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39th **university of southern mindanao**
AGENCY IN-HOUSE
REVIEW
Research
Development
Extension

October 23 – 24, 2019, 8:00 AM
USM Cafe Martina

THEME:

Sustaining Creative Research, Development and Extension
Innovations for Resilient and Regenerative
21st Century Communities.”

THIS SERVES AS AN INVITATION

RATIONALE

This Research Development & Extension (RDE) Agency In-House Review is an annual/yearly activity of the University. The main objective is to review and evaluate all on-going and completed Research Development and Extension Programs/Projects/Studies. This serves as an avenue for all researchers, extension workers and other stakeholders to convene and exchange new knowledge or products generated and development/extension strategies relevant to the University's vision, mission, and objectives. It is also through this activity that investments in RDE can be appraised thoroughly to ensure that RDE activities are geared toward addressing the needs and problems of the clientele of the university in its service area, in particular, and in the national level in general, for sustained agricultural development and its allied fields. Expectedly, very active interactions will form part of the highlights.

OBJECTIVES

1. To evaluate completed and on-going RDE projects/activities particularly with regard to the attainment of objectives and adherence to the approved programs;
2. To identify problems met during the implementation and recommend specific courses of action, i.e. continuation, extension, modification of planned activities and methodology, suspension, termination, etc., in compliance with the recommendations of the evaluating panel;
3. To identify technologies generated for field testing, verification, and piloting before its final dissemination/promotion and commercialization;
4. To identify mature technologies ready for packaging and dissemination;
5. To identify significant results for policy formulation and development;
6. To identify new researchable areas; and
7. To record and monitor both in-house and externally funded researches.



OFFICE OF THE UNIVERSITY PRESIDENT

MESSAGE

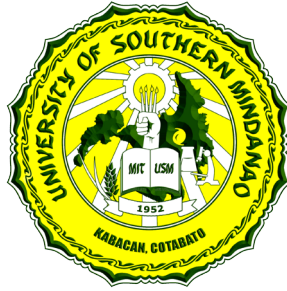
With my inmost appreciation, I would like to thank and congratulate all our researchers, faculty, staff, and extension workers involved in this year's 39th Research, Development and Extension In-House Review; a job well done! This year's theme, *"Sustaining Creative Research, Development and Extension Innovations for Resilient and Regenerative 21st Century Communities,"* opens a new horizon of inspiration and ideas for all of us engaged in research studies.

We must keep abreast of recent developments in the field of research as we strive to provide a healthy environment, to combat the adverse effects of globalization, climate change, and natural calamities. We should give equal importance in finding ways to utilize our resources more efficiently. Most importantly, we must not get tired of giving our best in our present and future research endeavors because our combined efforts will contribute in the realization of Hadja Bai Fatima Matabay N. Plang's vision.

God bless USM RD & E!


FRANCISCO GIL N. GARCIA, Ph.D.
SUC President IV





OFFICE OF THE VICE PRESIDENT FOR RESEARCH, DEVELOPMENT & EXTENSION

MESSAGE

The USM Quality Policy Statement reflects the University's quality research development and extension aimed to spearhead need-based research outputs for commercialization, publication, and patenting; to develop technologies for food security, climate change mitigation and improvement in the quality of life; and to facilitate transfer of technologies generated from research to the community for sustainable development.

In compliance, the annual in-house review serves as a platform for the RDE community to convene, present, review and discuss research findings and formulate policies on important matters affecting our country. This year, the 39th USM RDE adopts the theme: "Sustaining Creative Research, Development and Extension Innovations for Resilient and Regenerative 21st Century Communities" is anchored on the 21st Century development which highlight the importance of sustaining a resilient and regenerative community development.

We hope that through these review sessions we shall be able to assess outputs geared towards greater heights of globalization to build effective policies, create sustainable advocacy program, and learn ways to achieve sustainable goals.

Thank you everyone for participating in this year's in-house scientific meeting.

A stylized black ink signature of Cayetano C. Pomares.

CAYETANO C. POMARES, Ph.D.

Vice President for Research, Development
& Extension



OFFICE OF THE DIRECTOR FOR RESEARCH AND DEVELOPMENT SERVICES

MESSAGE

Research, development and extension (RDE) must be dynamic, vibrant and continuous to produce new discoveries, knowledge, innovations, products and technologies for utilization of stakeholders and consumers. However, this only becomes a reality by producing quality RDE initiatives, efforts and results.

University of Southern Mindanao envisions and exerts efforts toward this direction in RDE for resilient and regenerative communities - academic community, farming community, business community, RDE community, consumers and other stakeholders.

The 39th USM RDE In-House Review provides opportunities for showcasing results of internally and externally funded researches with various themes to determine if they conform, fall short or exceed expectations with RDE vision and direction.

We wish all the oral and poster presenters the very best of the bests! Our utmost thanks and congratulations to Extension Office and PICRI/ PRTC, the organizers for this year's Review in collaboration and support with other offices such as OP, VPAF, VPRE, RDO, USMARC and Publication including all heads and members of various committees.

A handwritten signature in black ink, appearing to read 'E. Barlaan'.

EDWARD A. BARLAAN, Ph.D.

Director for Research & Development
Services



OFFICE OF THE DIRECTOR FOR EXTENSION SERVICES

MESSAGE

The 39th USM In-house Review is an opportune time to ponder on various accomplishments of the university through its faculty and staff who actively engaged in Research Development and Extension. Anchored on the theme “Sustaining Creative RDE Innovations for Resilient and Regenerative 21st Century Communities”, may we reflect on the outputs, outcomes and impact of our research and extension endeavours that will contribute to the advancement of science and technology and improving the quality of life.

For almost four decades, this university wide RDE in-house review is a complete manifestation of our steadfast quest for generating new knowledge that can be patent, published and commercialized for sustainable development. Congratulations to all generators, innovators and implementers of knowledge for School Year 2019-2020.

In behalf of the Extension Services Office (ESO), as the over-all coordinator of this year’s in-house review, we would like to express our heartfelt gratitude for all the chairpersons and members of the various working committees, faculty, staff , and administration for the concerted effort that made this 39th RDE in-house review a fruitful one.

ARDNIEL A. BALADJAY, Ph.D.

Director for Extension Services

Over-all Coordinator, 39th Agency In-House Review

GENERAL SCHEDULE OF ACTIVITIES

DAY 1

October 23, 2019

TIME	ACTIVITY
7:00 AM – 8:00 AM	Registration
8:00 AM – 9:00 AM	Opening Program
9:30 AM – 12:00 NN	Presentation of RDE Projects
12:00 NN – 1:00 PM	<i>Lunch Break</i>
1:00 PM – 5:00 PM	Presentation of RDE Projects

DAY 2

October 24, 2019

TIME	ACTIVITY
8:00 AM – 12:30 NN	Presentation of RDE Projects
12:30 NN – 1:30 PM	<i>Lunch Break</i>
2:00 PM – 4:00 PM	Closing Program Presentation of Synthesis Awarding of Certificates

OPENING PROGRAM

USM Cafe Martina
University of Southern Mindanao
Kabacan, Cotabato
October 23, 2019, 8:30 AM

INVOCATION	Christian Prayer: ENGR. KHARLO SUBRIO IP Prayer : MR. EDEN M. ENORA Muslim Prayer : DR. EFREN MAGULAMA
SINGING OF THE NATIONAL ANTHEM	: MS. ANALYN GONZALES
WELCOME REMARKS	: DR. CAYETANO C. POMARES VP for RD&E
OPENING MESSAGE	: DR. FRANCISCO GIL N. GARCIA SUC President IV
RATIONALE	: DR. ARDNIEL A. BALADJAY Director for Extension Services <i>Over-all Coordinator, 39th IHR</i>
PRESENTATION OF EVALUATORS, MODERATORS & PARTICIPANTS	: DR. SAMSUDIN S. PANDAY Director, PICRI <i>Co-Coordinator, 39th IHR</i>

EMCEE:

FREDERICK JOHN B. NAVARRO
Manager, PRTC

PANEL OF EVALUATORS

RESEARCH

1. Dr. Noemi G. Tangonan
2. Dr. Sailila E. Abdula
3. Dr. Ramjie Y. Odin

DEVELOPMENT

1. Dr. Abonawas M. Pendaliday
2. Dr. Ariston D. Calvo
3. Dr. Teresita B. Bayaron

SOCIAL SCIENCE / EXTENSION

1. Dr. Purisima G. Bayacag
2. Dr. Delia Grace G. Bacaltos
3. Dr. Violeta P. Bello

MODERATORS

SESSION 1 – BASIC RESEARCH

DAY 1

Morning Session – Glyn Magbanua
Afternoon Session – Joseph Quisado

DAY 2

Morning Session – Arlene Riogelon
Afternoon Session – Danielyn Flores

SESSION 2 – DEVELOPMENT

DAY 1

Morning Session – Dianne Cristel Basilio
Afternoon Session – JMJson Bautista

DAY 2

Morning Session – Kathleen Bolotaolo
Afternoon Session – Jalalodenn Marohom

SESSION 3 – SOCIAL SCIENCE / EXTENSION

DAY 1

Morning Session – Leslie Sales
Afternoon Session – Julius Jerome Ele

DAY 2

Morning Session – Lawrence Anthony Dollente
Afternoon Session – Paul John Ongcoy

SCHEDULE OF PRESENTATION

DAY 1 – October 23, 2019

No.	Time		SESSION 1 Basic Research	SESSION 2 Development	SESSION 3 Social Science / Extension
	START	END	COMPLETED RESEARCHES AND EXTENSION PROJECTS		
1	9:30 AM	9:45 AM	Nutritional Analysis of Indigenous Vegetables and Wild Edible Fungi as Affected by Occurrence of Pests and Diseases & Weather Factors/ <i>Naomi G. Tangonan, Ma. Irene S. Candolita, Jigzel Divine F. Basoy & Willie Jones B. Salling</i>	Potential of Mabolo Fruit (<i>Diospyros blancoi</i>) for Fruit Wine Production and Conservation/ <i>Rhett Sean P. Pomares & Dennis S. Muyco</i>	RVG 4 ICT: Rural Villages on the Go for Information Communication Technology/ <i>Elizabeth R. Genativa, Danilyn A. Flores, Eugene G. Ranjo, Nor-ahne M. Corpuz, Janice T. Palmaera, Aljay S. Agbunag, Renel M. Alucilja, Jean M. Martin, Jerry T. Plamonte, James P. Serquiña, Maricel G. Dayaday, Jeannalen P. Lunod, and Saque J. Amilbahar</i>
2	9:45 AM	10:00 AM	Effects of Pests and Diseases, Biocontrol and Weather on the Phytochemical Production of Coffee and Cacao in Mindanao/ <i>Naomi G. Tangonan, Ma. Irene S. Candolita, Conrado C. Evangelista & Willie Jones B. Salling</i>	Organic Feeds/ <i>Cayetano C. Pomares</i> Study 3. Feeding Trial, Breeding, Milk Collection and Processing	Promotion of Science-Based Technologies for Sustainable Rural Development/ <i>Moveita P. Balala & Alicia C. Cabiao</i>
3	10:00 AM	10:15 AM	Identification Suitable Sites for Small Irrigation Projects in Region 12 Through GIS- Based Water Resource Assessment/ <i>Willie Jones B. Salling, Renel Alucilja, Reynart Balansag & Kristine Anne C. Ramos</i>	Development of Organic Complete Ration Mix (OCRM) Adoption, Processing and Commercialization for Organic Dairy Goat Production/ <i>Cayetano C. Pomares</i>	10:00 AM – 10:15 AM – O P E N F O R U M (15 Minutes)
4	10:15 AM	10:30 AM	Optimum Fertilization to Enhance Yield and Quality of Fresh Durian in Southern Mindanao/ <i>Flora P. Nicor</i>	Establishment of Organic Agriculture R&D Center/ <i>Adeflor G. Garcia & Purificacion O. Cahatian</i>	SOCIAL SCIENCE Cooperative Performance in Region XII/ <i>Lope E. Dapun</i> Study 1. Determinants of Success of Cooperatives in Region XII, Philippines Study 2. Financial Performance of Cooperatives in Region XII, Philippines: Comparative Analysis
5	10:30 AM	10:40 AM	10:30 AM – 10:50 AM – O P E N F O R U M (20 Minutes)		
6	10:40 AM	10:50 AM			
7	10:50 AM	11:05 AM	Harnessing Insect-Bat Ecosystem Services for Economical Rice Production/ <i>Ma. Teodora N. Cabasan</i>	Enhancing Nurseries of Promising Rubber Clones in Region 12/ <i>Adeflor G. Garcia & Purificacion O. Cahatian</i>	Validation of USM Research Output for the Past Five (5) Years : A Knowledge Management System Initiative/ <i>Cayetano C. Pomares & Francisco Gil N. Garcia</i> Cotabato Special Rice: A Participatory Approach in Building A Community Rice-Based Enterprise/ <i>Lope E. Dapun</i>
8	11:05 AM	11:20 AM	Functional Genomics- Assisted Development of Gene Markers for Economically Important Traits in Cacao Production and Varietal Improvement/ <i>Edward A. Barlaan & Emma K. Sales</i>	Beekeeping under Crop-Based Agro Ecosystems/ <i>Emiliana G. Batomalaque</i>	Client Satisfaction Evaluation of the University of Southern Mindanao Agricultural Research Center (USMARC) Central Analytical Laboratory/ <i>Flora P. Nicor</i>
9	11:20 AM	11:35 AM	Exploration and Evaluation of Indigenous Plants in North Cotabato with Pro and Anti-Angiogenic Properties/ <i>Emma K. Sales & Lydia C. Pascual</i>	Development and Evaluation of Automated System for Organization Election/ <i>Paul John Ongcoy & Ryan Z. Gonzaga</i>	11:20 AM– 11:40 AM– O P E N F O R U M (20 Minutes)
10	11:35 AM	11:50 AM	Identification and Molecular Profiling of Oil Palm Varieties and Hybrids Towards Oil Palm Varietal Improvement in the Philippines/ <i>Edward A. Barlaan</i>	11:35 AM– 11:50 AM– O P E N F O R U M (20 Minutes)	
			11:50 AM– 12:10 PM – O P E N F O R U M (20 Minutes)		
12:10 PM – 1:00 PM – L U N C H B R E A K					

SCHEDULE OF PRESENTATION

DAY 1 – October 23, 2019

No.	Time		SESSION 1 Basic Research	SESSION 2 Development	SESSION 3 Social Science / Extension
	START	END	COMPLETED RESEARCH	ON-GOING RESEARCHES	
11	1:00 PM	1:15 PM	Purification and Production of Native Chicken through Molecular Breeding Component 3. Marker Assisted Breeding of Native Chicken/ Cayetano C. Pomares	Establishment of Geographic Information Support System Center for High Value Commodities and Indigenous Crops in SOCCSKSARGEN/Adeflor G. Garcia & Purificacion O. Cahatian	Baseline Study for the Proposed Kabulan-an-2 Multipurpose Irrigation and Dam Project/Norma U. Gomez, Rhenalile N. Bello, Alaiza Hadji Ali & Paulene Grace Favila
12	1:15 PM	1:30 PM	Genomics Assisted-Development of Gene for Important Traits in Rubber Production and Clone Improvement/Emma K. Sales, Mary Grace Balbuena, Edward A. Barlaan	Upgrading of Geographic Information Center R&D Facilities at the University of Southern Mindanao/Adeflor G. Garcia & Purificacion O. Cahatian	Science & Technology Community Based Farm (STCBF) on Improved Nursing Mgt Budwood Gardens Establishment & Intercropping Schemes to Promote & Expand Rubber Farming In Mindanao/Gloria P. Dela Peña
13	1:30 PM	1:40 PM	1:30 PM – 1:40 PM- O P E N F O R U M (10 Minutes)	Going Bananas: Restoring Livelihoods for Conflict-Affected Farmers in Cotabato/Adeflor G. Garcia, Purificacion O. Cahatian & Harem R. Roca	Curriculum Development and Offering on Halal Science and Scholarship for SUC Faculty on Halal Science (Human Resource Development on Halal Science, Technology and Innovation)/Emma K. Sales & Josephine R. Migalbin
14	1:40 PM	1:50 PM	Innovation of Nursery Management and Production System of Quality Planting Materials for High Value Crops/Marisa E. Garcia & Nancy E. Duque	Product Development and Value-Adding of USM Grown Tropical Fruits (Lanzones, Marang and Mangosteen)/Agnès A. Rodulfa & Arlene Rogelon	Universal Access to Quality Tertiary Education Act (RA 10931, August 2, 2017)/Adeflor G. Garcia, Purificacion O. Cahatian, Clark I. Maarat, Samsudin S. Panday, Joseph O. Castillo & Ronald D. Superioridad
15	1:50 PM	2:00 PM	Packaging and Marketing of Herbs-Based, Spices-Based, Coffee-Based, and Cacao-Based Products/Irving Fajarito & Metche Anne C. Logranio Component 1: Improved Packaging for Herb and Spice Products for Increased Marketability and Profitability Component 2: Improved Packaging for Coffee and Cacao Products for Increased Ma	1:50 PM – 2:10 PM- O P E N F O R U M (20 Minutes)	
16	2:00 PM	2:10 PM	Performance Evaluation of Fermented Teas as Biofertilizer and Biopesticides and their Effects on Pest, Diseases and Yields of Solanaceous Vegetables/Purificacion O. Cahatian		
17	2:10 PM	2:20 PM	Phenotyping and Genotyping Analysis of Coffea canephora (Robusta) Using Morphological and Molecular Markers/Emma K. Sales		
18	2:20 PM	2:30 PM	2:20 PM – 2:40 PM- O P E N F O R U M (20 Minutes)		
19	2:30 PM	2:40 PM			
20	2:40 PM	2:50 PM	Multilocation Trial of Ten (10) Promising Varieties of Cacao in Different Agro-Climatic Zones in the Philippines/Romulo L. Cena	Land Management of Diverse Rubber-Systems in Southern Philippines/Adeflor G. Garcia 1. Land Suitability Analysis for Rubber in Agusan del Sur 2. Land Suitability Analysis for Rubber in Agusan del Sur 3. Developing Rapid and Affordable Soil Nutrient Test Fertilizer Formulation for Rubber Cropping System 4. Development of Cost Effective Pest and Disease Management 5. Economic Studies on the Rubber-Based Cropping System in Southern Philippines 6. Capacity Building of Rubber Stakeholders and Role of Women and Children in Natural Rubber Industry in Agusan del Sur	Physical Fitness Assessment Towards Development of Fitness Test Manual/Moreno Java, Elpedio Arias & Vinus Java Component 1: Physical Fitness Assessment Among Elementary Students Towards Development of Fitness Test Manual Component 2: Physical Fitness Assessment Among Secondary Students Towards Development of Fitness Test Manual Component 3: Physical Fitness Assessment Among Physical Education Students Towards Development of Fitness Test Manual BSE LET Performance for the Last Six Years (2009–2015)/Eimer Estiloso & Lezel Pataray Study 1. BSE LET Performance for the Last Six Years (2009–15) Study 2. BSE LET Performance for the Last Six Years (2009–2015) in Science and Skills Major Fields
21	2:50 PM	3:00 PM	Demonstration of Good Agricultural Practices and Rehabilitation of Cacao Farms/Romulo L. Cena		Awareness and Availability of Data for Detection/Roy B. Gacusi
22	3:00 PM	3:10 PM	Use of Bio Fertilizers for Sustainable Cocoa Production/Leonila M. Tolentino		Authentication of USM Chronicles/Dialica L. Caup & Khadigula O. Balah

SCHEDULE OF PRESENTATION

DAY 1 – October 23, 2019

No.	Time		SESSION 1 Basic Research	SESSION 2 Development	SESSION 3 Social Science / Extension
	START	END	ON-GOING RESEARCHES		
3:10 PM – 3:30 PM– O P E N F O R U M (20 Minutes)					
23	3:30 PM	3:40 PM	Botanical Extracts from Locally Available Plant for the Control of Major Insect Pest of Cocoa and Rice/Purificacion O. Canatian	Study: Agri-Farm Tourism Development for Herbs, Spices and Medicinal Plants/Rhodora S. Manceras & Mondira I. Sumael Component 1: Germplasm Collection of Herbs, Spices and Medicinal Plants Component2: Morphological Characterization of Herbs, Spices and Medicinal Plants Towards the Development of Catalogue	Evaluation of the Effectiveness of Mainstreaming the DDR Concepts in Basic Solution Curriculum in Region XII/Eimer Estillosa
24	3:40 PM	3:50 PM	Phenology Studies, Crop Management and Model Development for Cocoa/Maria Victoria O. Espaldon, Calixto M. Protacio & Romulo L. Gena	Agro-Eco Farm Tourism Development for Fruits and Industrial Crops in the University of Southern Mindanao/Antonio P. Pasig, Nancy E. Duque, Cris Harvin Rey Calvo, Ivy Pasquin, Marisa E. Garcia, Ferdinand A. Dululao, Gwen Iris D. Empleo & Edward A. Barlaan Study 1: Agro-Eco Farm Tourism Development for Existing Fruit Crop Orchard Study 2: Coconut Gene Bank Establishment for Education and Tourism Study 3: Rehabilitation of Existing Fruit Crop Orchards	Enhancement of Enterprise, Marketing and Financial Practices among Registered Tricycab Drivers and Owners of Kabacan (EMarFin Practices – TDO)/Analyn A. Gonzales
25	3:50 PM	4:00 PM	Reduction of Immaturity Period of New Rubber Clones through Covercropping, Fertilization and Size of Planting Materials/Antonio P. Pasig & Nenita E. Olera	Agro-Eco Farm Tourism Development for Poultry and Livestock in the University of Southern Mindanao/Julius Jerome G. Ele, Maryjoy Canolas, Josephine R. Migalbin, Jurhamid C. Imlan, Eulalia Vergara, Geoffrey R. Atok & Vic Laurence P. Oliva Component 1: Poultry Farm Tourism Component 2: Goat Farm Tourism Component 3: Swine Farm Tourism	Tracer Study of CED Graduates from 2014-2018 and their Employability Status/Ellen Joy Faralla, Dyane Rhea B. Banaay, Sonia F. Almazan & Sandra M. Paldomama Component 1: Tracer Study and Employability Status of English, Filipino and Social Major Component 2: Tracer Study and Employability Status and Scimath Major (Biological Science, Physical Science and Mathematics) Component 3: Tracer Study and Employability Status Of Skill-Related Majors (TLE and MAPEH) Component 4: Tracer Study and Employability Status of BEED Graduates
26	4:00 PM	4:10 PM	Graftability and Subsequent Nursery and Field Performance of Mangosteen Graftage/Ariston D. Calvo, Nancy E. Duque & Marisa E. Garcia Study 1. Graftability of Mangosteen as Influence by Scion Conditioning Study 2. Enhancing Growth of Mangosteen Rootstock Using Organic and Biofertilizer	Integrated Farming Systems Towards Increased Agricultural Productivity Through Family Entrepreneurship/Josephine Migalbin, Samsudin L. Panday, Jurhamid C. Imlan, Analyn A. Gonzales & Mitzi Aileen M. Alba Study 1: Crop Production Systems (Vegetables, Legumes, Rootcrops, Herbs and Spices) Study 2: Poultry and Livestock Production Study 3: Agri-Preneurship	Special Training for Employment Program/Adeflor G. Garcia, Purificacion O. Canatian
4:10 PM – 4:30 PM– O P E N F O R U M (20 Minutes)					

SCHEDULE OF PRESENTATION

DAY 1 – October 23, 2019

No.	Time		SESSION 1 Basic Research	SESSION 2 Development	SESSION 3 Social Science / Extension
	START	END	ON-GOING RESEARCHES		
27	4:30 PM	4:40 PM	Optimum Nutrient Requirement to Enhance Productivity of Mangosteen, Lanzones and Rambutan/Ariston D. Calvo & Nenita E. Olera Component 1: Optimum Nutrient Requirement to Enhance Productivity of Mangosteen Component 2: Optimum Nutrient Requirement to Enhance Productivity of Lanzones	Grain Blends: Towards Producing Good Cooking and Eating Quality Rice/Rhodora Manceras, Ivy M. Pasquin, Cris Harvin Rey G. Calvo & Edward A. Barlaan Study 1. Screening of Rice Cultivars with Good Cooking and Eating Quality Study 2. Rice Blend Formulation for Better Cooking and Eating Quality Study 3. Establishment of Rice Nursery for Cultivars With Good Cooking and Eating Quality	College of Agriculture AgriMobile: Enhancing Decision-Making Capabilities of Agricultural Extension Workers on Pest, Disease and Nutrient Management of High Value Crops/Adellor G. Garcia & Purificacion O. Cahatian
28	4:40 PM	4:50 PM	Interspecific Grafting of Seedless Breadfruit "Rimas" (<i>Artocarpus altilis</i>) with Other Artocarpus Species and Subsequent Nursery and Field Performance of Graftage/Nancy E. Duque & Ariston D. Calvo Study 1. Influence of Scion Defoliation on Grafting Success of Rimas on Camansi Rootstock Study 2. Influence of Scion Stage and Length on Grafting Success of Rimas on Camansi Rootstock Study 3. Influence of Time of Grafting on the Success and Survival of Rimas Graftage Study 4. Nursery Performance of Rimas Graftage	Development of Coffee-Based Beverage Combined with Tropical Fruits/Arlene Riogelon & Edward A. Barlaan	Pantawid Pamilyang Pilipino Program: Effects and Defects on Agricultural Manpower Resource/Maricar U. Juaneza & Roselyn M. Clemen
29	4:50 PM	5:00 PM	Evaluation of Different Pummelo Cultivars Commercially Grown in the ASEAN Under Mindanao Condition/Marisa E. Garcia & Nancy E. Duque	Simulation Model Validation on Sheep-Oil Palm Integration Model (USM SOIM) at USM AVAS/Milagrina P. Pomares, Cayetano C. Pomares & Noe Jr. S. Mamon	Security Assessment Towards Safer University of Southern Mindanao/Oriando B. Forro
30	5:00 PM	5:10 PM	Conservation and Characterization of Durian Genetic Resources (Phase 2)/Romulo L. Cena, Ariston D. Calvo & Nenita E. Calvo	Development of Farming System Model on Oil Palm-Based Livestock and Poultry Integration (Enhancing Poultry Organic Production System/Milagrina P. Pomares Study 1: Sheep Integration	Health, Environment and Agricultural Livelihood Skills (HEALS) for Sustainable Development/Analyn Gonzales, Elizabeth Molina, Faith Buned, Glyn Magbanua, Jerose Molina, Sedra Murray, Maribelle Plamonte, Leo Gayao, Elizabeth Genotiva, Solomon Presta, Moreno Java, Hasim Iskak & Jacinta Puey
5:10 PM – 5:30 PM – OPEN FORUM (20 Minutes)					

SCHEDULE OF PRESENTATION

DAY 2 – October 24, 2019

No.	Time		SESSION 1 Basic Research	SESSION 2 Development	SESSION 3 Social Science / Extension
	START	END	ON-GOING RESEARCHES		
31	8:00 AM	8:10 AM	Testing and Validation of SSR Marker Kit for Philippine Mango Germplasm in Commercial Mango/ <i>Emma K. Sales</i>	Sustainable Land Use Plan of USMARC and PICRI/ <i>Rezin G. Cabantug, Tito Jun T. Tidula, Mel Chrissel A. Sales, Cayetano C. Pomares, Samsudin S. Panday & Efen E. Magulama</i>	FAT to FIT: Fellowship and Teamwork to Fitness in Training through Sports and Fitness Program for USM/ <i>Judy L. Garcia, Elpidio A. Arias, Moreno Jr. B. Java, Marlene E. Offrecio, Gladys Pearl Ambrosio, Jomar B. Est, Malony F. Martinez, Marlon A. Mancera, Jerum B. Elumbaring, Helen Grace D. Lopez, Priscilla P. Dagoc, Norge D. Martinez, Desiree Tenebroso, Marichu C. Calixtro, Queenie Tabiano & Cheese Rabago</i>
32	8:10 AM	8:20 AM	To "MECO-TECO" Joint Research Project: Improvement of Carabao Mango Production and Fruit Quality through Quantitative Trait Loci (QTL) Identification for Scab and Stem-End Rot Resistance by Genome Wide Association Studies (GWAS)/ <i>Emma K. Sales, Edward A. Barlaan & University of Taiwan</i>	Batasan Agro-Ecological Landscaping-Sustainable Land for Local Government Intervention/ <i>Cayetano C. Pomares & Harem R. Roca</i>	Fish and Meat Processing in North Cotabato and Maguindanao (Extension Project)/ <i>Cyra Mae R. Escalera, Leonila V. Papalid & Milagrina P. Pomares</i>
33	8:20 AM	8:30 AM	Processing and Production of Fruit Wine/ <i>Agnes A. Rodulfa</i> Study 1: Processing and Production of Marang, Pineapple and Papaya in Making Wine Study 2: Shelf-Life of the Fruit Wine Product Study 3: Market Viability of Fruit Wine Products in University of Southern Mindanao	Production Technology Development for Inland Fishes Catfish (<i>Clarias macrocephalus</i>)/ <i>Pla Amabelle M. Flores, Leonila V. Papalid, Stephen Dave M. Dupo & Richer B. Tiad</i> Component 1: Enhancement of Production of Catfish (C. macrocephalus) Through Biofac Technology Component 2: Comparative Evaluation of Induced Spawning Techniques for Native Catfish (C. macrocephalus)	Processing, Packaging and Commercialization of Freshwater Fishes: An Alternative Sustainable Source of Income for Housewives/ <i>Cyra Mae R. Escalera, Leonila V. Papalid, Milagrina P. Pomares, Ritcher B. Tiad & Stephen Dave M. Dupo</i>
34	8:30 AM	8:40 AM	Anthelmintic Metabolites from Herbal Medicines for Livestock/ <i>Elsa A. Gonzaga, Elizabeth C. Molina, Rolando J. Garduque, Lovelle Jun Gonzaga</i>	Development of AVAS-USM as an Avenue for Community-Based Tourism/ <i>Meldred F. Samblanceño</i>	Save Ligawasan Marsh: A Climate Change Mitigation Initiative Through Efficient Utilization of Alternative Energy/ <i>Saque J. Amilbahar, Tito Jun T. Tidula & Cayetano C. Pomares</i>
8:40 AM – 9:00 AM – O P E N F O R U M (20 Minutes)					
35	9:00 AM	9:10 AM	Mungbean Productivity Through Improved Cultural Management Scheme/ <i>Nancy E. Duque & Ariston D. Calvo</i>	Macropropagation Techniques: An Alternative Technique of Producing Quality Lakatan Planting Material/ <i>Nenita E. Olera, Romulo L. Cena, Ardiel A. Baladajay & Ariston D. Calvo</i> 1. Field Technique of Producing Quality Lakatan Suckers through False & Complete Decapitation 2. Detached Corn Technique: An Alternative Macropropagation for Lakatan	Revitalizing the Intellectual Property and Technology Business Management (IP-TBM) Operations in the University of Southern Mindanao (USM)/ <i>Pla Amabelle M. Flores, Cyrelle M. Besana, Jalaloden B. Marohom & Mark Henry De Leon</i>
36	9:10 AM	9:20 AM	Technology Options and Packaging of USM Yellow Corn NCH 33 and 35 Component 1: Effect of Different Population Densities on the Yield of USM NCH 22 and 35 Component 2: Yield Response of USM NCH 33 and 35 to Different Fertilizer Rates/ <i>Ferdinand E. Duldulao & Antonio P. Pasig</i>	Development, Value Adding and Evaluation of Herbs-Based, Spices-Based, Coffee-Based, and Cacao-Based Products for Increased Commercial Value/ <i>vy Mar B. Cabornida, Mark Al-Jamie J. Mutulani & Maribelle T. Plamonte</i> Component 1: Formulation and Evaluation of All-Purpose Seasoning Mixes using Blends of Herbs and Spices Component 2: Development and Evaluation of Different Coffee-Based Products Component 3: Development and Evaluation of Different Cacao-Based Products	University of Southern Mindanao: Creating a Culture of Food Safety in North Cotabato/ <i>Maria Elena N. Tanabe</i>
37	9:20 AM	9:30 AM	Corn R & D Program: Enhancing Yield Potential in Corn Through Exploitation of Heterosis/ <i>Efen E. Magulama, Romulo L. Cena, Nenita E. Olera & Joanne E. Duran</i> Comp. 1. Inbred Line Development Comp. 2. Formation of Experimental Hybrids and Synthetics Comp. 3. Maintenance and Improvement of Existing USM Varieties Comp. 4. Seed Increases of Promising Varieties and Submission of Entries for NCT-NSIC Test Comp. 5. Identification of Outstanding Varieties in National Corn Trial of the National Seed Industry Council (NSIC)		Collaborative Barangay-Based Development and Economic Mainstreaming (CBDEM Phase II)/ <i>Analya A. Gonzales</i>

SCHEDULE OF PRESENTATION

DAY 2 – October 24, 2019

No.	Time		SESSION 1 Basic Research	SESSION 2 Development	SESSION 3 Social Science / Extension
	START	END	ON-GOING RESEARCHES		
38	9:30 AM	9:40 AM	Management of Rescued Wildlife: Fauna Livability and Adaptation of Endemic Fauna Under Captivity/ <i>Cayetano C. Pomares, Francisco Gil N. Garcia, Alris John Calvo & John Aries Tabora</i> Study 1. Identification of Agro-Ecological Environs on the Existence and Capture of Endemic Fauna Study 2. Biodiversity and Conservation of Important Fauna Species Study 3. Development and Distribution of IEC Materials on Conservation	Development and Implementation of an e-Exam of USMCEE Using Star Topology/ <i>Maricel G. Dayaday & Ajay S. Agbunag</i> Component 1: Data Consolidated for the Development of Electronic Exam of USMCEE Component 2: Development of Electronic Exam Using Bus Topology Network Component 3: Validation of Developed USMCEE Electronic Exam for the Utility of Examinee	Development of USM Radio Broadcast Program for Products and Technologies of USM and Affiliated Organization/ <i>Genghis Khan P. Manero, Ardiel A. Baladajay, Allan G. Dallo & Allan C. Facurib</i> Component 1: Production of Radio Program "Ugnayan Sa Masa" (Broadcast) Component 2: Assessment on the Effectiveness, Relevance and Extent of Listenership of Ramp (Print)
9:40 AM – 10:00 AM – O P E N F O R U M (20 Minutes)					
39	10:00 AM	10:10 AM	Enhancing Organic Poultry Production System/ <i>Milagrina P. Pomares</i>	Batasan Agro-Ecological Landscaping–Sustainable Land Use for Local Government Intervention/ <i>Cayetano C. Pomares, Harem R. Roca, John Aries Tabora & Flora P. Nicor</i> Study 1. Batasan Agro-Ecological Landscaping Indigenous and Endemic Flora And Fauna Study 2: Batasan Agro-Ecological Landscaping a Showcase on Edible Landscaping Study 3: Batasan Agro-Ecological Landscaping Integration of Cinnamon mindanense in an Edible Landscape Study 4: Batasan Agro-Ecological Landscaping Pilot Test For Sustainable Organic Agriculture	Farming Methods & Health Assessment of Farmers in North Cotabato (Local Capability) Building for Agriculture & Occupational Health Surveillance in Farming Communities/ <i>Emma K. Sales, Lydia C. Pacual & Jinky Lailanie Lu (UP Manila)</i>
40	10:10 AM	10:20 AM	Enhancing Semen Biotechnology for Goat and Sheep/ <i>Cayetano C. Pomares</i>	10:10 AM – 10:20 AM– O P E N F O R U M (20 Minutes)	Training of work Scholarship Program/ <i>Adelfor G. Garcia, Purificacion O. Cahatian, Clark I. Maarat, Samsudin S. Panday, Joseph O. Castillo & Ronald D. Superioridad</i>
41	10:20 AM	10:30 AM	Filipino Cuisine: Twists, Tweaks and Variants/ <i>Cheryl Y. Dulay, Ivy Mar B. Cabornida & Shirl Mae M. Bebit</i>		Assessment of the Rabies Control Program in North Cotabato Province (Phase II)/ <i>Elizabeth C. Molina, Elsa A. Gonzaga & Rolando J. Garduque</i>
42	10:30 AM	10:40 AM	Prog. Smarter Approaches to Reinvigorate Agriculture as an Industry in the Philippines (SARAI) –Phase II/ <i>Maria Victoria R. Espaldon, Felino P. Lansigan, Adelfor G. Garcia, Moises A. Doradon Purificacion O. Cahatian & Romulo L. Cena</i>		The ULS Tracer Study of the Enhanced Science Curriculum 2008-2012 Graduates/ <i>Arabella M. Soberano & Maybell S. Martin</i>
43	10:40 AM	10:50 AM	10:40 AM – 11:00 AM– O P E N F O R U M (20 Minutes)		Manobo: Their Indigenous Culture and Laws/ <i>Maricar Juaneza</i>
44	10:50 AM	11:00 AM			10:50 AM – 11:10 AM– O P E N F O R U M (20 Minutes)
45	11:00 AM	11:10 AM	Genetics or Environment: Tracing the Root Cause of Increasing Homosexual Population/ <i>Jonald L. Pimentel & Anna Jean S. Garcia</i>		
46	11:10 AM	11:20 AM	Industry Profile of Halal Commodities in Mindanao/ <i>Roy B. Gacus, Lorna G. Valdez & Ruby S. Hechanova</i>		
47	11:20 AM	11:30 AM	Market Potential and Product Acceptability of UF18 Cacao Variety/ <i>Cheryl y. Dulay, Ivy Mar B. Cabornida & Jigzel Divine F. Bascay</i>		

SCHEDULE OF PRESENTATION

DAY 2 – October 24, 2019

No.	Time		SESSION 1 Basic Research	SESSION 2 Development	SESSION 3 Social Science / Extension
	START	END	ON-GOING RESEARCHES		
48	11:30 AM	11:40 AM	Pilot Testing & Validation of the Molecular Marker Diagnostic Kit for Durian Nurseries in Mindanao & Other Parts of the Philippines/ <i>Emma K. Sales</i>		
49	11:40 AM	11:50 AM	Rehabilitation and Application of Good Agricultural Practices (GAP): A Way to Revive Dragon Fruit for Sustainable Production Under Kabacan Agrometeorological Condition/ <i>Flora P. Nicor & Noe Jr. S. Mamon</i> Component 1: Plant Propagation and Nursery Management Component 2: Reviving Dragon Fruit Plantation by Rehabilitation for Sustainable Production		
50	11:50 AM	12:00 NN	Molecular Identification and Detection of Microbial Pathogens In Banana/ <i>Edward A. Barlaan</i>		
12:00 NN – 12:30 PM– O P E N F O R U M (30 Minutes)					
12:30 PM – 1:30 PM – L U N C H B R E A K					
FINALIZATION OF RESULTS					
2:00 PM – 4:00 PM : AWARDING AND CLOSING CEREMONY AT USM CAFE MARTINA					
RESTORATION					

CLOSING PROGRAM

USM Cafe Martina
University of Southern Mindanao
Kabacan, Cotabato
October 24, 2019, 2:00 PM

PRESENTATION OF SYNTHESIS

SESSION I

DR. NANCY E. DUQUE

Senior Science Research Specialist

SESSION 2

MS. MARRY GRACE SECRETARIA

Education Program Specialist I

SESSION 3

ENGR. KHARLO SUBRIO

Education Program Specialist II

PRESENTATION OF OUTPUT FOR
RESEARCH

DR. EFREN MAGULAMA

Director, USMARC

PRESENTATION OF OUTPUT FOR
EXTENSION

DR. ARDNIEL BALADJAY

Director for Extension Services

PRESENTATION OF OUTPUT FOR
COLLEGE-BASED RESEARCHES

DR. EDWARD BARLAAN

Director for Research & Development
Services

PRESENTATION OF OUTPUT FOR PICRI
RESEARCHES

DR. SAMSUDIN PANDAY

Director, PICRI

PRESENTATION OF RDE OUTPUTS

DR. CAYETANO POMARES

Vice President for RD & E

ACCEPTANCE OF RDE OUTPUTS

DR. FRANCISCO GIL GARCIA

SUC President IV

AWARDING OF BEST PAPERS &
BEST POSTERS

DR. FRANCISCO GIL GARCIA

SUC President IV

DR. CAYETANO POMARES

Vice President for RD & E

DISTRIBUTION OF CERTIFICATES

DR. FRANCISCO GIL GARCIA

SUC President IV

DR. CAYETANO POMARES

Vice President for RD & E

CLOSING MESSAGE

DR. FRANCISCO GIL GARCIA

SUC President IV

CLOSING PRAYER

MR. MARK HENRY DE LEON

Research Assistant

EMCEE:

MS. JANICE M. BANGOY

Training Specialist II

39TH AGENCY IN-HOUSE REVIEW WORKING COMMITTEES

VENUES: Cafe Martina, URESC Conference Hall, D.D. Clemente Hall

Over-all Coordinator : Dr. Ardnriel A. Baladjay
Co-Coordinator : Dr. Samsudin S. Panday

Executive Committee

Chairperson : Dr. Francisco Gil N. Garcia
Members : Dr. Lope E. Dapun
Dr. Cayetano C. Pomares
Dr. Edward A. Barlaan
Dr. Efren E. Magulama

Program and Tarpaulin Committee

Chairperson : Genghis Khan P. Manero
Co-Chairperson : Jasmin A. Pecho
Members : Leizl Gray Oria
Janice M. Bangoy
Lara Jade Estimo
Dianne Martinez

Certificates Committee

Chairperson : Jasmin A. Pecho
Co-Chairperson : Ralph Butch S. Garidan
Members : Honey Grace Silva

Invitation Committee

Chairperson : Dr. Ardnriel A. Baladjay
Co-chairperson : Janice M. Bangoy
Members : Oscar Organas

Registration and Ushering Committee

Chairperson : Leanne Jay Manceras
Co-Chairperson : Amancio Manceras
Members : Cyrelle Besana
Genalyn Galas
Luvilla Gonzaga
Avigel Cabrillos
Sharmaine Unos
Sophia Bonete
Jeanie Binaohan
Jomarie Abubakar
Sheryl Mae Roy

39TH AGENCY IN-HOUSE REVIEW WORKING COMMITTEES

VENUES: Cafe Martina, URES Conference Hall, D.D. Clemente Hall

Documentation Committee

Chairperson : Dr. Roviline Pal-iwen
Co-Chairperson : Jave Fiel

Members

Session 1 : Melesa Prado
Session 2 : Ellaine Genevive Parcon
Session 3 : Lloyd Anton Von Colita & Min Tech Staff

Secretariat and Proceedings Committee

Chairperson : Nenita Olero
Co-chairperson : Khristine Garcia
Members : Regine Nabua
Ella Angco
Sunshine Lacsao
Jason Baltazar

RAPPORTEUR TEAM FOR SESSION 1

Chairperson : Nancy Duque

Moderators (Basic Research)

DAY 1

AM – Glyn Magbanua
PM – Joseph Quisado

DAY 2

AM – Arlene Riogelon
PM – Danielyn Flores

Encoders:

Sheena Lucena
Sheila Owano
Riza Meperanum

Computer Operator:

Michael James Abrea

RAPPORTEUR TEAM FOR SESSION 2

Chairperson : Marry Grace Secretaria

Moderators (Development)

DAY 1

AM – Dianne Cristel Basilio
PM – JMJson Bautista

DAY 2

AM – Kathleen Bolotaolo
PM – Jalaloden Marohom

Encoders:

Joe Ann Engada
Abygail Sauyen
Jonavelyn Turba

Computer Operator:

Salvador Inocencio

39TH AGENCY IN-HOUSE REVIEW WORKING COMMITTEES

VENUES: Cafe Martina, URESC Conference Hall, D.D. Clemente Hall

RAPPORTEUR TEAM FOR SESSION 3

Chairperson : Engr. Kharlo Subrio

Moderators (Social Science/Extension)

DAY 1

AM – Leslie Sales

PM – Julius Jerome Ele

DAY 2

AM – Lawrence Anthony Dollente

PM – Paul John Ongcoy

Encoders:

Joelle Aguirre

Cromwell Jumao-as

Rezin Cabantug

Computer Operator:

Mark Henry De Leon

Hall Preparation, Stage Decoration and Restoration Committee

Chairperson : Moreno Java

Co-Chairperson : Ferdinand Duldulao

Members : Norge Martinez

Vinus Java

Elpidio Arias

Malony Martinez

Pinky Palanog

Ryan Balbuena

Erwin Ferrer

Jerome Elumbaring

Ruben Tagare

Jeannie Duka

Jomar Esto

Ariel Vallajos

Hernani Pastolero

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Co-Chairperson : Shirl Mae Bebit

Members : Neneng Fernandez

Hernani Pastolero

Maribelle Piamonte

Hostel Staff

Honorarium and Token Committee

Chairperson : Purificacion Cahatian

Co-Chairperson : Julius Jerome Ele

Members : Honey Grace Silva

Oscar Organas

Sound and Audio-Visual Equipment Committee

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Co-Chairperson : Eugene Ranjo

Members : Ryan Gonzaga

Mario Rentuaya

Joel Misanes

Ildefonso Seguritan

Clarence Dave Galas

ICTC Staff

39TH AGENCY IN-HOUSE REVIEW WORKING COMMITTEES

VENUES: Cafe Martina, URESC Conference Hall, D.D. Clemente Hall

Transportation and Electricity Committee

Chairperson : Benjamin Fortinez
Co-Chairperson : Eugene Mars Abril
Members : Oscar Organas
Sadylie Pelle
Allan Morgan
Ruby Paquit

Finance Committee

Chairperson : Bernabe Mondia
Co-Chairperson : Helen B. Edano
Members : Elma Elevazo
Quennie Durendes
Mylin Prado

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Chairperson : Mary Joy Canolas
Co-Chairperson : Monaira Sumael
Members : Ivy Pasquin
Arlene Riogelon

Security Committee

Chairperson : Orlando Forro
Co-Chairperson : A.H. Janani
Members : Security Service Staff

Steering Committee:

Chairperson : Janice Bangoy
Co-Chairperson : Analyn Gonzales
Members : Elizabeth Genotiva
Noe Mamon

ACKNOWLEDGEMENT

We wish to extend our heartfelt appreciation to all those who, in one way or another, have contributed and helped for the success of this year's 39th Agency In-House Review. May God bless you a hundred fold!

USM HYMN

Musical Arrangement: Prof. Ruth Ellinor L. Cannen
Lyrics: Prof. Ruth Ellinor & Dr. Teofilo C. dela Cruz

USM Beloved!
School so brave and true.
Shines her love for truth and beauty,
May she ever live to serve.

USM Beloved!
To thy name we sing,
Faithful shall we be to thee,
All one body, we.

Loyal shall we ever be
Alma Mater, dear
Let her spirit guide us,
Towards life's highest goal.

Refrain:

We pledge to thee
our love and loyalty
In our hearts for aye! (2x)

USM Beloved!
Our love and loyalty
Fount of knowledge great,
Flows her love for highest goodness,
We shall cherish ever more.

Be our inspiration,
Love within each heart,
As in life we'll do our part
with thy spirit serve.

God and land and fellowmen
Truth and freedom bring;
Hear our voices ringing,
Hail, our USM!

(Repeat Refrain)

VISION

USM envisions upholding its status of excellence in research and development by continuing to be the pioneer source of technology and information that are on track towards poverty reduction, food security, and global competitiveness for cohesive and sustainable development among its multi-socio-cultural clienteles.

MISSION

To put into operation a system to undertake multi-disciplinary approach for R & D activities to ensure that technologies and information generated can address the prevailing concerns and issues in the local, regional and national levels for sustainable development.

GOALS

1. Improve the system with scientific excellence through collaborative and interdisciplinary R&D activities that are anchored on the University's vision/mission;
2. Conduct researches and generate technologies that could provide solutions and address the local, regional, and national concerns and issues;
3. Provide a mechanism to ensure that research results be effectively and efficiently delivered to the clients for utilization and commercialization; and
4. Build up resource generation facilities for continuous and sustainable R&D programs that are geared towards ensuring food security, global competitiveness, socio-cultural responsiveness that eventually improve the quality of life of the clienteles.

