

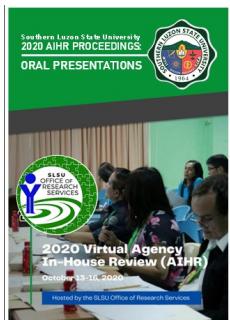
**Southern Luzon State University
2020 AIHR PROCEEDINGS:
ORAL PRESENTATIONS**



**2020 Virtual Agency
In-House Review (AIHR)**

October 13-16, 2020

Hosted by the SLSU Office of Research Services



The 2020 AIHR Proceedings: Oral Presentations was published as a documentation of the conduct of the Virtual Agency In-House Review (AIHR) 2020 of the Southern Luzon State University through the Office of Research Services (ORS).

The AIHR is an annual event showcasing the proposed and completed research projects of the university faculty members and personnel. For this year, the AIHR focused on the oral presentations of the recently completed projects of SLSU researchers.

2020 VIRTUAL AIHR COMMITTEE

OVERALL CHAIR

Marissa C. Esperal, PhD
Vice President, PREPD

CO-CHAIR

Delia R. Babilonia PhD
ORS Director

SECRETARIAT

April Arianne A. de Leon
Education Program Specialist I
Jean Venelie G. Raga
RDE Support Staff

IEC MATERIALS' DESIGN AND LAYOUT

April Arianne A. de Leon
Education Program Specialist I

Published by the
OFFICE OF RESEARCH SERVICES
Southern Luzon State University, Lucban, Quezon

researchser@slsu.edu.ph | (042) 540-8506

ABSTRACT OF PAPERS

NATURAL SCIENCES CATEGORY



**S & T interventions on quality planting material
Production of two important forest tree species
indigenous in Mt. Banahaw de Lucban (page 3)**

Kathreena E. Gutierrez, Eraldwin A. Dimailig,
Wenceslao S. Durante, & Earl Joseph Tinamisan, *et al.*

**Mangrove Crab (*Scylla serrata*) production in
Alabat Island, Quezon Province using an
aquasilviculture system (page 4)**

Delia R. Babilonia, Sarah Joy L. Zoleta,
Jobert G. Lomboy, Adrian Servando, & Joel Altero

S & T interventions on quality planting material production of two important forest tree species indigenous in Mt Banahaw de Lucban

Gutierrez KE¹, Dimallig EA¹, Durante WS¹, Tinamisan EJ¹, Cadelino RM¹, Dela Cruz JT¹, Evasco AM¹, Gatson CV¹, Nolasco AM¹, & Ravanzo JV¹

¹College of Agriculture, Southern Luzon State University,
Lucban 4328 Quezon, Philippines

Corresponding Author:

Kathreena E. Gutierrez, e-mail: kathreenaegutierrez@gmail.com

Biodiversity studies in Mt. Banahaw de Lucban show high variation and species. The endemicity of the area can range from 66-76% but with some forest tree species considered as threatened based on the IUCN List of Threatened Species in the Philippines and DENR Administrative Order No.2017-11 Updated National List of Threatened Philippine Plants and their categories. With the expansion of the National Greening Program, the conservation of indigenous forest tree species like Batikuling (*Litsea leyteensis* Merr.) and Makaasim (*Syzygium nitidum* Benth.) and demand for quality planting materials production should be a priority. However, the production of high-quality planting stocks of these species should not be dependent on the volume and seasonal availability of the seeds of the target forest tree species to be planted. Adopting a scientific way of producing high quality and needed volumes of planting stocks of indigenous trees through clonal nurseries and vegetative propagation techniques are essential. Southern Luzon State University through its Clonal Forestry Nursery facility aims to generate and promote S&T interventions as a platform in the production and conservation of selected indigenous forest trees species of Mt. Banahaw de Lucban. Propagation protocol is being developed using mycorrhiza technology and rooting hormones and molecular characterization through DNA barcoding which includes optimization of polymerase chain reaction (PCR) cycling condition for *rbcL* gene. Developing alternatives and simplifying operations are needed and vegetative propagation can be an answer for the fast climate change and undeniable land degradation in many tropical countries where certain species are becoming rare and threatened.

Keywords: Quality planting material, Production, Forest tree species, Indigenous

Mangrove crab (*Scylla serrata*) production in Alabat island, Quezon Province using an aquasilviculture system

Babilonia DR¹, Zoleta SJL², Lomboy JG³, Altez JT⁴ , & Servando AC⁴

¹College of Agriculture, Southern Luzon State University,
Lucban 4328 Quezon, Philippines,

²Southern Luzon State University, Lucban 4328 Quezon, Philippines,

³Southern Luzon State University - Alabat Campus, Alabat 4333
Quezon, Philippines,

⁴Alabat 4333 Quezon, Philippines

Corresponding Author:

Delia R. Babilonia, email: dbabilonia@slsu.edu.ph

An aquasilviculture project was established in the mangrove areas of three selected barangays in Quezon and Alabat, namely Apad, Gordon and Balungay. These were operated and maintained by the community participants who were organized and capacitated for this purpose. This undertaking aimed to determine the productivity and profitability of mangrove crab (*Scylla serrata*) production in an aquasilviculture system. Results revealed significant differences on growth ($P < 0.05$) among sites. Balungay obtained the highest final weight, length and absolute gain in weight; survival and yield. Conversely, income and ROI (Return on Investment) were negative for this initial implementation of aquasilviculture in Alabat Island. The low production has been attributed to low growth and survival of the crabs.

Keywords: Alabat Island, Aquasilviculture, Mangrove, Mangrove crab, Productivity, Profitability

ABSTRACT OF PAPERS

DEVELOPMENT CATEGORY



**Technology commercialization of Nipa sweeteners
developed by ITDI (page 7)**

Violeto N. Coronacion

**Regulated water misting for oyster mushroom
production area (page 8)**

Roland A. Calderon, Edgardo E. Cedeño, & Jermine F. Alinea

**RECORDS (Research and Extension Completed and
On-going Registered programs Database System) (page 9)**

Frederick T. Villa, Arvin N. Natividad, & Razel C. Tulod

**Development of canned lemon grass (*Cymbopogon citratus*)
enhanced smoked milkfish (*Chanos chanos*) (page 10)**

Victoria M. Noble, Virgilio B. Buelva,
Myrna N. Licas, & Veronica Aurea A. Rufo

**Expansion of native pig production and
commercialization of developed processing technologies
in Tagkawayan, Quezon (page 11)**

Veronica Aurea A. Rufo, Felix B. Lampos & Dorris N. Gatus

**Product development from oyster mushroom
(*Pleurotus ostreatus*) (page 12)**

Alma J. Caringal, Nona D. Nagares, & Salvo O. Salvacion

Technology commercialization of Nipa sweeteners developed by ITDI

Coronacion VN¹

¹Southern Luzon State University—Infanta Campus,
Infanta 4336 Quezon, Philippines

Corresponding Author:

Violeto N. Coronacion, e-mail: violetocoronacion@gmail.com/
violeto_coronacion@yahoo.com

The R&D “Technology Commercialization of Nipa Sweeteners Developed by ITDI” was conducted to pilot scale the nipa sap sugar technology for commercialization at Southern Luzon State University-Infanta Campus. Specifically, the study aims to; Identify reliable parameters for the upscale 60 kilograms from 5 to 10 kilograms capacity, to further improve and field-test a biomass operated kettle for the production of Nipa Sap sugar, to identify the technical and financial viability of Nipa Sugar at pilot scale, establish Quality Control parameters and appropriate packaging for Nipa Sugar, and to establish the “best practices” and demonstration facility for the pilot scale production. Results of the study shows that based from the experiment comparing the performance and cost efficiency of two the two production design used in the study we found out that T2 used of combined equipment Biomass Operated Kettle (BOK) and double Jacketed Kettle (DJK) is more efficient in terms of fuel consumption than the single process, also the increase in volume of production positively contribute to increase in recovery of sugar. Moreover, result of the study used to established the standard parameters for the upscale 60kg capacity production of nipa sugar, test the capability and efficiency of the improved design Biomass Operated Kettle (BOK), analyze and determine the financial viability of producing nipa sap sugar at pilot scale, developed appropriate packaging of the sweeteners products and test its acceptability p to different market establishment and promotional activities in the local, regional and at national level. Also, through this R&D project SLSU Infanta were able to establish the nipa processing center and develop a new model of production facility to commercialize the technology. Based from the finding and conclusion the author highly recommend the follow up study to test the capability of the new production model established in SLSU Infanta “ 1000 lit capacity Biomass Boiler Type Nipa Sweeteners Production Facility or SSF, and option for technology transfer to fully commercialize the developed technology.

Keywords: technology commercialization, nipa sweeteners, biomass operated kettle, double jacketed kettle, optimization

Regulated water misting for oyster mushroom production area

Calderon, RA¹, Cedeño, EE¹, & Alinea, JF¹

¹Southern Luzon State University - Lucena Campus,
Lucena 4301 Quezon, Philippines

Corresponding Author:

Roland A. Calderon, email: calderonjonas@gmail.com

The oyster mushroom industry in the Philippines has worsened since 1995, and the lowest production volume was 355 metric tons (MT) in 2009. When in fact, the Philippines is an economic place to grow mushroom simply because of the low-production cost, richness of cheap substrates from agro-wastes and high demand which will indeed be profitable to the mushroom growers. The oyster mushroom industry does not only help boost the idea of incorporating mushroom in food and medicine but it also provides additional income to small farmers and is found vital in developing the rural economy. Using the materials for microcontroller, with necessary temperature and humidity sensors connected to an LCD notification screen where there will be a systematic monitoring and continuous propagation of water misting whenever the sensor reading is above 20-25° C and the relative humidity not less than 85-90 percent. The main purpose of this research was to design and develop a regulated water misting system for an oyster mushroom production area to induce a higher quality of yield through determining and monitoring the temperature and humidity for supplying sufficient amount of water mist. The general population of respondents for this study was composed of five (5) experts in the field of agriculture and five (5) experts in technology and programming. The device was designed and fabricated to become a regulated water misting system which is Arduino-based. It served as a replacement to using manual task in determining how to maintain the suitable weather conditions of oyster mushrooms in order to produce a higher quality of yield. Adaptability, cost-effectiveness of the materials, functionality, and originality were used as variables to determine its general acceptability and efficiency among the end-users. The evaluation results showed that the device was highly acceptable which certified that the researchers were able to satisfy the objectives which was to innovate a regulated water misting system intended for the oyster mushroom industry.

Keywords: Gizduino, GSM, oyster mushroom, water misting

RECORDS (Research and Extension Completed and On-going Registered programs Database System)

Villa FT¹, Natividad AN², & Tulod RC²

¹Southern Luzon State University, Lucban 4328 Quezon, Philippines

²Southern Luzon State University - Lucena Campus,
Lucena 4301 Quezon, Philippines

Corresponding Author:
Frederick T. Villa, e-mail: erickvilla527@yahoo.com

The study conceptualized the design and development of RECORDS (Research and Extension Completed and On-going Registered programs Database System) which will serve as the data software of SLSU Research and Extension offices. The development of the system used VB.Net as a programming language and MS Access as database of the system application to function properly. This research followed the process of developmental research. The study was conducted during the school year 2019-2020 in SLSU Campus Lucena City since the proponents where from such campus though it is intended to use by SLSU as a whole likewise to be adopted with corresponding permission by other colleges and universities. The system was evaluated by IT experts, researchers and extensionists of SLSU. The parameters used in evaluating the developed system were functionality, reliability, usability, efficiency, maintainability, portability and security. The evaluation result showed that the 30 respondents highly accepted the device where functionality and portability got the same highest weighted mean of 3.95, followed by reliability and efficiency with the same WM of 3.79, usability and security with the same weighted mean of 3.75 and maintainability with 3.61weighted mean. Overall rating for the RECORDS evaluation got the average weighted mean of 3.79 with equivalent interpretation of highly acceptable. This implied that the developed RECORDS (Research and Extension Completed and On-going Registered programs Database System) can be utilized effectively by the SLSU Research and Extension Offices.

Keywords: database system, extension, registered programs, research

Development of canned lemon grass (*Cymbopogon citratus*) enhanced smoked milkfish (*Chanos chanos*)

Noble VM¹, Buelva VB¹, Licas MN¹, & Rufo VAA¹

¹Southern Luzon State University - Judge Guillermo Eleazar Tagkawayan Campus,
Tagkawayan 4321 Quezon, Philippines

Corresponding Author:

Victoria M. Noble, email: victorianoble1982@gmail.com

This developmental study was conceptualized to enhance the developed smoked milkfish product as to its taste, smoking process, and market appeal through proper packaging and labelling of the developed canned smoked Milkfish. The study evaluated the sensory qualities, shelf life, nutrient analysis, chemical analysis and determined the most acceptable and preferred treatments of the improved technology. The developed canned smoked milkfish got the high degree of acceptability for general quality, as they have a more acceptable specific attribute of appearance, aroma, taste, texture and general acceptability. The study revealed that French Style ranks first among the five samples. This means that the sample obtained the better sensory qualities in appearance, aroma, taste, texture and general acceptability. Consequently, the shelf life of Canned Lemon Grass (*Cymbopogon citratus*) enhanced Smoked Milkfish (*Chanos chanos*) are still in good condition and fit for human consumption until the 14th month of observation. Changes in sensory characteristics of color, flavor, and taste were very minimal. There were no perceived changes in odor, biting sensation and sour taste in the samples. The characteristics of canned smoked Milkfish includes golden brown color, firm and intact, good smokey flavor, light golden-brown color, and luscious flavor. Nutritional analysis showed that the product has a high protein value. Canned smoked Milkfish has a proximate composition of 21.5 g protein; 1.8 g total carbohydrate; 74 mg cholesterol; 714 g sodium; 4.3 g ash; 61.1 g moisture; 11.3 g total fat; and high energy of 195 kcal. Likewise, a higher return of investment (ROI) was obtained. More so, the project generated a unique processing technique from the locally grown milkfish cultured from brackish water aquaculture fishpond project of the university.

Keywords: lemon grass enhanced, nutrient analysis, proximate composition, sensory evaluation, shelf life

Expansion of native pig production and commercialization of developed processing technologies in Tagkawayan, Quezon

Rufo VAA¹, Lampos FB¹, & Gatus DN¹

¹Southern Luzon State University - Judge Guillermo Eleazar Tagkawayan Campus,
Tagkawayan 4321 Quezon, Philippines

Corresponding Author:
Veronica Aurea A. Rufo, e-mail: rufovicky39@gmail.com

The research study in “Expansion of Native Pig production and Commercialization of Developed Processing Technologies in Tagkawayan, Quezon” aimed to strengthen and sustain promotion of native pig production and processing technologies in Tagkawayan, Quezon. The pertinent data were sourced out from both demonstration farm and beneficiaries’ farm in 17 selected barangays of agricultural community Tagkawayan, Quezon using questionnaire, interview and observation. The significant result of the study indicated 37 farrowing are of 17 sows giving 223 live birth piglets registering 72% survival rate of 160 piglets. The cause of mortality was attributed to scoring, crashing and colds. Forage crops consisting of tricantera, indigofera, malunggay and rensonii in addition of rice bran, paliat, San Fernando, vegetable trimmings, trash fish, binlid, become the source of most of the feeds. Information-education campaign and commercialization activities took in the form of seminar, demonstration, walk-in/on-site orientation, local and urban market promotion, product display at exhibits and agri-fairs. Local market study revealed processed meat products, like longganisa, hotdog, tocino, sausage, ham, embutido and patties are made from commercial pork, beef and chicken. Problems encountered as cited by pig raisers were delayed farrowing, slow growth, wild characteristics and shortage of forage materials and seasonal supply of rice bran.

Keywords: Indigenous materials, Native pig, Natural Feeding, Promotion, Value Added

Product development from oyster mushroom (*Pleurotus ostreatus*)

Caringal, AJ¹, Nagares, ND² and Salvacion, SO¹

¹Southern Luzon State University—Tiaong Campus,
Tiaong 4325 Quezon, Philippines

²Southern Luzon State University—Lucena Campus,
Lucena 4301 Quezon, Philippines

Corresponding Author:

Alma J. Caringal, email: acaringal@slsu.edu.ph

Oyster mushroom was successfully developed into mushroom chili garlic in canola oil, mazapan con mushroom and mushroom oatmeal cookies. Acceptability, nutritional content, and shelf-life of the products were evaluated. Nine-point hedonic rating scale was used to determine the acceptability of the products in terms of color, appearance, taste, texture and over-all acceptability. Nutritional analysis was done using the AOAC official methods (2016) while shelf-life was determined through the major modes of deterioration namely bacteriological load, physical test, and change in sensory attributes. Mushroom chili garlic in oil and mazapan con mushroom were liked very much while mushroom oatmeal cookies was liked moderately. Nutritional content analysis showed that mushroom chili garlic in canola oil have 71.08 % crude fat, 5.79% crude protein, 6.36% moisture, 8.31% total sugar, 485.66mg/100g sodium, and 3.07% total dietary fiber. Mazapan con mushroom contained 8.40% crude fat, 5.32% crude protein, 7.53% moisture, 45.70% total sugar, 249.69 mg/100g sodium, and 3.48% total dietary fiber. Meanwhile, mushroom oatmeal cookies consisted of 29.03 % crude fat, 7.66% crude protein, 4.91% moisture, 28.09% total sugar, 96.21mg/100g sodium, and 1.98% total dietary fiber. Shelf-life study for mushroom chili garlic in canola oil and mushroom oatmeal cookies showed that there were no significant changes on appearance, flavor, texture and odor up to the end of storage study except mazapan con mushroom. The high nutritive value of the oyster mushroom made this product a good one for processing into a high value product. By developing it into new products, the mushroom growers will have increased income because it will be popular to food processors. Also, there will be addition of new nutritious products in the market using oyster mushroom.

Keywords: Mazapan con mushroom, Mushroom chili garlic in canola oil, Mushroom oat cookies, nutritional content, Oyster mushroom, shelf-life

VIRTUAL AIHR HIGHLIGHTS

Oral Presentations Via Messenger Room



OCTOBER 13 (Tuesday)

Opening Program (9 AM)

Oral Presentations:

Natural Sciences Category (2 PM)

OCTOBER 15 (Thursday)

Oral Presentations:

Development Category (9 AM)

OCTOBER 16 (Friday)

Awarding Ceremony (9 AM)

OPENING PROGRAM



For the first time, the Southern Luzon State University (SLSU), through the Office of Research Services (ORS), spearheaded the annual Agency In-House Review (AIHR) through video conferencing.

The ORS facilitated the opening program of the virtual AIHR on October 13, 2020 using the Messenger Room platform. The invocation was followed immediately with a welcome remarks from the Vice President for Planning, Research, Extension, Production and Development (VP-PREPD), Dr. Marissa C. Esperal. She emphasized that the present challenges can be viewed as opportunities for advancement as the situation gave everyone a chance to reimagine what is possible moving forward, such as the conduct of virtual classes and activities such as the AIHR.

The University President, Dr. Doracie B. Zoleta-Nantes, PhD, also graced the said event with an inspirational

message highlighting the need to do more and to improve the current level of SLSU in terms of research, with emphasis on the need to provide mentoring. Dr. Zoleta-Nantes also presented figures showing the number of citable documents by ASEAN Country from 1996 to 2019, as well as a graph of Scopus-indexed citable documents of top universities in the Philippines as of 2019. With the target to elevate SLSU's SUC leveling status, the President posed a challenge to pursue not only quality collaborative research projects, but also to produce publishable papers.



The image shows a screenshot of a video conference interface. On the left, there is a grid of participant thumbnails. In the top right corner of the main video frame, there is a banner with the text "AIHR 2020: Inspirational Message". Below the banner are two logos: the Southern Luzon State University (SLSU) seal and the SLSU Office of Research Services logo. To the right of these logos is a portrait of Dr. Doracie B. Zoleta-Nantes, PhD, identified as the University President.

Dr. Delia R. Babilonia, the ORS Director, introduced the keynote speaker, Dr. Melbourne R. Talactac of Cavite State University. Dr. Talactac earned his doctorate degree in Veterinary Science from The United Graduate School of Veterinary Science, Yamaguchi University, Japan. He acquired his Master of Science in Veterinary Medicine and Doctor of Veterinary Medicine in the Chungnam National University (CNU) Republic of Korea and the University of the Philippines—Los Baños (UPLB), respectively. The young professor continues to build an outstanding profile in research as he was able to publish a number of papers in reputable journals and was a recipient of several awards and distinctions such as the Outstanding Young Scientist award and as Philippine Nominee to the APEC Science Prize for Innovation, Research and Education (ASPIRE) in 2020.

Dr. Talactac prepared a presentation detailing the opportunities in the new normal and how researchers can keep things in perspective. He also dug deeper on how universities can create a nurturing research environment by discussing thoroughly the need to establish or strengthen an efficient mentoring system, the reasons for giving early career researchers an opportunity to be successful, and the advantages of establishing or improving the university research incentive and travel grant system.

The panel of evaluators for the oral presentations were also introduced. Dr. Yolanda A. Ilagan of Cavite State University led the evaluation for the Natural Sciences Category, while Dr. Shirley G. Cabrera of Batangas State University led the Development Category. Dr. Renecelia B. Paz de Leon of the University of Rizal System served as member for both categories.

The image consists of two side-by-side portraits of keynote speakers. The left portrait is of Dr. Delia R. Babilonia, PhD, Director, Office of Research Services, Southern Luzon State University. The right portrait is of Dr. Melbourne R. Talactac, PhD, 2020 Virtual AIHR Keynote Speaker. Both portraits include their respective university seals and the SLSU Office of Research Services logo.

DAY 1: NATURAL SCIENCES



At 2:00 in the afternoon of October 13, the oral presentations for the Natural Sciences Category commenced. The two entries evaluated were the following:

- 1. S & T interventions on quality planting material production of two important forest tree species indigenous in Mt Banahaw de Lucban**
- 2. Mangrove crab (*Scylla serrata*) production in Alabat island, Quezon Province using an aquasilviculture system**

For. Kathleen E. Gutierrez presented the former, while Dr. Delia R. Babilonia presented the latter which is a non-competing paper.

Dr. Ilagan spearheaded the Question and Answer (Q&A) portion every after each presentation, together with her team members, Dr. Cabrera and Dr. Paz de Leon.

Dr. Ilagan recommended that if For. Gutierrez would like to do more on diversity study, she should get more number of samples and include those from other places. Dr. Cabrera, in addition, suggested that the reason for choosing the species must be highlighted as one of the baseline data to make the paper strong. On the other hand, Dr. Paz de Leon commended the presenter for manifesting confidence and mastery during the presentation. She also raised the option of stating the names of the indigenous species used in the study instead of hiding it in the title.

For the presentation of Dr. Babilonia, Dr. Cabrera inquired if the researcher introduced a new technology and was clarified that the technology itself is not new but it was the first time it was introduced in Alabat, Quezon. Dr. Paz de Leon noticed the depth of understanding of the presenter on the subject that was studied and commented that the utilization of

continuous canal to improve the water quality in the study site shall be a good selling point of the study if it will later be submitted for competition. Further,

Dr. Ilagan told the researcher to consider studying the socio-economic impact of the aquasilviculture technology to the participants.

DAY 2: DEVELOPMENT



The ORS facilitated the presentations under the Development Category on the second day of the AIHR held on October 15, at 9:00 in the morning.

The panel evaluated the six entries below-enumerated, respectively:

1. Technology commercialization of Nipa sweeteners developed by ITDI
2. Regulated water misting for oyster mushroom production area
3. RECORDS (Research and Extension Completed and On-going Registered programs Database System)
4. Development of canned lemon grass (*Cymbopogon citratus*) enhanced smoked milkfish (*Chanos chanos*)

5. Expansion of native pig production and commercialization of developed processing technologies in Tagkawayan, Quezon

6. Product development from oyster mushroom (*Pleurotus ostreatus*)

Dr. Paz de Leon praised Dr. Violette Coronacion for manifesting confidence during his oral presentation, and exhibiting mastery of the subject matter. However, she highlighted that the paper included discussion on standardization, hence it must be added as one of the objectives of the research. Also, all the evaluators agreed with the suggestion that the title of his paper be revised for it to be more suited to the direction of his research.

For the second paper, Dr. Cabrera acknowledged that the team has a very good paper. When she inquired for the unique feature of their program, the presenter explained that their device can send a message to mobile phones to notify the concerned individuals when the temperature in the facility is not desirable, and added that the same program may also be used for other agricultural and livestock setups. Dr. Paz de Leon acknowledged the novelty of the program as it dealt with automation. Dr. Cabrera laid the suggestion that the team include farmers as part of the evaluators because their perspective may differ from that of the technical experts. Dr. Ilagan agreed and furthered that the team try to increase the number of evaluators next time.

Prof. Razel Tulod represented her group in the next presentation, while Prof. Arvin Natividad presented the program developed from their research. During the Q&A, Dr. Cabrera suggested for the inclusion of encryption for security purposes. She also inquired whether the program was cost-effective. The project leader, Dr. Frederick Villa, answered the question by stating the cost that may be incurred if external developers were hired to accomplish the same program. On the other hand, Dr. Ilagan reminded the team to apply for patent before anybody else does, because they already exposed almost all of their data. Dr. Paz de Leon praised the team for their significant endeavor for the benefit of the university.

In the presentation of Dr. Victoria Noble, Dr. Cabrera recommended that a microbiological analysis be conducted before dwelling with shelf-life analysis of any food products. On the other

hand, Dr. Ilagan reiterated the need to reach an acceptable number of sensory evaluators and ensure that each group of evaluators shall be composed of the same number of participants. Dr. Paz de Leon shared the same opinion with Dr. Ilagan, that the title of the research be revised to clarify that the focus of their paper is the utilization of various techniques in food preparation and/or cooking and not the taste enhancer itself. She also praised the researchers for the good and interesting paper.

The evaluators also gave positive comments to the next presenter, Prof. Aurea Rufo. However, they noticed that the paper is more of an extension initiative than a research. They mentioned that the university may consider it as an entry under the Extension Category of Regional Agency In-House Review of STAARRDEC.

For the last presentation, the evaluators congratulated the team for winning the Best Sawsawan in an exposition that featured the product of their undertaking. However, Dr. Cabrera reminded the team on the procedures to be considered when dealing with shelf-life study. Then, Dr. Ilagan asked Prof. Alma Caringal to include in their paper the information on which product variant became most popular. Also, Dr. Paz de Leon raised the need to improve the title by emphasizing value-addition.

In general, the evaluators congratulated and praised all the SLSU researchers for their job well-done.

DAY 3: AWARDING CEREMONY



VIRTUAL AGENCY IN-HOUSE REVIEW (AIHR) 2020



BEST PAPER

(Natural Sciences Category)



S & T interventions on quality planting material production of two important forest tree species indigenous in Mt. Banahaw de Lucban

Prof. Kathreena E. Gutierrez, Prof. Eraldwin A. Dimailig,
Prof. Earl Joseph Tinamisan & Dr. Wenceslao S. Durante

BEST PAPER

(Development Category)

Technology Commercialization of
Nipa Sweeteners Developed by ITDI

Dr. Violeto N. Coronacion

The ORS concluded the AIHR through an awarding ceremony on October 16, 2020, wherein the best papers were recognized. Right after the playing of an Audio-Visual Presentation of the glimpse of the whole activity, the emcee announced the winners.

BEST PAPERS

- S&T interventions on quality planting material production of two important forest tree species indigenous in Mt. Banahaw de Lucban (*Natural Sciences Category*)

Authors: For. Kathreena E. Gutierrez, For. Eraldwin Dimailig, Mr. Earl Joseph Tinamisan, Dr. Wenceslao S. Durante, Rona Mae M. Cadelino, Ms. Jenecyl T. dela Cruz, Ailyn M. Evasco, Czies Ann V. Gatson, Analiza M. Nolasco, and John Vincent V. Ranvanzo

- Technology commercialization of Nipa sweeteners developed by ITDI (*Development Category*)

Author: Dr. Violeto N. Coronacion

1st RUNNER UP

- Regulated water misting for oyster mushroom production area (*Development Category*)

Authors: Dr. Roland A. Calderon, Prof. Edgardo E. Cedeno, and Prof. Jermine F. Alinea

2nd RUNNER UP

- Development of canned lemon grass (*Cymbopogon stratus*) enhanced smoked bangus (*Development Category*)

Authors: Dr. Victoria M. Noble, Prof. Veronica Aurea A. Rufo, Prof. Myrna N. Licas and Dr. Virgilio B. Buelva

The winners received certificates and corresponding cash prizes. As a closing message, Dr. Babilonia recognized the evaluators, the winners, the participants and the significant personalities who made the event a success. She also announced the upcoming activities of ORS such as the writeshop for proposal writing and workshop for writing for publication.

Republic of the Philippines
SOUTHERN LUZON STATE UNIVERSITY
Office of Research Services

VIRTUAL AGENCY IN-HOUSE REVIEW 2020

SCHEDULE OF ACTIVITIES

October 13

9AM | Opening Program
2PM | Oral Presentation
(Natural Science Category)

October 15

9AM | Oral Presentation
(Development Category)

October 16

9AM | Awarding Ceremony

SCHEDULE OF ACTIVITIES
Via Messenger Room

October 13 - Day 1
9 AM - Opening Program
2 PM - Presentation
(Natural Science.
Category)

October 15 - Day 2
9 AM - Presentation
(Development
Category)

October 16 - Day 3
9 AM - Awarding Ceremony

AIHR 2020: Evaluators



Yolanda A. Ilagan, PhD
Director for Research,
Cavite State University

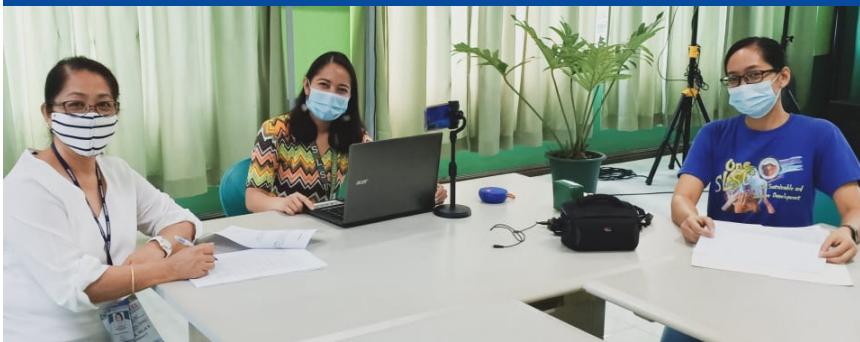


Shirley G. Cabrera, PhD
Director for Research
Management Services,
Batangas State University



Reneecilia B. Paz de Leon, EdD
Director, Office of Public Affairs,
University of Rizal System

AIHR 2020: Secretariat



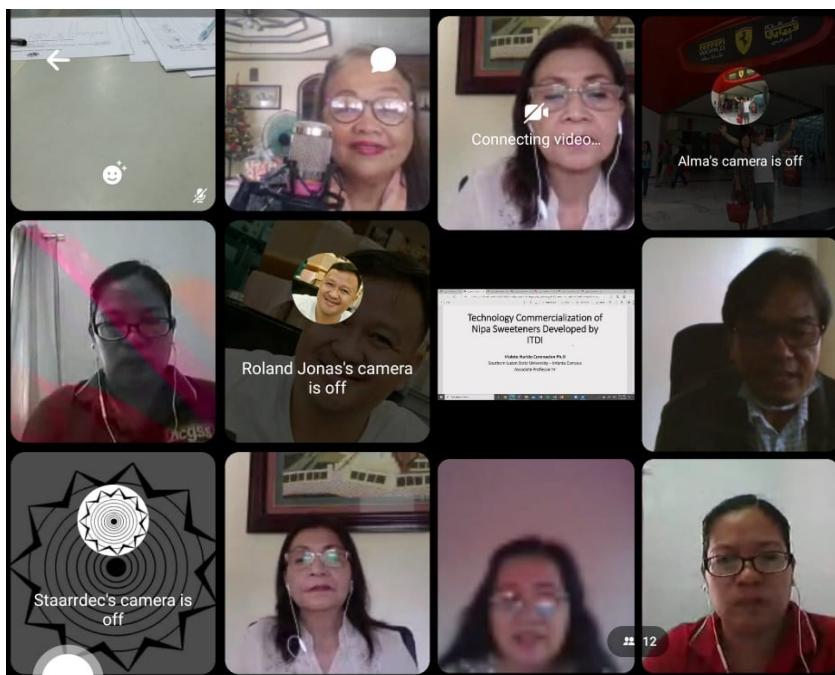


Opportunities in the “New Norm”

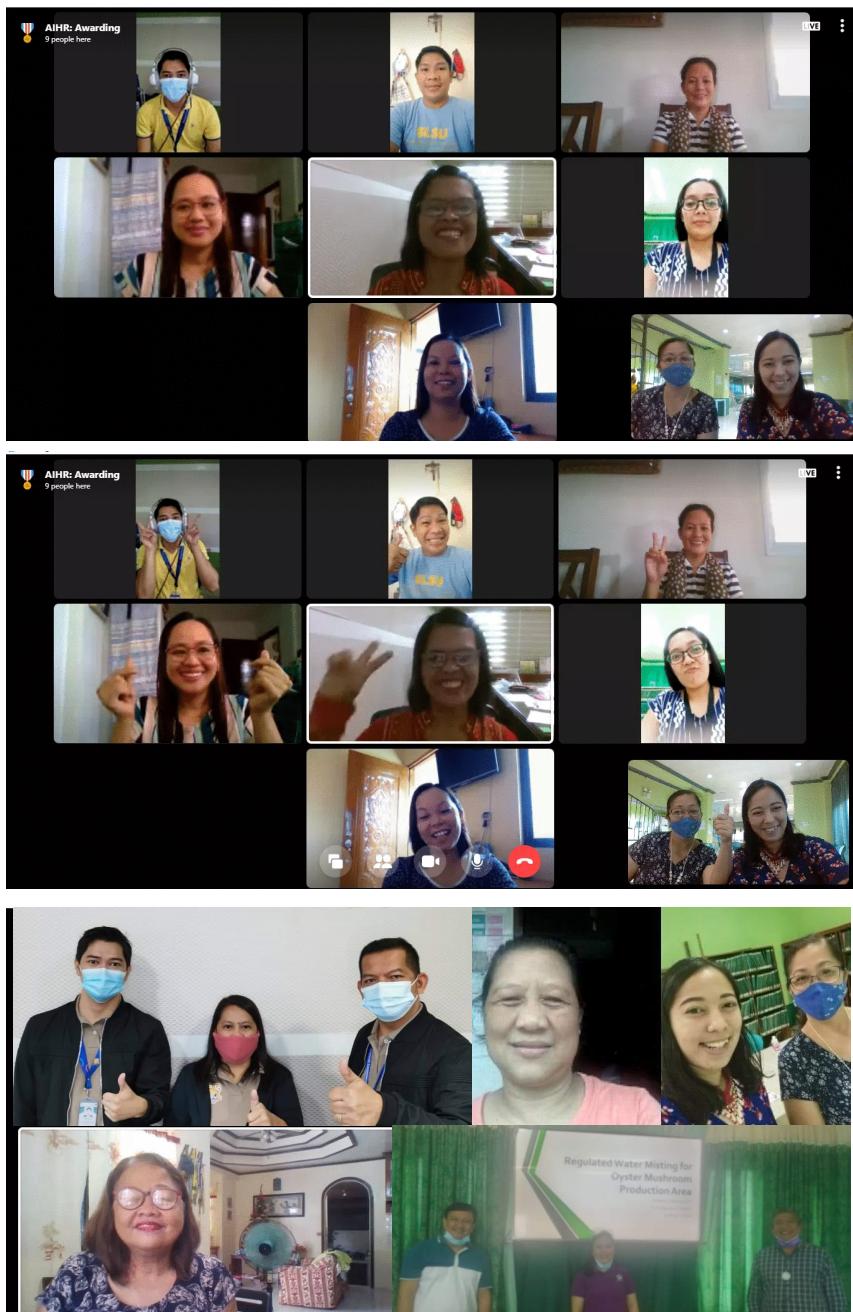
- A. Do the things that you never have time for
 - Write a paper, book or a proposal
 - Data analysis
 - Take online courses
- B. Reach out to junior colleagues
 - Opportunities to collaborate with you
 - Establish a good mentoring system
- C. More time for Family & Self while working remotely

The Keynote Speaker









VISION

Southern Luzon State University as an excellent academic Hub in its curricular programs, transdisciplinary researches, and responsive extension services.

MISSION

The University commits to develop a sustained culture of delivering quality service and undertaking continuous innovations in instruction, research and extension in its relevant curricular programs supportive of national and global development goals.

GOALS

1. Center of teaching excellence.
2. Premier research university that generates S&T-based innovations.
3. Training institution that promotes gender-responsive climate-resilient and community-driven development for all.
4. Wider platform for student and personnel development.
5. Facilities that support student learning enhancement and personnel's healthy working environment.
6. Strengthened local and international academe-industry and alumni linkages.