early maturity. The potential of using *B. carinata* as a microgreen would be an excellent alternative production technique to circumvent its early maturity limitation. This study investigated the influence of white and blue light on Vitamin C and phenols content in *B. carinata* microgreens. Microgreens were grown for 14 days in a growth chamber using plastic punnet containers filled with cocopeat and sand under white and blue light. The capillary wick watering technique was used for irrigation. Temperature and relative humidity were monitored and maintained at 25°C and 60%, respectively. The photoperiod and intensity of light were also maintained at 12 hr and $160 \pm 2.5 \mu\text{mol m}^{-2}\text{s}^{-1}$ respectively. After 14 days, microgreens were harvested and freeze-dried to analyse phenols and Vitamin C. Data was subjected to ANOVA and means separated by Tukey's multiple comparison test. Results indicated that light had no significant effect on *B. carinata* phenol content. However, microgreens grown in sand showed statistically higher amounts of phenol content than those grown using cocopeat. For vitamin C content, media and light showed no significant effect. Based on our results, sand, as a locally available medium and in either light, can equally be used to produce microgreens for phenols and Vitamin C for *Brassica carinata*.

Keywords: Microgreens, LED light, growing media, functional foods, nutraceuticals

Understanding the Diversity and Status of Urban Trees and Herbaceous Plants of Setagaya Ward

Kibalama Marvin Bogere ^{a*}, Iwao Uehara ^a

*^a Tokyo University of Agriculture, Japan
Corresponding email: 12423401@nodai.ac.jp*

Abstract

Urban areas present a challenge of imbalance in the diversity of the planted species of trees and other planted herbaceous plants. The limited planting space therefore depicts urban areas as locations of low biodiversity. This research focused to compare the diversity of trees and herbaceous plants growing in selected green children's parks and street lanes of Setagaya ward. This research also highlighted the regeneration mechanism and relevance of herbaceous plants species surveyed in the selected survey sites of Setagaya. Six urban street lanes stretching a distance of 18.3 km, and 18 green children public parks covering an area of 21,045.5 m² were surveyed. A total of 49 tree species belonging to 28 families were surveyed. Of these, 15 species are exotic while 34 species are native to Japan. A total of 26 tree species and 38 tree species were surveyed on street lanes and in public parks respectively, 15 tree species were surveyed in both land uses. Also, a total of 46 herbaceous plant species were surveyed. A total of 33 herb species and 29 herb species were surveyed on street lanes and in public parks respectively. 16 herbaceous plant species were surveyed in both land uses. Six herb species are dispersed by birds, one species by explosion mechanism, seven species by humans, 12 species by water and 14 species by wind. 60 % of herbaceous species have medicinal value, 40% have food value, 57.5% have ornamental value, 7.5% have materials value. The parks surveyed have higher Shannon-Weiner species diversity index of 3.1452 and that of street lanes is 2.5312. Street tree species include *Liquidambar formosana*, *Liriodendron tulipifera*, *Ginkgo biloba* and so forth. Park tree species include *Osmanthus fragrans*, *Zelkova serrata*, *Quercus myrsinfolia* and so forth.

Keywords: Urban forestry, trees, herbaceous plants, diversity, regeneration

The Dynamics of Physical, Chemical Properties and Greenhouse Gas Emission in Food Waste Composting

**Lioba Chelangat Ronoh^{1*}, Machito Mihara², John Bosco Mukundi¹,
Catherine Ngamau¹, Aggrey Adimo¹ and Narong Touch²**

*¹Department of Horticulture and Food Science,
School of Agriculture and Environmental Sciences,
Jomo Kenyatta University of Agriculture and Technology, Nairobi, Kenya*

*² Faculty of Regional Environment Science,
Tokyo University of Agriculture, Tokyo, Japan*

**Corresponding email: liobaronoh7@gmail.com*

Abstract

Rapid growth in the global population leads to increased consumption and generation of waste that ends up in dumpsites and landfills, which are the most common ways to dispose of waste throughout the world. Municipal solid waste's life-cycle activities and breakdown contribute significantly to greenhouse gas emissions (GHGs). Composting is an environmentally friendly method of managing organic waste, but it has a substantial downside in the form of greenhouse gas emissions; including carbon monoxide (CO), nitrous oxide (N₂O), methane (CH₄), and carbon dioxide (CO₂). The aim of this study was to access the dynamics of (GHGs) i.e., CO₂ and CH₄ emission, the physical and chemical characteristics of food waste during composting. Five treatments comprised of; T0 = 100% cow dung (CD); T1= 75% CD + 25% FW; T3= 50% CD+ 50% FW and T4=100% food waste (FW)+0% CD were set up. GHG emission and physical properties not limited to; soil moisture, soil organic matter (SOM) and soil organic carbon (SOC) were sampled and measured weekly. Chemical properties analyzed included total nitrogen (TN), total Phosphorus (TP) using a spectrophotometer, pH, electrical conductivity, K⁺, Na⁺ and Ca²⁺. The results indicated that there was no correlation between GHGs emission, physical and chemical properties of the compost. However, there was a strong correlation at between TN, SOM, and SOC $p<0.01$ during the fifth week of the composting.

Keywords: Food waste, greenhouse gas emission, composting

Long-term Hydrologic Analysis of Malawian River Basins; A Case Study of Diamphwe Basin

**Kenford A. B. Luweya^a, Lameck Fiwa^b, Ke Zhang^c, Sarvesh Maskey^d,
Hiroko Gono^e and Hiromu Okazawa^{d*}**

*^a Graduate School of Agro-Environmental Science,
Tokyo University of Agriculture, Japan*

^b Lilongwe University of Agriculture and Natural Resources, Malawi

^c Japan International Research Center of Agricultural Sciences, Japan

^d Faculty of Regional Environmental Science, Tokyo University of Agriculture, Japan

*^e Faculty of International Agriculture and Food Studies,
Tokyo University of Agriculture, Japan*

**Corresponding email: h1okazaw@nodai.ac.jp*

Abstract

Developing countries suffer severe socio-economic consequences from extreme weather events, including livelihood losses and increased costs. Identifying climatic and hydrologic events through trend analysis is essential for managing water resources. The study focuses on the Diamphwe River basin in central Malawi, a crucial area supporting wetland (dambo) ecosystems, agriculture (rainfed and vegetable-irrigated winter cropping), and water supplies for the Dedza and Lilongwe districts. Using statistical analysis methods such as Mann-Kendall, Pettit, and Standardized Precipitation Index (SPI), the study examined hydrologic trends from 1975 to 2010 to identify long-term hydrologic trends in the region that are important for improving agricultural productivity. The research findings revealed a high correlation between rainfall and increased land user time. However, rainfall significantly impacts river discharge only during the rainy season. In the dry season, water for river discharge comes from sources like aquifers and subsurface flow. Through the Pettit test and SPI, it was discovered that 1989 was a transition year, and the 1991-2000 decade was the dryer decade with the worst drought during the 36-year project period. The study concludes that decreasing trends in rainfall and river discharge, along with a sudden drop in 1989 and drought, indicate a changing climate in the river basin. This change is linked to increased land use, reducing forest land. The research offers essential insights to water and environmental stakeholders, helping them develop region-specific policies based on research to mitigate and adapt to the potential negative impacts of climate change on society and the environment. The research is also valuable for farmers and local authorities, as it provides helpful information on tackling climate change challenges in agriculture in order to improve the efficiency of the proposed multi-purpose dam project on the river.

Keywords: Climate change, trend, river discharge, rainfall, Mann-Kendall test, Pettitt test

Assessment of Hydroponic Suitability for Malawian Indigenized Vegetables: *Amaranthus retroflexus* and *Phaseolus vulgaris* (common bean)

Dickson M. Mazibuko^{a, b}, Antonio Fuentes^a, Kazuha Wakasugi^a, Sarvesh Maskey^c, Hiromu Okazawa^c

^a Graduate School of Agro-Environmental Science,
Tokyo University of Agriculture, Japan

^b School of Natural and Applied Sciences University of Malawi, Malawi

^c Faculty of Regional Environmental Science, Tokyo University of Agriculture, Japan
Corresponding email: h1okazaw@nodai.ac.jp

Abstract

Adoption of improved crop cultivation technologies has been to be slow in Sub-Saharan Africa (SSA), leading to lower yields and starvation. This study examined the adaptation of two vegetables indigenized in Malawi, *Amaranthus retroflexus* (Vegetable Amaranth) and two cultivars of *Phaseolus vulgaris* (common bean), to hydroponic cultivation. Yield and growth were compared using a Nutrient Film Technique (NFT) hydroponic system in Yokohama, Japan. Amaranthus showed excessive growth with a marked apical dominance. Both bean cultivars were successfully grown under hydroponics with no significant differences. The hybrid cultivar however had significantly lower specific leaf area (SLA), suggesting a genetic predisposition. These two vegetables can be further tested in hydroponics. For amaranth, it needs to be investigated if de-budding can suppress apical dominance and promote above-ground biomass.

Keywords: Amaranth, common beans, cultivation technologies, hydroponics, vegetables

Recycling of Nitrogen and Phosphorus from Urban Wastewater using Calcium-silicate-hydrate (CSH): Case Study in Cambodia

Somara OUM^{a*}, Narong TOUCH^b and Machito MIHARA^b

*^a Graduate School of Agro-Environmental Science,
Tokyo University of Agriculture, Japan*

^b Faculty of Regional Environment Science, Tokyo University of Agriculture, Japan

**Corresponding email: oum.somara128@gmail.com*

Abstract

The effluents from wastewater contain nutrients that have been identified as the primary causes of eutrophication in natural waters. A case study from Cheung Ek, an urban wastewater lake in Cambodia, has indicated polluted with NH_4^+ (18-22 mg/L) and PO_4^{3-} (2.3-4.6 mg/L). Even though phytoremediation through water morning glory cultivation was introduced into the lake, only a certain amount of nutrients can be removed from the lake's water (65.22% and 17.36% for NO_3^- and PO_4^{3-} , respectively). Hence, this wastewater's lake must receive suitable treatment before being discharged into other water bodies. Low-cost and high-performance materials or techniques that could synergistically remove pollutants in a simple manner are highly desired. Therefore, the main goal of this research study is to evaluate the CSH synthesized from calcium hydroxide $\text{Ca}(\text{OH})_2$ and rice husk ash as a promising strategy both economically and environmentally friendly for wastewater treatment as well as nitrogen and phosphorus recovery. The CSH material was prepared by combining calcium hydroxide $\text{Ca}(\text{OH})_2$ and rice husk ash with a ratio (1:4) and mixing with 75% deionized water. Following the process with a vibrator from 1 to 3 minutes, the CSH was kept in the mold for 3 weeks at room temperature before starting the experiment. The absorption experiment considers parameters such as pH, EC, Ca, K, NH_4^+ , and PO_4^{3-} in 2 weeks period. Results of the absorption experiment indicated that CSH can effectively remove nutrients from wastewater, achieving removal rates of 97% for PO_4^{3-} and 98% for NH_4^+ . The absorption capacity of CSH is 0.11 mg- PO_4^{3-} /g-CSH and 0.065 mg- NH_4^+ /g-CSH. These results suggest that CSH, derived from $\text{Ca}(\text{OH})_2$ and rice husk ash, could serve as a cost-effective solution to water pollution in Cambodia, given the material's affordability and widespread availability throughout the country.

Keywords: Nutrients recycling, CSH, Cambodia



International Society of Environmental and Rural Development

Philosophy of ISERD:

Recently, in developing countries, subsistence agriculture is being converted to export-oriented monoculture, and the amounts of agricultural chemicals applied to the farmland are increasing every year. The applied chemicals in farmland cause serious environmental problems downstream such as eutrophication, unusual growth of aquatic plants, decrease in dissolved oxygen and accumulation of bottom mud in water resources. Also, there seem to be many cases in which people apply agricultural chemicals without understanding its impact to health and food safety. Therefore, it is necessary to promote and enhance understanding of sustainable rural development among local stakeholders including farmers.

Sustainable rural development aims to meet human needs while preserving the natural environment. As it should cover not only social and economic development but also natural environment conservation, no single organization can achieve sufficiently the aspirations of sustainable rural development. Collaboration among international, governmental and non-governmental organizations, together with the academe and scientific sector, is indispensable.

The knowledge and intelligence accumulated in universities and research institutions are also expected to make the programs facilitated by the international, governmental and non-governmental organizations more adequately implemented and meaningful to societal development. However, these cases especially those implemented locally have been scattered without having been summarized well or recorded in annals academic or scientific societies.

So, the International Society of Environmental and Rural Development founded in 2010, aims to discuss and develop suitable and effective processes or strategies on sustainable rural development focusing on agricultural and environmental aspects in developing countries. The ultimate goals of the society are to contribute to sustainable rural development through social and economic development in harmony with the natural environment, and to support the potential or capacity building of local institutions and stakeholders in the rural area with academic background.

Purposes of ISERD:

The primary purposes of ISERD are to contribute to sustainable rural development through social and economic development in harmony with the natural environment and to support the potential or capacity building of local institutions and stakeholders in the rural area with academic background.

In order to enhance the realization of the primary purposes of ISERD, the secondary purposes are;

- to facilitate interaction among international, governmental, non-governmental organizations and local communities,
- to hold conferences or symposia on environmental and rural development,
- to edit the International Journal of Environmental and Rural Development,
- to confer some awards based on scientific achievement, research paper or poster presentation, and
- to encourage and develop local awareness concerning sustainable rural development.

Membership:

There shall be two categories of membership.

- (a) Individual
- (b) Organizational

An application for membership of ISERD shall be submitted to the secretariat of ISERD, where is located in the Research Center at Institute of Environmental Rehabilitation and Conservation (Japan) by writing or by other appropriate means.

Also, every presenter who attends the International Conference on Environmental and Rural Development (ICERD) is registered as an Individual Member of ISERD.

Council of ISERD:

The affairs of ISERD shall be governed and managed by the ISERD Council. The councilors are as follows.

President

Prof. Dr. Mario T. Tabucanon, United Nations University Institute for the Advanced Study of Sustainability, Japan

Deputy Presidents

Prof. Dr. Bunthan Ngo, Royal University of Agriculture, Cambodia
Prof. Dr. Anan Polthanee, Khon Kaen University, Thailand
Prof. Dr. Eiji Yamaji, The University of Tokyo, Japan /
Institute of Environmental Rehabilitation and Conservation, Japan

Executive Secretary / Editor-in-Chief of IJERD

Prof. Dr. Machito Mihara, Tokyo University of Agriculture, Japan /
Institute of Environmental Rehabilitation and Conservation, Japan

Managing Editors

Dr. Narong Touch, Tokyo University of Agriculture, Japan
Dr. Santa PANDIT, Institute of Environmental Rehabilitation and Conservation, Japan

Treasurer

Dr. Lalita Siri wattananon, Rajamangala University of Technology Thanyaburi, Thailand

Regional Vice Presidents

Dr. Shafiqullah Rahmani, Ghanzani University, Ministry of Higher Education, Afghanistan
Prof. Dr. Barry N. Noller, The University of Queensland, Australia
Prof. Dr. Sinisa Berjan, Embassy of Bosnia and Herzegovina in Japan /
University of East Sarajevo, Bosnia and Herzegovina
Dr. Buntong Borarin, Royal University of Agriculture, Cambodia
Prof. Dr. Ping Li, Institute of Grassland Research, China
Prof. Dr. Dieter Trautz, Osnabrück University of Applied Sciences, Germany
Dr. Sri Wahyuni, Islamic University of Riau, Indonesia
Dr. Kasumi Ito, Nagoya University, Japan
Prof. Dr. Nang Hseng Hom, Yezin Agricultural University, Myanmar
Prof. Dr. Junaid Alam Memon, Institute of Business Administration Karachi, Pakistan
Prof. Dr. Regucivilla A. Pobar, Bohol Island State University, Philippines
Dr. Chuleemas Boonthai Iwai, Khon Kaen University, Thailand
Dr. David R. Ader, University of Tennessee, USA
Dr. Nguyen Khoi Nghia, Cantho University, Vietnam

ISERD Secretariat:

Research Center, Institute of Environmental Rehabilitation and Conservation (ERECN)

2987-1 Onoji Machida-shi, Tokyo 195-0064, Japan
Tel/Fax: +81-42736-8972
E-mail: iserd.secretariat@gmail.com
Webpage: www.iserd.net

Collaborated with

Association of Environmental and Rural Development (AERD)

93/64 Moo.3, Sinsab Village 2, Bungyeetho Sub-District, Thanyaburi District,
Pathum Thani 12130, Thailand
Tel/Fax: +66-2957-8064
E-mail: iserd.secretariat@gmail.com
Webpage: www.iserd.net