

博士学生・修了生プロフィール（岩手大学大学院連合農学研究科）掲載一覧  
 Profile of doctoral students and graduates (UGAS, Iwate University)

No.	専門分野 Specialized field	氏名 Full name	配属大学・機関 Assigned university
1	作物学 crop studies	及川 誠司 Seiji OIKAWA	岩手大学 Iwate Univ.
2	Bio-production Biological Ecology Control	NKOU METOU OU ERNEST	山形大学 Yamagata Univ.
3	動物生理学 Animal physiology	藤掛 雄馬 Yuma Fujikake	弘前大学 Hirosaki Univ.
4	Bioresources studies Biomolecular functions studies	Paulin Dradre Atakuru	山形大学 Yamagata Univ.
5	農産食品プロセス工学、食品流通 工学、環境農学	佐々木 勇麻 Yuma SASAKI	岩手大学 Iwate Univ.
6	農産プロセス工学、食品工学	倉田 大丞 Daisuke KURATA	岩手大学 Iwate Univ.
7	Agricultural and Environmental Engineering	Dhirendranath Singh	山形大学 Yamagata Univ.
8	Regional resources and environmental economics studies/Agricultural economics studies	Rosalia Natalia Seleky	山形大学 Yamagata Univ.
9	Forest Ecology Tree Physiology	Citra Gilang Qur'ani	山形大学 Yamagata Univ.
10	National park management	TATAUROVA Nadezhda	岩手大学 Iwate Univ.

連合農学研究科	配属大学／Assigned university	氏名／Full name
岩手大学	岩手大学／Iwate University	Seiji Oikawa
専門分野／ Specialized field	作物学/ crop studies	
研究テーマ／ Research theme	初冬直播，越冬/ winter sowing , overwintering	
取得（予定）学位 取得（予定）年月／ Obtained (planned) degree Acquired degree (planned) date	農学博士，2024年3月	
<b>メッセージ／ Message</b>		
<p>初めまして、岩手大学連合農学研究科に所属している及川誠司と申します（男性，26歳）。出身は岩手県奥州市（野球選手の大谷さんの出身地）です。私の地元が米どころであることから、作物学，特にイネの初冬直播や越冬について研究しています。稲だけでなく，他の作物についても興味はあります。</p>		

連合農学研究科	配属大学／Assigned university	氏名／Full name
岩手大学	山形大学／Yamagata University	NKOUM METOU OU ERNEST
専門分野／ Specialized field	BIOPRODUCTION BIOLOGICAL ECOLOGY CONTROL	
研究テーマ／ Research theme	Empirical Study on Rice Production; Rice Production depends on the Functions of Mud Snails in the Rice Paddy Field	
取得（予定）学位 取得（予定）年月／ Obtained (planned) degree Acquired degree (planned) date	September / 2024(Scheduled)	
メッセージ／ Message		
<p>研究計画</p> <p><b>SELF INTRODUCTION</b></p> <p>Nkoum Metou'ou Ernest currently works as an Agricultural Engineer (Direction of Regulation and Control of Agricultural Inputs and Products) at the Ministry of Agriculture and Rural Development in Cameroon. Mr Nkoum holds a Professional bachelor in Phytosanitary risk and a Professional Masters in Norms Control Quality Option: Plants Productions. He worked as Chief of Agricultural Extension Station from 2011-2016 for the last three years before he was posted as Agricultural Engineer. His fields of expertise include assessment of pesticides toxicity in food and human health, environmental assessment of pesticides toxicity (ecotoxicology), management of pesticides packages, sustainable alternatives in plant protection and integrated plant protection management Currently PhD Student at Yamagata University.</p> <p><b>RESARCH PLAN</b></p> <p>According to many recent research studies there are many beneficial effects of mud snails in rice paddy fields related to ecology conservation while improving rice production by increasing yield. This case study is focused on the possible positive effects of mud snails to provide nutrients to rice plant, improve and also increase soil fertility. In the same perspective they allow others organisms to live and proliferate by purifying water. Finally, we will study interactions between aquatic and terrestrial organisms that are mainly predators.</p>		

連合農学研究科	配属大学／Assigned university	氏名／Full name
岩手大学	弘前大学／Hirosaki University	藤掛雄馬
専門分野／ Specialized field	動物生理学	
研究テーマ／ Research theme	ホヤの心臓における拍動反転機構の解明	
取得（予定）学位 取得（予定）年月／ Obtained (planned) degree Acquired degree (planned) date	博士（農学）、2024年3月 取得（予定）	
メッセージ／ Message		
<p>ホヤは脊椎動物にもっとも近縁な系統に属する生物でありながら、定期的に心臓の拍動方向が反転し、全身の血流も逆になるという珍妙な特徴を持っています。その仕組みや生物学的意義は百年以上もの間謎とされてきました。学部では、パラフィン切片の観察や共焦点レーザー顕微鏡による観察を通して心臓の構造を理解しました。修士課程では、心臓において拍動リズムを生成するペースメーカー細胞集団が存在する領域を同定し、それらが生成する特徴的な拍動リズムが拍動反転に重要であることを明らかにしました。博士課程では、拍動反転の分子メカニズムに迫るために、拍動リズムの生成に関与するイオンチャネルについて <b>In situ hybridization</b> による発現解析を行っており、今後はゲノム編集や阻害剤を用いた機能解析を計画しています。</p>		

連合農学研究科	配属大学／Assigned university	氏名／Full name
岩手大学	山形大学／Yamagata University	Paulin Dradre Atakuru
専門分野／ Specialized field	Bioresources studies/Biomolecular functions studies	
研究テーマ／ Research theme	Isolation of new secondary metabolites from endophytes fermentation and plant Biological activities assessment of bioactive compounds isolated	
取得（予定）学位 取得（予定）年月／ Obtained (planned) degree Acquired degree (planned) date	Doctor of Philosophy Ph.D (Agriculture) Obtained on September 2023 (Scheduled)	
メッセージ／ Message		
<p>Fungi and plant material can produce many bioactive secondary metabolites that belong to different classes of natural compounds. Some of these compounds have been selected for their antagonism against pests in farm and human pathogens. Several types of research have focused on the bioprospection of endophytes for the production of enzymes, antibiotics, and insecticides.</p> <p>Serious plant diseases are caused by several pests, but fungi probably cause the most severe losses due to diseases on a worldwide scale. Nowadays fungicide research to develop strategies reducing the risk of fungicide resistance to occur is urgently needed. The appeal of Plant extracts with antimicrobial activities has shown potential as alternatives to chemical pesticides for postharvest control.</p> <p>Another side, secondary metabolites, used as a single compound or as a mixture, are medicines that can be effective and safe even when synthetic drugs fail.</p> <p>One aspect of my current research is focused on the indole nucleus, which is found to be very active in the pharmaceutical industry field as several natural alkaloids having indole as their basic ring are found to be therapeutically active agents. This is also interesting in agriculture because a part of this compound composes many pesticides from the Azole group.</p> <p>The objective of our research is to give more details about the interaction between endophytes potential and their second metabolites produced, potential bioactive compounds from medicinal plants, and their mechanisms of action.</p> <p>Qualifications: Functional and Metabolic Biochemist Agrochemical Engineer Laboratory homepage: <a href="https://hakkou0.webnode.jp/">https://hakkou0.webnode.jp/</a> Some aspects of our research will be published in Phytochemistry Journals and Natural products journal within a year.</p>		

連合農学研究科	配属大学／Assigned university	氏名／Full name
岩手大学	岩手大学／Iwate University	佐々木勇麻/ SASAKI, Yuma
専門分野／ Specialized field	農産食品プロセス工学、食品流通工学、環境農学/ Process Engineering in agricultural products; Environmental impact assessment of food supply chain; Environmental agriculture	
研究テーマ／ Research theme	<p>ポストハーベスト技術を対象とした環境影響評価（ライフサイクルアセスメント, LCA）</p> <p>農耕地における温室効果ガス削減技術の検証および有効性の評価</p> <p>Life Cycle Assessment (LCA) on postharvest process of agricultural products</p> <p>Development and analysis for mitigation technique of Greenhouse gas (GHG) emission from crop land</p>	
取得（予定）学位 取得（予定）年月／ Obtained (planned) degree Acquired degree (planned) date	博士（農学），2024年9月 Doctor of Philosophy Ph.D (Agriculture). Obtained in September 2024 (scheduled)	
<b>メッセージ／ Message</b>		
<p>私は農研機構の研究員で，社会人学生として岩手連大に入学しました。農研機構では農作物の栽培時を対象に気候変動緩和策技術の検証を行っている一方，岩手連大では青果物の収穫後のプロセス（輸送や加工，消費段階）について，LCA と呼ばれる環境影響評価手法を用い，CO2 排出量の定量化や削減策を検討する研究をしています。農作物の栽培から収穫，消費までの一貫したプロセスについて幅広く評価・検討できるのが私の強みであり，研究を通じて，環境面からみた持続可能なサプライチェーンの構築を目指しています。研究内容の詳細は、下記のリサーチマップからご確認ください。</p> <p>I'm working in the NARO, Japan, as a researcher and a working student of the UGAS. My objective in the NARO is to reduce GHGs from crop land and mitigate climate change. In the UGAS, I quantify GHGs from postharvest processes (e.g., distribution, processing, and consumption) through LCA (life cycle assessment) and consider a strategy for GHG reduction; LCA is one of the common environmental impact assessment methods in the world. I can evaluate environmental impact associated with both pre- and post- harvest processes of fruit and vegetables. My goal as a researcher is to optimize the supply chain of the agricultural products from environmental perspective.</p> <p>Details of my research (Researchmap): URL  <a href="https://researchmap.jp/yumasasaki.agri?lang=en">https://researchmap.jp/yumasasaki.agri?lang=en</a></p> <p>Laboratory homepage: &lt; <a href="http://news7a1.atm.iwate-u.ac.jp/~agreng/recycle/PH/index.html">http://news7a1.atm.iwate-u.ac.jp/~agreng/recycle/PH/index.html</a></p>		

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Main published papers: Sasaki Y., Orikasa T. et al., 2022. Optimal packaging for strawberry transportation: evaluation and modeling of the relationship between food loss reduction and environmental impact. *Journal of Food Engineering*. 314:110767. <https://doi.org/10.1016/j.jfoodeng.2021.110767>

連合農学研究科	配属大学／Assigned university	氏名／Full name
岩手大学	岩手大学／Iwate University	倉田大丞
専門分野／ Specialized field	農産プロセス工学、食品工学	
研究テーマ／ Research theme	減圧マイクロ波による農産物加工技術の最適処理条件の導出	
取得（予定）学位 取得（予定）年月／ Obtained (planned) degree Acquired degree (planned) date	2024年9月 取得（予定）	
<b>メッセージ／ Message</b>		
<p>学部時代では応用生物化学課程で生化学研究室に所属し、ネコの嗅覚受容体とそのリガンド探索に関する研究に取り組んでいましたが、食品加工保存技術に興味を持ち、修士課程からは本学の農産物流通科学研究室に所属しました。修士課程では、従来の乾燥方法と比較して、農産加工品への高付加価値化が期待できる新たな農産加工技術である減圧マイクロ波技術に着目し、乾燥シイタケの製造工程に適用することで、乾燥時間の短縮や化学的および物理的特性の向上について評価してきました。博士課程では、シイタケ以外の広範囲の農産物にも減圧マイクロ波を適用し、農産物個々の特性に応じた最適処理条件の導出に向けて研究を進めています。将来は、食品や化学に関連した幅広い分野の研究が行える仕事につきたいと考えています。</p> <p>研究室のホームページ  <a href="http://news7a1.atm.iwate-u.ac.jp/~agreng/recycle/PH/">http://news7a1.atm.iwate-u.ac.jp/~agreng/recycle/PH/</a>        主な公表論文        Kurata, D., Orikasa, T., Komuro, M., Sasaki, K., &amp; Koide, S. (2020). Quality evaluation of shiitake mushrooms dried by vacuum microwave treatment. <i>Food Science and Technology Research</i>, 26(3), 339-350. <a href="https://doi.org/10.3136/FSTR.26.339">https://doi.org/10.3136/FSTR.26.339</a>        During my undergraduate years, I belonged to the Biochemistry Laboratory in the Department of Biological Chemistry and Food Science and was engaged in research on the search for Olfactory Receptors (OR) and their ligands in cats. I became interested in food processing and I have belonged to the Laboratory of Postharvest Science of Agricultural Products since my master's course. We focused on Vacuum Microwave (VMW) drying, which is one of the newer drying methods that can be expected to add high value to agricultural products compared to the conventional drying method. My master's thesis aimed to apply VMW drying to shiitake mushrooms and evaluate drying time, chemical and physical properties. In the doctoral course, we are applying VMW to not only shiitake</p>		



mushrooms but also a wide range of agricultural products, and are researching toward deriving optimal processing conditions according to the characteristics of each agricultural product. In the future, I would like to get a job where I can do research in a wide range of fields related to food and chemistry.

連合農学研究科	配属大学／Assigned university	氏名／Full name
岩手大学	山形大学／Yamagata University	Dhirendranath Singh
専門分野／ Specialized field	Agricultural and Environmental Engineering	
研究テーマ／ Research theme	Development of a crop growth monitoring system using an Unmanned Ground Vehicle (UGV) and deep learning for rice cultivation	
取得（予定）学位 取得（予定）年月／ Obtained (planned) degree Acquired degree (planned) date	March 2022	
メッセージ／ Message		
<p>Digital agriculture is a new frontier that has been rapidly attracting attention because of the potential benefits it offers such as the reduction of labour, efficient and sustainable use of resources and increased productivity. I am interested in how we can use recent advancements in remote sensing and artificial intelligence (AI) technology for the development of various farming solutions to equip farmers with the tools they need to meet the growing food requirements of an increasing world population. At UGAS my research focused on developing a crop growth monitoring system using remote sensing (field robot), artificial intelligence (deep learning) and GIS for rice cultivation.</p> <p>Before commencing the doctoral program at UGAS, I worked in Guyana's rice industry for over 10 years with the Guyana Rice Development Board (GRDB) serving in different capacities. My last role was Head of the Postharvest Research Department where I led research on the processing capacity, parboiling practices, and value added opportunities for Guyana' rice. I also managed a seed processing facility and a certified seed program with contract growers that resulted in more high quality seed being available to farmers. Before this, I worked as Head of the GRDB Regional offices overseeing the functions of the Extension and Quality Control services.</p> <p>Against this background, my current goal is to use current and emerging technologies to develop farming solutions to address the challenges faced by farmers in developing countries like Guyana. Towards this end, I would like to connect and collaborate with colleagues working on solutions for rice cultivation, rice post-harvest and digital agriculture.</p> <p>LinkedIN: <a href="http://www.linkedin.com/in/dhirendranath-singh">www.linkedin.com/in/dhirendranath-singh</a></p> <p>Main published paper:</p>		

Singh, D., Ichiura, S., Than Thung, N., Sasaki, Y., & Katahira, M. (2021).  
Rice tiller number estimation by field robot and deep learning (Part 1) –Exploring infield  
tiller detection with YOLOv4– Journal of Japanese Society of Agricultural and Food  
Engineering, 83(5), 391–406.

連合農学研究科	配属大学／Assigned university	氏名／Full name
岩手大学	山形大学／Yamagata University	Rosalia Natalia Seleky
専門分野／ Specialized field	Regional resources and environmental economics studies/Agricultural economics studies	
研究テーマ／ Research theme	<ul style="list-style-type: none"> <li>- Farm succession in Indonesian farm households</li> <li>- Agricultural and structural changes in Indonesia</li> </ul>	
取得（予定）学位 取得（予定）年月／ Obtained (planned) degree Acquired degree (planned) date	Doctor of Philosophy Ph.D. (Agriculture), Obtained on 23 March 2022	
メッセージ／ Message		
<p>The shrinking of agriculture has become a highly social issue nowadays, not only in developed countries but also in developing countries. I have always been interested in agricultural issues. I have majored in agricultural economics since I was an undergraduate student. Then, for the last five years, I have been developing my skills and abilities as a young researcher on farm succession issues through my master's and doctoral degree programs in Japan. As an agricultural economist student, I began gaining experience by conducting a field survey in Indonesian rural areas and building a professional relationships with some universities and research institutions. In the future, I would like to become a professor in a university and manage several international research projects at the same time. I would like to use my skills to mentor students or society who need guidance and advice in agricultural fields.</p> <p>Qualifications: Assistant professor, University lecturer.</p> <p>Laboratory homepage: <a href="https://yudb.kj.yamagata-u.ac.jp/html/345_en.html">https://yudb.kj.yamagata-u.ac.jp/html/345_en.html</a></p> <p>Main published papers:</p> <ul style="list-style-type: none"> <li>- Rosalia Natalia Seleky, Ozawa Wataru, Sumita Tsuyoshi. Research on Characteristics of farms with successors: a case study of Margomulyo Village, Sleman District, Yogyakarta Province, Indonesia. <i>Journal of Rural Society and Economics</i>, 38 (2): 115-126 (October, 2020); <a href="https://www.jstage.jst.go.jp/browse/jrse/37/0/_contents/-char/ja">https://www.jstage.jst.go.jp/browse/jrse/37/0/_contents/-char/ja</a></li> <li>- Rosalia Natalia Seleky, Ozawa Wataru, Yasue Hiroyuki, Mizuki Asato, Chen Aofei, Jamhari. Research on Factors influencing farm household succession in agricultural occupations: a case study of Margokaton Village, Sleman District, Yogyakarta Province, Indonesia. <i>Journal of Rural Society and Economics</i>, 39 (2): 42-53 (January, 2022); <a href="https://www.jstage.jst.go.jp/browse/jrse/37/0/_contents/-char/ja">https://www.jstage.jst.go.jp/browse/jrse/37/0/_contents/-char/ja</a></li> </ul>		

連合農学研究科	配属大学／Assigned university	氏名／Full name
岩手大学	山形大学／Yamagata University	Citra Gilang Qur'ani
専門分野／ Specialized field	Forest Ecology/Tree Physiology	
研究テーマ／ Research theme	Invasive characters from physiological performance/Forest ecology and ecosystem	
取得（予定）学位 取得（予定）年月／ Obtained (planned) degree Acquired degree (planned) date	Doctor of Philosophy Ph.D (Agriculture and Forestry)/March 23rd 2022	
メッセージ／ Message		
<p>The existence of plant invasive aliens species in the forest community reduces the native biodiversity and changes the ecosystem structure. I am interested to study the invasiveness characters of tree species from the perspective of organ contribution to use the carbon storage during stress and disturbance to be able to construct the innovative future population control. I believe that organ ability to use the carbon correspond with the adaptation strategy and support the whole-plant level performance. In my PhD, I focus on understanding the effect of low light condition and artificial disturbance to the adaptation strategy of invasive aliens species, Black locust (<i>Robinia pseudoacacia</i> L.), in seedling and adult stage to understand the organs ability to cope with stress condition. The results were unexpected as rapid recovery after the disturbance and zero mortality under the low light stress were observed in both stages. Controlling invasive aliens species has been a long-time unsolved problem in many areas across the globe, including in my home country, Indonesia. In the future, I wish to work closely on environmental services, including forestry ecosystem and ecological recovery, especially on the implementation of my study to controlling the distribution of invasive aliens specie sand increase the native species enrichment.</p>		

連合農学研究科	配属大学／Assigned university	氏名／Full name
岩手大学	岩手大学／Iwate University	TATAUROVA Nadezhda
専門分野／Specialized field	国立公園の管理 National park management	
研究テーマ／Research theme	ロシア国立公園の管理システム：バイカル国立公園を事例に	
取得（予定）学位 取得（予定）年月／ Obtained (planned) degree Acquired degree (planned) date	博士（農学）2023年3月取得（予定）	
メッセージ／ Message		
<p>性別：女 年齢：36 国籍：ロシア 取得資格：JLPT N2 研究室のホームページ： <a href="http://www.agr.iwate-u.ac.jp/lab/%E5%9C%B0%E5%9F%9F%E8%B3%87%E6%BA%90%E7%AE%A1%E7%90%86%E5%AD%A6%E7%A0%94%E7%A9%B6%E5%AE%A4/">http://www.agr.iwate-u.ac.jp/lab/%E5%9C%B0%E5%9F%9F%E8%B3%87%E6%BA%90%E7%AE%A1%E7%90%86%E5%AD%A6%E7%A0%94%E7%A9%B6%E5%AE%A4/</a> 主な公表論文： タタウロワ・ナデジダ・ロシア連邦国立公園の管理実態と課題に関する研究, 第131回日本森林学会大会, 発行年2020 URL： <a href="https://www.jstage.jst.go.jp/article/jfsc/131/0/131_27/_article/-char/ja">https://www.jstage.jst.go.jp/article/jfsc/131/0/131_27/_article/-char/ja</a> 私は、ロシア出身でタタウロワ・ナデジダです。2010年から盛岡市に住んでいます。現在、岩手大学の博士課程でロシアの国立公園の管理システムに関する研究をしています。修士論文のテーマは「日ロ経済関係—現状・課題及び課題の解決策—」です。 また、岩手大学国際交流PRアソシエイトにも日本における留学生活や盛岡、東北に関する記事を書いています。日本、特に東北を主題としたインスタブログを書いています。写真家としても活躍しています。</p>		