# Chronic

The official newsletter of the Department of Agriculture-Bureau of Agricultural Research

# CLSU develops test kits for ASF monitoring

The Department of Agriculture-Bureau of Agricultural Research (DA-BAR) shows its support by allocating Php 40-M for the development of intensified diagnostic strategies including mass production of rapid test kits for the African Swine Fever (ASF) monitoring.

This is part of the Php 80-M commitment of the Department through the DA-National Livestock Program (NLP) and DA-Bureau of Animal Industry (BAI) in line with the instructions of Agriculture Secretary William Dar to elevate and accelerate the DA's effort in combatting ASF.

Deemed as ASF Virus Nanogold Biosensor, the test kits can be used as rapid screening test for ASF biosecurity, monitoring, and surveillance in the country at a much cheaper and faster rate.

Dr. Clarissa Yvonne J. Domingo of the Central Luzon State University (CLSU) developed the technology in partnership with DA-BAI.

Further aimed to revive the hog industry, these ASF Virus Nanogold Biosensor Test Kits are to be utilized as component activities by the



"Bantay ASF sa Barangay" (BABay ASF) Program of DA.

A meeting vis-à-vis the research for development (R4D) project on the development of intensified diagnostic strategies including mass production of rapid test kits for ASF were attended by various officials and staff from CLSU, DA-BAI, DA-NLP, DA-National Meat Inspection Services, DA Biotech Program Office, and DA-BAR on 28 January 2021 via video conferencing.

For sustainability of the project, DA-NLP already have developed the "Bantay ASF sa Barangay" budget for 2022-2023 in order to ensure the availability of test kits, as well as other polymerase chain

reaction tests, hence, continue the surveillance and control of ASF.

"There should be a proper documentation and monitoring relative to the technology assessment of the kits, as well as a safety and efficacy assurance from DA-BAI," DA-BAR director Dr. Vivencio R. Mamaril said as regards to the investment that will be done by the bureau.

Meanwhile, DA-BAR Research **Program Development Division** head Raymond Patrick L. Cabrera mentioned that proposal should also provide plans on the commercialization and sustainability of the technology, and not only on the mass production. ###(Jireh Alodia R. Laxamana)

#### Director Mamaril lays down marching orders for 2021

Dr. Vivencio R. Mamaril, director of the Department of Agriculture-Bureau of Agricultural Research (DA-BAR) emphasized the bureau's critical role as the national research for development (R4D) coordinating agency of DA in not just making research happen but also putting these researches in a farm-level application.

This he stated during the conducted DA-BAR Annual Review and Planning Workshop on 7-8 January 2021 in Diliman, Quezon City to assess past strategies and formulate action plans under a new management.

So, to ensure continuous operation amidst current health crisis, Director Mamaril discussed salient points to consider which include continuous monitoring and implementation of R4D projects, judicious fund utilization, transition of the bureau into the threedivisional set-up, and aligning the bureau's goals and activities to the Agriculture Secretary's One DA approach.

With this, Director Mamaril, also acknowledged the staff bureau for their relentless efforts and support to the activities and programs of DA-BAR. ▶4

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# BAR supports smart cultivation technologies to expand urban agriculture



Agriculture Secretary William Dar (right) leads the groundbreaking of the Smart Greenhouse.

Following the directions and strategies of the Department of Agriculture (DA) Secretary William Dar to continuously make the agri-fishery sector resilient under the New Normal, the DA-Bureau of Agricultural Research (BAR) and the DA-Bureau of Plant Industry (BPI), support the establishments of smart cultivation technologies producing crops all-year-round suitable for urban setting.

On January 28, during the 91st Founding Anniversary of DA-BPI, Secretary Dar led the groundbreaking of controlled environment agriculture technologies, namely: Smart Green House and Indoor Cultivation System, both of which are part of BPI's "Surviving and Rebooting Agriculture in the City as Urban Farming" project.

Both cultivation technologies use controlled microclimate conditions suitable for growing crops all-yearround

They also make use of vacant indoor spaces productive making them suitable urban areas

producing crops that are fresh and pesticide-free.

Secretary Dar, in his speech, instructed DA-BPI to include community gardening in various schools, barangays, and subdivisions nationwide as it expands the implementation of DA's urban agriculture under the umbrella Plant, Plant, Plant program.

He added that urban agriculture is one way to mitigate high food prices by providing Filipino households with fresh vegetables produced right in their backyard and community gardens. It is also an effective strategy to improve food availability and accessibility and attain food security.

Also inaugurated were the Tissue Culture Laboratory and National Mushroom Culture Laboratory and Training Facility.

The Tissue Culture Laboratory, funded by DA-BAR, serves as an in-vitro gene bank to ensure the production of clean, quality, and disease-free planting materials of different high-value crops through rapid multiplication.

While the Mushroom Culture Laboratory is established to ensure the production of high-quality mushroom cultures and planting spawns. ### (Rita T. dela Cruz)

**BAR CHRONICLE** highlights the bureau's activities as the country's national coordinating agency for agriculture and fishery R4D, and provides updates on NaRDSAF-member institutions.

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### Nueva Vizcaya onion farmers' tales



Elder Edeston (left) and Ronie Mapalo (right) shares their testimonies.

Onion Farmers from Nueva Vizcaya shares their tales during the conducted field days in Bagabag and Aritao, Nueva Vizcaya.

Elder Edeston, farmer cooperator from Bagabag, Nueva Vizcaya tried

the Department of Agriculture (DA) -Cagayan Valley intervention on off-season onion. With a 230 sq.m. off-season onion field, he now reaps 125 kilograms sold at Php150.00/kg.

Edeston refers to the project implemented by DA-Cagayan Valley titled, "Outscaling on Off-Season Onion Production in Rice-based areas in Nueva Vizcaya" which was an off-shoot of the Community-based Participatory Action Research project conducted in 2017-2019.

Funded by the DA-Bureau of Agricultural Research, the project aimed to improve the production efficiency through off-season planting, use of quality planting materials,



The Department of Agriculture (DA) swiftly moved to help farmers nationwide combat fall armyworm (FAW) by enlisting researchers of the University of the Philippines Los Baños (UPLB) on 28 January 2021 at the National Crop Protection Center (NCPC), Los Baños, Laguna.

Dr. Leocadio Sebastian, chief of staff and DA undersecretary, with the help from the leading entomologists of the university, identified research gaps and potentials to better devise management strategies against FAW.

Research needs identified include better ways to lure or catch FAW, crop diversification strategies, and field sanitation initiatives.

Training protocols for farmers on the management of FAW were also seen pertinent, helping in the early identification of infestations on the field. In 2020, the DA-Bureau of Agricultural Research (BAR) supported two UPLB research initiatives on FAW management.

One project aims to explore the use of biological control agents against true armyworm, onion armyworm, and fall armyworm.

The technology which would be developed from the said project will serve as a better and safer option for FAW management, particularly for corn and onion farmers, while also advocating the reduced use of chemical insecticides.

Meanwhile, another project focuses on the development of lures and traps for fall armyworms using pheromones.

The said pheromones will be used for monitoring, trapping, attracting, and killing fall armyworms.

The project targets to produce locally developed pheromone blends and lures that are costeffective.

Six new research proposals were submitted to DA-BAR during the said meeting.

DA-BAR director Dr. Vivencio Mamaril called for urgent measures to mitigate the pest in time for summer. ### (Jhon Marvin R. Surio)

## from off-season onion production

protected cultivation, and appropriate nutrient management.

Further, Chonalyn A. Pascua, coproject leader, shared that as a result of the CPAR project, farmers attained an average yield of 1.21 and 1.41 mt/1,000 sq.m. and income of P36, 636.85 and P80,495.00, respectively.

Another testimony came from Ronie Mapalo, cooperator of Aritao, Nueva Vizcaya. Despite the effects of Typhoon Ulysses and occurrence of the series of typhoons in the country, his initial production yielded 200 kg with a net income of P10,856.14 from a 310.0 sq.m. He also cited the use of rainshelter during off-season as introduced by the DA.

The noted improvement in productivity in onion production and profitability for onion farmers, prompted to further outscale offseason onion production. This is in support to the enhancement of food production and improvement in food adequacy to ease the threat of hunger in times of pandemic.

Interventions include: Super Pinoy variety, raised beds and solarization, rain shelter or protective covering, and the application of Trichoderma (60 packs/ha) and calcium boron (5 liters/ha). ### (Ma. Eloisa H. Aquino, and Diana Lim and Caryl Maria Minette Ulay of DA-Cagayan Valley)

## DA-BAR streamlines its organizational structure

In line with the Department of Agriculture's (DA) efforts to efficiently implement agriculture and fishery programs, the DA-Bureau of Agricultural Research (BAR) streamlined its organizational structure effective 4 January 2021.

The rebooting was opportune as DA recently implemented the 12 key strategies under the "One DA" holistic framework and inclusive approach which aims to reach a 2.5 percent growth target for the sector by year end.

At the helm were Dr. Vivencio R. Mamaril, the new DA-BAR director, and Joell H. Lales, as the bureau's new OIC-assistant director. Lales, formerly DA-BAR-Program Development Division head, replaced Digna L. Sandoval who opted to retire early.

#### **◀1...Director Mamaril**

Furthermore, to supplement the director's orders and keep the bureau abreast of the Secretary's directives and thrusts, DA-BAR assistant director Joell Lales gave an overview of the One DA Approach and the 3R Framework. He included the discussion on what the bureau can consider during the preparation for the New Normal R4D Agenda.

Updates and upcoming initiatives for the 2021 first quarter were also laid out by the bureau's division and unit heads: Raymond Patrick Cabrera for Research Program Development Division; Anthony Obligado for Research Coordination Division; Salvacion Ritual for the Knowledge Management and Information Systems Division; Judith Maghanoy for the Budget Unit; and Roberto Quing Jr. for the Accounting Unit. ### (Chantale T. Francisco)

The bureau will be working under its three divisions: Research Program Development Division (RPDD), Research Coordination Division (RCD), and Knowledge Management and Information Systems Division (KMISD).

RPDD is in charge of planning, formulation, and updating of national and regional RDE agenda and program as well as facilitating the review, evaluation, and funding of project proposals.

Raymond Patrick L. Cabrera and Cynthia Remedios V. De Guia will serve as acting-division head and OIC-assistant division head, respectively.

RCD will coordinate, monitor, and evaluate the implementation of agriculture and fishery RDE projects and activities. Anthony B. Obligado, head; and Julia A. Lapitan, assistant head, will lead the division's four sections.

KMISD is responsible for translating RDE outputs into useful knowledge products and services, and enhancing access to scientific literature and information exchange with the National Research and Development System in Agriculture and Fisheries institutions and organizations.

Salvacion M. Ritual as head and Evelyn H. Juanillo as assistant head will be on top for the division.

Meanwhile, the administrative support services of the bureau will be under the leadership of the bureau's assistant director.

The organizational reboot was based on the Department of Budget and Management-approved rationalization plan of the bureau. ### (Rena S. Hermoso)

### Lales designated as new DA-BAR OIC-deputy

With the retirement of former OIC-assistant director Digna L. Sandoval, Mr. Joell H. Lales, Chief Agriculturist, is designated as the new OIC-assistant director of the Department of Agriculture-Bureau of Agricultural Research (DA-BAR) through DA Special Order no. 844, series of 2020 signed by Agriculture Secretary William Dar on 16 December 2020.

Asst. dir. Lales shared his vision to further support in elevating the DA-BAR's research for development (R4D) strategies and programs to be better aligned with the DA's Food Security and Resiliency Framework and the One DA approach.

"I share the aspirations of the DA-BAR management and the entire organization in elevating R4D to



greater heights as primarily pursued by our Agriculture Secretary—to be more responsive and have a more meaningful pursuit towards generating farm and industry-level applications. I will be extending my full assistance to the best that I can in this capacity to our Director and the entire DA-BAR management in taking stewardship of all BAR supported R4D programs, activities, and projects," said Asst. Dir. Lales.

Prior to his designation, asst. dir. Lales was the chief of the DA-BAR Program Development Division (now Research Program Development Division), for almost a decade, from 2011 to 2020. He also served as the bureau's Planning Officer from 2006-2010. ### (Clarisse Mae N. Abao)

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RDMIC Bldg., Elliptical Road corner Visayas Avenue
Diliman, Quezon City, Philippines 1104

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