



MARILYN M. BELARMINO

Genetic Resources Manager

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📍 Brgy. Pangasugan, Baybay, Leyte 6521-A, Philippines

PROFILE

Versatile, results-driven and passionate Genetic Resource manager with combined 14+ years of experience leading the genebank team of two multinational organizations, The WorldVeg Center and East West Seed Company and, 15 years track record in teaching both graduate and undergraduate courses as Associate Professor of the Visayas State University. Seeking to leverage solid teaching, research, lean leadership and management skills to contribute to the advancement of the academic and research programs of the Visayas State University and create an optimal experience for both faculty and students.

EDUCATION

1994 Doctors Degree (Agricultural Sciences)

United Graduate School of Agricultural Sciences, Iwate University, Japan

Dissertation: Studies on the Tissue Culture and Somatic Hybridization of Sweet potato and Wild Relatives

1988 Master of Science (Horticulture)

University of the Philippines at Los Banos, Laguna, Philippines

Thesis: Callus Induction and Plant regeneration in Food Yam (Dioscorea alata L.)

1983 Bachelor of Science in Agriculture (Plant Breeding)

Visayas State College of Agriculture, Baybay, Leyte, Philippines

Graduated Cum laude

Thesis: Effect of Nitrate-Nitrogen on the Growth and Tuber Formation of Detached Sweet Potato Leaves

PROFESSIONAL WORK EXPERIENCE

Genetic Resource Manager

East West Seed Company Inc., Lipa City, Batangas, Philippines

June 2012 - July 2023

- Led the Genetic Resources Management Function of East West Seed Company operating in Asia, Latin America and Africa, providing scientific directions for its operations, infrastructure development and staff skills training which successfully resulted in the establishment of a centrally-managed genebank and the safe preservation of over 22,000 fully documented accessions both local and exotic.
- Developed strategies and worked closely with the global breeding teams in identifying novel sources of traits through the implementation of trait discovery research projects which broaden the germplasm base of breeders and the identification of disease resistant germplasm.
- Established partnerships with national and international genebanks demonstrating effective public-private partnerships which resulted in the Company's contribution to the national and global germplasm conservation efforts as shown by its top rank achievement in the Access-to-Seed Index"
- Developed a strategy that addresses the challenges of international seed movement through partnership with the National Plant Quarantine Service Division (NPPO) resulting in the Company's compliance to phytosanitary requirements and achievement of its business objectives.
- Developed a 10-year Genebank Strategic Plan that guides the Company in achieving an effective germplasm conservation and its sustainable management.

Genetic Resource Scientist

AVRDC-The World Vegetable Center, Arusha city, Tanzania

January 2009 -June 2012

- Led the operations of the Genetic Resource Conservation and Seed Unit (GRSU) of the WorldVeg Regional Center for Africa and was responsible for implementing process improvement, establishing new infrastructure and staff skills training resulting in much improved and effective operations.
- Strengthened the WorldVeg subSaharan conservation program by implementing improved seed processing and storage methods, proper documentation and efficient seed distribution to its mandate regions and beyond, according to international standards, as well as cooperated with WorldVeg scientists in securing backup materials in Svalbard Global Seed Vault.
- Implemented 5 global research projects as project leader or as principal implementer in the region which contributed to the Center's global conservation efforts, poverty alleviation, disaster relief and crop improvement research.
- Contributed to the Center's fund sourcing initiatives and collaborated with WorldVeg scientists in developing 10+ research project proposals submitted to *BecA and CSIRO, CIFSRF-IDRC-CIDA, HortCRSP-USAID, Swiss Agency for Development and Cooperation (SDC), DIFID-FAO, and the ITPGR Benefit Fund Sharing* seeking funding to support the long-term conservation and maintenance of the 68,000+ genebank collection.
- Focal person for contract negotiations with the public and private sectors in line with the Center's aim to strengthen its capability on public and private partnership in the Africa region.

Associate Professor IV

Visayas State University, Baybay, Leyte, Philippines

December 2005 - June 2011

- Chaired the Department of Horticulture for 2 terms (6 years) , responsible for setting and advancing the strategic academic direction of the Department, facility development, budget planning and staff development.
- Prepared 6 instructional materials, syllabi and laboratory manuals for graduate and undergraduate Plant Tissue Culture courses to improve students' learning experience and to comply with the university accreditation. Supervised 6 PhD students, 8 MS students and over 20 BS students who successfully completed their academic degrees.
- Actively involved in the university's fund sourcing initiatives through grant proposals. Two-time research grant awardee, the International Foundation for Science, Sweden. Chief investigator/implementer of 10 research projects and, collaborated with Hohenheim Univ. & Daimler Chrysler for multi-million project
- Initiated public-private partnerships with Chiba Univ, Japan; Dole Philippines. Assisted in developing the university RDE policy and strategy that led to the creation of policy favorable to tissue culture experts such as the commercialization of laboratory products.
- Published 23 peer-reviewed scientific paper, presented 24 research papers/ posters. Participated in 43 international, national, and regional scientific meetings & trainings and served as facilitators in 16 conferences/symposia/meetings/trainings.
- Chaired the Department of Horticulture for 5+ years responsible for advancing its strategic direction and supporting the improvement of its core activities in teaching, research, extension & other fields. Spearheaded faculty recruitment and development, updated instructional materials and upgraded the infrastructure through effective management of the department's budget.

PROFESSIONAL WORK EXPERIENCE *continued...*

Associate Professor III

Visayas State College of Agriculture (formerly Leyte State University), Baybay, Leyte, Philippines

May 1994 - November 2005

- Taught undergraduate and graduate courses using improved instructional materials aimed at meeting course competencies. Supervised graduate and undergraduate students in the conceptualization, implementation and write-up of their theses.
- Provided hands-on training to students in the ladderized curricular program and technical services to both inhouse and external training programs.
- Managed the operations and personnel of the Horticulture Dept. Tissue Culture Laboratory and provided technical expertise to laboratory personnel from other SUCs and private sectors. Principal implementer and focal person for locally- and externally-funded projects involving plant tissue culture.

Instructor

Visayas State College of Agriculture, Baybay, Leyte, Philippines

July 1989 - December 1990

- Taught General Horticulture and Plant Tissue courses and supported the department in implementing improvements in instruction, research and extension areas. Provided expertise through undergraduate thesis advisership in Horticulture (Plant Tissue Culture)
- Led the operations of the Plant Tissue Culture Laboratory of the Philippine Root Crop and Training Center and spearheaded the conservation and micropropagation of major root crops. Provided technical support and expertise to the University's Extension and Training department. Prepared and submitted 8 research proposals for funding, presented 3 research papers in scientific meetings and attended 11 scientific meetings, symposia and seminar-workshops.

Science Research Specialist

Visayas State College of Agriculture, Leyte, Philippines

March 1985 - June 1989

- Established the Philippine Root Crop and Training Center (PRCRTC) Tissue Culture Laboratory and built up its capacity using her IFS research grant (USD 12,000). The new laboratory paved the way to the Center's plant tissue culture research and collaboration with CG Centers -CIAT and CIP, and local institutions (e.g., UPLB). Actively involved in the Center's fund sourcing initiatives.
- Implemented IFS research project and presented results in scientific conferences; developed micropropagation and vitro storage protocols for sweet potato, cassava, taro and yam as part of the PRCTC conservation program.
- Provided plant tissue culture technique training to staff from other SUCs and served as resource person in farmers' trainings, seminars and workshops. Provided technical support and expertise to the National Abaca Research Center (NARC) and Regional Coconut Research Center (RCRC) as affiliate staff.

PROFESSIONAL WORK EXPERIENCE *continued...*

Research Assistant

Visayas State College of Agriculture, Baybay, Leyte, Philippines

May 1983 - May 1985

- Assisted the project leader in implementing the PRCTC project on “Morpho-anatomical studies of stored root crops” funded by IDRC Canada. Acquired skills in histological preparation of plant tissue using microtome and staining technique through a hands-on training program on morpho-anatomical techniques at the University of the Philippines at Los Baños (UPLB)
- Awarded a scholarship grant from the International Development Research Center, Canada to pursue an MS degree in Horticulture.

PROFESSIONAL AFFILIATIONS

Adjunct Associate Professor

Institute of Biological Sciences, College of Arts and Sciences, University of the Philippines at Los Baños

April 2017 - July 2022

- Provided technical expertise and guidance to graduate students in the conceptualization and implementation of their theses and final manuscript writing. Participated in academic convocation programs, Graduate Faculty and Department meetings and seminars.

Editorial Board Member

The Journal of Nature Studies (JNS)

July 2018 - December 2024

- Provides expertise in reviewing scientific papers submitted for publication in JNS. Participates in deciding whether to accept or reject a manuscript after deliberation of the editorial board members.

Regular Member, Philippines Association of Agriculturists, Inc. (PAA)

ID Number :0004298, registered May 10, 2023

FELLOWSHIPS AND SCHOLARSHIPS

JASSO Follow up Research Fellowship

January 2008-March 2008

- *Awarded a 3-month fellowship under the Japan Student Services Organization (JASSO) to continue the abaca transformation research at the Faculty of Horticulture, Chiba University, Japan.*

JSPS Invitation Fellowship Program (Long-term)

June 2005-May 2006

- *Awarded a 1-year fellowship under the Japan Society For The Promotion of Science (JSPS) to conduct research on the “Development of Transformation Protocol in Abaca (*Musa textilis* Nee) using somatic embryos” at the Faculty of Horticulture, Chiba University, Japan.*

FELLOWSHIPS AND SCHOLARSHIPS *continued...*

JSPS Postdoctoral Fellowship for Researchers in Japan (Standard)

March 1997-February 1999

- Awarded a 2-year fellowship under the Japan Society For The Promotion of Science (JSPS) to conduct research on "Agrobacterium-mediated transformation of and regeneration in Phalaenopsis" at the Faculty of Horticulture, Chiba University, Japan.

International Foundation for Science (IFS) Research Grant, Sweden

1988-1990; 1995-1997

- Awarded 2 research grants from IFS to conduct research on the "In vitro conservation of root crops".

Japanese Government Scholarship (Monbusho) for Doctoral Degree Program

April 1991-March 1994

- Awarded a full scholarship to pursue Doctoral degree at the United Graduate School of Sciences, Iwate University, Morioka Japan.

Monbusho International Research Student Grant

Oct. 1990-March 1991

- Awarded 6 months research under the Japanese Grants-in-Aid Scholarship to conduct research preliminary to the formal doctoral degree program.

Japanese Intensive Language Course

April 1990-September 1990

- Awarded 6 months grant to study Japanese language as requisite to the doctoral degree program.

International Development Research Center for Masteral Degree Program

June 1985-March 1988

- Awarded a scholarship funded by the IDRC Canada to pursue a Master of Science degree at the University of the Philippines Los Banos, Laguna.

Philippine Development Scholarship for undergraduate degree program

SY 1982-1983

Visayas State College of Agriculture (ViSCA) scholarship for undergraduate degree program

SY 1979-1982

LICENSURE AND ELIGIBILITY

Licensed Agriculturist (No. 0004298)

Philippine Regulatory Commission granted December 2005;
valid until July 30, 2026

Civil Service Eligible

Civil Service Commission of the Philippines granted April 1983 under P. D. 907

- Masungsong L.A., A.A. Alcala, I.E. Buot JR., **M.M. Belarmino**. 2022. Classifying fifty-seven Cucumis (Cucurbitaceae) accessions into six species using leaf architectural traits BIODIV ERSITAS Volume 23, Number 8, August 2022 Pages: 4006-4017
- Masungsong L.A. , N. K. Torreta, **M.M. Belarmino**, T. H. Borromeo , I. E. Buot, Jr.. 2019. Leaf Architectural Variations among Species and Accessions of Genus Cucumis L. The Thailand Natural History Museum Journal 13(2): 91-101, December 2019
- Masungsong L.A., **M. M. Belarmino** and I. E. Buot JR. 2019. Delineation of the selected Cucumis L. species and accessions using leaf architecture characters. B I O D I V E R S I T A S 20(3): 629-635
- J.D.H. Keatinge, M.L. Chadhab, J.d'A. Hughesa, W.J. Easdown, R.J. Holmer, A. Tenkouanoe, R.Y. Yanga, R. Mavlyanovaf, S. Neaveg, V. Afari-Sefah, G. Luthera, M. Ravishankarc, C. Ojiewoh, **M. Belarmino**, A. Ebert, J.F. Wang and L.J. Lina. 2012. Vegetable gardens and their impact on the attainment of the Millennium Development Goals. Biological Agriculture & Horticulture Vol. 28, No. 2, June 2012, 71-85; <http://dx.doi.org/10.1080/01448765.2012.681344>
- **Belarmino M.M.** Somatic embryogenesis and plant regeneration in abaca. 2004. Philippine Journal of Crop Science (Philippines) Vol. 29. Suppl 1 p.24, ISSN : 0115-463X
- **Belarmino M.M.** and E. C. Parac. 2006. Regeneration of Musa textilis Nee via somatic embryogenesis from excised shoot tip. Phil. J. Science Vol.30 Suppl 1 p.52
- De la Rosa Z. S. and **M. M. Belarmino**. 2007. Plant regeneration in roses (Rosa spp.) using axillary bud technique. Annals of Tropical Research 21(1):1-13
- Rosillo A. P. and **M. M. Belarmino**.2007. Production of plantlets from crown explant of pineapple (Ananas comosus Merr.) variety `Queen`. Jour. of Sciences and Humanities 6:48-60
- **Belarmino M.M.** 2002. Promotive factors for the initiation of callus and plant regeneration in upland rice. Annals of Tropical Research 24(1):90-112
- **Belarmino M.M.**, T. Abe and T. Sasahara. 2001. Somatic hybridization in Sweet Potato. In Somatic hybridization in Crop Improvement II. Biotechnology in Agriculture and Forestry, Bajaj (ed), Vol. 128 No. 2 pp.125-143
- **Belarmino, M.M.** and E.P. Parac. 2001. "A simple and efficient procedure for somatic embryogenesis in abaca (Musa textilis Nee)". In Proc. of the Asian Agriculture Congress held on April 24-27, 2001 at the Westin Philippine Plaza, Manila, Philippines
- **Belarmino M.M.** and M. Mii. 2000. Agrobacterium-mediated genetic transformation in Phalaenopsis species. Plant Cell Rep. 19:435-442.
- **Belarmino M.M.** and M. Mii. 1999. Production of transgenic Phalaenopsis plants using Agrobacterium tumefaciens. In: Proc. of the 15th Annual Scientific Conference of the Federation of Crop Science Societies of the Philippines (FCSSP). Family Country Home, Gen. Santos City, May 10-15, 1999. (Finalist for best paper competition)
- **Belarmino M.M.** and M. Mii. 1998. Development of an Agrobacterium-mediated genetic transformation in Phalaenopsis. In: Proc. of the XXV International Horticulture Congress. Aug. 2-7, 1998, Brussels (Benelux).

- **Belarmino M.M.** and T. Sasahara. 1996. Asymmetric protoplast fusion between sweet potato (*Ipomoea batatas* Lam.) and its wild relatives. In: Proc. of the 12th Annual Scientific Conference of the Federation of Crop Science Societies of the Philippines (FCSSP). Villa Victoria Beach Resort, Davao City, May 13-18, 1996.
- **Belarmino M.M.** and C. Gabon. 1999. Low-cost micropropagation of *Chrysanthemum morifolium* L. *Phil. Jour. of Science*. 128(2):125-143
- **Belarmino M.M.**, A. Abe and T. Sasahara. 1997. Asymmetric protoplast fusion between sweet potato and its wild relatives, and plant regeneration. *Plant Cell, Tiss, Org. Cult.* 46: 195-202.
- **Belarmino M.M.** and D. B. Posas. 1997. In vitro propagation of *Citrus maxima* (Burm) Merr. *Annals of Tropical Research* 19(1): 19-35.
- **Belarmino M.M.** and T. Sasahara. 1996. Asymmetric protoplast fusion between sweet potato (*Ipomoea batatas* Lam.) and African marigold (*Tagetes erecta* L.). *Phil. J. Crop Sci.* 21 (1 & 2).
- **Belarmino M.M.**, T. Abe and T. Sasahara. 1994. Plant regeneration from stem and petiole protoplasts of sweet potato (*Ipomoea batatas* Lam.) and its wild relative, *I. lacunosa*. *Plant Cell Tiss. Org. Cult.* 37: 145-150.
- **Belarmino M.M.** 1993. In vitro culture of sweet potato (*Ipomoea batatas* Lam.) and yam (*Dioscorea* spp.) for pathogen elimination and micropropagation. In: *Adapted Propagation Techniques for Commercial Crops in the Tropics*, Proc. of the Southeast Asian Regional Workshop on Propagation Techniques for Commercial Crops of the Tropics. Ho Chi Minh City, Vietnam. 7-12 February 1993.
- **Belarmino M.M.**, T. Abe and T. Sasahara. 1992. Callus induction and plant regeneration in African marigold (*Tagetes erecta* L.). *Japan. J. Breed.* 42(4): 835-841.
- **Belarmino M.M.**, T. Abe and T. Sasahara. 1992. Efficient plant regeneration from leaf calli of *Ipomoea batatas* (L.) Lam and its related species. *Japan. J. Breed.* 42:109-114.
- **Belarmino M.M.** and T. Sasahara. 1992. Callus Induction and Plant Regeneration in African Marigold (*Tagetes erecta* L.). In Proc. of the during the 34th Annual Meeting of the Japan Society of Plant Breeding held on Oct. 18-21, 1992 in Nagoya, Japan
- **Belarmino M.M.** and T. Sasahara. 1992. Shoot formation from protoplast-derived calli of sweet potato and its wild relatives and the initiation of somatic hybrid. In Proc. of 35th Annual Scientific Meeting of the Japanese Plant Breeding Society held on Oct. 4-6, 1993 in Hokkaido, Japan
- **Belarmino M.M.**, T. Abe and T. Sasahara. 1991. Callus induction and organogenesis in *Dioscorea* species. *Japan. J. Breed.* 41:561-569.
- **Belarmino M.M.** and T. Sasahara. 1991. Variation in Plant Regeneration from Leaf Calli of *Ipomoea batatas* and its related species In Proc. of the during the 33rd Annual Meeting of the Japan Society of Plant Breeding held on Oct. 2-4, 1991 in Niigata, Japan Sapporo, Japan

AWARDS

- **Best Poster Award** with Duatin FMY, Parac E, Marabe S and Gapsin, R., for the research paper, “Public Private Partnership in the Philippines - Application of Abaca Fiber in the Automotive Industry, Production of High Quality and Virus Free Abaca Planting Materials using Improved Tissue Culture Technology” presented during the 41th Annual Pest management Council of the Philippines Scientific Meeting and Conference at Waterfront Insular Hotel,Davao City, March 9-12, 2010
- **Best Poster Award** with Prof. Masahiro Mii for the research paper, “Production of disease-resistant Phalaenopsis’. Award given by the Philippine Society for Lactic Acid Bacteria during the joint conference with Phi Delta Honor Society held on October 25-17, 2006 in Sabin Resort Hotel, Ormoc City, Philippines
- **AFMA R&D Paper Award** with E. Parac and L.R. Gonzal for the research paper, “Regeneration of abaca (*Musa textilis* Nee) from shoot tip explants through somatic embryogenesis”. Award given by the Bureau of Agricultural Research during the 16th National Research Symposium held on October 5, 2004 at Diliman, Quezon City, Philippines
- **Outstanding Basic Research Award** with E. Parac and L.R. Gonzal for the research paper, “Regeneration of abaca (*Musa textilis* Nee) from shoot tip explants through somatic embryogenesis”. Award given by the Regional Research Development Network during the 16th Regional Symposium on R&D for Agriculture and Fisheries, Environment and Natural Resources Engineering, Energy and Industry held on August 30-31, 2004 at Sabin Resort Hotel, Ormoc City, Philippines

INSTRUCTIONAL MATERIALS

- Belarmino M.M. 2007. Teaching Guide in Hort. 199-Undergraduate Seminar. Visayas State University, Visca, Baybay, Leyte. 40 pp.
- Belarmino M.M. 2007. Teaching Guide in Hort.198-Research Planning and Manuscript Preparation, Visayas State College of Agriculture, Baybay, Leyte. 131 pp.
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- Belarmino M.M. 2006. Training module in Basic Plant Tissue Culture Techniques. Leyte State University, Visca, Baybay, Leyte. 60 pp.
- Belarmino M.M. 2006. Study Guide in Hort. 173-Plant Tissue culture I. Visayas State College of Agriculture, Baybay, Leyte. 155 pp.
- Belarmino M.M. 2002. Laboratory Manual in Hort. 173-Plant Tissue culture I. Visayas State College of Agriculture, Baybay, Leyte. 35 pp.
- Belarmino M.M. and M.T. Diputado, Jr. 2002. Laboratory Manual in Hort. 209-Crop Seed Physiology. Visayas State College of Agriculture, Baybay, Leyte. 35 pp.

(A) Resource speaker/lecturer/guest speaker

A-1 International

- Invited Panel Member, International Expert Panel on Fruit and Vegetable Genetic Diversity: The status and Challenges of Conservation, Exchange and Use (webinar), Rome Italy, February 16, 2021
- Resource person, Asia Regional Training on Conservation and Sustainable Use of PGRFA and Farmers' Rights / 5-8 8th Session of the Governing Body of the ITPGRFA organized by DA Policy Service Office, Manila, Aug. 9, 2019
- Oral Presenter, International Conference on Genetic Resources and Biotechnology (ICGRB 2018) - Information Systems & Exchange of Genetic Resources for Effective Crop Improvement organized by the Ministry of Agriculture, ICABIOGRAD held in Bogor Indonesia on Aug. 20-21, 2018.
- Private Seed Sector Representative, "Convention Global Alliance for the Future of Food's Strategic Convening on Resilient Seed Systems" held in Oaxaca, Mexico on Oct. 22 - 26, 2018.
- Presented a poster entitled, "MORPHOLOGICAL DIVERSITY, SEED CHLOROPHYLL FLUORESCENCE AND SEED QUALITY OF EGUSI WATERMELON (CITRULLUS MUCOSOSPERMUS) COLLECTION" in the 12th Triennial International Society for Seed Science Conference (ISSS) in Monterey, CA, USA, Sept. 10-14, 2017
- Oral presentation during the African regional workshop on: "The Right to adequate Food and Nutrition: Implications for Food Science and Nutrition Education, Public Policy, Food Fortification and Distribution Activities in Africa" conducted at the College Natural Science, Addis Ababa University, Ethiopia from Oct. 7-9, 2010
- Resource person representing non-profit organization during Regional Seminar on Plant Variety Protection under the UPOV Convention held in Dar es Salaam, Tanzania in Feb. 23-26, 2010
- Certificate of recognition as Member of Research Operations Committee during the 2010 Nane-nane Agricultural Show held in Arusha Tanzania from Aug.1-8, 2010

A-2 National

- Invited Private Sector Representative, Stakeholder Consultation on Farmers' Rights Via WebTex organized by DA Policy Research Service, Manila, April 23, 2021 via Webex
- Resource speaker on "Cucurbits Conservation and Use -Perspective at East West Seed" in Expert Consultation Meeting for Global Cucurbitaceae Crop Conservation Strategy, Kampaeng Saen, Nakhon Pathom, Thailand, Dec. 11-13, 2019.
- Panel member, International Seminar on the Benefits of Plant Variety Protection under the UPOV System held in Vivere Hotel Alabang, Muntinlupa city, Philippines in Aug. 2, 2018
- Seminar on Best Practices on Farmers' Rights in relation to the ITPGRFA organized by DA Policy Research Services held at DA Policy and Planning Conference Room, 3/F, Elliptical Road, Diliman, Quezon City on July 26, 2018.
- Panel member, "Stakeholders' Consultation on the Proposed Enhancement to the Current Risk Analysis Procedures to Prevent the Entry of Invasive Alien Species in the Philippines", organized by DENR Management Bureau, on Dec. 1, 2015, at the Eurotel Hotel, Pedro Gil Manila.

A-3 Local

- Resource Speaker in R&D Seminar Series “Introduction to Genetic Resources Management” held at the Hortanova Research Center, Lipa city on Nov. 28, 2018
- Technical consultant of the East-West Foundation’s Oh My Gulay-Tanim sa Kinabukasan (OMG-TSK) at Pangao Elementary School, Pangao, Lipa city on March 29, 2017.
- Oral presentation, “Introduction to Genetic Resource Management” during the R&D Seminar Series held in Hortanova Research Center, Lipa city on Nov. 28, 2013

(B) Participation in Trainings**B-1 International**

- Training completed on “ITP313D Advance International Training Programme on Intellectual Property and Genetic Resources - In Support of Innovation” organized by the Swedish Patent and Registration Office (PRV) and the World Intellectual Property Organization (WIPO) held in Bogor Indonesia from Aug. 14-18, 2018.
- Training completed on “ITP313D Advance International Training Programme on Intellectual Property and Genetic Resources - In Support of Innovation” organized by the Swedish Patent and Registration Office (PRV) and the World Intellectual Property Organization (WIPO) held in Stockholm Sweden from Nov. 12-28 and, Basel and Geneva Switzerland in Dec. 1, 2017
- Training on “ISO 9001:2008 Awareness organized by TUV Rheinland Philippines Inc. held at East west seed Company, Bulacan in June 4, 2013
- Completed the training on “Leadership Greatness” organized by Franklin Covey on Dec. 4, 2013
- Project Management Training Course conducted by MDF South Asia Training and Advisory held in CIFOR Bogor Indonesia in Nov. 12, 2010
- Negotiation Training Program organized by the Center for Understanding in Conflict and The Center for mediation in Law held at the Sanur Beach Hotel, Bali in Jan. 18-22, 2010

B-2 National

- Seedmen's Training organized by the Philippine Seed Industry Association (PSIA) held on Dec 3-4, 2020.
- Training-Workshop on Project Development and Resource Generation for SUCs held on October 2-6, 2006 at the University Hotel, UP Campus, Diliman, Quezon City, Philippines
- National Training Workshop on Root Crops and Abaca Germplasm Characterization, Documentation and In Vitro Conservation held at IPB, UPLB, Los Baños, Laguna from Jan. 22-24, 1990 Philippines
- Training on ‘Propagation of Anthurium’ held on October 14-15, 1999 at the Ornamentals Crops Division, U.P. Los Baños, College, Laguna sponsored by UPLB and Philippine Council for Agriculture, Forestry, Natural Resources Research and Development (PCARRD), Philippines

B-3 Local

- Training completed on “Basic Knowledge for Cultural Practice” organized by East West Seed Academy, Sept. 1, 2015
- “Training on Interactive Session on Leadership and Management” facilitated by Shekar Gupta; February 19, 2015 in EWSC BGC Office, Unit 2803 28F Trade & Financial tower building 7th avenue corner 32nd St. Fort Bonifacio Global City, Taguig
- Interactive Session on Leadership and Management Training, with Coach Shekhar Gupta, Aug. 20, 2015 in EWSC BGC Office, Unit 2803 28F Trade & Financial tower building 7th avenue corner 32nd St. Fort Bonifacio Global City, Taguig
- 3rd Interactive Training Session with Coach Shekhar Gupta held at EWSC BGC Office, Unit 2803 28F Trade & Financial tower building 7th avenue corner 32nd St. Fort Bonifacio Global City, Taguig, February 17, 2016
- Completed training on “ CF-Mobile Product Demonstration” organized by Rhino Research Company held in East West Seed headquarters, San Rafael Bulacan on Sept. 22, 2015.
- In-House Training Company Course in “R&D Project Management” delivered by John de Newtown, Hertfordshire, Oct. 1-2, 2012
- Instructional Leadership Training Workshop held on May 30-31, 2007 at the FARMI Training Hall, VSU, Visca, Baybay, Leyte Philippines

(C) Participation in Conferences/seminar workshops/webinars**C-1 International**

- 2022 APSA Seed Technology - Webinar 1 on Seed Dormancy Organized by the APSA Standing Committee on Seed Technology, Thailand, 7 June 2022
- 2022 APSA Seed Technology - Webinar 2 on Application of the digital tools for quality enhancement, Organized by the APSA Standing Committee on Seed Technology, Thailand, 3 August 2022
- How to access genetic resources for your breeding program (webinar) by Anke van den Hurk, Deputy director of Plantum and Chair of the Committee on Sustainable Agriculture of the International Seed Federation (ISF), May 28, 2021
- “Introgressomics: a new approach for using crop wild relatives in breeding: a case in eggplant” (webinar) by Prof. Jaime Prohens, Genetics and Plant Breeding at the Universitat Politècnica de València (UPV) , Spain, July 22, 2021 (webinar)
- "Public-Private Collaboration in Genetic Resources Conservation and Use: EWINDO-UGM Partnership" (webinar) by Mr. Sunardi, M. Si Genetic Resource Manager, EWINDO, Indonesia, Dec. 6, 2021
- Policy & Advocacy Working Group virtual seminar organized by Global Alliance For the Future of Food , July 23, 2019 at 9:00 AM to 10:30 AM (ET)

C-1 International

- Results-based management Workshop organized by Baastel Consulting Firm Canada, held Feb.16-20, 2012 in Arusha Tanzania.
- Completed an A1 level E-Learning Course in French Language (44 hours) organized by Alliance Franco Tanzanienne of Arusha Tanzania held from June 1, 2011 to Jan. 2, 2012
- Regional Seminar on Plant Variety Protection under the UPOV Convention organized by UPOV, MAFC Tanzania, ARIPO, USTPO and AVRDC -The World Vegetable Center held at the Dar es Salaam in Feb. 23-26, 2010
- Participated in the Workshop on the Outcomes of the Impact assessment on Emergency Seed Supply to Drought Affected Farmers, organized by FAO-United Nations, the Department of International Development of the United Kingdom (DFID) and, the Ministry of Agriculture, Food Security and Cooperatives of Tanzania, held at FAO Conference Hall, Dar es Salaam, Tanzania in Oct. 13, 2011.
- Participated in Food and Nutrition Scoping Workshop, BecA – CSIRO Partnership on Food Security in Africa, ILRI Campus, Addis Ababa, Ethiopia
- Participated in African Regional Workshop on: “The Right to Adequate Food and Nutrition: Implications for Food Science and Nutrition Education, Public Policy, Food Fortification and Distribution Activities in Africa.” ; College of Agriculture, Addis Ababa University , Oct. 7-9, 2010
- Participated in the Annual meeting of the national partners Initiative, organized by CAS-IP in Washington, DC, USA on June 13-19, 2010.
- Participated in the 3rd Skills Building Workshop of the National Partners Initiative (NPI) with the topic, “Negotiation Training Program” conducted by The Center for Understanding in Conflict sponsored by NPI of Central Advisory Service on Intellectual Property Rights (CAS-IP), Bioversity; held in Sanur Beach Resort Hotel, Bali, Indonesia
- Results-based Management Workshop conducted in Feb. 16-20, 2009 by Le Groupe-conseil baastel ltee, Canada, organized by AVRDC-The World vegetable Center, Regional Center for Africa, Arusha, Tanzania.
- Regional Seminar on Plant Variety Protection under UPOV Convention held at the New Africa Hotel, Dar es Salaam, Tanzania in 23-26 February 2010 sponsored by the International Union for the Protection of New Varieties (UPOV), African Regional Intellectual Property Organization (ARIPO), the United States patent and Trademarks Office (USPTO), AVRDC-The World Vegetable Center, Ministry of Agriculture, Food Security and Cooperatives of Tanzania (MAF)
- 3rd Skills Building Workshop of the National Partners Initiative held in Sanur Beach Resort Hotel, Bali, Indonesia in 18-22 January 2010
- Innovation Platform meeting of the Vegetable Breeding and Seed Systems Programme at AVRDC, Regional Center for Africa , Arusha, Tanzania held in December 1, 2009 at AVRDC in Arusha, Tanzania
- Innovation Platform Meeting AVRDC-The World Vegetable Center-Regional Center for Africa held at AVRDC, Regional Center for Africa , Arusha, Tanzania in March 20, 2009

C-1 International

- Innovation Platform meeting for the vBSS project held at AVRDC, Regional Center for Africa , Arusha, Tanzania in July 31, 2010
- Foundation Seed Workshop held at Naura Springs Hotel, Arusha, Tanzania in August 18, 2009 sponsored by AVRDC, TASTA and the Ministry of Agriculture, Food Security and Cooperatives of Tanzania
- 3rd Annual Meeting of the Central Advisory Service on Intellectual Property (CAS-IP), National Partners Initiative held at the Novotel Hotel, The Hague on 1-5 September 2009, sponsored by Bioversity
- 2nd World Seed Conference held at FAO, Viale delle Terme di Caracalla, 00153, Rome, Italy in September 8-10, 2009
- 2nd GTZ Planning Project Workshop held at ICRISAT, Hyderabad, India in April 28-30, 2009
- 9th Workshop on Sustainable Horticultural Production in the Tropics held at Snow Crest Hotel, Arusha, Tanzania in Dec. 2-5, 2009, sponsored by Horticultural Society of Kenya and German Academic Exchange (DAAD)
- 1st Workshop on Good Agricultural Practices for Production of African Indigenous Vegetables held in Snow Crest Hotel, Arusha, Tanzania in Dec. 7-8, 2009, sponsored by FAO, ISHS
- 2006 Spring Annual Meeting of the Japanese Horticulture Society (poster session) held in March 29-30, 2006 at Chiba University, Nishi-Chiba campus, 1-33, Yayoi-cho, Inage-ku, Chiba-shi, Chiba 263-8522, Japan
- 109th Annual Meeting of the Japan Society of Plant Breeding held in March 28-30, 2006 at Tokyo University of Agriculture & Technology, Fuchu Campus, 3-8-1 Harumi-cho, Fuchu-shi, Tokyo 183-0057, Japan
- JIRCAS/IPGRI Joint International Workshop on "Cryopreservation of Tropical Plant Germplasm" held on October 20-23, 1998 at Tsukuba, Japan
- AVRDC Special Purpose Training Program held at the Asian Vegetable Research Center (AVRDC), from July 26, 1989-August 19, 1989
- Regional (ASIA) Sweet Potato Production Training Course held at PCARRD, Los Banos, Laguna, Philippines from Jan. 23-Feb. 3, 1989
- Regional Course for Asia on Potato Germplasm Management, Breeding and Evaluation held at PCARRD, Los Banos, Laguna, Philippines from March 15-29, 1989
- Participant and Training Facilitator during the, "Sweet Potato Mini-Course on Tissue Culture and Virology" sponsored by SAPPRAD, CIP, PCARRD & ViSCA held on March 12-14, 1989 in UPLB and ViSCA.

C-2 National

- “In Focus: Rice Crop Health Monitoring and Assessment” during the Rice Science & Technology Webinar Series Part 2 organized by the College of Agriculture and Food Science , University of the Philippines Los Banos Laguna held on 08 June 2023 via Zoom.
- “Operation, Maintenance, Safety, Storage, and Basic Troubleshooting of Agricultural Farm Machines (from Land Preparation to Postharvest)” during the Rice Science & Technology Webinar Series Part 2, organized by the College of Agriculture and Food Science , University of the Philippines Los Banos Laguna held on 20 June 2023 via Zoom.
- “PRiSM: The first satellite-based nationwide rice monitoring system in Southeast Asia” during the Rice Science & Technology Webinar Series Part 2 organized by the College of Agriculture and Food Science , University of the Philippines Los Banos Laguna held on 13 June 2023 via Zoom.
- “Pamamahala ng Sustansya ng Lupa sa Palayan” during the Rice Science & Technology Webinar Series Part 2 organized by the College of Agriculture and Food Science , University of the Philippines Los Banos Laguna held on 15 June 2023 via Zoom.
- 41th Annual Pest management Council of the Philippines Scientific Meeting and Conference at Waterfront Insular Hotel,Davao City, March 9-12, 2010
- National Vegetable Congress of the Philippines held at Sabin Beach Resort, Ormoc, Leyte on June 24-26, 2008, Philippines
- 4th Annual Meeting of the National Research Council of the Philippines-Visayas Regional Chapter held on May 21, 2007 at the Center for Continuing Education, Visayas State University, Visca, Baybay, Leyte, Philippines
- Training-Workshop on Project Development and Resource Generation for SUCs held on October 2-6, 2006 at the University Hotel, UP Campus, Diliman, Quezon City, Philippines
- Risk Assessment Seminar Workshop for Technology Developers held on January 26-28, 2005 at the Philippine Rice Research Institute, Munoz, Nueva Ecija sponsored by PhilRice and Department of Agriculture, Philippines
- South-South-North Natural Fiber Dialogue: Natural Fiber For Industrial Purpose: Current Issues held on March 4-6, 2005 at Leyte State University, Visca, Baybay, Leyte
- 23rd National Conference and Scientific Meeting of the Environmental Education Network of the Philippines held on May 26-28, 2004 at the Leyte State University, Visca, Baybay, Leyte
- National Abaca Congress held on December 3-4, 2003 at Sabin Resort Hotel, Ormoc City, Philippine
- Consultative Meeting and Workshop on Abaca Crop Improvement held on Aug. 20-21, 2002 at the Splash Mountain Restaurant & Resort, Los Baños, Laguna, Philippines
- Training on ‘Propagation of Anthurium’ held on October 14-15, 1999 at the Ornamentals Crops Division, U.P. Los Baños, College, Laguna sponsored by UPLB and Philippine Council for Agriculture, Forestry, Natural Resources Research and Development (PCARRD), Philippines

C-2 National

- 1st Semi-Annual Review on Integrated Root Crops Program held at PRCRTC, Visca, Baybay, Leyte on Feb. 9-10, 1990 Philippines
- National Training Workshop on Root Crops and Abaca Germplasm Characterization, Documentation and In Vitro Conservation held at IPB, UPLB, Los Baños, Laguna from Jan. 22-24, 1990 Philippines
- National Rootcrops and Abaca Genetic Resources Workshop held at NPGRL, Los Baños, Laguna and at VISCA, Baybay, Leyte from Sept. 14-15, 1989 Philippines

C-3 Local

- Applied pollen analysis with impedance-flow cytometry webinar, March 03, 2022
- Research & Education Working Group virtual seminar, July 26, 2019 at 9:00 AM to 10:30 AM (ET)
- Special seminar on “Breeding for low input cultivars: Looking back, Looking forward” presented by Dr. E. Rasco held at the Crop Science Cluster, CA, UP Los Banos in Nov. 17, 2016
- Seminar-Workshop on Basic Sensory Quality Assessment, by Prof. Marie Faye Nguyen-Orca, Prof. Angelina Felix & Ms. Gemaima Evangelista (trainors), July 21, 2016 in East-West Seed Co., Hortanova Research Center, Lipa city, Batangas
- 4DX Team Work Session Workshop on June 29-30, 2015, by Tessa Mendoza (facilitator), organized by East-West Seed Co., Sept 22, 2015, in East-West Seed Co., San Rafael Bulacan
- Seminar on DNA-The Molecular Basis of Heredity presented by Dr. Conrado Balatero held at the Hortanova Research Center, Lipa city, Batangas in April 23, 2014
- Seminar on “Central Dogma of Molecular Biology” presented by Asst prof. Neilyn Ona-Villaof IBS UPLB held at the Hortanova Research Center, Lipa city, Batangas in April 23, 2014
- Brain-Based Coaching Workshop held at the Hortanova Research Center, Lipa city, Batangas in Nov. 15, 2013
- Workshop on “Setting Performance Expectations” organized by East West Seed Philippines on April 12, 2013
- Participated in the 2013 East-West Seed Co. R&D Team Building Program organized by Asian Metro Tours and Events Co. held in Caliraya Resort Club, Lumban Laguna on May 9-10, 2013
- Regional RDE Symposium held at Baybayon ni Agalon Beach Resort, Albuera, Leyte on June 17-18, 2008 Philippines
- “Seminar-Workshop on Ethics of Quality-Oriented Professional: Soaring Eagles Within Institutional Boundaries on Dec. 4, 2007 at CCE, VSU, Visca, Baybay, Leyte Philippines
- Seminar-workshop on “School and Family Mental Health” on Oct. 24-25, 2007 at CCE, VSU, Visca, Baybay, Leyte Philippines
- Instructional Leadership Training Workshop held on May 30-31, 2007 at the FARM I Training Hall, VSU, Visca, Baybay, Leyte Philippines

C-3 Local

- Instrument calibration, Operation & Troubleshooting Seminar-Workshop held on August 6-8, 2007 at the department of Pure and Applied Chemistry, VSU, Visca, Baybay, Leyte Philippines
- 19th Regional Research and Development/Extension (RDE) Symposium on May 24-25, 2007 at the Garden Beach Resort, LSU, Visca, Baybay, Leyte Philippines
- Curricular Program Review and Consultation Planning Meeting held on April 24-26, 2007 at the Center for Continuing Education, Leyte State University, Visca, Baybay, Leyte Philippines
- 4th Annual Meeting of the National Research Council of the Philippines-Visayas Regional Cluster held in May 21, 2007 at the Center for Continuing education, Visayas State University, Visca, Baybay, Leyte Philippines
- 2005 ACRO Seminar Series held on January 21, 2005 at FARMI, Leyte State University, Visca, Baybay, Leyte Philippines
- Seminar on Teaching as a Vocation held in January 31, 2004 at the Center for Continuing Education (CCE), Leyte State University, Visca, Baybay, Leyte Philippines
- 2nd Phase University-Wide Strategic Planning Workshop held in January 24, 2004 at the Center for Continuing Education (CCE), Leyte State University, Visca, Baybay, Leyte Philippines
- 16th Regional Symposium on R & D Highlights held in August 30-31, 2004 at the Sabin Resort Hotel, Bantigue, Ormoc City Philippines
- 15th Regional Symposium on R & D Highlights held in August 19, 2003 at the Convention Center, Leyte State University, Visca, Baybay, Leyte Philippines
- Training on 'How To Present Research Results' held on March 14-16, 2001 at PhilRootcrops and DAEM, Visca, Baybay, Leyte Philippines
- Forum on Biotechnology held at SMED Center, Tacloban City in July 19, 2000 Philippines
- Seminar on Open Learning and Distance Education held in May 10, 2000 at the FARMI Audio-Visual and Training Room, Visca, Baybay, Leyte Philippines
- Training Workshop on Development on Self-Instructional Materials for Distance Learning held in May 11-13, 2000 at the FARMI Audio-Visual and Training Room, Visca, Baybay, Leyte Philippines
- Training on Plant Tissue culture Laboratory Management and Tissue Culture Techniques held in November 27-29, 2000 at Visayas State College of Agriculture, Baybay, Leyte sponsored by VISCA and the Netherlands Management Cooperation Program (NMCP) Philippines
- Seminar on "Safety in the Laboratory" held in November 24, 2000 at Hall A, B & C, SM City, Cebu, Philippines
- Philippine Association For Graduate Education (PAGE VIII) General Assembly held in January 23, 1999 at the Human Resources Development Center, Leyte Normal University Philippines

C-3 Local

- Values Orientation Workshop (VOW) conducted in October 18-20, 1999 by the Visayas State College of Agriculture, Baybay, Leyte and the Civil Service Commission for 24 training hours Philippines
- Training course on 'Research and Technology Management' held in January 25-29, 1999 at FARMI, Visca, Baybay, Leyte Philippines
- Orientation Seminar on the Accounting and Auditing Manual for Research Operations (AAMRO), Book I and Financial Management Dialogue held in July 12, 1995 at PRCRTC, ViSCA, Baybay, Leyte Philippines
- Communication Skill Enhancement Seminar-Workshop held in Jan. 26-Feb. 2, 1990 at ViSCA, Baybay, Leyte Philippines

COMPLETED RESEARCH PROJECTS

- Principal implementer of the 5-year project on "Germplasm Conservation, Research and Training " covered under the East West Seed Co. and UPLB IPB-NPGRL partnership. The purpose is to assist the NPGRL genebank in reviving their old genebank collection (seeds) and contribute to the conservation efforts of local vegetable germplasm.
- Project leader of a 5-year project on "AVRDC Germplasm conservation, evaluation, and gene discovery" funded by AVRDC through the support of donors and the Government of Taiwan
- Principal collaborator of a 3-year project, "Value addition of indigenous food crops by low cost sustainable processing: towards poverty reduction, food and nutrition security in sub-Saharan Africa" – in collaboration with Jomo Kenyatta Univ. of Agric. and Technology and Biotechnology Center for Eastern Africa (becA) funded by Government of Australia through CSIRO
- Principal implementer of the WorldVeg project, "Vegetable seed kits for immediate rehabilitation of vegetable production and consumption for vulnerable households in Tanzania", a one year project funded by DFID through FAO
- Project leader in Africa region on a 4-year project, "Vegetable Seed Kits for Immediate Rehabilitation of Vegetable Production and Consumption for Disaster-affected Households in Developing Countries" coordinated by AVRDC-HQ in Taiwan and funded by the Government of Taiwan.
- Project Co-Leader of a 3-year project, "Regeneration and Safeguard of Valuable Collections of Vegetable Germplasm held at The World Vegetable Center (AVRDC)", funded by Global Crop Diversity Trust Fund c/o Rome Viale delle Terme di Caracalla, 00153 Rome, Italy
- Project Team member: Vegetable Breeding and Seed Systems for Poverty Alleviation in Sub-Saharan Africa" (3 years funded by Bill and Gates Foundation, U.S.A.)
- Project Collaborator: Genetic, Physiological, and Molecular Approaches to Improve Heat and Drought Tolerance of Tropical Tomato" (3 years funded by BMZ/GTZ)

COMPLETED RESEARCH PROJECTS

- Project Component Leader of a 3-year project, "Abaca Fiber Utilization in the Automotive Industry (Daimler Chrysler-DEG-PPP Project Phase II), "Production of Disease-free Abaca Plantlets through Tissue Culture and Virus Indexing". Jointly implemented by Visayas State University and University of Hohenheim, funded by Daimler Chrysler, Germany.
- Project Leader of a 3-year project, "Production of virus-free banana plantlets using tissue culture technique". Implemented by the Department of Horticulture, Visayas State University. Funded by the Visayas Consortium for Agricultural Research in the Philippines.
- Project Component Leader of a 2-year project, "Induction of Somatic Embryogenesis and Its Applications for the Genetic Improvement of Abaca (*Musa textilis* Nee)". Implemented by the National Abaca Research Center, Visayas State University. Funded by the Department of Agriculture-Bureau of Agricultural Research, Philippines
- Project Leader of a 3-year project, "Regeneration for somaclonal variants for blast resistance from upland rice tissue cultures". Implemented by the Department of Horticulture, Visayas State University. Funded by the Philippine government.
- Main Researcher of a 2-year research study, "Development of protocol for Agrobacterium-mediated transformation of *Phalaenopsis* orchid". Hosted by Plant Cell Technology Laboratory, Faculty of Horticulture, Chiba University, Japan. Funded by Japan Society for the Promotion of Science through the Monbusho Grant-in Aid Program.
- Co-Project Leader of a 2-year project, "Rapid propagation of aberrant coconut (makapuno)", Implemented by the National Coconut Research Center, fFunded by Philippine government.
- Main Researcher of a 3.5 year study, "Studies on the Tissue Culture and Somatic Hybridization of Sweet potato and Wild Relatives". Implemented by the Plant Breeding Laboratory, Faculty of Agriculture, Yamagata University, Japan, funded by the Japanese Government.
- Project Leader of a 3-year project: "In vitro culture of sweet potato (*Ipomoea batatas* Lam.) and taro (*Colocasia esculenta* L.) for the production of disease-free plants for micropropagation and germplasm preservation". Implemented by the Philippine Root Crop Research and Training Center. Funded by a grant from the International Foundation for Science, Sweden.
- Project Leader of a 3-year project, "Development of Techniques for the Isolation and Culture of Protoplasts from Yam (*Dioscorea* spp.) and Regeneration of Plants". Implemented by the Philippine Root Crop Research and Training Center. Funded by a research grant from the International Foundation for Science, Sweden.
- Project Leader of a 2-year project, "Propagation of breadfruit (*Artocarpus altilis* L.) through tissue culture". Implemented by the Department of Horticulture, Visayas State University. Funded by the Philippine government.

REFERENCES

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