

Researching for better cooking skills—the way to go!



photos by Dr. Marlowe U. Aquino



Research institutions working on food science and culinary arts made sure that these food discoveries will entice and trigger the curiosity of Filipinos as food lovers.

The 21st Anniversary celebration of the Bureau of Agricultural Research (BAR) will present a variety of innovative activities that will stage the creative innovativeness of the Filipinos through a cooking demonstration of simple yet affordable and nutritious agricultural products.

BAR partners will take center stage to demonstrate preparations of nutritious delicacies and menu for every Filipino family with limited budget in their pockets.

Food preparations will range

from fruit- and vegetable-based dishes to grain-based dishes. Meat, poultry, and dairy products will also be included in the menu to add mouth-watering and delicious preparations.

What is interesting in this activity is the fact that the agricultural products used are based on intensive research from the raw materials to processed products. Research institutions working on food science and culinary arts made sure that these food discoveries will entice and trigger the curiosity of Filipinos as food lovers.

To top it all, the preparations and demonstrations will encourage individuals to think and venture into simple business which will support the overall activities and vision of the Department of Agriculture making business out of agricultural activities.

Enjoy the fun and join BAR as it celebrates the outputs of research and development in agriculture and fisheries food, wine, clothes, and technologies for innovation and business. (Marlowe U. Aquino, PhD)



RDMIC Bldg., Visayas Ave., cor. Elliptical Rd.
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**Special
Anniversary
Issue**

BAR marks 21 years; Yap and Angara to attend



Attending the event as guests of honor are Department of Agriculture (DA) Secretary Arthur C. Yap and Senator Edgardo J. Angara, chair of the Senate Committee on Agriculture and Food.

Secretary Yap has been instrumental in the implementation of the National Technology Commercialization Program (NTCP), one of the banner programs of BAR, believing that an effective way to harness the gifts of technology and its fast advancement is to bring them down to the marginalized sectors of society. And that the only way to sustain a technology is through commercialization.

Senator Angara has made some important contributions to agricultural development during his term as agriculture secretary which was marked by the implementation of breakthrough agricultural programs on food security, seed and crop production, and strong support to R&D.

Recently, he has been advocating for an adequate funding for the Agriculture and Fisheries Modernization Act (AFMA).

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Agri and Fisheries TechCom Forum and Exhibit opens at SM Megatrade

The innovative spirit and entrepreneurial inclination of the Filipinos shine as the 2008 Agriculture and Fisheries Technology Commercialization Forum and Exhibit formally kicks off on August 21 at the SM Megatrade Hall 2, 5th Level, SM Megamall, Mandaluyong City. The activity coincides with the 21st Anniversary Celebration of the Bureau of Agricultural Research (BAR).

The forum and exhibit, which will run from August 21 to 24, will feature emerging technologies and trends in Philippine agriculture through product exhibition and a series of seminars on practical and in-demand livelihood sources today from organic agriculture to health and wellness to proper product packaging and labeling.

On August 21, the activity will start with the opening of the booth exhibits and product displays to be led by guests of honor, Agriculture Secretary Arthur C. Yap and Senator Edgardo J. Angara. They will be joined in by National Academy of Science and Technology (NAST)

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BAR leads launching of SSNM for maize

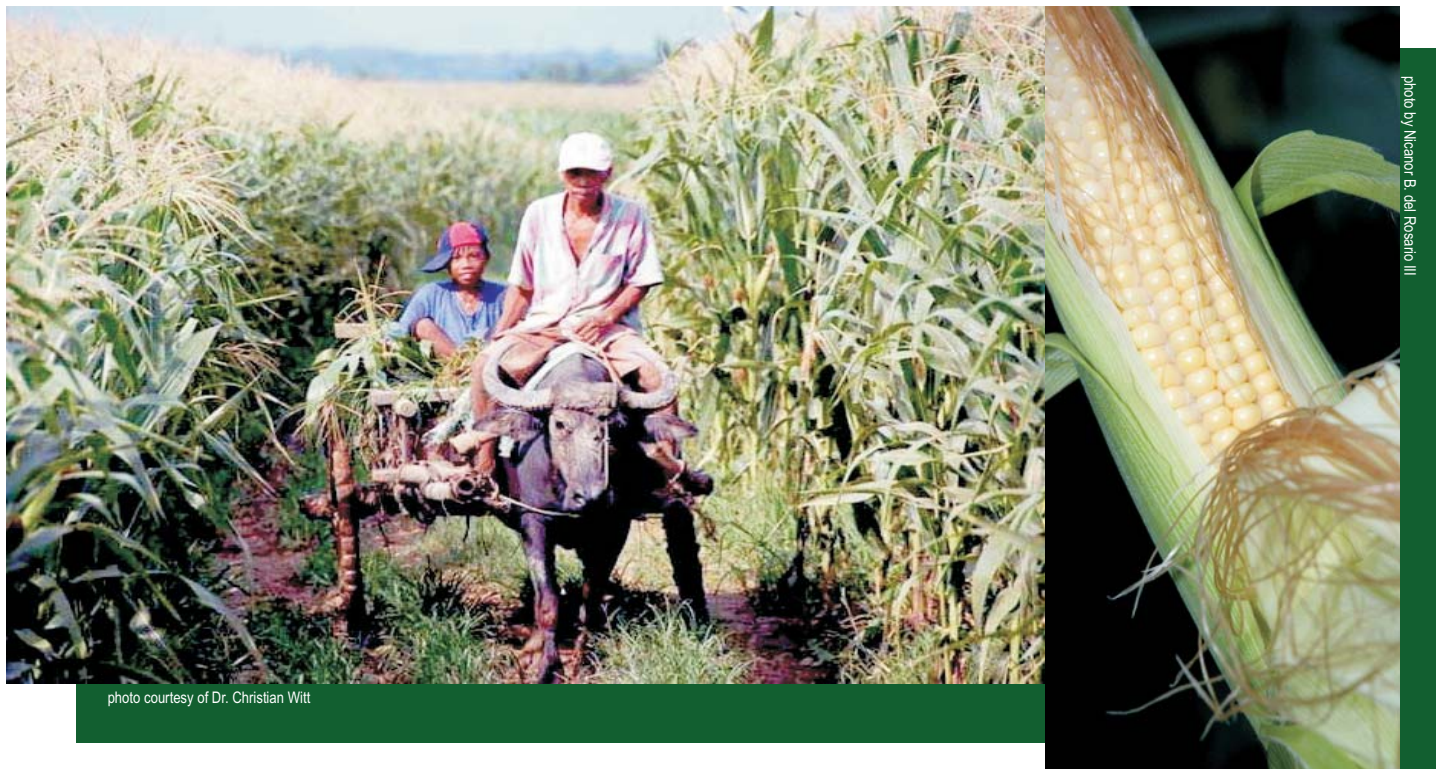


photo by Nicanor B. del Rosario III

photo courtesy of Dr. Christian Witt

The Site-Specific Nutrient Management (SSNM) for maize in the Philippines, a national initiative of the University of the Philippines Los Baños and the Department of Agriculture-Bureau of Agricultural Research (DA-BAR) to increase the productivity and profitability of maize farming through site-specific, integrated crop and nutrient management, will be officially launched on 21 August 2008.

The launch is a part of a week-long activities of the National Technology Forum and 21st BAR Anniversary.

The project is part of a multi-national research initiative that aims to quantify and understand the yield potential of maize in favorable environments of Southeast Asia and develop a new SSNM approach and best crop management practices for maize through on-farm research in major agro-ecological zones of the Philippines.

The project was initiated in 2005 under the leadership of Dr. Christian Witt, director of the Southeast Asia Program (SEAP) of the International

Plant Nutrition Institute (IPNI).

DA Assistant Secretary Dennis B. Araullo, chair of the SSNM National Steering Committee, will have a five-minute presentation on the overview and updates of the SSNM for Maize in the Philippines project. In the afternoon, Dr. Christian Witt will lecture in a seminar on SSNM for Maize.

Trial results of the three pilot sites on SSNM located in Bukidnon, Isabela, and Tarlac will also be exhibited. (Christmas B. de Guzman)

improved production management systems and product packaging and processing. The synthesized information created a difference in the overall direction towards a responsive and innovative agricultural and fisheries development.

Furthermore, BAR has responded to the new trends in agricultural development by incorporating cyber technology to effectively deliver and manage R&D outputs. It resulted to community outcomes because of the impacts of BAR's two banner programs: *Community-based Participatory Action Research (CPAR)* and *Agriculture and Fisheries Technology Commercialization (TechCom)*.

Recently, BAR launched an interactive monitoring and evaluation system (M&E) that immediately provides a system for effective R&D decision-making capability and change resource management for community development.

Continuing initiatives in R&D management

BAR's initiatives are anchored on the vision of improving the lives of people through R&D excellence. The Bureau opened avenues to make its programs attuned with the changing times.

With BAR at the helm, it orchestrated the DA-SUC-LGU

partnership to support the efforts of DA in addressing food security and sustainability. It addressed the challenge of globalization by enhancing R&D initiatives through information and knowledge management. With the customization of interactive information systems, it provided focus and depth on farmers' resource management, technology requirements, technology profiles, and updates that are now being shared to end-users in real time. Instituting the DA-LGU initiatives through community-based activities enabled the community and people to be more involved encouraging self-reliance and empowerment.

Moving forward

The lives of BAR's clientele, especially the researchers, scientists, development practitioners, and research managers, have changed with the development and implementation of focused research programs and activities. They produced quality outputs that are now being used by the farmers and fisherfolk for increased production and profit.

As the Bureau adds another year to its service, it is important to reflect and re-examine the pass and hope to affirm what has been achieved so far. Even so, it is ironic to say that every sector of the society would like to say, "Yes we did it!"—even though the impact is not truly felt.

In the agriculture sector, making

a difference is what BAR is made to do. The effects of climate change, the changing farmer priorities, the declining support to agricultural development especially education, training and extension, and the limited investment to R&D, are here to stay but the question is: Are we willing to take another step towards improving our lives?

BAR is now at the crossroads of responding to the calls of the people for appropriate technologies and as mandated, providing avenues for effective and efficient research and development. Whatever is the calling, BAR can stand tall and proudly say that it has contributed in its own little way to make the lives of the Filipinos better.

If R&D is the centerpiece of agricultural development, then let not our own strength be the sole worker but a collaborative and complementing efforts be shared to all our partners in development.

The Bureau's continuous search for viable technologies and sharing of agricultural knowledge are just little facets of our cause. As we work for more innovative approaches towards agricultural development, we encourage all of you to be in tandem with us.

As we celebrate BAR's new crusade for interactive and innovative endeavors in the coming years, may we work together and share our gains in agricultural research and development. 🌱



photo by Ricardo G. Bernardo

“1KA-21 ANIBERSARYO NG PATULOY NA PAGSISIYASAT SA TEKNOLOHIYA AT KAALAMAN PANG-AGRIKULTURA”



The official monthly publication of DA-BAR

RITA T. DELA CRUZ
managing editor/layout

MANUEL F. BONIFACIO, PhD
consulting editor

MARLOWE U. AQUINO, PhD
FELIPE S. DELA CRUZ, PhD
RITA T. DELA CRUZ
CHRISTMAS B. DE GUZMAN
MA. ELOISA E. HERNANDEZ
MIKO JAZMINE J. MOJICA
writers

RICARDO G. BERNARDO
ANTHONY A. CONSTANTINO
reproduction/printing

JULIA A. LAPITAN
VICTORIA G. RAMOS
circulation

JULIA A. LAPITAN
head, ACS

MARLOWE U. AQUINO, PhD
head, MISD

NICOMEDES P. ELEAZAR, CESO IV
adviser

BAR Chronicle is the monthly publication of the Bureau of Agricultural Research (BAR) of the Department of Agriculture (DA), which is mandated to ensure that all agricultural researches are coordinated and undertaken for maximum utility to agriculture. This publication provides regular updates on BAR's activities as the country's national coordinator for agriculture and fisheries R&D. It also highlights features and news articles concerning NaRDSAF-member institutions.

For subscription and inquiries please contact: **Applied Communication Section**, Management Information and Systems Division (MISD), Bureau of Agricultural Research, Department of Agriculture 3/F RDMIC Bldg., Visayas Ave., cor. Elliptical Rd., Diliman, Quezon City 1104 PHILIPPINES
Telephone No. +63 (02) 928-8505 local 3026-3027 Fax: (02) 927-5691 or (02) 927-0227
e-mail: misd-acs@bar.gov.ph Articles are also available online. Please visit us at: <http://www.bar.gov.ph>

21st BAR Anniversary: Continuous search for technology and knowledge towards agricultural dev't

Marlowe U. Aquino, PhD



photo by Rita T. dela Cruz

This year marks another milestone for the Department of Agriculture-Bureau of Agricultural Research (DA-BAR) as it celebrates 21 years of effective research and development (R&D) management in agriculture and fisheries.

Carrying the theme, *Ika-21 Anibersaryo ng Patuloy na Pagsisiyasat sa Teknolohiya at Kaalaman Pang-agrikultura*, BAR intensifies its proactive and coordinative role in managing the agriculture and fisheries R&D of the country.

Through the years, BAR, together with its partner-institutions from the government, non-government, and private sector, has actively responded to the call of

providing timely and appropriate technologies for the key players and stakeholders of agriculture and fisheries. Several initiatives have been prioritized to address what was deemed necessary to effect change in agricultural development. So far, these have been considered the influencing factors of R&D management.

In search of a viable development modality

As the Bureau turns 21, it envisions to make R&D the lifeblood of the people who work on their way to improve and find meaning in life. With this in mind, the various programs and activities were realigned to highlight institutional upgrades and develop initiatives that address the aspirations and needs of its clientele – the farmers and fisherfolk.

The viable development modality that BAR instituted in search of information and technology is INFORMATION-SENSITIVITY AND INFORMATION-ORIENTED RESOURCE MANAGEMENT FOR COMMUNITIES. This modality has changed the direction of BAR programs and service delivery owing to the voluminous and numerous research outputs.

BAR's management saw that R&D activities of researchers, scientists, development practitioners, and other key players complement the continuous search of relevant, appropriate, and applicable technologies for a more sustainable production and profitable endeavors. Analyzing and synthesizing R&D outputs made them applicable for

BAR-supported book on postharvest technology is 2008 NAST Outstanding Book

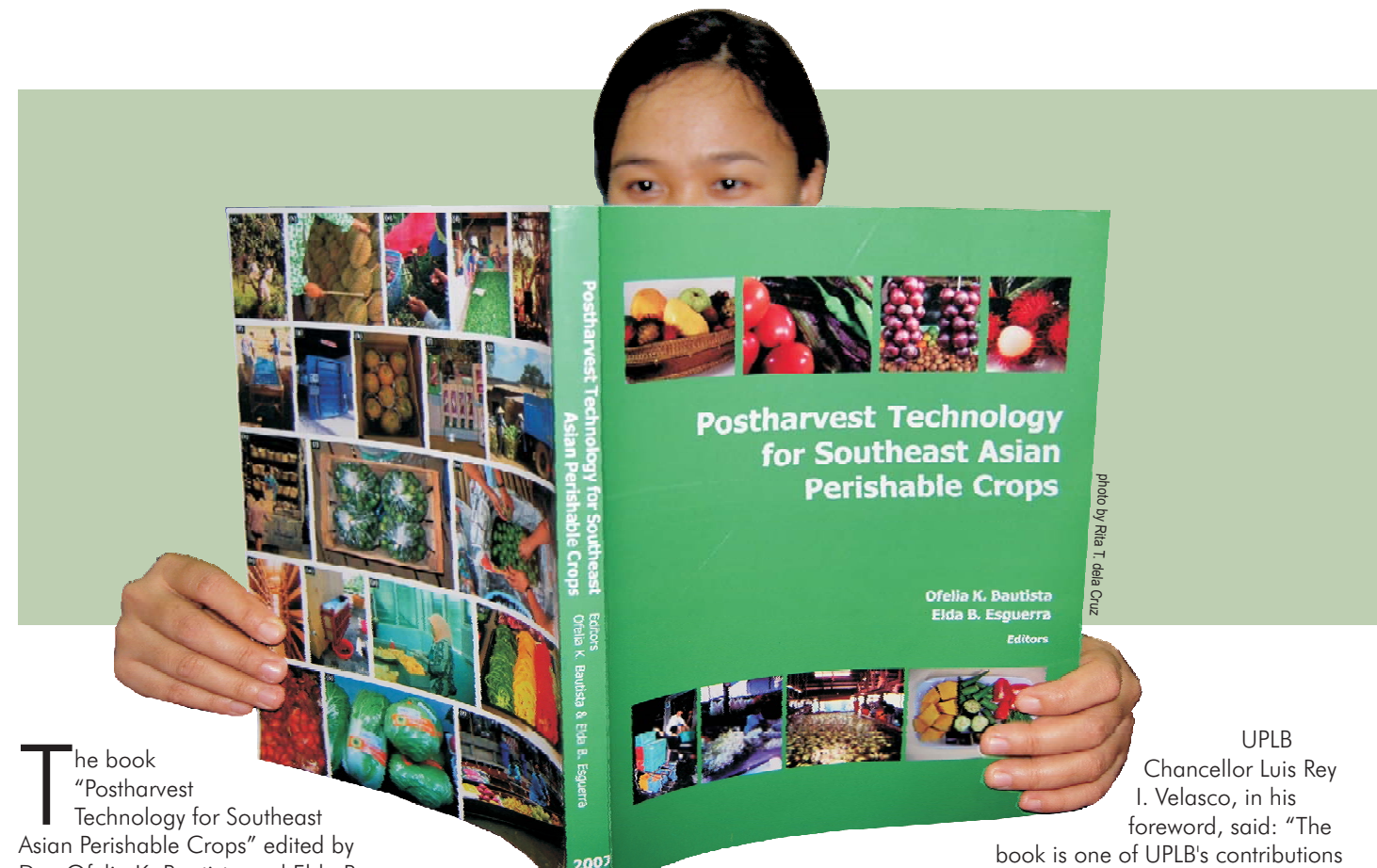


photo by Rita T. dela Cruz

The book "Postharvest Technology for Southeast Asian Perishable Crops" edited by Drs. Ofelia K. Bautista and Elda B. Esquerro of the University of the Philippines Los Baños (UPLB) won the 2008 Outstanding Book.

The award was given during the 30th Annual Scientific Meeting of the National Academy of Science and Technology (NAST) on 10 July 2008 at the Manila Hotel.

The book, published by UPLB and the Bureau of Agricultural Research (BAR), is a follow-up to the first edition of Dr. Bautista's "Postharvest Technology for Southeast Asian Perishable Crops" published in 2000, which serves as a recognized reference material for agricultural universities and colleges that offer courses on postharvest.

The second edition is an update of the first featuring the latest technologies in postharvest handling and was expanded to cover eight sections: overview of postharvest handling (Section 1), basis of postharvest technologies (Section 2), harvesting and modifiers of quality before harvest (Section 3), technologies (Sections 4-7), and economic feasibility and social dimensions of postharvest systems

improvement (Section 8).

"The volume is intended both as a textbook for students and a reference for professionals interested in postharvest handling of produce," Dr. Bautista said. She added: "The book is based mainly on the data and information generated or gathered by the authors, thesis students, and colleagues supplemented by their experiences and insights in research, teaching, and conducting training courses, consultancies, and in meetings with policymakers and practitioners in the field here and abroad."

UPLB Chancellor Luis Rey I. Velasco, in his foreword, said: "The book is one of UPLB's contributions to reducing postharvest losses, maintaining quality of fresh produce and ensuring food safety." He further said that the book comes at an opportune time in UP's centennial celebration, giving back to the Filipino people such body of knowledge and building a legacy of distinct excellence in the field of agriculture.

Dr. Bautista obtained her PhD in Horticulture from UPLB and University of California Davis as part of the joint program of the two universities. She is one of the pioneers at the Postharvest Horticulture Training Research Center (PHTRC) and an adjunct professor of the Crop Science Cluster at UPLB's College of

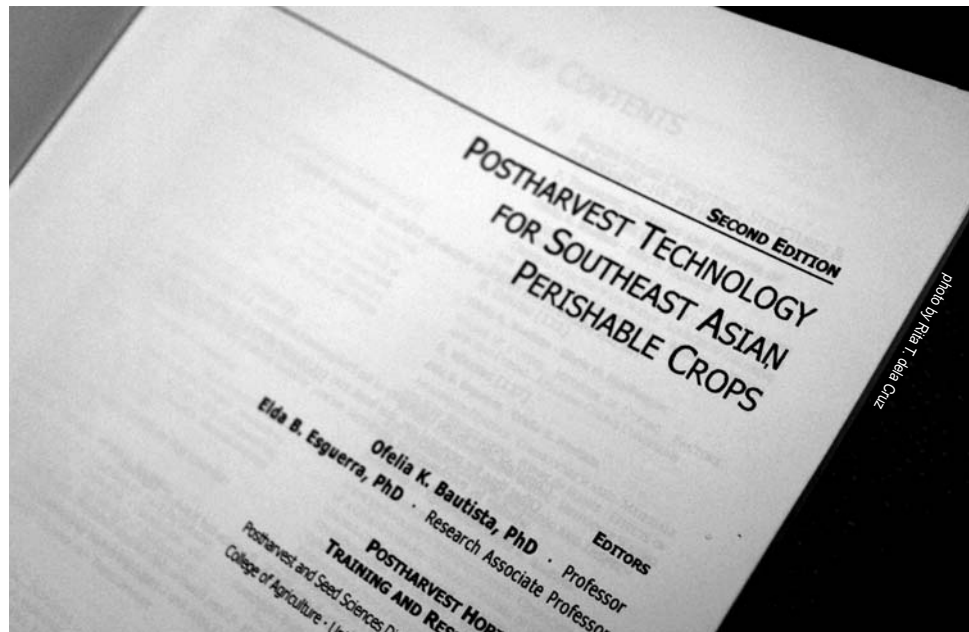
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**...the book is one of UPLB's
contributions to reducing postharvest
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produce and ensuring food safety.**

Agriculture. Co-editor Dr. Esguerra graduated from the Kagawa University in Japan with a PhD in Postharvest Horticulture. She is a research associate professor and head of the Postharvest and Seed Sciences Division of the Crop Science Cluster.

The other five winners of the Outstanding Book Award were:

- ❑ **The Unfolding Gene Revolution: Ideology, Science, and Regulation of Plant Biotechnology** by Eufemio T. Rasco Jr. (published by International Service for the Acquisition of Agri-biotech Applications and the SEAMEO Southeast Asian Regional Center for Graduate Study and Research in Agriculture, 2008);
- ❑ **Philippine Nutrition Facts and Figures** prepared and edited by Nutritional Assessment and Monitoring Division, Food and Nutrition Research Institute (published by the Food and Nutrition Research Institute, Department of Science and Technology);
- ❑ **Gender, Information Technology and Health** by Jinky Leilani del Prado-Lu (published by the University of the Philippines Press, 2005);
- ❑ **Handbook on Termites** by Menandro N. Acda (published by the University of the Philippines Los Baños, 2007); and
- ❑ **Fixing Society: The Inside World of Fixers in the Philippines** by Ronnie V. Amorado (published by the Research and Publication Office of the Ateneo de Davao University, 2007).



The Outstanding Book Award is one of the six awards given by NAST. The others are:

- ❑ **Outstanding Young Scientist (OYS) Award** is given to young Filipino scientists (40 years and below) who have made significant contributions to science and technology.
- ❑ **Third World Academy of Sciences (TWAS) Award** in the Philippines is awarded to an outstanding young Filipino scientist by NAST and the Third World Academy of Sciences.
- ❑ **TWAS NAST DuPont Talent Search for Young Scientist** is a project of NAST and DuPont to encourage young people to pursue careers in science (scientific papers in basic or applied science).
- ❑ **Hugh Greenwood Environmental Science Award** recognizes outstanding scientific and technological research works that contribute to environmental protection and conservation.

- ❑ **ProScientia Transformafix Award** is an achievement award for extraordinary enterprise established by corporate institutions operating within the Philippines resulting in notable practical success due to pioneering and novel science and technology and leading to measurable increase in the global competitiveness of the Philippines.

NAST, the country's highest advisory and recognition body concerning science and technology, gives recognition to deserving scientists and researchers for individual or group works that have contributed to the advancement of science in the country. These awards are given not only to recognize outstanding achievements but also to provide meaningful incentives to scientists and researchers; and in encouraging young people to pursue careers in science. (Rita T. dela Cruz)

BAR marks... from page 1

According to him, AFMA is the modernization blueprint of the agricultural sector but sound programs have to be combined with adequate funding. The lack of funding support could disrupt what could have been the successful modernization of Philippine agriculture.

BAR has prepared a line-up of activities highlighting its anniversary celebration. These include a book launching of seven BAR-supported publications, recognition of two BAR-supported projects on postharvest technology and banana research, program launching of a multinational research initiative on the Site-Specific Nutrient

Management (SSNM) for Maize in the Philippines, and awarding of the 2008 BAR Outstanding Employees.

Coinciding the BAR Anniversary celebration is the holding of the National Agriculture and Fisheries Technology Commercialization Forum and Exhibit to be participated in by at least 70 exhibitors from all over the Philippines showcasing various products and technologies generated from research. BAR will also feature a series of seminars and presentations on the latest technologies that are being supported by BAR through NTCP. The exhibit and seminar series will run from August 21 to 24. (Rita T. dela Cruz)



Agriculture and Fisheries... from page 1

President Emil Q. Javier, BAR Director Nicomedes P. Eleazar, and other DA key officials.

In the afternoon, there will be a cooking demonstration on skinless *longganisa*, *siomai*, and hamburger to be conducted by Dr. Joy Contreras of the Bureau of Animal Industry (BAI). This will be followed by a presentation on various products and delicacies derived from sweet sorghum, a crop that is also a potential source of bioethanol.

On August 22-24, there will be a series of seminars on various technologies supported by BAR under its National Technology Commercialization Program (NTCP).

The technologies and research results to be presented are:

- Special product lines from *oregano* (DA-Southern Tagalog Integrated Agricultural Research Center)
- Prospects of culinary herbs in the Philippines (Benguet State University)
- Good agricultural practices and

guidelines for fruits and vegetables (Bureau of Agriculture and Fisheries Product Standards)

- Production of wines from indigenous fruits (Mijiah Wines)
- Sweet sorghum as best options for bio-power (Mariano Marcos State University)
- Promotion and market uptrend of coconut sap water postharvest technologies (Philippine Coconut Authority)
- Postharvest technologies to reduce losses and extend shelf life of fresh fruits and vegetables (University of the Philippines Los Baños)
- Salted egg production and value-adding products (DA-Ilocos Integrated Agricultural Research Center)
- Enhancement of product packaging and labeling (Department of Science and Technology)
- How to apply for organic certification (Organic Certification Center of the Philippines)
- Prospects of using indigenous plants for the spa industry (Spa Association of the Philippines)

- Food plants as source of nutraceutical and cosmeceutical ingredients (UPLB)
- Seaweeds for health and wellness (UP Diliman)
- Beneficial microorganism: Providing health the natural (Bio-organic Plus Phils., Inc)
- Integrated fertilizer management program for rice production without chemical fertilization (Sagana 100)
- Marketable products from malunggay (DA-Bicol Integrated Agricultural Research Center)

BAR has been promoting the commercialization of emerging and appropriate technologies related to agriculture and fisheries to boost the growth of this sector. Through the NTCP initiated by BAR and under the leadership of Secretary Arthur C. Yap, farmers and fisherfolk are empowered to sustain quality production, processing, and marketing of high-value and indigenous commodities which are attractive to today's discriminating and health-conscious market. (Miko Jazmine J. Mojica)



cooking demo

product displays

technology forum

BAR to award 2008 Outstanding Employees

Annually, the Bureau of Agricultural Research (BAR) gives due recognition to its outstanding employees who have shown exemplary performance and dedication in their respective duties and responsibilities.

Senator Edgardo J. Angara, Agriculture Secretary Arthur C. Yap, and BAR Director Nicomedes P. Eleazar will award this year's Outstanding Employees with a plaque and cash prize during the 21st BAR Anniversary celebration on 21 August 2008 at the SM Megatrade Hall 2, 5th Level, SM Megamall, Mandaluyong City.

Awards are divided into two categories: permanent and project-based and eight sub-categories: division head and unit head, technical supervisory, technical non-supervisory, non-technical supervisory, non-technical non-supervisory, technical project-based, non-technical project-based, and support service. The last sub-category is a recent addition to the award specific for administrative staff recommended by their respective unit and section heads.

Winners from each category will have the priority to attend a training abroad. Meanwhile, the runners-up will be awarded during the BAR Employees' Day on 26 August 2008 at the RDMIC Building, Visayas Avenue, Diliman, Quezon City.

A search committee was organized to facilitate the final selection of awardees. BAR Assistant Director Teodoro S. Solsoloy is the chair of the committee. Its members include consultants of BAR, namely: Dr. Manuel F. Bonifacio, Dr. Santiago R. Obien, and Ms. Josefina M. Lantican. (Ma. Eloisa E. Hernandez)



photo by Ma. Eloisa E. Hernandez

You can become an even more excellent person by constantly setting higher and higher standards for yourself and then by doing everything possible to live up to those standards.

~ Brian Tracy

20th NRS intensifies BAR's role to bring technologies closer to people

This year, the National Research Symposium (NRS) highlights the gains of R&D institutions, scientists, researchers, and development practitioners for a more practical utilization and application to sustainable agricultural development in support to the theme, Mula Sakahan Patungong Hapagkainan (Bridging the Benefits of Agricultural R&D Closer to the People). The symposium is slated on 2-3 October 2008 at the RDMIC Building, Diliman, Quezon City.

NRS is an annual competition hosted by the Bureau of Agricultural Research (BAR) to promote R&D excellence and give due recognition to outstanding researchers and their researches/studies in agriculture and fisheries. The symposium aims to identify and disseminate new technologies and

knowledge useful to agriculture and fisheries modernization.

Likewise, holding the NRS enhances the Department of Agriculture (DA) programs on food security and sustainability through a competition of outstanding R&D papers/projects from eight R&D paper categories. These are basic research, applied research (technology/information generation – agriculture), applied research ((technology/information generation – fisheries), applied research (technology adaptation/verification – agriculture), applied research (technology adaptation/verification – fisheries), socio-economics, development (agriculture), and development (fisheries).

The winner is awarded the AFMA Best Research and given cash prize and trophy during the NRS awarding

ceremony.

The Bureau's adherence on the theme focuses to support the efforts of DA. Notably, the R&D system has identified and developed information and technologies that address the needs and aspirations of the people and their communities. With the NRS, making information and technology relevant and available for easy access by farmers and fisherfolk is efficiently facilitated.

BAR hopes that this year's R&D papers will surpass previous entries as it continuously works for R&D excellence through proper information and knowledge management for development. The farm to table concept will make it innovative as all key players and stakeholders will assume responsibility and accountability. (Marlowe U. Aquino, PhD)

Bioversity-BAR-UPLB banana project wins 2008 NAST Best Scientific Poster Award

A joint project of the Bioversity International-Philippines, Department of Agriculture-Bureau of Agricultural Research (DA-BAR), and University of the Philippines Los Baños (UPLB), titled "Introduced Bananas: New Cultivars, More Options for Banana Growers," won the Best Scientific Poster Award under agricultural sciences category during the recently concluded 30th Annual Scientific Meeting of the National Academy of Science and Technology (NAST).

The scientific meeting was held at the Manila Hotel on 10 July 2008. The annual scientific meeting is a prestigious national scientific conference that recognizes outstanding achievements in science and technology.

The poster featured the study authored by Felipe S. dela Cruz Jr. (UPLB), Lavernee S. Gueco (UPLB), Olivia P. Damasco (UPLB), Visitacion C. Huelgas (UPLB), Fe. M. dela Cueva (UPLB), Teodora O. Dizon (UPLB), Vida Grace O. Sinohin (Bioversity), and Agustin B. Molina Jr. (Bioversity).

Funded by BAR, the project presented results of a field trial at the Central Experiment Station of the UPLB College of Agriculture involving banana hybrids introduced from the Musa Germplasm International Transit Centre in 2000.

Six introduced hybrids (FHIA 01, 02, 17, 18, 23, and 25), and six local cultivars (Cuarenta Dias, Cavendish, Latundan, Cardaba, Lakatan-Davao, and Lakatan-Cavite) were evaluated in terms of yield and yield characteristics, visual and organoleptic acceptability, and reaction to the banana bunchy top virus.

Another project funded by DA-BAR and implemented by UPLB and Bioversity International, titled "Role of healthy-looking Saba and other alternate hosts on the spread of banana bunchy top disease (BBTD)," was presented during the event. The proponents of the study were FM dela Cueva, EG Dinglasan, TO Dizon, FS dela Cruz Jr., OP Damasco, LS Gueco, and AB Molina. (Felipe S. dela Cruz, PhD, Bioversity-Philippines)

INTRODUCED BANANAS: New Cultivars, More Options for Banana Growers

Felipe S. dela Cruz, Jr.¹, Lavernee S. Gueco¹, Olivia P. Damasco¹, Visitacion C. Huelgas¹, Fe M. dela Cueva¹, Teodora O. Dizon¹, Isidoro G. Banasihan¹, Vida Grace O. Sinohin² and Agustin B. Molina, Jr.²

¹Crop Science Cluster - Institute of Plant Breeding, College of Agriculture, University of the Philippines Los Baños, College, Laguna 4031, Philippines;
²Bioversity International - Commodities for Livelihoods, IRR, Los Baños, Laguna, Philippines

Introduction

Musa researchers worldwide have developed and identified a number of new, high-yielding and disease-resistant banana cultivars. Through the Bioversity International (formerly INIBAP/IPGRI), these improved cultivars are now being made available for testing and distribution to smallholder banana growers. It is believed that the introduction of these new cultivars as a component of an integrated crop management strategy involving the use of clean planting materials, will have a rapid and significant impact on levels of production of banana in the Philippines. These cultivars are conserved at the National Plant Genetic Resources Laboratory and are available upon request.

Methodology

Six (6) introduced hybrids were grown together with six (6) local cultivars at the Central Experiment Station at UPLB

The performance of the banana cultivars were evaluated in terms of:

- Yield and yield characters
- Visual and organoleptic (taste) assessment
- Reaction to pests and diseases

Results

Yield evaluation and reaction to banana bunchy top virus (BBTV)

Cultivar	Days to harvest	Bunch weight	No. of hands	No. of fingers	Reaction to BBTV
FHIA 01	364 cd	22.22 d	9 de	126 ef	MR
FHIA 02	344 bc	24.30 d	9 de	130 ef	MR
FHIA 17	420 ef	36.61 b	12 b	201 c	MR
FHIA 18	400 de	21.38 d	8 de	133 e	R
FHIA 21*	355	26.50	8	113	MR
FHIA 23	449 fg	31.79 c	11 c	218 b	MR
FHIA 25	521 h	47.49 a	15 a	278 a	MS
Cuarenta Dias	279 a	8.51 g	7 f	110 h	HS
Cavendish	307 ab	23.44 d	8 de	128 ef	MS
Latundan	354 c	12.39 f	7 f	101 i	**
Cardaba	479 g	23.19 d	9 de	150 d	MR
Lakatan (Davao)	382 cde	17.24 e	7 f	116 gh	MS
Lakatan (Cavite)	379 cde	18.03 e	7 f	110 h	S

* Data on yield evaluation was taken from a separate trial at NARSU
** Many of the plants were infected by other diseases
R: Resistant; MR: Moderately Resistant; S: Susceptible; MS: Moderately Susceptible; HS: Highly Susceptible

Bunch and hand (inset) characteristics of outstanding introduced cultivars

Conclusion and Recommendation

FHIA 17, 21, 23 and 25 produced heavier bunches than the highest yielding local cultivars (Cavendish and Cardaba), while FHIA 17 and 21 produced the heaviest individual fruits. However, these introduced cultivars were less sweet than the local cultivars based on TSS reading.

While the selected introduced cultivars may not be preferred by the local consumers as dessert bananas, the potential of these cultivars may be for the processing industry, particularly as raw materials for the production of banana chips.

Musa researchers worldwide have developed and identified a number of new, high-yielding and disease-resistant banana cultivars. Through the Bioversity International (formerly INIBAP/IPGRI), these improved cultivars are now being made available for testing and distribution to smallholder banana growers.

BAR launches seven supported publications during its anniversary

The Bureau of Agricultural Research (BAR) will launch seven publications supported under the Special Publication Grant (SPG) during its 21st Anniversary celebration on 21 August 2008.

SPG is one of the services given by BAR to support the government initiatives in modernizing the agriculture and fisheries sectors of the country. SPG is awarded to an

organization/institution and scientific/professional societies to cover the cost of publications of scientific proceedings/symposia, refereed scientific journals, manuals on research methodologies, and books that can be availed of by members of the National Research and Development System for Agriculture and Fisheries (NaRDSAF).

The publications include two technical books on rice black bugs and

rats, an impact assessment, a production manual on lanzones, a recipe book, a children's book on the importance of eating rice, and two volumes of the research outputs of the fisheries sector in e-book format.

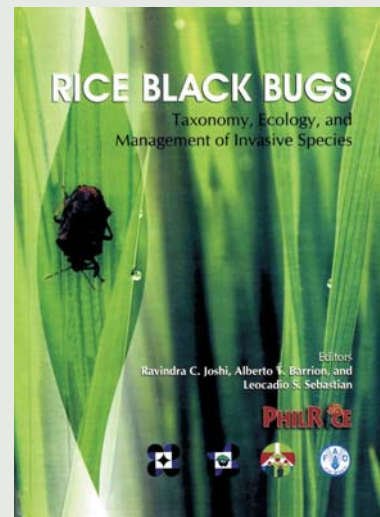
Major authors and editors will attend the book launching during the opening program at the SM Megatrade Hall 2, 5th Level, SM Megamall, Mandaluyong City.

Rice Black Bugs: Taxonomy, Ecology, and Management of Invasive Species

Ravindra C. Joshi, Alberto T. Barrion, and Leocadio S. Sebastian (editors)

Published by: PhilRice, DOST-PCARRD, DA-BAR, and FAO

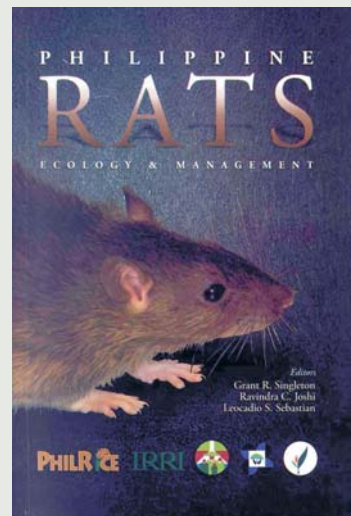
This is a book comprising of an extensive literature on the taxonomy, ecology, and sustainable management of rice black bug (RBB). The 800-page publication provides a lengthy discussion on some of the old problems and introduces new ecological techniques for the management of RBB. It consists of four sections covering clarifications on the confusing taxonomy using traditional and modern taxonomic tools, country reports of RBB experiences of other rice-growing countries, aside from approaches to management of RBB pest species.



Philippine Rats: Ecology and Management

Grant R. Singleton, Ravindra C. Joshi, and Leocadio S. Sebastian (authors)
Published by: PhilRice, IRRI, DA-BAR, DOST-PCARRD, and BPI

It features current knowledge on the Philippine rodents, their ecology, systematics, diseases, and management. It covers a wide array of topics from the historical perspective of the development of rodent pest management from 1968 to 1988, to biology and management in complex agroecosystems, to ecology of pest and native rodent species, and to their impact on farming communities.

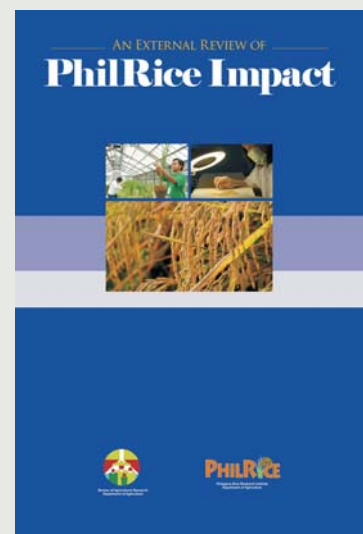


An External Review of PhilRice Impact

Tess V. Rola (editor)

Published by BAR and PhilRice

This is a publication that discusses the impact of the Philippine Rice Research Institute from 1997 to 2007 in the scientific and development work. It serves as a reference materials for the PhilRice Board of Trustees and its clientele. The external review was commissioned by BAR while the publication was prepared in partnership with the Conservation and Development Specialists Foundation, Inc. (CDSFI).

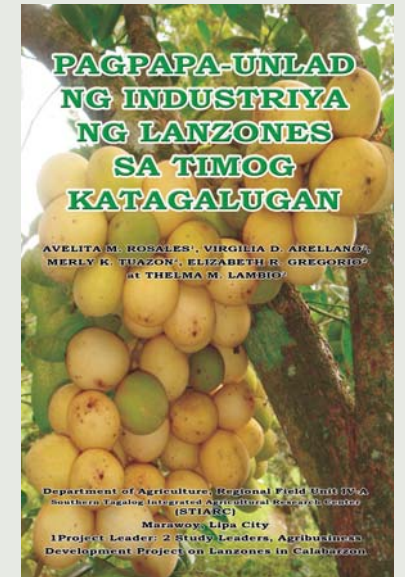


Pagpapaunlad ng Industriya ng Lanzones sa Timog Katagalugan

Avelita M. Rosales, Virgilia D. Arellano, Merly K. Tuazon, Elizabeth R. Gregorio, and Thelma M. Lambio (authors)

Published by BAR and STIARC

It is a user's manual on lanzones (*Lansium domesticum* Correa) production. The manual specifically discusses topics on the rehabilitation of lanzones, planting different varieties, production of quality planting materials, harvesting, and marketing.



O! May Gulay Recipe Book

Prepared and published by BAR

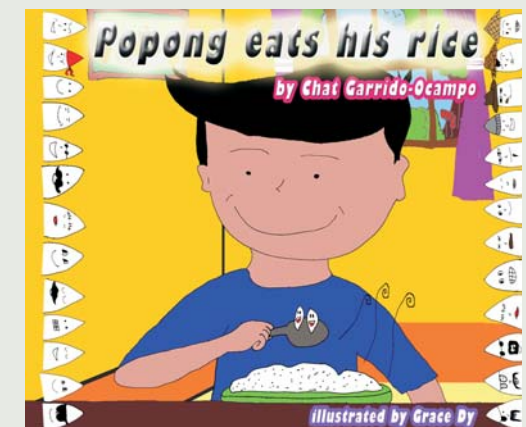
This publication features the winning recipes from students of public high school in the National Capital Region (NCR) who joined the O! May Gulay Cooking Contest held and exhibited during the 2007 Agrilink/Aqualink/Foodlink on 4-6 October 2007 at the World Trade Center, Pasay City. The activity was designed to develop vegetable recipes that are easy to prepare, affordable, and delicious in support of DA's efforts in promoting local agriculture products.

Popong Eats His Rice

Chat Garrido-Ocampo (author)

Published by BAR

This is a children's book that highlights the importance of eating rice. It narrates the story of a kid, Popong, and his wizard-of-Oz-like adventure into the world of rice through the help of Rice Prince who appeared in his dream. The Rice Prince showed Popong the important lessons of eating rice and not wasting it.



Research Output of the Fisheries Sector Program (FSP) Volumes I and II

Prepared by SEAFDEC/AQD

Published by BAR



The compiled volumes comprise of the latest research outputs from the fisheries sector published in e-book format for easy access and dissemination to the fisheries R&D sector and other concerned institutions. The two volumes of FSP books were packaged into a user-friendly CD booklet by the Aquaculture Department of the Southeast Asian Fisheries Development Center (SEAFDEC/AQD). FSP Volume 1 contains 34 research papers published in scientific journals and other publications and has a printed version released in November 2002 while Volume 2 consists of 32 BAR-funded researches on fisheries R&D reflecting the Department of Agriculture's (DA) directions and priority programs on fisheries. (Rita T. dela Cruz)