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CONTENTS

Page

Advancing Toward a Global Hub for Island Studies:Strengthening International Partnerships in Southeast Asiap····· 1

Research Seminars/ Special seminar·····17

Recent Publications ·····26

Cover photo: Handicrafts in Solomon Islands (by KAWAI Kei)

Advancing Toward a Global Hub for Island Studies: Strengthening International Partnerships in Southeast Asia

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Our center has long promoted international joint research rooted in addressing local challenges. Through the JSPS (Japan Society for the Promotion of Science) Core-to-Core Program from FY2021 to FY2023, we have built robust relationships of trust with island nations in Southeast Asia. This fiscal year, we are taking steady steps to develop these achievements further and establish our center as a leading international research hub for Island Studies.'

On this occasion, with Management Strategy Expenses (President's Discretionary Expenses), we welcomed distinguished professors from partner universities in Malaysia, the Philippines, and Indonesia—key figures who play a pivotal role in advancing our international research hub. Through direct dialogue, we confirmed our shared understanding of the common challenges faced by island regions, including global warming and environmental change. Furthermore, we received invaluable, insightful advice regarding our university's research framework from an international perspective. The objective evaluations provided by these professors have allowed us to recognize our unique strengths while clearly highlighting the specific tasks ahead as we strive to become a truly global research center.

The following reports are submitted by three individuals.

A Report on The 12th East Asian Island and Ocean Forum (EAIOF) Social, Cultural, and Biological Diversity in Small Islands

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Since 2022, I have had the distinct privilege of participating in a Joint Research and Exchange Program organized by the International Center for Island Studies of Kagoshima University, Japan. I am still incredibly appreciative of this chance because the program created important channels for academic discussion and cooperation on ocean governance and island sustainability, two topics that are becoming more and more important for archipelagic countries like the Philippines. I had the privilege of interacting with eminent colleagues and institutional partners who are dedicated to promoting cooperative research and shared learning among island communities in South and Southeast Asia. Our immersion in Amami Island, a place renowned for

its exceptional social, cultural, and biological diversity, was a program highlight. It offered a vibrant and rich setting for field-based learning and interaction.

Reflecting on this experience, I recognize its significant academic, institutional, and strategic benefits.

Academically, the program provided a valuable platform for knowledge exchange on island sustainability, ocean governance, and community-based resource management—pressing concerns for countries like the Philippines. My understanding of comparative island governance frameworks was deepened and my perspectives were expanded by the lectures, research presentations, and fieldwork activities on Amami Island. I incorporate lessons from Amami into conversations about resilience, biodiversity conservation, and participatory resource management to my Master of Science in Sustainability students at the University where I teach. Additionally, I had the chance to present three research papers to other participants, thus encouraging scholarly discussion. Engaging with Japanese high school students and sharing aspects of Philippine culture, science, and sustainability initiatives was one of the most memorable experiences. It promoted cross-cultural understanding and encouraged young learners to value global island connections.

Institutionally, the forum enabled me to build networks and collaborate with fellow scholars across the region. A notable outcome was the co-hosting of the ***Interdisciplinary Research on the Coexistence of People and Nature in Tropical and Subtropical Asian Islands***. This collaborative initiative brought together eight scholars from Indonesia, Japan, Malaysia, and the Philippines to present diverse small-island issues to students across participating countries. The activity demonstrated the potential of digital and hybrid platforms to sustain cross-border academic engagement. More importantly, these initial partnerships laid the groundwork for longer-term institutional cooperation, joint research proposals, and expanded mobility programs among our universities.

Professionally, the program contributed significantly to my development as a scholar and educator. It allowed me to explore new research directions, strengthen my regional academic network, and position myself within a growing community of small-island sustainability researchers in East and Southeast Asia. Participation in the program also enhanced institutional visibility for my home university, reinforcing our commitment to international collaboration and interdisciplinary research.

Overall, the Joint Research and Exchange Program has been transformative—academically enriching, institutionally strategic, and professionally empowering. It stands as a strong model for sustained regional cooperation in advancing resilient and sustainable futures for island communities.

Enhancing the Center's Effectivity in Promoting Joint International Research and Exchange

Reflecting on the experience, the Center for Island Studies of Kagoshima University can further enhance its effectiveness in promoting joint international research through more structured and strategic collaboration mechanisms.

First, the *Center for Island Studies* can elevate existing bilateral partnerships into a formal university consortium dedicated to small island sustainability studies. Building on the distinctive strengths and contextual experiences of each member institution, a regional consortium composed of universities from Japan, Indonesia, Malaysia, the Philippines, and Korea can be established to advance collaborative research, joint academic programs, and community engagement initiatives focused on island sustainability.

Also, the consortium would promote systematic knowledge exchange, coordinated research agendas, faculty and student mobility, and joint innovation initiatives aimed at strengthening island resilience, sustainable livelihoods, and evidence-based policymaking across the region. Partnerships may be institutionalized through clearly defined Memoranda of Agreement, joint research programs, co-advisership arrangements for graduate students, credit-sharing mechanisms for cross-enrolled courses, shared laboratory and research facilities, jointly developed academic programs, and collaborative community extension projects.

Through these mechanisms, the Center can move beyond project-based collaborations toward a more sustainable, long-term regional platform for small island research and development.

Improving Stay at Amami Station of the International Center for Island Studies, Kagoshima University

Foreign researchers who stay at the Amami Station of the Center for Island Studies play a vital role in advancing knowledge on small island sustainability. To maximize their productivity and enrich their experience, several improvements could be made.

First, administrative and logistical assistance to foreigners can be institutionalized. This will include assistance with permits, transportation, and local coordination would help researchers focus more on their studies rather than navigating unfamiliar procedures.

Accommodation and living facilities also play an important role. Comfortable housing, access to healthy meals, and recreational opportunities would improve well-being during extended stays. During our stay in Amami Island, we were made to stay in local hotels and this renders it more expensive. Cultural and community integration initiatives, such as local orientation sessions, cultural tours, and opportunities to engage with the island community, would help researchers adapt and foster meaningful collaborations. It is noteworthy to mention that the chance to mingle with local high school students made the experience more memorable.

Finally, establishing structured communication channels and mentorship programs with the Center's staff and local researchers can facilitate knowledge exchange and collaborative opportunities. By addressing these areas, the Amami Station can create an environment that is not

only conducive to research but also supportive of personal and professional growth for foreign researchers.

Improving International Awareness of the Center

Strengthening the international visibility of the Amami Center for Island Studies is essential to positioning it as a leading hub for subtropical island sustainability research and global academic collaboration. As island communities worldwide face shared challenges related to climate change, biodiversity conservation, marine governance, and cultural preservation, the Center is uniquely situated to serve as a platform for knowledge exchange and partnership-building. Enhancing international awareness will not only attract scholars, students, and research collaborators but also expand opportunities for joint projects, funding, and policy engagement. The following strategies outline practical approaches to elevate the Center's global presence and impact.

First, the Center should regularly host international events such as conferences, workshops, summer schools, and research symposia. Inviting scholars to experience the Center's facilities and field sites firsthand not only showcases its research strengths but also attracts potential collaborators and long-term institutional partners.

Second, the Center can more strategically promote its research outputs across multiple media platforms—particularly through digital channels. A robust digital strategy that includes an updated and multilingual website, active social media engagement, research newsletters, and regular webinars can significantly expand global reach. Showcasing research highlights, case studies, policy contributions, and collaborative success stories will strengthen visibility. By emphasizing its unique island-focused work on sustainability, resilience, and climate adaptation, the Center can position itself as a regional thought leader in small island studies.

Third, the Amami Station may explore the development of virtual laboratories and cloud-based collaborative research platforms. These digital platforms could support shared GIS mapping, coastal and marine monitoring systems, biodiversity databases, participatory community mapping, and joint data repositories accessible to international partners. Leveraging digital infrastructure would enable real-time collaboration, reduce geographic barriers, and enhance research productivity. Hybrid research models—combining field-based data collection in Amami with remote analytical collaboration—can further broaden participation and improve efficiency.

Finally, expanding visiting researcher programs, internships, and collaborative fieldwork opportunities will foster cross-cultural exchange and organic international promotion. Scholars who have meaningful research experiences at the Center become ambassadors who strengthen its global reputation through sustained academic networks and word-of-mouth recognition.

Concluding Remarks

The Joint Research and Exchange Program of the International Center for Island Studies at Kagoshima University has been academically enriching, institutionally strategic, and professionally transformative. It strengthened regional networks, expanded collaborative opportunities, and reinforced the importance of sustained partnerships in advancing small island sustainability research.

Moving forward, by institutionalizing structured collaborations, enhancing support for visiting researchers, and strengthening international visibility through digital and global engagement strategies, the Center can further position itself as a leading hub for island studies in Asia. Such efforts will not only elevate institutional impact but also contribute meaningfully to building resilient and sustainable futures for island communities across the region.

Enhance Promotion of International Joint Research and Exchanges of the International Center for Island Studies Kagoshima University, Japan

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Abstract. Promoting international joint research and academic exchanges is vital to strengthen the global impact of the International Center for Island Studies (ICIS) at Kagoshima University, Japan. Island regions face environmental, socioeconomic, and climate challenges that require interdisciplinary and cross-border collaboration. Initiatives such as researcher mobility, joint publications, collaborative fieldwork, and training workshops can enhance research quality and international visibility. By building networks among scholars, policymakers, and local communities, ICIS can support sustainable island development and comparative research. Strengthened global partnerships will position ICIS as a leading center for island studies in the Asia-Pacific region and contribute meaningfully to global sustainability discourse.

Keywords: International Center for Island Studies (ICIS), Amami Oshima Islands, Small Islands, International Collaboration, Asia-Pacific region.

Introduction

Island regions are complex socio-ecological systems with unique biodiversity, diverse cultures, and high vulnerability to climate change, natural hazards, and economic shifts. Addressing these challenges requires interdisciplinary and international collaboration that combines environmental science, social science, and policy-based research approaches. International joint research initiatives promote innovation, increase scientific productivity, and enhance knowledge exchange through global research networks (Adams, 2013). Collaborative island studies also support comparative research that improves understanding of resilience, sustainable resource management, and socio-environmental governance (Baldacchino, 2018; Grydehøj, 2017).

The International Center for Island Studies (ICIS) focuses on niche areas such as small island sustainability, climate adaptation, biodiversity conservation, marine and coastal systems, and island community development in the Asia-Pacific region. Its research station on the Amami Oshima Islands provides an important base for long-term environmental monitoring, ecological research, and community engagement. Promoting international research partnerships, mobility programs, and digital collaboration platforms will strengthen global visibility and enhance ICIS's role as a leading hub for innovative island studies and sustainable development research.

Enhancing International Research Collaboration

Enhancing international research collaboration is crucial for strengthening the global impact and academic excellence of ICIS. The center requires interdisciplinary and cross-regional research partnerships. International collaboration enables comparative island studies, knowledge exchange, and co-production of innovative solutions that integrate scientific, cultural, and policy perspectives (Baldacchino, 2018). Collaborative networks involving universities, governmental agencies, and local communities can facilitate joint research projects, shared datasets, and researcher mobility, improving scientific productivity and global visibility (Grydehøj & Kelman, 2017). Furthermore, digital collaboration platforms and international funding schemes promote inclusive participation and strengthen research capacity across island regions (Pugh, 2021).

Expanding international research collaboration and networking is fundamental for improving the Center's global presence. The establishment of a digital research portal would enable seamless communication between the Center and global partners, allowing for data sharing, joint publications, and cross-border research (AUN/SEED-Net, 2020). Furthermore, hosting webinars, virtual workshops, and thematic clusters on issues such as marine biodiversity, disaster resilience, and socio-economic adaptation can attract participation from diverse research communities (APN, 2021). The collaborative network between ICIS, Kagoshima University through research collaboration, seminars, and mobility with the Small Island Research Center, UMS, Malaysia (SIRC), Pattimura University, Ambon Maluku Indonesia (PU), and the University of the

Philippines Visayas (UPV) is a good example and should be continued for visibility around the Southeast Asian region.

Introducing international fellowships and scholarships for postdoctoral researchers, graduate students, and visiting scholars would position ICIS as a center of excellence in small island studies. There is available funding to Promote international joint research between Japan and ASEAN through fellowship programs (JSPS, 2022). The first collaborative project between ICIS, Japan and researchers from Malaysia, Indonesia and the Philippines was funded by JSPS for a period of three years (April 2021- April 2024) and led by Prof Kei Kawai, Former Director of ICIS. Through this effort, the Center can foster long-term joint research and capacity-building initiatives focused on shared multidisciplinary challenges between the participating countries. Strengthening international collaboration will position ICIS as a leading hub for island research, enhancing its role in addressing global challenges through a multidisciplinary research approach.

Strengthening Research Infrastructure Amami Station

Strengthening research infrastructure and technological capacity is fundamental to advancing the global leadership of the ICIS at Amami Station. Contemporary island research demands integrated platforms that combine geospatial technologies, environmental monitoring systems, high-resolution remote sensing, and digital data repositories. Strategic investment in analytical laboratories, big-data platforms, and innovation-driven partnerships will strengthen evidence-based decision-making and increase research visibility. Such infrastructure enhances interdisciplinary analysis of climate vulnerability, socio-ecological resilience, marine resource governance, and sustainable development in island regions. Previous studies emphasize that institutional capacity and technological integration significantly improve research productivity, international collaboration, and policy relevance in island contexts (Baldacchino, 2018; Grydehøj, 2017). Upgrading laboratories with modern spectrometers, water quality testing kits, and sediment cores will enhance analytical precision and research output quality (JAMSTEC, 2021).

Moreover, digital research ecosystems—incorporating virtual laboratories, open-access databases, and transnational mobility programs—facilitate knowledge co-production and comparative island scholarship (Kelman, 2020). The installation of climate and environmental monitoring equipment, such as weather stations and tidal gauges, would allow the Center to collect high-resolution data on temperature, humidity, and sea-level changes critical for global climate studies (GSJ, 2022). Establishing a GIS and Remote Sensing Laboratory with software tools such as ArcGIS, QGIS, and MATLAB would enable researchers to engage in spatial data modeling, coastal mapping, and environmental monitoring (OGC, 2020). Equipping field stations with drones, LiDAR systems, and automated sensors for real-time environmental monitoring would also ensure that the Center's data aligns with international research standards (UN ESCAP, 2021). These

upgrades would not only increase data reliability but also facilitate collaboration with other global research institutions.

By modernizing infrastructure and embracing emerging technologies, the Amami Station can reinforce its role as a regional and global hub for sustainable island studies, fostering impactful scientific outputs and long-term international research exchanges.

Developing Global Research Branding and Promotion

Developing strong global research, branding and promotion is essential to enhance the international visibility and academic influence of ICIS. In the increasingly competitive global research environment, strategic branding supports institutional recognition, attracts international collaborators, and increases research impact through targeted dissemination strategies. Island studies, as an interdisciplinary field addressing multidiscipline issues benefits from coordinated communication platforms, digital outreach, and open-access publication strategies that expand global engagement. Effective branding also involves showcasing unique research strengths, such as comparative island research, regional expertise in Asia-Pacific Island systems, and collaborative field-based studies, which contribute to international academic networks (Grydehøj, 2017). Moreover, leveraging digital technologies, social media dissemination, and international conferences enhances knowledge exchange and strengthens institutional reputation within global research ecosystems (Pugh, 2021). Effective public relations strategies, including press releases, policy briefs, multilingual digital platforms, and social media dissemination can broaden outreach beyond scholarly audiences and strengthen stakeholder engagement (Entradas & Bauer, 2017). Studies indicate that media visibility and online communication significantly increase citation impact and institutional recognition within global research networks (Sugimoto et al., 2017).

A comprehensive branding strategy should emphasize the Center's unique focus areas marine ecosystems, climate change adaptation, and geohazard management (JST, 2023). Developing a multilingual website featuring ongoing research projects, publications, and visual content such as documentaries and podcasts can attract international audiences and strengthen SIRC's digital presence.

ISCS's initiative in convening the 12th East Asia Island and Ocean Forum (EAIOF) with the theme: "Social, Cultural and Biological Diversity in Small Islands" in Amami Oshima Island, Kagoshima Prefecture, Japan in November 2025 is a successful example of Developing Global Research Branding and Promotion. Such events showcasing its research results have increased its global visibility with participation from various countries. The same method has also been advocated by UNESCO, UNEC and IPCC to promote the issue of 'climate change' through the organization of the annual "Global Climate Resilience Conference" (UNDC, 2020).

Through multimedia campaigns including press releases, social media engagement and collaboration with international media, ICIS can also disseminate research findings to academic and non-academic audiences worldwide. ICIS now has Instagram as a social media engagement hub to promote key activities (https://www.instagram.com/Kagoshima_univ.koho). This global reach will increase recognition and promotion of ICSC.

Expanding Open Access and Data Sharing Initiatives

Expanding open access and data sharing initiatives is critical to strengthening the scientific transparency, global reach, and collaborative capacity of ICIS. Open science practices enhance research visibility, accelerate knowledge dissemination, and promote equitable access to scientific outputs, particularly for geographically dispersed island communities (Piwowar et al., 2018). Island research often relies on multidisciplinary datasets and the analysis requiring standardized repositories and interoperable data platforms to ensure reproducibility and cross-regional comparison (Wilkinson et al., 2016). Adoption of FAIR (Findable, Accessible, Interoperable, Reusable) data principles facilitates international collaboration and strengthens evidence-based policymaking in island sustainability and climate resilience studies (Mons et al., 2017). Furthermore, open-access publishing increases citation impact and enhances institutional reputation within global research networks (Tennant et al., 2016). By investing in digital repositories, metadata standardization, and collaborative data infrastructures, ICIS can advance transparent science, foster inclusive participation, and position itself as a leader in responsible and impactful island research.

Participation in international data-sharing platforms such as GBIF for biodiversity data and IRIS for seismic information would further enhance SIRC's integration into global scientific communities (Sastry & Kumar, 2021). Moreover, developing digital data analysis laboratories with advanced computational systems capable of processing large-scale datasets using software such as R, Python, and MATLAB will increase the analytical power of the Center's research outputs (JAMSTEC, 2021). Implementing strict data-sharing protocols and ethical guidelines will safeguard data integrity and establish ICIS as a trustworthy data contributor in the international research ecosystem.

Building Capacity through Training and Community Involvement]

Building research capacity through structured training and active community engagement is fundamental to developing the island sustainably. Capacity building initiatives such as graduate workshops, field-based methodological training, and international mobility programs enhance technical competencies and foster interdisciplinary collaboration across island regions. Evidence

shows that participatory and co-produced research strengthens local ownership, improves data quality, and enhances policy relevance (Reed et al., 2018). In island contexts, community-engaged approaches are particularly critical for addressing climate adaptation, disaster risk reduction, and socio-ecological resilience (Kelman, 2020). Experiential learning models that integrate local knowledge with scientific methods promote culturally grounded and context-sensitive solutions (Grydehøj & Kelman, 2017). Furthermore, collaborative training platforms encourage early-career researcher development and long-term institutional partnerships, reinforcing global research networks (Baldacchino, 2018).

The ICIS must also focus on capacity building and training programs that strengthen both local and international research competencies. Offering specialized workshops on issues related to the small islands. Training modules on grant proposal development, and data analysis would further align the Center's output with international academic standards. Equally important is community involvement in research, which can enhance the social impact and inclusiveness of scientific initiatives. By organizing public outreach activities, citizen science projects, and environmental education programs for schools, the Center can bridge local knowledge with global research agendas (UNDP, 2020). This participatory approach would not only improve data collection and conservation outcomes but also enhance the Center's international image as a socially engaged research institution.

Conclusion

Enhancing the promotion of international joint research and academic exchanges is essential for consolidating the global position of the International Center for Island Studies at Kagoshima University, Japan. Strengthened institutional partnerships, researcher mobility programs, joint publications, and co-hosted international symposia can significantly increase scientific visibility and research impact. Furthermore, integrating digital collaboration platforms, open-access dissemination strategies, and shared research infrastructure enhances knowledge exchange and fosters long-term transnational cooperation. Strategic promotion efforts should also align with global sustainability agendas and regional development priorities, ensuring that research outputs contribute to policy formulation and community resilience in island contexts. By systematically advancing international networks, capacity building and collaborative innovation, it can strengthen its role as a leading hub for island studies. A continued commitment to global engagement will not only enhance academic excellence but also support problem-solving on islands and ensure a sustainable and resilient island future.

References

Adams, J. (2013). Collaborations: The rise of research networks. *Nature*, 490, 335–336.

AUN/SEED-Net (2020). Annual report on ASEAN University Network and Japan collaborative research programs. Bangkok: ASEAN University Network Secretariat.

Baldacchino, G. (2018). The study of island studies. *Island Studies Journal*, 13(1), 3–16.

Entradas, M., & Bauer, M. W. (2017). Public communication by research institutes. *Science Communication*, 39(3), 350–373.

Grydehøj, A. (2017). Island studies and the transnational turn. *Area*, 49(2), 168–172.

Grydehøj, A., & Kelman, I. (2017). The eco-island trap: Climate change mitigation and conspicuous sustainability. *Area*, 49(1), 106–113.

GSJ (2022). Regional geohazard monitoring and seismic data integration in Southeast Asia. Tsukuba: Geological Survey of Japan.

JAMSTEC. (2021). Marine and climate data infrastructure for sustainable island research. Yokosuka: Japan Agency for Marine-Earth Science and Technology.

Kelman, I. (2020). Disaster risk reduction and island resilience. *International Journal of Disaster Risk Reduction*, 44, 101430.

Mons, B., Neylon, C., Velterop, J., Dumontier, M., da Silva Santos, L. O. B., & Wilkinson, M. D. (2017). Cloudy, increasingly FAIR; revisiting the FAIR data guiding principles. *Information Services & Use*, 37(1), 49–56.

OGC (2020). Standards and interoperability for geospatial data sharing: Technical report. Open Geospatial Consortium.

Piwowar, H., Priem, J., Larivière, V. (2018). The state of OA: A large-scale analysis of the prevalence and impact of Open Access articles. *PeerJ*, 6, e4375.

Pugh, J. (2021). Relational thinking and island studies. *Island Studies Journal*, 16(1), 1–6.

Reed, M. S., Vella, S., Challies, E. (2018). A theory of participation: What makes stakeholder and public engagement in environmental management work? *Restoration Ecology*, 26(S1), S7–S17.

Sugimoto, C. R., Work, S., Larivière, V., & Haustein, S. (2017). Scholarly use of social media and altmetrics. *Journal of the Association for Information Science and Technology*, 68(9), 2037–2062.

Tennant, J. P., Waldner, F. & Jacques, D. C. (2016). The academic, economic and societal impacts of Open Access: An evidence-based review. *F1000Research*, 5, 632.

UNDP (2020). Data for development: Harnessing big data and innovation for the SDGs in Asia-Pacific. Bangkok: United Nations Development Programme.

Wilkinson, M. D., Dumontier, M. & Aalbersberg, I. J (2016). The FAIR Guiding Principles for scientific data management and stewardship. *Scientific Data*, 3, 160018.

Amami Station, International Center for Island Studies:
A Visiting Scholar Magnet—The Small-Island Sustainability and Values Hub

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Introduction

The University of Pattimura is strategically located in Maluku, an archipelagic province in eastern Indonesia comprising roughly 1,340 islands spread across a vast maritime expanse. Maluku covers about 712,479 km² and is approximately 92.4% sea, placing it among the most oceanic provinces in Indonesia. Historically, Maluku gained global attention as the "Spice Islands," where nutmeg, clove, and cinnamon shaped both identity and international trade for centuries.

That powerful spice narrative, however, has often overshadowed the region's equally significant marine assets, including fisheries, aquaculture, marine biodiversity, and the growing potential for coastal tourism.

Contemporary data highlight the scale of Maluku's marine resources, with the Maluku Sea producing around 3.5 million tons of fish annually, reported as about 30% of Indonesia's total fish production. This figure does not include additional contributions from seaweed cultivation, fish-farming systems, and pearl production reported across more than 4,000 hectares of coastal waters.

On land, agriculture remains important, with approximately 45,000 hectares devoted to clove cultivation, 35,000 to nutmeg cultivation, and 114,000 to coconut plantations. Maluku is also increasingly framed as a "hidden paradise" for international tourism, known for pristine coastlines, white-sand beaches, and some of the world's most biodiverse coral reef ecosystems.

Despite this abundance, Maluku has long experienced a development paradox, repeatedly ranking among Indonesia's poorest provinces across decades. The persistence of poverty alongside the region's high natural-resource potential represents one of the central challenges facing small-island communities. A key pathway to improving welfare is innovation—particularly innovation that upgrades low-value raw commodities into high-value processed products with stronger competitiveness in wider markets.

Maluku's paradox and the University of Pattimura's role

In responding to Maluku's development gap, the University of Pattimura holds a pivotal position as the province's primary higher education institution. Its responsibilities extend beyond conventional teaching and research and include directly supporting the transformation of local resources into higher-value economic opportunities. First, the university must prepare high-quality human capital equipped with knowledge, skills, and an innovative mindset to explore, study, and develop practical innovations. In this framing, innovation is not abstract; it is expected to support

commodity upgrading, product development, and market competitiveness for local producers and island communities.

Second, the university carries an entrepreneurial development role by training a new generation of entrepreneurs who can promote and sell local products and services.[2] This includes not only agricultural and fishery products but also ecological services and sociocultural assets that can be positioned for domestic and international markets.[2] The entrepreneurial dimension matters because research-based ideas do not automatically translate into income gains unless there are capable actors who can commercialize, distribute, and effectively brand the outcomes.

Third, the university functions as a knowledge hub for documenting and communicating the beauty and value of local traditions, local wisdom, ecological services, cultural diversity, and local cuisine. This documentation is also tied to identifying economic opportunities grounded in island ecology and the distinctive potential of marine and coastal tourism. Taken together, these roles imply a university that contributes to development by strengthening skills, building enterprise capacity, and validating local knowledge as both heritage and an asset base. Recognizing that island development challenges are not unique to Maluku, the University of Pattimura has pursued collaborations with universities that share island characteristics and have deeper experience in island studies. This approach aims to accelerate learning, enable comparison across contexts, and develop a network that can support sustained research and capacity-building rather than one-off exchanges.

Collaboration with ICIS–Kagoshima University

A central partnership described in this report links the University of Pattimura with Kagoshima University's International Center for Island Studies (ICIS-KU). The relationship reflects a long-term commitment to strengthening island studies and building collaboration across Southeast Asia and the wider Pacific-oriented region. In 2013, the University of Pattimura hosted the International Small Island Conference, after which a formal collaboration was established with ICIS-KU. ICIS-KU was developed through earlier institutional forms at Kagoshima University, including the Kagoshima University Research Center for the South Pacific (KURCSP, 1988–1998) and the Kagoshima University Research Center for the Pacific Islands (KURCPI, 1999–2014), before becoming ICIS.

The center is presented as a research institute dedicated to interdisciplinary island and island-zone research in Oceania and surrounding regions. Its work is organized around themes including environmental studies, human–environment interactions, and comprehensive island studies with attention to Oceania/South Pacific, Japan, and Southeast Asia. The report highlights ICIS-KU's record of scholarly publications, including South Pacific Studies (published twice yearly since 1980), Occasional Papers (since 1983), and the South Pacific Newsletter, as well as additional newsletter formats and edited volumes. These publication channels are described as

forming a robust knowledge base for island studies across disciplines and geographies. In this collaboration model, publications matter not only as outputs but also as mechanisms for community-building, shared reference points, and visibility for island-focused scholarship.

Substantively, the collaboration described spans attendance at conferences and seminars, bilateral student exchanges, hosting visiting researchers, collaborative research projects, and joint seminars. It also includes exchanges among students and faculty, joint training through fieldwork and excursions, co-authorship of journal papers and book chapters, and broader interdisciplinary work on islands and small-island communities. This mix signals an intention to combine formal academic exchange with field-based learning and tangible research production.

EAIOF 2025 and the 2026 host decision

A recent milestone in this networked collaboration was the International Conference on the East Asian Island and Ocean Forum (EAIOF) held in November 2025 on Amami-Oshima Island, Kagoshima Prefecture, Japan. ICIS-KU invited partner institutions—including the University of Pattimura, Universiti Malaysia Sabah, and the University of the Philippines Visayas—to participate as attendees and oral presenters. The forum supported exchanges among academics from multiple countries, including Japan, Taiwan, South Korea, China, the Philippines, Malaysia, and Indonesia.

One of the forum's distinctive features was the involvement of local high school students from Amami-Oshima, who presented ideas on promoting their home islands. The report frames this as both an educational opportunity for youth and a way to bring grounded community perspectives into an academic setting. By including students, the forum widened participation beyond the usual academic circle and created a channel for locally relevant ideas to shape discussion.

Beyond formal sessions, participants engaged in experiential, field-based learning to observe Amami-Oshima's ecology, social culture, and local economic development strategies. A key example highlighted is a visit to Kindai University's research and development facilities, positioned as an illustration of transforming fisheries from capture-based systems toward sustainable aquaculture—summarized in the phrase "from fishing to farming." This field exposure is presented as relevant to island communities across Southeast Asia that face similar pressures and opportunities in fisheries management, food systems, and livelihoods. It is suggested that universities gain training experience at R&D Kindai University.

At the conclusion of the conference, a major decision was taken: the University of Pattimura was selected to host the next EAIOF Conference on November 24–25, 2026, in Ambon, Maluku, Indonesia. This selection is described as both an honor and a responsibility, positioning Pattimura as a central node in the expanding regional network of island-studies institutions. Hosting is also seen as an opportunity to strengthen institutional relationships and convert forum participation into sustained programs and joint research.

Recommendations and Conclusion

To strengthen joint research and exchange, the report recommends that ICIS-KU shift from a "forum-based networking" model toward a more structured "programmatic collaboration platform." This shift is described as involving shared research themes, predictable mobility schemes for students and researchers, co-authored outputs with clear attribution protocols, and a transparent governance and funding model that partners can reuse.

The approach aligns with EAIOF's stated aim to build closer relationships and initiate collaborative research among East and Southeast Asian institutes, including partners in the Philippines, Malaysia, and the University of Pattimura. A concrete proposal is to create an "EAIOF+" framework that transforms an annual forum into a base for continuous collaboration between meetings. Priority themes named include biodiversity conservation and monitoring, sustainable food systems and food security, fisheries conservation and community-based marine management, sustainable tourism development, and preservation and documentation of island history and culture.

To support participation across geographically dispersed islands, the report recommends actively promoting two-way exchange programs among students, early-career researchers, and staff.

Suggested formats include short visits, field schools, co-supervision arrangements for graduate students, and hybrid seminar models that reduce financial barriers. To seed collaborative work, it proposes an "EAIOF Joint Research Seed Fund" offering small grants to support pilot studies and initial data collection that can later be leveraged into larger grant applications.

Improving participant support is presented as essential for turning conferences into productive collaboration. Before arrival, the report suggests a comprehensive participant resource pack with guidance on access to Amami Station, transport options, check-in procedures, local payment information, emergency contacts, and fieldwork etiquette in heritage or protected areas. During the forum, it proposes assigning moderators "discussant and connector" roles to identify promising cross-country collaborations and schedule follow-up working-group meetings while participants are still present. Because EAIOF aims for interdisciplinary exchange, it also recommends simple "translation" tools such as standardized slides or templates to help natural and social scientists communicate variables, units, and methods more clearly to one another. Field-based learning is recognized as valuable and should be continued, especially excursions that demonstrate aquaculture training.

At the same time, future excursions could be strengthened by offering optional thematic mini-tracks tailored to participant interests, including biodiversity training, monitoring and evaluation, tourism governance and guide certification, local food systems and biocultural documentation, and community-based conservation approaches. Sustaining momentum after the forum is treated as a decisive factor in whether collaboration becomes real. The report recommends establishing a post-forum working group committed to submitting at least one joint research

proposal or planning a special journal issue within a defined period. It also proposes an ICIS "collaboration desk" with dedicated support to help partners handle MOUs, visiting scholar agreements, co-supervision arrangements, and logistical barriers that often stall cooperation.

For international visibility, the report argues that ICIS-KU needs a clearer global signature and more accessible channels to keep overseas scholars engaged between EAIOF meetings. It recommends upgrading the Occasional Papers series and EAIOF proceedings into a more discoverable digital package, including consistent English-language metadata and, where possible, assignment of DOIs to improve citability. Rather than relying solely on annual gatherings, this report also calls for expanding partnerships beyond EAIOF by connecting with wider global island and coastal research networks.

It proposes co-hosting at least one joint international event annually in a hybrid format on the theme of "Sustainability and Values of Small Islands," leveraging Amami's UNESCO World Natural Heritage context as a comparative case. It further suggests developing recognizable research corridors for comparative analysis—such as Amami–Jeju, Amami–Maluku, and Amami–Penghu—to build memorable multi-site evidence bases.

Finally, it recommends positioning ICIS-KU clearly as "**the small-island sustainability and values hub**," using Amami and the Ryukyu chain as a comparative living laboratory for island studies. A concise "ICIS Research Flagships" document is proposed to align with what visitors observe during EAIOF, focusing on priority research domains such as biodiversity and ecosystem research, island food systems, governance studies (including customary institutions like Maluku's *Sasi*), sustainable tourism and heritage governance, and island culture and history documentation. To make **Amami Station a true visiting-scholar magnet**, the report suggests predictable visiting periods, dedicated workspace, local coordination support, introductions to stakeholders and field sites, and streamlined guidance for permits and ethics processes.

It also recommends targeted "mobility plus pilot-data" support for Southeast Asian partners—particularly from the Philippines, Malaysia, and Pattimura University—to address travel-cost barriers while strengthening comparative research capacity.

Through these steps—programmatic collaboration, seed funding, stronger participant support, open and visible outputs, and a clear identity—ICIS-KU can strengthen its role as a bridge institution connecting island communities and researchers across East and Southeast Asia. The upcoming EAIOF Conference in Ambon in November 2026 is presented as a timely opportunity to turn these recommendations into sustained initiatives that advance small-island sustainability research for years to come.

No.245, 20 January 2025

"Considering Modern and Contemporary Periods in Okinoerabu from Diverse Historical Sources"

TOMONO Fumiaki (Kagoshima University)

[ABSTRACT]

This report is a trial discussion of the possibility of a new framework that could be proposed for the narrative of the modern and contemporary history of Okinoerabu Island by using a variety of historical materials as the object of analysis.

In recent years, new developments in historical research on Okinoerabu Island have been emerging in various fields. For example, in Wadomari Town, a project to create a new municipal history began in 2021 to commemorate the 80th anniversary of the town's establishment, and that publication was published in May 2024. As part of a project to commemorate the 80th anniversary of the town's establishment, China Town also started a project to compile a new town journal in 2024, and a new municipal history is scheduled to be produced by 2026.

As described above, while historical research has been progressing in Okinoerabu Island in recent years, what points should we pay attention to in our future attempts to deepen the historical research of the island, especially the image of modern and contemporary history? In this report, I will consider the possibility of uncovering a richer image of history of modern and contemporary periods in Okinoerabu by analyzing the various historical materials that have survived on Okinoerabu Island.

No.246, 10 March 2025

"The Wild Lilies in Islands of Kagoshima"

MIYAMOTO Junko (Graduate School of Science and Engineering, Kagoshima University)
HASHIGUCHI Koshi (Graduate School of Agriculture, Forestry and Fisheries, Kagoshima University)

[ABSTRACT]

The genus *Lilium* of Liliaceae includes over 100 wild species and many cultivating laces. In Japan, 14 native species grow: *L. medeoloides* A. Gray, *L. concolor* Salisb., *L. maculatum* Thunb., *L. pensylvanicum* Ker Gawl., *L. auratum* Lindl., *L. speciosum* Thunb., *L. lancifolium* Thunb., *L. leichtlinii* Hook. f. pseudotigrinum (Carriere) H. Hara et Kitam., *L. callosum* Sieb. et Zucc., *L. japonicum* Houtt, *L. rubellum* Baker, *L. alexandrae* Hort. ex Wallace (=*L. ukeyuri*), *L. nobilissimum* (Makino) Makino, *L. longiflorum* Thunb., and *L. hansonii* Leichtlin ex D. T. Moore. In Kagoshima Prefecture, *L. auratum, L. speciosum, L. lancifolium, L. leichtlinii, L. callosum, L. alexandrae* (=*L. ukeyuri*), *L. nobilissimum, L. longiflorum, L. formosanum* Wallace, and some

cultivating laces were found in fields. *Lilium auratum* may be a domestic alien species. *Lilium formosanum* was introduced from Taiwan Island, and *L. x formolongo*, a hybrid between *L. longiflorum* and *L. formosanum*, is also found in Kagoshima. *Lilium nobilissimum* in Kuchinoshima Island, *L. alexandrae* (=*L. ukeyuri*) in the Amami Islands, and *L. speciosum* var. *speciosum* in Kyushu including the Koshiki Islands are endemic.

We are going to explain that information of wild habitats and genetic variations of *L. nobilissimum, L. alexandrae* (=*L. ukeyuri*), *L. speciosum* var. *speciosum*, and *L. formosanum*.

No.247, 21 April 2025

"The Work of Folk Song Researcher Kubo Ken'o"

YANAGAWA Hidetoshi (Faculty of Law, Economics and Humanities, Kagoshima University)

[ABSTRACT]

Kubo Ken'o is an independent folk song researcher who has been collecting folk songs since the 1940s and has made a great contribution to the music culture of southern Kyushu with his works such as "Minami Nihon Minyokyokushu" and "Minami Nihon Warabe Uta Fudoki." His activities are diverse, including as a poet, playwright, educator, composer, arranger, and music historian.

Since 2020, the presenter, together with composer Keiko Harada (Tokyo College of Music), has been researching and studying Kubo's collection of unpublished materials stored at the Kikaicho Central Community Center, and compiled the results in Toushoken Booklet No. 24, "Following the Folk Song of Southern Japan: Ken'o Kubo's Work," published in March 2024. In addition, as part of a project by the "Center for Modern Kagoshima Studies" attached to the Faculty of Law, Economics and Humanities of Kagoshima University last year and the year before, some of Kubo's tapes that had been stored at the Kagoshima Prefectural Library for many years were digitized. This presentation will introduce some of Kubo's activities that have become apparent through this research

No.248, 19 May 2025

"Reproductive Strategies of Acropora Corals"

BABA Takeshi (Faculty of Law, Economics and Humanities, Kagoshima University)

[ABSTRACT]

Previous studies on well-being have shown that there are differences in perceptions of subjective well-being depending on the attributes of the respondents. For example, it has been found that the attributes that experience a higher perception of well-being are women, younger people, higher income, and higher education.

In Amami City, the long-term policy direction is "Island of Happiness." It has also been continuously surveying the perception of well-being of the citizens of Amami. Based on the Amami City well-being survey, we clarify the profile of residents based on the characteristics of

their perceived social bonding, and analyses the differences in subjective well-being levels according to the profile of residents.

The analysis found that Amami citizens can be classified into five groups based on their perceptions of their social bonding with the local community. Furthermore, residents who feel a strong social bonding with the local community tend to have higher levels of subjective well-being. Therefore, designing social bonding between residents and their local communities has the potential to improve residents' well-being. Additionally, when formulating policies using well-being as an indicator, clearly defining the target profile of residents of the policy not only provides a basis for policy formulation but also enables the measurement of policy evaluation effectiveness.

No.249, 23 June 2025

"The Art of Social Symbiosis among Southeast Asian Sea People: Focusing on the Bajau"

NAGATSU Kazufumi (Faculty of Sociology, Toyo University)

[ABSTRACT]

In Southeast Asian studies, the island world of Southeast Asia, which is closely connected by the sea, is called the Southeast Asian maritime world. This area includes the islands of Southeast Asia and the coastal areas of the mainland from the South China Sea to the Gulf of Thailand and the Andaman Sea. One of the main actors in shaping this Southeast Asian maritime world is the sea people, a group of people who have constituted a life deeply connected to the sea. The sea people have connected the islands through repeated migration and movement across the sea, creating a unique historical and geographical space in this sea area. This study focuses on the Bajau people among these sea people. Some of the Bajau people are known to have once lived on boats. Even today, many people live in stilt houses (floating houses) along the coast and in shallow waters. The population is approximately 1 million. Their settlements are spread across three countries: the Philippines, Malaysia, and Indonesia. Their way of life is characterized by three key features: (1) high mobility, (2) a strong commercial orientation, and (3) the network-based society. This study aims to introduce the techniques of coexistence nurtured in the Southeast Asian maritime world by examining the lives of the Bajau people, who embody these characteristics.

No.250, 14 July 2025

"The Present State and Issues of Fisheries in the Amami Islands"

SHISHIDOU Hirotoshi (Kagoshima Prefecture Fisheries Technology and Development Center)

[ABSTRACT]

The Amami Islands, southwestern Japan, subtropical, are surrounded by coral reefs, and numerous natural fishing banks lie offshore. This Islands also benefit from the Kuroshio Current flowing to the northwest of the region, creating favorable marine conditions that have supported the development of fisheries since ancient times. The main fisheries are pole-and-line, longline, drive-

in net fishing, and diving-based fishing. In addition, the calm inner bays are actively used for aquaculture of fish, shellfish, and seaweed.

However, the total fisheries production by fishing boats in this Islands in 2023 was 1,608 tons, representing a 61% decrease compared to 1998. This rate of decline is greater than the nationwide decrease in fishery production during the same period, which was 45%.

Behind this decline are several contributing factors, including the geographical disadvantages of this Islands, rising costs of fuel and fishing materials, stagnant fish prices, and the impacts of climate change on the marine environment and fishery resources. These factors lead to reduced profitability for fishers and a decrease the fishers.

In response, Kagoshima Prefecture is implementing various policies to promote the fisheries in this Islands. These include advancing resource management, promoting the sustainable use of fishery resources, developing fishing grounds and seaweed beds, improving the distribution, processing, and marketing of marine products, encouraging fish consumption, securing and fostering future generations of fishers, and revitalizing fishing communities.

No.251, 29 September 2025

"Ryukyu Long-Furred Rat: A Resident of the Central Ryukyus"

YASUDA Yuko (Faculty of Agriculture, Kagoshima University)

[ABSTRACT]

The Ryukyu Archipelago, located in the southwestern part of the Japanese Archipelago, is geologically divided into three regions: Northern Ryukyus (between the Osumi and Tokara Straits), Central Ryukyus (between the Tokara Strait and Kerama Gap), and Southern Ryukyus (between the Kerama Gap and Yonaguni Strait). Differences in the timing of land connections and separations with the Asian continent have resulted in each region developing its own distinct biota, not only from mainland Japan but also from each other. Owing to this uniqueness, four areas—Amami-Oshima Island, Tokunoshima Island, the northern part of Okinawajima Island, and Iriomotejima Island—were inscribed as UNESCO World Natural Heritage sites in 2021.

This biogeographical distinctiveness is also evident in mammals, with several endemic species found only in the Ryukyus. The Ryukyu long-furred rat (*Diplothrix legata*) is one such species, occurring exclusively in the Central Ryukyus—specifically on Amami-Oshima, Tokunoshima, and northern Okinawajima islands.

Since 2023, I have conducted research in northern Okinawajima Island to elucidate the ecology and conservation measures for *D. legata*. This presentation will provide an overview of the species' discovery and past research, followed by current studies using radio telemetry to track movements and investigations into parasites that may pose a threat. Through these topics, I will also discuss the history of biological research in the Central Ryukyus and highlight the challenges faced by *D. legata* and other endemic animals in the region.

No.252, 27 October 2025

"Study of gravestones made of Yamagawa Stone in the Satsunan Islands"

MATSUSAKI Hirotsugu (Ibusuki City Board of Education Lifelong Learning Division)

[ABSTRACT]

Yamagawa stone is a yellow tuff found in the Yamagawa Fukumoto area of Ibusuki City, Kagoshima Prefecture, Japan. It has been used as a building material since long ago times due to its softness, ease of processing, and resistance to weathering. From the 15th century in particular, it was traditionally used for the tombs of the Shimazu clan heads and was sometimes understood as a "gravestones exclusively for the feudal lords." However, there have been few archaeological studies on the distribution, production system, and manufacturing techniques of gravestones made of Yamagawa stone, so their actual state remains unclear. In addition, recent research has revealed that the Imaizumi Shimazu tribe in Ibusuki City used "Ikeda stone," a yellow tuff similar to Yamagawa stone, which suggests a hierarchical use of stone materials. In this context, it has also become clear that a large number of Yamagawa stone gravestones were distributed in the Satsunan Islands, and that large gravestones made of Yamagawa stone were erected by island officials in particular. The existence of Yamagawa Port, which functioned as a gateway for the Ryukyu trade for the Kagoshima Domain, is thought to be the reason for the distribution of Yamagawa stone tombstones in the Satsunan Islands, but the specific distribution network and the reality of commercial activities are not known. Therefore, this presentation will report on the basic distribution survey for this research and explore future research directions.

No.253, 15 December 2025

"Symbionts of Poisonous Sea Urchins in the Nansei Islands"

YAMAMORI Luna (Seto Marine Biological Laboratory, Kyoto University)

[ABSTRACT]

Sea urchins possess sharp spines, and various symbionts are known to inhabit the spaces among them. For example, the fish *Aeoliscus strigatus* swims while mimicking spines of diadematid urchins, and parasitic taxa such as eulimids are also common. While sea urchins are generally recognized as voracious grazers of algae, some species, including *Echinometra* spp. and *Echinostrephus* spp., excavate holes in bedrock using their teeth and spines. I have demonstrated that distinctive assemblages of inquilines inhabit these pits. Among them are highly specialized taxa such as *Broderipia iridescens*, which exhibit strong ecological dependence on their host urchins.

In particular, poisonous sea urchins such as diadematids host unusual symbionts. For instance, the goose barnacle *Rugilepas pearsei* lives on the test of *Echinothrix diadema*, inserting part of its body into the test and modifying it to form a shelter-like structure. In addition, within the Aristotle's lantern of diadematid urchins lives a minute crustacean, *Clavisodalis sentifer*. In this presentation, I will introduce these unique symbionts of sea urchins.

No.254, 27 October 2026

"A Memorandum on the Arasetsu Rituals in Akina, Tatsugo Town"

MACHI Taiki (Department of Liberal Arts and Sciences, National Institute of Technology, Kagoshima)

[ABSTRACT]

In Akina, Tatsugo Town on Amami-Oshima Island, the rituals known as *Shochogama* and *Hirase Mankai* are performed on the first *hinoe* day of the eighth month of the lunar calendar. Together, these rituals are collectively called the *Arasetsu* (literally, "New Season") rituals and are closely associated with beliefs concerning the spirit of rice (*inadama*). *Shochogama* is conducted from before sunrise until dawn. A small thatched hut, also called the *Shochogama*, is built halfway up a mountain overlooking the village's rice fields. The spirit of rice is invited to this structure, after which men of the community shake the roof and eventually collapse the hut. *Hirase Mankai* takes place from the afternoon to early evening on the seashore, where men and women stand on two opposing rocks and exchange songs to invite the spirit of rice believed to come from beyond the sea.

This presentation reports on observations of the *Arasetsu* rituals conducted in 2025 September and examines the cosmology underlying these practices through a review of previous studies. It argues that the rituals symbolically connect mountains, fields, and the sea as interconnected spaces essential to agricultural fertility. In recent years, the *Arasetsu* rituals have partially opened to people from outside the community. For example, non-residents now assist in constructing the *Shochogama* and are allowed to participate by climbing onto its roof. Furthermore, since the rituals have been designated as an Important Intangible Folk Cultural Property of Japan, they have attracted increasing numbers of visitors. Taking these changes into account, this study also considers the role of the *Arasetsu* rituals as a tourism resource and discusses contemporary challenges in the transmission and preservation of traditional culture.

No.255, 16 February 2026

"Community-Driven Tourism Initiatives in Uken Village, Amami-Oshima Island"

NIIMOTO Kazufumi (Ippansyadanhoujin Megurumeguru)

[ABSTRACT]

This presentation introduces the practice of "tourism aimed at community development" being implemented in Uken Village, Amami-Oshima Island, Kagoshima Prefecture. Community-based tourism is often commodified and sold through travel agencies to meet market demands. This frequently results in the region's unique way of life and culture being superficially consumed as attractions, rather than authentically expressed. Recognizing this issue, Uken Village has developed experiential tourism centered on the community's lifestyle coexisting with the natural environment and the "environmental culture" cherished by the region. This approach prioritizes the community over adapting to tourist demands.

Specifically, local residents themselves become storytellers and facilitators, offering experiences centered on the “treasures at our feet” found within their daily lives. By having the community itself act as host and create the framework for these experiences, the village is fostering renewed pride in the region while also creating connections with people outside the area. Furthermore, by coordinating the Uken Village Tourism and Products Association, Genki no Deru Kosha Travel (a local travel agency), and even related organizations outside the island, the village has established a system where planning, recruitment, reception, guidance, and promotion are all completed within the region. This enables the implementation of a locally driven tourism model that does not overly depend on market demands. This presentation examines, through these examples, the potential for viewing tourism not merely as an economic driver but as a foundation that sustainably supports the community.

Symposium

Symposium of the International Center for Island Studies, Kagoshima University
“Citrus: Precious Fruits on the Amami and Okinawa Islands”
Date: November 29th (Sat.), 2025 13:00 - 17:00
Place: Kikai-Cho Government Office (Kikai-Cho Wan 1746, Kagoshima Prefecture, 891-6292 JAPAN)
On-line: (Zoom)

[Aim]
Citrus originated from northeastern India to southwestern China, and mainly expanded their habitat to the east. Japan, located at the eastern end, was separated from the Eurasian continent by the formation of the Sea of Japan during the Miocene epoch (23 to 5.3 million years ago), making the native species *Citrus depressa* (Shīkuwashā) and *C. tachibana* (Tachibana) unique and valuable ones that do not exist in other regions. Subsequently, in the Ryukyu islands, hybridization between Shīkuwashā and introduced species from outside of Japan, as well as crossbreeding among hybrids, led to the emergence of various local citrus. For example, on Kikaijima Island, local citrus such as “Fusū (*C. rokugatsu*),” “Keraji (*C. keraji*),” “Kurihā (*C. keraji*),” “Shīkū (*Citrus* sp.),” and “Tōkū (*C. nobilis*)” are cultivated. At this symposium, we will introduce the latest new findings on the characteristics of local citrus in the Amami and Okinawa islands, and together with participants and audience, we aim to explore new possibilities for utilizing local citrus as a “tool” to revitalize the islands.

[Program]
13:30 Opening Address

13:40 “Recent Findings on the Local Citrus of Amami and Okinawa” YAMAMOTO Masashi (Faculty of Agriculture, Kagoshima University)
14:20 “Origin of Native Citrus Species in the Ryukyu Islands” KINJO Hideyasu (Okinawa Prefecture Ogimi Village Shiikuwasha Production Area Promotion Council, H.K.Laboratory)
15:00 Break
15:15 “The Potential of Citrus Fruits from Japan’s Southwestern Islands as Functional Resources”SAKAO Kozue (Faculty of Agriculture, Kagoshima University)
15:55 Break
16:10 Discussion
16:55 Closing Remarks

[Abstract]

Recent Findings on the Local Citrus of Amami and Okinawa

YAMAMOTO Masashi (Faculty of Agriculture, Kagoshima University)

Amami and Okinawa are home to a variety of citrus genetic resources, including Shiikuwasha, which grow in the wild or are cultivated. In recent years, we have gained significant insight into the distribution, history, and characteristics of these local citrus accessions. DNA analysis indicates that many of the local citrus in this region, including Kabuchii, Kerajimikan, and Rokugatsumikan, are hybrids resulting from crosses between wild Shiikuwasha and foreign-introduced Kunenbo or Daidai (sour orange). Additionally, field surveys on many islands have provided information on the distribution of local citrus species. For instance, Kabuchii and Rokugatsumikan are widely distributed and referred to by different names across the islands. In contrast, accessions such as Kerajimikan have been confirmed on a limited number of islands. Among these, several local citrus species, including Shiikuwasha and Kabuchii, have been found to contain significant amounts of polymethoxyflavonoids, which have been shown to have a high preventive effect against lifestyle-related diseases. These results indicate that the local citrus accessions of Amami and Okinawa are unique and valuable genetic resources not found in other regions. Furthermore, they are also important as cultural resources due to their long-standing use in daily life.

Origin of Native Citrus Species in the Ryukyu Islands

KINJO Hideyasu (Okinawa Prefecture Ogimi Village Shiikuwasha Production Area Promotion Council, H.K.Laboratory)

Shiikuwasha is thought to have been created by a natural cross between Tachibana and a Chinese mandarin. Further crossbreeding was carried out between these hybrids, resulting in a citrus fruit with a genotype similar to Ishikunibu (Masashi Hirai). Genes characteristics of Japanese mandarins are found in all of the Shiikuwasha lineages, Ogimi Kugani, Katsuyama Kugani, Kaachi (Mayagaa), Kabishi, Fusubuta, Mikanguwa, Hijakunibu, Ishikunibu, and Tachibana, and in

individuals other than Ishikunibu, characteristics of Chinese mandarin can be seen (Masashi Yamamoto).

Currently, the Okinawa Institute of Science and Technology Graduate University, the University of California, the University of Florida, Research institutes in the United States and Spain, and an international citrus research team are investigating the kinship history of citrus in East Asia, the Ryukyus, and Japan.

The results were published in Nature Communications on July 26, 2021. Genetic analysis has now revealed that the individuals previously referred to as Tanibuta shiikuwasha (Tachibana group) in Tanaka's classification evolved from mandarin, which originated in China, in the Ryukyu Islands 2.2 to 2.8 million years ago.

It has been discovered that Tachibana and Shiikuwasha, which were said to be the oldest citrus trees in Japan, were created between 40,000 and 200,000 years ago through the involvement of Tanibuta (tentative scientific name: *Citrus ryukyuensis*). It has been thought that Tachibana was introduced via the northern route via the Korean Peninsula and the southern route from the Ryukyus, but this research has made discoveries that support the Ryukyu route.

At present, the single parent of Tachibana is unknown (mandarin from China?), but the parent of Shiikuwasha is a type of Mandarin from Henan Province, China, which is called Katsuyama Ishikunibu (a different species from Ishikunibu, *Citrus reticulata*), and it is thought that various mutant strains of Shiikuwasha were created through forward and reverse crosses.

It is predicted that during the Great Trade period of the Ryukyu Kingdom (8th to 12th century), Kunenbo, Daidai, Buntan, etc. introduced from Asia, as well as Tanibuta and Shiikuwasha, migrated north while interbreeding, and various citrus fruits were born in various parts of Japan. Future research will elucidate the origin of domestic citrus and rewrite the history of citrus.

The Potential of Citrus Fruits from Japan's Southwestern Islands as Functional Resources

SAKAO Kozue (Faculty of Agriculture, Kagoshima University)

Fruit-bearing trees of local citrus accessions on the Southwest Islands of Japan represent valuable plant resources with unique genetic backgrounds. However, many of these fruits are discarded unused due to practices such as fruit thinning, presenting a challenge for effective utilization. In this study, we focused on the "functional properties" of these local citrus accessions, aiming to explore their potential value for future regional industrial applications.

Previous research has indicated that the peel of these citrus varieties is rich in polymethoxyflavonoids (PMFs), including nobiletin and tangeretin. These compounds are known for their physiological activities such as reducing oxidative stress and alleviating metabolic syndrome.

We conducted a comprehensive evaluation of the functional properties of these citrus fruits, focusing on four key areas: 1) blood glucose-lowering effects, 2) skin protective effects, 3)

anti-allergic effects, and 4) anticancer effects. Moreover, we employed NMR metabolomics and other analytical approaches to estimate functional components and characterize the distinct properties of each accession. Our findings revealed that “Kikaimikan” displayed a remarkable blood glucose-lowering effect, while “Koz” from Yakushima Island exhibited strong skin-protective activity. These results highlight the promising potential of these local citrus resources as region-specific functional materials.

Recent Publications

+++ Kagoshima University Toushoken Booklet +++

No. 25 TAKATSU Takashi: Introduction to Chinese Books of the Ryukyus (March 2025)

No. 26 HIRAI Kazuomi: An Iskander's Experoence of the Russo-Japanese War, Focusing on the "Seiro Nikki" by Miyatsurgu Ohno (March 2025)

KagoshimaUniversity Toushoken Booklets No. 25 and No.26

+++ South Pacific Studies +++

Vol.45, No. 1,2, 2025

Research Papers

- Garry S: Analyzing the Evolution of Rascal Gang Culture in Port Moresby, Papua New Guinea, through the Sociological Imagination Lens.
- Papoutsaki E, Kuwahara S: “Shodansho” - A place for laughter and chatting A community

led response to aging and depopulated small islands in Japan.

Vol.46, No. 1, 2025

- Okamura T: A Comparison of a Selected Number of Words and Terms on Norfolk Island (Australia) and Auckland (New Zealand).
- Hashiguchi K, Terada J, Shimizu K, Kawanishi M, Miyamoto J: Genetic Analysis of Lilium speciosum Thynb. (Liliaceae) in the Koshiki Islands and the Southwestern Kyushu Populations, in Japan.

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