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# Make use of expertise in biotechnology -Binay

COMMITTEE Chair of Science and Technology Senator Maria Lourdes Nancy Binay called for better utilization of biotechnology in her speech during the opening ceremony of the technology exhibit in preparation for the celebration of the 15th National Biotechnology Week (NBW) on 18 November 2019 in Pasay City.

Senator Binay underscored the importance of biotechnology, citing

that the Philippines is among the most vulnerable to the effects of climate change, and that it is crucial for the nation to have a paradigm shift and "make use of the expertise of our researchers who are involved in biotechnology."

"If we are to secure our people's future mahalaga na kumilos tayo para masigurong ginagamit natin ang husay at expertise ng ating mga researcher sa usaping food security,

public health, *at iba pang* concerns *na saklaw ng* biotechnology," she added.

Binay also stressed the need for the country to make full use of the advances in the field, take hold of the agricultural programs, and help free the Filipinos from hunger and ignorance. Further, she attested to the credibility of the scientific method in resolving issues pertaining to food

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#### DA kickstarts nat'l rice awareness month

THE Bureau of Agricultural Research together with the other attached agencies, staff bureaus, and regional field offices of the Department of Agriculture (DA); representatives from local government units; participants from state universities and colleges; and farmers participated in the kick-off activity of the National Rice Awareness Month 2019 on 4 November 2019 in Diliman, Quezon City.

With the theme, "Buy local. Eat local," the activity aimed to strengthen the support given to farmers through the promotion and consumption of locally-produced rice.

In his keynote message, Acting Agriculture Secretary William Dar recognized rice as an important part of Filipino culture; hence, continuous support to farmers must be given.

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Acting Agriculture Secretary William Dar delivers his keynote speech.



BAR staff participate in the kick-off activity of the National Rice Awareness Month 2019 at the University of the Philippines Diliman, Quezon City. PHOTOS: JMSURIO

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#### **Biotech**



Sen. Maria Lourdes Nancy Binay (center), Science and Technology committee chair; Rev. Fr. Emmanuel Alparce (2<sup>nd</sup> from right), chair on Information, Education and Communication of DA-Biotech Program; and Dr. Rhodora Aldemita (right), director of the International Service for the Acquisition of Agri-biotech Applications lead the ribbon-cutting ceremony of the technology exhibits. PHOTO: LFONTANIL

safety

"I am hoping that this exhibit will not only increase the appreciation for the contribution of biotech to providing solutions to our most pressing problems but also make us aware of the challenges we still have to work on," Senator Binay concluded.

Binay also affirmed the objectives of the exhibits and the rest of the activities lined up to commemorate the National Biotechnology Week.

This year's NBW celebration carried the theme, *Biotek: Makabagong Solusyon at Kalusugan*, emphasizing the beneficial impact of the safe and responsible use of biotechnology and its products towards achieving and sustaining food security, equitable access to health services, and sustainable and safe environment.

Other highlights of the weeklong event included techno exhibits and seminars. The Bureau of Agricultural Research through its Applied Communication Division participated in the exhibits featuring various technologies generated from the research and development initiatives of the bureau.

The NBW celebration takes place every last week of November every year in accordance with Presidential Proclamation No. 1414, s. 2007.

The event was led by the Department of Agriculture through its Biotechnology Program Office, with the sponsorship of BAR. ### (Leoveliza C. Fontanil)



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### PhilRice holds PRISM, PRIME summit

PARTNERS and representatives from rice research institutions and government agencies convened for the Philippine Rice Information System (PRISM) and Pest Risk Identification and Management (PRIME) summit of the Philippine Rice Research Institute (PhilRice) on 18 November 2019 in South Triangle, Quezon City.

With the theme "From big data to usable information," the summit served as a venue to present the progress and milestones of PRISM and PRIME and to gather feedback from the users of data products.

PRISM is a satellite-based rice monitoring system that generates information on planted rice area, yield, and rice areas at risk due to flood and drought nationwide. It uses technologies on remote sensing, crop growth simulation models, geographical information system, smartphone-based survey forms, cloud computing infrastructure, and online information system.

Developed through a collaborative R&D project between the Department of Agriculture (DA), PhilRice, and the International Rice Research Institute (IRRI) with funding from the Bureau of Agricultural Research (BAR), PRISM was the first to operate a nationwide satellite imaging and Information and Communications

Technology-based rice monitoring system in Southeast Asia.

In its R&D phase, PRISM was composed of two components—rice area mapping and crop health assessment. In 2017, crop health component was then proposed separately as PRIME.

Now on its second year of implementation, PRIME is a joint project between PhilRice, IRRI, DA regional offices, and the Bureau of Plant Industry (BPI) that aimed to understand risk factors for pest outbreaks and identify appropriate management strategies and tactics to reduce crop losses on rice.

Funded by BAR, the project focused on five pests that caused major crop losses in the country: blast (leaf and neck blast), bacterial leaf blight, rice tungro disease/green leafhopper, brown planthopper, and rats.

"This data-led projects under the National Rice Program are both now on its sustainability phase of implementation," said Dr. Valentino Perdido on behalf of Engr. Ariel Cayanan, DA undersecretary for operations.

Dr. Perdido further emphasized that accurate and verified information is crucial in achieving the country's goal of sufficient and affordable rice without compromising the farmers' profit.

"Information is an essential ingredient of any knowledge management and structure. A reliable information system in any organization is necessary to support better management and policy and decision making," he added.

Dr. Renaud Mathieu, IRRI-Geospatial Science and Modelling Cluster head, commended the Philippine government's initiative.

"I think it is a great example of how observation technology and space science can lead to innovation in agriculture, optimizing national resources and seeing improved security and economic growth," Dr. Mathieu said.

Present in the activity were
Dr. John De Leon, PhilRice acting
executive director; Dr. Eduardo
Jimmy Quilang, PhilRice deputy
executive director for research;
Gerald Glenn Panganiban, BPI
assistant director; Wilma Cuaterno,
BPI-Crop Pest Management Division
chief; Dr. Alice Laborte, IRRI senior
scientist; and Raymond Patrick
Cabrera, BAR-Program Development
Division staff and rice focal.

Also part of the summit were the launching of the PRIME website (prism.philrice.gov.ph) and the opening of the exhibit of milestones of PRISM and PRIME in the regions. ### (Rena S. Hermoso)



INSET: Dr. John De Leon, acting executive director of the Philippine Rice Research Institute, welcomes the delegates of the 2019 PRIME and PRISM Summit. PHOTO: RHERMOSO

Issue



NMET PROJECT FARMERS' FIELD DAY HELD. Farmer-cooperator from Leon, Iloilo, assesses the rice line during the 3rd Farmers' Field Day of the project, "National Multi-Environment Testing (NMET) of Drought-prone Direct-seeded Rainfed Lowland Rice Lines, in Jaro, Iloilo" on 6 November 2019. One hundred and sixteen farmers from Sta. Barbara, Leon, and San Miguel, Iloilo attend the activity. Implemented by the University of the Philippines Los Baños and funded by the National Rice Program of the Department of Agriculture through the Bureau of Agricultural Research, the project aims to introduce farmers to new rice lines being developed into varieties. PHOTO: JIBERMAS | TEXT: RHERMOSO

#### DA kickstarts nat't...from page 1

"Through the years, rice makes our staple food whether it is for breakfast, lunch, or dinner. Rice is always present in the table of a Filipino family because it complements Pinoy dishes. This opportunity is for our farmers to increase their income through the production of good quality and acceptable varieties of rice in the country. This year, we aim to educate more consumers, stakeholders, and policy-makers to support local rice," Secretary Dar said.

Further, DA Undersecretary for Consumer Affairs Ernesto Gonzales introduced Kadiwa ni Ani at Kita to the participants. As a program launched in connection to the New Thinking in Agriculture, Kadiwa envisions to help farmers prosper by boosting farm-to-market initiatives.

DA-Field Operations Service Director Roy Abaya also shared that the activity is usually conducted at the Quezon City Memorial Circle. But this year, it was decided to hold it at the University of the Philippines (UP) Diliman, in the hopes of bringing the plight of the farmers closer to students especially those in state universities and colleges.

"[DA] believes in bridging the gaps and connecting the government agencies and other institutions like state universities and colleges, especially UP and the Central Luzon State University. I encourage you to be conscious of their situation and strengthen your advocacy in relation to agriculture," Engr. Abaya emphasized.

Meanwhile, Miss Universe 2013 3rd Runner-up and RICEponsible Ambassador Ariella Arida also pledged support in the advocacy of helping rice farmers in the country.

"It is really an honor and privilege to stand before you to be your RICEponsible Ambassador. As an individual, beauty queen, host, and TV actress, I can be a voice in promoting the advocacy of [DA]. The wide use of social media is a great tool in spreading the awareness and through this, I will be able to spread out the reason why we should shop local and continue supporting our rice farmers," RICEponsible Ambassador Arida vowed.

Joining them were Philippine Rice Research Institute Acting Executive Director John de Leon, DA-Ilocos Regional Executive Director Valentino Perdido, and UP-College of Science Associate Dean Eizadora Yu.

The activity concluded with the declaration of the Panatang Makapalay led by Arida, which affirmed the responsible use and consumption of local rice and the utilization of other alternative crops like saba, kamote, and corn.

The oath recognized the amount of labor spent by Filipino farmers in growing rice, and that, as respect, no grain should be put into waste. ### (Jhon Marvin R. Surio)

# Corn, cassava achievers named in 2019 Corn Congress

WITH the theme "Bountiful Harvest and Increase Farmers Income: Key to Prosperity and Inclusive Growth," the Department of Agriculture (DA) through its Corn & Cassava Program and the Agricultural Training Institute (ATI), named outstanding corn and cassava achievers as part of the celebration of the 7<sup>th</sup> National Quality Corn Achievers Awards (NQCAA), 3<sup>rd</sup> Cassava Cluster Management Excellence Awards (CCMEA), 3<sup>rd</sup> Cornucopia Awards, and the 15<sup>th</sup> Philippine National Corn Congress (PNCC) on 12-14 November 2019 at the Iloilo Convention Center in Mandurriao, Iloilo City.

Present to spearhead the ribboncutting ceremony were Engr. Ariel Cayanan, DA undersecretary for operations; Dr. Lorenzo Caranguian, national corn program coordinator; Dr. Rosana Mula, ATI assistant director; and Dr. Candido Damo, national corn program technical consultant.

Aimed at recognizing the vital contributions of its stakeholders, top performing local government units and individuals with outstanding contributions to the corn industry were awarded.

CCMEA recognized the achievements of cluster organizations in support to the development of the cassava industry, and the promotion of the production and marketing of safe and quality cassava in the country.

Meanwhile, Cornucopia Awards awarded incentives to farmer organizations that implemented value-adding technologies and promoted the development of different processed products from corn and cassava.

During the awarding proper, five provinces, 25 municipalities, 100 agricultural extension workers, three cassava clusters, and three corn/cassava farmer organizations were given recognition.

The Bureau of Agricultural Research, as part of the national technical working group of the NQCAA, CCMEA, and Cornucopia Awards, assisted in the evaluation and field validation of the nominees on the different categories of the awards. BAR is also part of the ad hoc committee during the conduct of the awarding ceremony.

PNCC is an annual activity organized by Philippine Maize Federation, Inc. for stakeholders to gather, build network, learn new technologies, and gain new insights for the improvement of the industry. ### (Bernalin P. Cadayong)



One of the recipients of the Cornucopia Awards receives trophy and cash prize during the 15<sup>th</sup> Philippine National Corn Congress. PHOTO: BCADAYONG

### Asec. Eleazar, Sandoval visit organic fertilizer facility in Ilocos

TO ensure that research and development facilities supported by the Bureau of Agricultural Research (BAR) are operational and are utilized properly, Dr. Nicomedes Eleazar, Department of Agriculture assistant secretary for special affairs; and Digna Sandoval, BAR assistant director and Institutional Development Division (IDD) head. visited a recently established organic fertilizer facility on 5 November 2019 in Caoayan, Ilocos Sur.

Established to convert farm waste into compost and enhance microorganism activities that improve soil quality and nutrients, the "Rapid Production Facility for Organic Biofertilizer" is comprised of milling and grinding machines that make use of agricultural wastes such as rice stalks, corn husks and stalks, tobacco midribs, and vegetable rejects.

Also present during the monitoring and assessment visit were Anthony Obligado, BAR-Technology Commercialization Division (TCD) head; Anabelle Rigucera, Nueva Segovia Consortium Cooperatives (NSCC) agritourism officer; and Cynthia Parel, NSCC business enterprises head.

Among all the rapid production facilities for organic biofertilizer in

the country, the facility housed at the Agri-Tourism Farmville of NSCC in Ilocos is the biggest in terms of land area and volume of outputs.

The facility was established through funding under the Research Facilities Development Grant (RFDG) of BAR-IDD. ### (Clarisse Mae N. Abao)



L-R: BAR-TCD Head Anthony Obligado, BAR Asst. Dir. Digna Sandoval, NSCC Agritourism Officer Anabelle Rigucera, DA Asst. Sec. for Special Affairs Nicomedes Eleazar, and NSCC Business Enterprises Head Cynthia Parel PHOTO: CMABAO



Dr, Nicomedes Eleazar, DA assistant secretary for specials affairs and BAR director, mills market-rejected vegetable as part of the initial step in the organic bio-fertilizer conversion. PHOTO: CMABAO

# Asec. Eleazar looks into banana, mushroom, citrus R&D in NVSU



Dr. Nicomedes Eleazar, DA assistant secretary for special affairs and BAR director leads the monitoring team. They are visiting the NVSU's citrus screenhouse where various varieties of citrus are grown. PHOTO: JALAXAMANA

FOLLOWING the recommendations of Acting Agriculture Secretary William Dar to look into research and development (R&D) initiatives with regards to commodities such as banana, mushroom, and citrus, Department of Agriculture (DA) Assistant Secretary for Special Affairs and Bureau of Agricultural Research (BAR) Director Nicomedes Eleazar visited the Nueva Vizcaya State University (NVSU) on 21 November 2019 in Bayombong, Nueva Vizcaya.

Present during the bureau's assessment visit were Dr. Elbert Sana, NVSU Citrus Resources Research and Development Center director; Dr. Wilfredo Dumale, Jr., Research, Extension, and Training vice president; Dr. Jonar Yago, R&D

director; and Dr. Leoncio Matibag, Accrediting Agency of Chartered Colleges and Universities in the Philippines Survey Team overall coordinator.

The activity included discussions about the bureau's initiatives on technology commercialization, in relation to the Agricultural Competitiveness Enhancement Fund (ACEF) which will serve as a source of support for the commercialization of NVSU's products in line with Secretary Dar's instruction to scope citrus, mushroom, and banana projects.

As such, Asec. Eleazar commended the quality research projects of NVSU and the university's development through the years specifically in the packaging

of NVSU's wine product, which he then suggested to undergo commercialization.

The bureau also monitored four facilities of NVSU, such as the citrus screen house, banana tissue culture laboratory, disease indexing laboratory, and food processing center.

Meanwhile, Asec. Eleazar also visited their mushroom laboratory funded by BAR through the project "Commercialization of Shiitake Production and Product Development Technology in Nueva Vizcaya." Some products developed from their shiitake include shiitake chili paste, shiitake mix, and dried shiitake. ### (Jireh Alodia R. Laxamana)

### Asec. Eleazar joins Wednesday Roundtable@Lido

TO discuss and promote various initiatives for the agriculture and fisheries research and development (R&D) in the Philippines, Department of Agriculture Assistant Secretary for Special Affairs and Bureau of Agricultural Research (BAR) Director Nicomedes Eleazar joined experts from different fields for the "Wednesday Roundtable@Lido" on 13 November 2019 in Quezon City.

Aimed at increasing the awareness of stakeholders on various R&D initiatives in the country, the discussion revolved on the importance of R&D specifically in the agriculture and fisheries sector; government initiatives in support to Filipino farmers and fishers; and the impact of the R&D programs and projects being implemented.

Hosted by Melo Acuña of Radio Veritas Asia, the discussion was also participated in by Dr. Maria Theresa M. Mutia, center chief of the National Fisheries Research and Development Institute-National Freshwater Fisheries Research and



Melo Acuña (left), former Radio Veritas anchor, facilitates the "Wednesday Roundtable" discussion participated by experts from the agri–fishery R&D sectors.

Development Center; Francisco SB. Torres, Jr., chief of SMARTSEAS and Manila Bay Project; and Joer Hizon, managing director of Genetron International Marketing.

Asec. Eleazar discussed BAR's R&D initiatives and banner programs, such as the Community-based Participatory Action Research and the National Technology Commercialization Program, and Regional Research and Development Extension Network. Furthermore,

the experts also engaged in a brief discussion on their respective agency's plans for 2020.

"We are currently gearing our initiatives and efforts to complement the new vision of the Department of Agriculture on improving the lives of our farmers and fishers through agribusiness endeavors and ensuring that all our researches reach its intended clienteles," Asec. Eleazar concluded. ### (Clarisse Mae N. Abao)



SSIP TRAINING CONDUCTED. Twenty-five participants composed of officials, researchers, and technical staff from regional offices of the Department of Agriculture CALABARZON and MIMAROPA, provincial and municipal local government units attend the training on the development of Small Scale Irrigation Projects (SSIP) Suitability Maps in Los Baños, Laguna on 13-15 November 2019. Spearheaded by the University of the Philippines Los Baños, Romblon State University, and Western Palawan University, the training aims to ensure smooth transition, utilization, and application of the research outputs on SSIP planning and implementation. The three-day training is one of the major activities of the project, "Identifying Suitable Sites for Small Scale Irrigation Projects through Geographic Information System-based Water Resources Assessment", funded by the Bureau of Agricultural Research in partnership with state universities and colleges and the Bureau of Soils and Water Management. PHOTO: IJPANAGA | TEXT: RHERMOSO

# Traditional and heirloom rice featured in BAR seminar



Dr. Marissa V. Romero of PhilRice discusses her topic, Buy Local and Eat Local, Promotion of Traditional Rice Varieties. Majority of the attendees are private individuals interested on Philippines heritage rice varieties. Photo: LBARTINA

AS part of the celebration of the National Rice Awareness Month, the Bureau of Agricultural Research (BAR) through its Applied Communication Division conducted an in-house seminar series on the traditional and heirloom rice on 28 November 2019 in Diliman, Quezon City.

Dr. Marissa V. Romero, chief science research specialist of the Rice Chemistry and Food Science Division of the Philippine Rice Research Institute, served as resource speaker of the activity.

In her presentation titled, "Buy Local and Eat Local, Promotion of Traditional Rice Varieties," Dr. Romero highlighted the importance of preserving the Philippine heritage rice crop varieties and discussed its exceptional characteristics including being an excellent source of minerals and vitamins for the human body.

According to Dr. Romero, contrary to the belief that traditional rice varieties (TRVs) have vanished, they are continuously being cultivated and are very much still intertwined with local culture and tradition. They also remain as a major source of income for many farmers in the country.

Dr. Romero also pointed out that TRVs and heirloom rice possess many valuable traits for both farmers and consumers, such as excellent grain quality, health-promoting properties, agro-morphological traits, and stress resistance. Thus, they are already valuable as they are, while for breeders they are a crucial genetic resource for crop improvement. Hence, they continue to prove useful at present and in the future.

The unique and special traits of TRVs are translated in high demand in the domestic and international market and thus, command a premium price - a boon to our farmers and traders.

"TRVs have high market value and demand, which are very favorable for rice farmers because of its potentials," Dr. Romero concluded. ### (Leoveliza C. Fontanil)

# BAR strengthens ACEF, conducts writeshop

IN line with the directives of Acting Agriculture Secretary William Dar to strengthen the research and development (R&D) projects to be funded under the 2019 Agricultural Competitiveness Enhancement Fund (ACEF), the Bureau of Agricultural Research (BAR) conducted a writeshop on 12-13 November 2019 in Diliman, Ouezon City.

Dr. Jonar Yago, R&D director of Nueva Vizcaya State University (NVSU), together with the staff

of BAR-Institutional Development Division (IDD), evaluated proposals from the proponents of various state universities and colleges present during the said activity, namely: Apayao State College, Central Mindanao University, University of Southeastern Philippines, Mindanao State University, Ifugao State University, Kalinga State University, University of Southern Mindanao, and NVSU.

Engr. Marvin Evangelista of BAR–IDD discussed the implementing guidelines on the

Research Facilities Development Grant while Chrystel Fonseca of BAR-Technology Commercialization Division emphasized the National Technology Commercialization Program.

As a member of the ACEF Program Management Committee, BAR was tasked to lead the screening and conduct of the initial evaluation of R&D proposals submitted by various SUCs. ### (Jireh Alodia R. Laxamana)



BAR AT THE 'ANI AT KITA' TV PROGRAM. Cynthia Remedios de Guia, BAR-Program Development Division assistant head, elaborates the program initiatives and activities of the bureau in line with the twin goal of the Department of Agriculture, Ani and Kita, during the On-the-Spot segment of Ani at Kita TV program on 18 November 2019. Aired over the People's Television Network during weekends at 9:00-9:30 A.M. from 16 November to 28 December 2019, the program showcases best agricultural practices and locally-made agricultural products. PHOTO AND TEXT: CPADULLON

# NIMBB zeroes in on sustainable development on 40<sup>th</sup> anniversary



Dr. William Padolina (5<sup>th</sup> from left), International Rice Research Institute deputy director general for partnerships; Dr. Fernando Sanchez, Jr. (6<sup>th</sup> from left), UPLB chancellor, Dr. Edwin Villar (left), PCAARRD deputy executive director for research and development, Dr. Marilyn Brown (4<sup>th</sup> from left), NIMBB director; and Joell Lales (4<sup>th</sup> from right), Bureau of Agricultural Research-Program Development Division head join other officials and researchers during the inauguration of the bioprocessing plant.

TO recognize the achievements and milestones of biotechnology in the country and its role in our pursuit of sustainable development, the Bureau of Agricultural Research participated in the celebration of the 40<sup>th</sup> anniversary of the National Institute of Molecular Biology and Biotechnology (NIMBB) on 18 November 2019 at the University of the Philippines Los Baños (UPLB).

With the theme "BIOTECH @40: Excellence and Innovation Towards Sustainable Development," the event aimed to promote scientific breakthroughs in biotechnology and further empower scientists and researchers in persisting biotechnology-driven projects in the modern world.

Dr. Marilyn Brown, the newly-appointed UPLB BIOTECH director, expressed her gratitude to all of the researchers and scientists who made this milestone possible. With 40 years in the industry, BIOTECH has generated 47 products and technologies that contributed widely to the growth and development of the farming sector, essential to the Philippine economy.

Acting Agriculture Secretary
William D. Dar, in the presence of
Department of Agriculture Program
Director Dionisio Alvindia, graced
the event and underscored that
we should continue the campaign
on optimizing traditional and
modern biotechnology to raise
the agricultural production and

ultimately actualize the 'New Thinking Paradigm' in the lives of our farmers and fisherfolk towards a food-secure Philippines.

This year, the institute also inaugurated the Department of Science and Technology-Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (PCCAARD)-UPLB-BIOTECH Bioprocessing Plant to kickstart the week-long anniversary celebration. With a huge demand in livestock feeding, this bioprocessing plant was said to produce and promote the pilot scale quantity of the Protein Enriched Copra Meal for commercial production. ### (Chantale T. Francisco)

# BAR-funded book qualifies for best science book

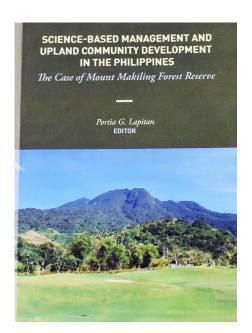
A book funded by the Bureau of Agricultural Research (BAR) makes its way to the finals during the awarding ceremony of the 38<sup>th</sup> National Book Awards on 23 November 2019 at the National Museum of Fine Arts Auditorium in Ermita, Manila.

The BAR-funded book was titled "Science-Based Management and Upland Community Development in the Philippines: The Case of Mount Makiling Forest Reserve," which provides information on natural resource management and upland community development.

The editor and lead author of the book was Dr. Portia Lapitan,

vice chancellor for academic affairs of the University of the Philippines Los Baños (UPLB). The book also featured articles written by UPLB researchers and faculty members, such as Dr. Teodoro Villanueva; Dr. Juan Pulhin; Dr. Priscila Dolom; Dr. Nathaniel Bantayan; Dr. Nelson Pampolina; Juancho Balatibat; Dr. Manuel Castillo; Atty. Eleno Peralta; Corazon Calimag; Nicasio Balahadia; Pamela Joyce Eleazar; and Agnes Mora.

Published by the UP Press, the book was one of the finalists for the Best Book in Science category under the Non-Literary Division. ### (Jireh Alodia R. Laxamana)





**QUALITY SEED POTATO IN BENGUET.** Farm worker prepares quality potato seedlings for distribution to identified farmers. She is one of the beneficiaries of the project, "Commercialization of Quality Seed Potato thru the Standardized Seed Production System," implemented by the Benguet State University-Northern Philippines Root Crops Research and Training Center. Funded by the Bureau of Agricultural Research, the project trains potato farmers on the production and management of quality seeds. PHOTO: BJOROZO | TEXT: RHERMOSO

# Adlay focal persons, research chiefs gather for national review



Members of the national adlay technical working group convened to discuss the commodity's update and plans during the workshop proper. PHOTO: JMSURIO

FOCAL persons and research division chiefs from the regional offices of the Department of Agriculture (DA) convened for the 2019 National Adlay Review and Planning Workshop on 18-22 November 2019 at the DA-Northern Mindanao Agricultural Crops and Livestock Research Complex in Malaybalay, Bukidnon.

The review aimed to revisit the commodity's roadmap and layout plans to harmonize efforts for the production of adlay in the country.

Dr. Juanita Salvani, research division chief of DA-Northern Mindanao, welcomed the participants and presented the updates on the national adlay technical working group meeting held recently.

Apolonia Mendoza, Bureau of Agricultural Research-Program Monitoring and Evaluation Division adlay focal person, spearheaded the conduct of the review through the

presentation of the assessment of the adlay research and development program along with its accomplishments and direction.

Meanwhile, Elmer Enicola of the Institute of Plant Breeding of the University of the Philippines Los Baños, provided the participants some updates on the registration of adlay in the country.

Representatives from DA regional offices then presented the accomplishments and updates of their projects on adlay. This was done to ensure that funded and supported projects adhere to the adlay R&D program guidelines set by the bureau. Some project proposals related to adlay were also presented.

Field visits on adlay farm sites were also conducted to showcase the progress of adlay R&D in the region. ### (Jhon Marvin R. Surio)

#### BAR attends in...from page 16

Food Association of Tigaon of Bicol Region, NOAC Achievers' Award for the Farmers' Group Category; Elmer Salazar of Bicol Region, NOAC Achievers' Award for the Small Farming Individual Category; and Teresa Sacley of CAR, NOAC Achievers' Award for the Young Farmer Category.

The BAR-funded project of the Benguet State University titled "Increasing Productivity and Value of Heirloom Rice Landraces in the Cordillera Highlands through Variety Evaluation and Organic Production Technologies" won the Outstanding Organic Agriculture Research Category.

On the other hand, another funded project of DA-Ilocos Region titled "Technology Promotion and Utilization of Organically-Grown Soybean in Region 1" was also shortlisted for the Outstanding Organic Agriculture Research Category. Both researches were also recognized in this year's celebration of the 31st National Research Symposium of BAR.

Recognition awards were also given to: Princess Rose Infornon, 4th NOAP Poster Making Contest; Hazel Gwyneth Birondo, 4th NOAP Essay Writing Contest; Joy Tricia Corpuz, 1st Agricultural Training Institute Kabataang Organic Agriculture Quiz Bee

Meanwhile, Nelson Gabutero of MIMAROPA was awarded the Gawad Saka: Search for Outstanding Organic Agriculture Farmer.

Completing the week-long celebration were parallel sessions with invited speakers which shared knowledge and expertise on organic agriculture, marketing, research, and policy. Simultaneous farm tours were also organized for interested participants.

Participating together with select BAR staff were research managers from DA regional offices.

This year's gathering was hosted by DA-CALABARZON. ### (Jhon Marvin R. Surio)

### Climate-smart village,

#### a key towards a resilient and sustainable agriculture

Text and photo by Chantale T. Francisco

WITH the world's temperature constantly rising, the agricultural sector in the country is becoming more vulnerable to the adverse effects that climate change has continuously brought over the years.

Filipino farmers who heavily rely on favorable weather conditions for good produce are now having a difficult time adjusting to the climate and the demands of their crops.

In 2014, the Department of Agriculture (DA) launched the Adaptation and Mitigation Initiative in Agriculture (AMIA) program to aid farmers in diminishing the risks posed by extreme weather conditions and climatic shifts.

AMIA enabled local communities in the agriculture and

fisheries sector to pursue climateresilient livelihoods through various technological innovations.

The communities who were able to adopt these technologies were then called AMIA villages.

AMIA villages are practice sites where farmers can learn and apply various climate-resilient practices introduced through the program.

The selection of AMIA villages started with a Climate Risk Vulnerability Assessment, followed by identifying the presence of farmers' organizations, financial institutions, and agricultural extension workers, and then ensuring the participation of local government unit and identifying the area's potential in upscaling.

In CALABARZON Region, selected barangays from the municipalities of Guinayangan and San Francisco, Quezon were chosen for the AMIA program. These municipalities are rich in natural resources yet vulnerable to climate change.

Their main crops and sources of income are coconut, rice, and corn. Due to extreme weather conditions and unpredictable climate shifts, these crops were slowly becoming unprofitable.

"Because of climate change, the rice field usually utilized twice a year is now only used once because of the absence of rain. Some of our farmers were not even able to plant because of longer droughts which caused



Model farm site of the AMIA village in Brgy. Himbubulo Weste, Guinayangan, Quezon

#### Climate Change

them to earn less than before," said Belina Rosales, Guinayangan's municipal agriculturist.

"During the intervention of AMIA in partnership with the International Institute of Rural Reconstruction (IIRR) back in 2017, our farmers were taught various techniques on how to cope up with climate change.

According to Rico Lacaba, the project manager of the climate-smart agriculture of IIRR, their partnership with AMIA is really beneficial to the farmers in Guinayangan, Quezon.

"As part of a non-government organization which aids the local government unit in testing technologies and interventions, AMIA effectively served as the vehicle to further disseminate these to our farmers and fishers," he said.

"They were trained to plant different kinds of vegetables during rice off-season. Taking care of livestock such as native pigs, goats, and chickens were also introduced in their livelihood," Rosales shared.

Guillerma Alpeler, farmer for 12 years from Brgy. Himbubulo Weste, Guinayangan, also attested to the success of AMIA.

As a member of the Samahan ng Maggugulay at Magpuprutas sa Bayan ng Guinayangan, AMIA helped improved her crops and ways of farming.

"The income we got from our vegetable harvest is significantly higher compared to when we were just plainly reliant on the productivity of our coconut plantation. I can attest to this because I, myself, was able to earn 9,000 pesos per day during the harvest season of vegetables," Alpeler said.

Through Farmer Field School, they received trainings and technical assistance on how to make their own fertilizers and organic pesticides.

Alpeler added that "we are really fortunate to join this initiative. That's why I pursued and continued my participation in the program. I wanted to gain more knowledge even though I was able to attend formal trainings before. I am very grateful to AMIA for giving us these blessings. We were now able to provide the needs of our families and most importantly

form a more resilient bond within the community."

Guinayangan Mayor Cesar Isaac further explained that AMIA facilitated the development of agriculture in their municipality.

"This project by AMIA in collaboration with IIRR is really important because they equipped the farmers with enough knowledge in crop management, cost production, and sustainable agriculture during extreme weather conditions," Mayor Isaac added.

Jonathan De Castro from San Francisco, Quezon, one of the beneficiaries, also shared that he learned how the weather conditions affect their soil and crop productivity. This encouraged him to learn more about the climate-smart agriculture approach.

De Castro said that with AMIA, their prior knowledge was enhanced especially on how they manage their soil during heavy rains.

"They taught us different kinds of crop varieties together with some solutions on soil erosion," he explained.

De Castro added, "before AMIA came into our barangay, the R-18 variety is what we usually use during rice plantation. When the AMIA project was implemented here, the RC-282 variety was introduced to us. We saw that RC-282 was indeed more productive than R-18. Before, we used to plant 5-7 seedlings but with RC-282, 2-3 seedlings are enough."

"We introduced drought-tolerant rice varieties to the farmers such as the RC-282, GSR-11, RC-27, RC-25 and many more. From the varieties introduced, RC-282 has the highest yield. The farmers gained at least four tons of harvest per hectare when we tested the variety in the field," said Aida Luistro, project leader from Department of Agriculture-CALABARZON.

She further explained, "in corn, we tried the intercropping, strip cropping, and the use of leguminous crops for added fertilization."

Luistro added, "in the case of San Francisco, they taught the proper execution of the Sloping Agricultural Land Technology as they were

prone to soil erosions, and the incorporation of leguminous crops for fertilization."

Even though the project brought the agricultural sector of Guinavangan and San Francisco into good shape, there were still some challenges during its implementation.

"It was kind of difficult during its introduction because this approach is new when it comes to agricultural development," said Luistro.

The objective of the climateresilient agriculture is to increase farm productivity while enhancing the community's farming adaptation to climate change.

"We promoted climate-smart agriculture technologies and practices to other farmers through the conduct of Farmers' Field Day wherein, our farmer cooperators shared their experiences and learnings in applying those technologies. We also facilitated Farmers Forum cum Planning Workshop with the local government units to draft the sustainability plan for the projects," she explained.

With that, Guinayangan and San Francisco were considered one of the model communities in terms of climate-smart agriculture. The farmers have indeed gained resiliency over the years. Locaba from IIRR pointed out that this project gave the farmers two kinds of things—the tangible and the non-tangible.

The tangible things acquired by the farmers were food security, additional income, and value-chain technologies while the non-tangible things were the knowledge gained through trainings and seminars, the cohesiveness of the community, and the good attitude towards their livelihood.

Farmers now were not just resilient but also more than willing to share what they know to others and this will really make a big difference. ###

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### **BAR attends in 16th NOAC**

SHOWCASING the many successes of the implementation of organic agriculture in the country, the Bureau of Agricultural Research (BAR) participated in the celebration of the 16<sup>th</sup> National Organic Agriculture Congress (NOAC) on 11-15 November 2019 in Alfonso, Cavite.

Carrying the theme "OA4K: Organikong Agrikultura sa Kumikitang Kabuhayan para sa Kalusugan at Kapaligiran," the congress also aimed to further promote organic agriculture in the country.

Acting Agriculture Secretary William Dar; Department of Agriculture (DA) Undersecretary for High Value Crop Development Program and Rural Credit, and National Organic Agriculture Board Alternate Chair Evelyn Laviña; DA Assistant Secretary for Special Affairs and BAR Director Nicomedes Eleazar; National Organic Agriculture Program Coordinator Christopher Morales; Bureau of Agriculture and Fisheries Standards Director Vivencio Mamaril; DA-CALABARZON Regional Executive Director Arnel de Mesa; Bureau of Plant Industry Assistant Director Gerald Glenn Panganiban; Municipal Mayor Randy Salamat; and DA-CALABARZON Organic Agriculture Program Focal Lucia Campomanes graced the opening program of the activity.



Dr. Nicomedes Eleazar, DA asst. secretary for special affairs and BAR director, leads the bureau's staff during the 16th NOAC. PHOTO: JMSURIO

Meanwhile, as part of the celebration, an awards night was also held to recognize outstanding individuals, farmers' groups and organizations, researchers, partner implementers, and students with significant efforts leading to the promotion of organic agriculture in the country. Usec. Laviña and Engr. Morales spearheaded the said awarding.

Winners of their respective categories were: the Provincial Local Government Unit of Batanes, NOAC Achievers' Award for the Provincial Category; Municipal Local Government Unit of Bislig, Surigao

del Sur, NOAC Achiever's Award for the City/Municipal Category; Dr. Catherine Buenaventura of the Cordillera Administrative Region (CAR), NOAC Achievers' Award for the Provincial Focal Person Category; Jimmy Rowell Sombilla of Central Luzon Region, NOAC Achievers' Award for the City/ Municipal Focal Person Category; Jennifer Dulnuan of CAR, NOAC Achievers' Award for the Agriculture Extension Worker Category; Marsan family of CAR, NOAC Achievers' Award for the Organic Farming Family Category; Agri-Planters and

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