



The **Philippine**
Men & Women
of Science

A compilation of bio-bibliographical information on men and women in the field of science and technology.

Volume XXXII

Philippine Men and Women of Science

(Formerly Philippine Men of Science)



**INFORMATION RESOURCES AND ANALYSIS DIVISION
Science and Technology Information Institute
Department of Science and Technology**

Volume 32

June 2016



The **PHILIPPINE MEN AND WOMEN OF SCIENCE** *Volume 32, June 2016 issue* is published by the Science and Technology Information Institute – Department of Science and Technology (STII-DOST), General Santos Ave., Bicutan, Taguig City, Philippines.

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PREFACE

The Philippine Men and Women of Science (PMWS) is an online publication of the Science and Technology Information Institute (STII). The first volume was published in 1964 as the Philippine Men of Science (PMS) featuring one hundred and one Filipino scientists' contributions to the scientific community.

The Philippines is primarily an agricultural country. Many Filipinos rely on agriculture for their livelihood. As the advance of agriculture, rural development, use of land resources, and relevant environmental studies continue to play a pivotal role in the economy, research in these areas help set the scene for further growth across the country.

This online biobibliographical publication features researchers and institutions that can serve as a point of reference useful in strategic or applied work on scientific topics of current interest. As a tool, information presented supports visibility for researchers and opens readers to the new face of science in these subject areas. Specific topics of interest include but are not limited to authors who looked at a macro perspective in terms of agriculture management and policy levels and those whose microscopic lenses focus on genetic and microbial research.

The *Philippine Men and Women of Science Volume 32* salutes our scientists and the significance of their research. This tool aids in shaping research foundations – what can be found and learned now is here for the future. Profiles in this edition show research prowess important to Agriculture, Plants, Animals, and Environmental Studies. If a quick preview is desired, readers can use the authors and specialization indexes.

Our team upholds a continuous, concerted effort that diligently coordinates records. To date, we have persevered in the timeless tradition of ongoing data mining, organization, and communication of facts on productive scientists and researchers in their fields.

We offer our deepest gratitude to our scientists, researchers, partners, and staff who contributed to the completion of this volume.

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<ul style="list-style-type: none"> • Agricultural Marketing and Price Analysis • Agricultural Policy and Development • Impact Assessment 	

Name Nathaniel C. Añasco

Gender Male

Organizational Affiliations

Assistant Professor and Director, Institute of Marine Fisheries and Ocean Sciences, University of the Philippines Visayas

Education

Doctor of Philosophy in Fisheries Science, Kagoshima University, Japan 2010

Master of Science in Fisheries Science and Technology, Kagoshima University, Japan 2007

Master of Science in Fisheries, University of the Philippines Visayas, Miag-ao, Iloilo 1993

Bachelor of Science in Biology, University of the Philippines Visayas, Miag-ao, Iloilo 1991

Fields of Specialization

Marine Pollution and Ecotoxicology

Water Quality

Marine Chemistry

Fisheries Biology

Aquatic Ecotoxicology

Bioaccumulation

Honors / Awards

UP Diamond Jubilee Professorial Chair in Fisheries Science, University of the Philippines 2011

Outstanding Young Scientist, National Academy of Science and Technology 2011

Best Paper Presenter Award, University of the Philippines Visayas 2003

Director's Award, Bureau of Agricultural Research, Department of Agriculture 2002

Publications

2014

Calapuan, J.R., Añasco, N.C., Campos, W.L., Cainglet, R.P., & Primavera, K.H., Antifouling potentials of *Neopetrosia proxima* from Southern Guimaras, Philippines against the marine diatom *Navicula ramosissima*, barnacle *Balanus* sp., and green mussel *Perna viridis*. *Advances in Environmental Sciences, International Journal of the Bioflux Society*, 2014, 6(3):214-222.

Koyama, J., Imakado, C., Uno, S., Kuroda, T., Hara, S., Majima, T., Shiota, H., & Añasco, N.C., Simulated distribution and ecotoxicity-based assessment of chemically-dispersed oil in Tokyo Bay. *Marine Pollution Bulletin*, 2014, 85(2):487-493.

Vicente, J.R., Nillos, M.G.G., Taberna, H.S., Jr., Pahila, I.G., & Añasco, N.C., Sorbents derived from lignocellulosic waste materials: characterization and potential removal of surfactants, phenolic compounds, and nutrients from environmental aqueous solutions. *Advances in Environmental Sciences, International Journal of the*

Bioflux Society, 2014, 6(1):91-100.

- 2010 Añasco, N., Uno, S., Koyama, J., Matsuoka, T., & Kuwahara, N., Assessment of pesticide residues in freshwater areas affected by rice paddy effluents in Southern Japan. *Environmental Monitoring Assess*, 2010, 160:371-383.
Uno, S., Koyama, J., Kokushi, E., Monteclaro, H., Santander, S., Cheikyula, J.O., Miki, S., Añasco, N., Pahila, I.G., Taberna, H.S., Jr., Matsuoka, T., Monitoring of PAHs and alkylated PAHs in aquatic organisms after 1 month from the Solar I oil spill off the coast of Guimaras Island, Philippines. *Environmental Monitoring and Assessment*, 2010, 165(1-4):501-515.
Añasco, N.C., Koyama, J., & Uno, S., Pesticide Residues in Coastal Waters Affected by Rice Paddy Effluents Temporarily Stored in a Wastewater Reservoir in Southern Japan. *Archives of Environmental Contamination and Toxicology*, 2010, 58(2):352-360.
- 2008 Añasco, N., Size structures, length-weight relationships, sex ratios and temporal variations in gonadal stages of the three most important pufferfishes (Family: Tetraodontidae) of Estancia, Iloilo. *UP Visayas Journal of Natural Science*, 2008, 13(2):161-170.
Añasco, N.C., Koyama, J., Imai, S., & Nakamura, K., Toxicity of Residual Chlorines from Hypochlorite-treated Seawater to Marine Amphipod *Hyale barbicornis* and Estuarine Fish *Oryzias javanicus*. *Water, Air, and Soil Pollution*, 2008, 195:129-136.
Añasco, N., Pufferfishes (Family: Tetraodontidae) of Estancia, Iloilo: species composition and importance values with notes on new records of occurrences in the Philippines and classification of the Genus *Lagocephalus*. *UP Visayas Journal of Natural Science*, 2008, 13(2):149-160.
- 2007 Uno, S., Kokushi, E., Miki, S., Añasco, N.C., Koyama, J., & Monteclaro, H., Survey of chemical pollution in coastal areas of Panay Island, Philippines. *UP Visayas Journal of Natural Science*, 2007, 12(1):9-24.
- 2001 Añasco, N., & Babaran, R.P., Spatial distribution and habitat selection of setnet-caught greasyback shrimp (*Metapenaeus ensis*) and banana prawn (*Penaeus merguensis*) in Batan Bay estuary. *UP Visayas Journal of Natural Science*, 2001, 6(1-2):196-217.

Name Menandro N. Acda

Gender Male

Organizational Affiliations

Professor, Dept. of Forest Products and Paper Science, College of Forestry and Natural Resources, University of the Philippines Los Baños, College, Laguna

Chair, Dept. of Forest Products and Paper Science, College of Forestry and Natural Resources, University of the Philippines Los Baños, College, Laguna

Education

Post Doctorate, Oregon State University, Corvallis, OR, USA 1997

Doctor of Philosophy in Forest Products (Area: Wood Preservation and Biodeterioration/High Pressure Wood Impregnation), Oregon State University, Corvallis, OR, USA 1995

Master of Science in Wood Science and Technology, University of the Philippines Los Baños, College, Laguna 1992

Bachelor of Science in Forest Prod Engineering, University of the Philippines Los Banos, College, Laguna 1986

Fields of Specialization

Termite Biology and Control

Wood Protection/Biodeterioration

Bio-based Composites

Agriculture

Forestry

Wood Protection

Wood Adhesion and Glues

Bioenergy

Materials Engineering

Employment

Professor, University of the Philippines Los Baños, 2008-Present

Associate Professor, University of the Philippines Los Baños, 2005-2008

Post Doctoral Research Associate, Oregon State University, 1995-1997

Assistant Professor, University of the Philippines Los Baños, 1993-2004

Graduate Research Assistant, Oregon State University, 1993-1995

Instructor, University of the Philippines Los Baños, 1989-1992

Association Membership

Member, Society of Wood Science and Technology (US)

Member, Forest Products Research Society (US)

Member, INBAR (China)

Member, International Research Group on Wood Protection (Sweden)

Member, International Isoptera Society (US)

Regular Member, National Research Council of the Philippines

Honors / Awards

U.P. Scientific Productivity Award, University of the Philippines 2008

NAST Outstanding Book Award, National Academy of Science and Technology 2008

Engr. Arsenio G. Espiritu Professorial Chair Award, University of the Philippines Los Baños 2008

U.P. Creative Work and Research Grant, University of the Philippines 2007

Ford Conservation and Environment Grants, Ford Philippines 2007

Julian Banzon Medal for Applied Research, National Academy of Science and Technology 2007

UNESCO Fellowship, The United Nations Educational, Scientific and Cultural Organization (UNESCO) 2006

Ford Conservation and Environment Grant, Ford Philippines 2006

Marquis Who's Who in Science and Engineering, 8th Edition (3 years), Marquis Who's Who 2005-2008

San Miguel Corporation Professorial Chair Award, University of the Philippines Los Baños 2005

U.P. Creative Work and Research Grant, University of the Philippines 2005

2000 Outstanding Scientists of the 21st Century, International Biographical Centre, Cambridge, United Kingdom 2005

Charles Lindbergh Foundation Research Grant, Charles Lindbergh Foundation, USA 2004

Outstanding Researcher Award, University of the Philippines Los Baños 2004

UPLB Alumni Association Professorial Chair Award, University of the Philippines Los Baños 2004

International Publication Awards (15 papers, 2003-2008), University of the Philippines 2003-2008

UPLB Alumni Association Professorial Chair Award, University of the Philippines Los Baños 2003

International Tropical Timber Organization Fellowship, International Tropical Timber Organization, Japan 2002

International Foundation for Science (IFS) Research Grant, International Foundation for Science, Sweden 2001

UPLB Faculty Development Grant, University of the Philippines Los Baños 2000

Researches

Completed

UPLB comprehensive termite management program.

Lahar barrier for termite control in the Philippines.

Wood-plastic composite from wood residues and recycled plastic for increased utilization of wood resources.

Use of lahar from Mt. Pinatubo as barrier to prevent tunneling and invasion of Subterranean termites into homes and timber structures in the Philippines.

Recycling Waste Chicken Feather for Low Cost Building Materials in the Philippines

Remedial control of Philippine Subterranean Termites (Isoptera: Termitidae) using bait toxicants

Papers Presented

Morell, J.J., Levien, K.L., & Acda, M. (1996). Biocide Impregnation of Wood-based Materials with Supercritical Carbon Dioxide, 212th American Chemical Society National Meeting, Orlando, FL.

Publications

- 2016
Rojo, M.J.A., & Acda, M.N., Interspecific Agonistic Behavior of *Macrotermes gilvus* (Isoptera: Termitidae): Implication on Termite Baiting in the Philippines. *Journal of Insect Behavior*, 2016, 29(3):273-282.
Acda, M.N., Jara, A.A., Daracan, V.C., & Devera, E.E., Opportunities and Barriers to Wood Pellet Trade in the Philippines. *Ecosystems & Development Journal*, 2016, 6(1):27-31.
- 2015
Acda, M.N., Fuel pellets from downed coconut (*Cocos nucifera*) in super typhoon Haiyan. *Biomass and Bioenergy*, 2015, 83:539-542.
Acda, M.N., Physico-chemical properties of wood pellets from coppice of short rotation tropical hardwoods. *Fuel*, 2015, 160:531-533.
- 2014
Acda, M.N., Toxicity and Transmission of Thiamethoxam in the Asian Subterranean Termite *Coptotermes gestroi* (Isoptera: Rhinotermitidae). *Journal of Insect Science*, 2014, 14(222):1-4.
Acda, M.N., Chemical Composition of Ethanolic Seed Extract of *Annona squamosa* L. and *A. muricata* L. (Annonaceae) Using GC-MS Analysis. *The Philippine Agricultural Scientist*, 2014, 97(4):422-426.
Acda, M.N., & Devera, E.E., Physico-chemical properties of wood pellets from forest residues. *Journal of Tropical Forest Science*, 2014, 26(4):589-595.
Acda, M.N., Repellent Effects of *Annona* Crude Seed Extract on the Asian Subterranean Termite *Coptotermes gestroi* Wasmann (Isoptera: Rhinotermitidae). *Sociobiology*, 2014, 61(3):332-337.
Batiancela, M.A., Acda, M.N., & Cabangon, R.J., Particleboard from waste tea leaves and wood particles. *Journal of Composite Materials*, 2014, 48(8):911-916.
- 2013
Acda, M.N., Geographical Distribution of Subterranean Termites (Isoptera) in Economically Important Regions of Luzon, Philippines. *Philippine Agricultural Scientist*, 2013, 96(2):205-209.
Acda, M.N., Evaluation of Lahar barrier to protect wood structures from Philippine subterranean termites. *Philippine Journal of Science*, 2013, 142(1):21-25.
Acda, M.N., & Cabangon, R.J., Termite resistance and physico-mechanical properties of particleboard using waste tobacco stalk and wood particles.

- International Biodeterioration & Biodegradation, 2013, 85:354-358.
- 2012 Acda, M.N., & Ong, H.B., Penetration of Lahar Aggregates by Philippine Subterranean Termites (Isoptera: Termitidae). Isabela State University - Cabagan Journal of Research, 2012, 21(1):25-36.
- Acda, M.N., Devera, E.E., Cabangon, R.J., Pabelina, K.G., & Ramos, H.J., Effects of dielectric barrier discharge plasma modification on surface properties of tropical hardwoods at low pressure. Journal of Tropical Forest Science, 2012, 24(3):416-425.
- Acda, M.N., Devera, E.E., Cabangon, R.J., & Ramos, H.J., Effects of plasma modification on adhesion properties of wood. International Journal of Adhesion and Adhesives, 2012, 32:70-75.
- 2011 Servañez, B.F., Razal, R.A., Fernandez, E.C., Carandang, M.G., & Acda, M.N., Physico-Mechanical Properties of Culturally-Preformed Bayog (*Bambusa merrilliana* (Elmer) Rojo & Roxas comb. nov.). Journal of Bamboo and Rattan, 2011, 10(1&2):49-62.
- Jimenez, J.P., Jr., Acda, M.N., Razal, R.A., & Madamba, P.S., Physico-Mechanical Properties and Durability of Thermally Modified Malapapaya [*Polyscias nodosa* (Blume) Seem.] Wood. Philippine Journal of Science, 2011, 140(1):13-23.
- 2010 Acda, M.N., Waste Chicken Feather as Reinforcement in Cement-Bonded Composites. Philippine Journal of Science, 2010, 139(2):161-166.
- 2009 Manalo, R.D., & Acda, M.N., Effect of hot oil treatment on physical and mechanical properties of three species of Philippine bamboo. Journal of Tropical Forest Science, 2009, 21(1):19-24.
- Acda, M.N., Toxicity, tunneling and feeding behavior of the termite, *Coptotermes vastator*, in sand treated with oil of the physic nut, *Jatropha curcas*. Journal of Insect Science, 2009, 9(Article 64):1-8.
- Acda, M.N., Sustainable use of waste chicken feather for durable and low cost building materials for tropical climates. Sustainable Agriculture: Technology, Planning and Management, 2009:353-366.
- 2008 Acda, M.N., Insecticidal activity of thiamethoxam against the bamboo powder post beetle *Dinoderus minutus* Fabr. (Coleoptera: Bostrichidae). Journal of Pest Science, 2008, 81(2):109-113.
- Boongaling, E.G., Acda, M.N., Hernandez, H.P., & Del Rosario, E.J., Fractionation, Derivatization and Termiticidal Activity of Cashew (*Anacardium occidentale* L.) Nut Shell Liquid Against the Philippine Milk Termite (*Coptotermes vastator* Light). The Philippine Agricultural Scientist, 2008, 91(4):408-415.
- 2007 Acda, M.N., Foraging populations and territories of two species of subterranean termite (Isoptera: Termitidae) in the Philippines. Asia Life Sciences, 2007, 16(1):71-80.
- Acda, M.N., *Schedorhinotermes makilingensis*, A New Species of Subterranean Termite (Isoptera: Rhinotermitidae) from the Philippines. Sociobiology, 2007, 50(1):163-171.
- Acda, M.N., Toxicity of thiamethoxam against Philippine subterranean termites. Journal of Insect Science, 2007, 7(26):1-6.
- Acda, M.N., Handbook on Philippine Termites. Los Baños, Laguna, Philippines, UP University Publications office, 2007.
- 2007 Acda, M.N., Foraging populations and territories of two species of subterranean termite (Isoptera: Termitidae) in the Philippines. Asia Life Sciences, 2007, 16(1):71-80.
- Acda, M.N., *Schedorhinotermes makilingensis*, A New Species of Subterranean Termite (Isoptera: Rhinotermitidae) from the Philippines. Sociobiology, 2007, 50(1):163-171.

- Acda, M.N., Toxicity of thiamethoxam against Philippine subterranean termites. *Journal of Insect Science*, 2007, 7(26):1-6.
- Acda, M.N., Handbook on Philippine Termites. Los Baños, Laguna, Philippines, UP University Publications office , 2007.
- 2005 Acda, M.N., & Ong, H.B., Use of Volcanic Debris as Physical Barrier Against the Philippine milk Termite (Isoptera: Rhinotermitidae). *Sociobiology*, 2005, 46(1):117-129.
- Acda, M.N., & Ong, H.B., Penetration of Lahar Aggregates by Philippine Subterranean Termites (Isoptera: Termitidae). *Sociobiology*, 2005, 47(1):189-200.
- Morell, J.J., Acda, M.N., & Zahora, A.R., Performance of oriented strandboard, medium density fiberboard, plywood and particleboard treated with tebuconazole in supercritical carbon dioxide. Document No. IRG/WP/05-30364. International Research Group on Wood Protection. Stockholm, Sweden, 2005.
- 2004 Acda, M.N., Foraging Population and Territories of the Tropical Subterranean Termite *Macrotermes gilvus* (Isoptera: Macrotermitinae). *Sociobiology*, 2004, 43(2):169-177.
- Acda, M.N., Economically important termites (Isoptera) of the Philippines and their control. *Sociobiology*, 2004, 43(2):159-169.
- Acda, M.N., A Method to Trap and Rapidly Segregate Subterranean Termites (Isoptera: Rhinotermitidae) for Laboratory Bioassays. *Sociobiology*, 2004, 44(2):255-260.
- Acda, M.N., Philippine Termites: A Handbook for Homeowners and Pest Control Operators. international Tropical Timber Organization, Tokyo, Japan, 2004.
- 2001 Acda, M.N., Morrell, J.J., & Levien, K.L., Supercritical fluid impregnation of selected wood species with tebuconazole. *Wood Science and Technology*, 2001, 35(1):127-136.
- 1998 Acda, M.N., Morrell J.J., Silva A., Levien, K.L., & Karchesy, J., Using Supercritical Carbon Dioxide for Extraction of Western Juniper and Alaska-Cedar. *Holzforschung*, 1998, 52(5):472-474.
- 1997 Acda, M.N., Morrell, J.J., & Levien, K.L., The effects of process variables on supercritical fluid impregnation of composites with tebuconazole. *Wood and Fiber Science*, 1997, 29(3):282-290.
- Acda, M.N., Morrell, J.J., & Levien, K.L., Effects of Supercritical Fluid Treatments on Physical Properties of Wood-based Composites. *Wood and Fiber Science*, 1997, 29(2):121-130.
- Morrell, J.J., Levien, K.L., Acda, M.N., & Sahle-Demessie, E., Impregnating Wood with Biocides using Supercritical Carbon Dioxide: Process Parameters, Performance and Effects on Wood Properties. *Proceedings, American Wood Preservers' Association*, Pittsburgh, PA, 1997, 93:367-384.
- 1996 Acda, M.N., Morrell J.J., & Levien, K.L., Decay resistance of composites following supercritical fluid impregnation with tebuconazole. *Material und Organismen*, 1996, 30(4):293-300.
- 1995 Acda, M.N., Morrell, J.J., & Levien, K.L., Impregnation of Wood-based Composites using Supercritical Fluids: A Preliminary Report. *Proceedings Canadian Wood Preservation Association*, 1995, 16:9-28.

Name Lilibeth A. Acosta-Michlik

Gender Female

Organizational Affiliations

Senior Researcher Fellow, Potsdam Institute for Climate Impact Research (PIK)
Telegraphenberg, Germany

Education

Doctor of Philosophy in Agricultural Policy (*magna cum laude*), Institute for
Agricultural Policy and Marketing, Departure of Agriculture, University of
Bonn, Germany 1998

Master of Philosophy in Economics and Politics of Development, Faculty of
Economics and Politics, University of Cambridge, England 1991

Bachelor of Science in Agricultural Economics (*cum laude*), University of the
Philippines Los Baños, Laguna, Philippines 1988

Fields of Specialization

Agricultural Economics

Vulnerability and Adaptation to Climate Change Impacts

Agriculture Policy

Environmental Science

Ecosystem Modelling

Employment

Senior Scientist, Postdam Institute for Climate Impact Research (PIK), 2009 August-
Present

Senior Research Fellow, Centre for the study of Environmental Change and
Sustainability, School of Geosciences, University of Edinburgh, United Kingdom, 2008
January-2011 April

Adjunct Professor, School of Environmental Science and Management, University of
the Philippines Los Baños, 2007 August-Present

Scientific Coordinator, School of Environmental Science and Management, University
of the Philippines Los Baños, 2007 July-2010 May

Scientific Coordinator, Unité d'économie rurale, Faculté d'ingénierie biologique,
agronomique et environnementale, Université Catholique de Louvain, 2007 April-2011
January

Research Associate, School of Environmental Science and Management, University
of the Philippines Los Baños, 2006 January-2008 June

Research Associate, Department of Agricultural Economics, University of the
Philippines Los Baños, 2004 July-2005 December

Senior Research Fellow, Département de Géologie et de Géographie, Université
Catholique de Louva, 2004 April-2007 March

Senior Research Fellow, Department of Global Change and Social Systems, Potsdam Institute for Climate Impact Research (PIK), Potsdam, Germany, 2001 November-2004 March

Correspondence Management / Computer Assistant, Embassy of the Democratic Socialist Republic of Sri Lanka, Berlin, Germany, 2001 January-2001 October

Post-doc Research Fellow, Department of Natural Resource Economics, University of Kyoto, Japan, 1998 November-2000 September

Computer Operator/Clerk, Embassy of the Democratic Socialist Republic of Sri Lanka, Bonn, Germany, 1998 January-1998 October

Doctoral Researcher, Institute for Agricultural Policy, Department of Agriculture, University of Bonn, Germany, 1993 April-1998 March

Senior Economic Development Specialist, Agriculture Staff, National Economic and Development Authority (NEDA), Manila, 1991 October-1993 March

Economic Development Specialist, Agriculture Staff, National Economic and Development Authority (NEDA), Manila, 1988 September-1991 September

Honors / Awards

Balik Scientist Awardee, Department of Science and Technology 2008

Fellowship Award, Global Change System for Analysis, Research and Training (START) 2004-2005

Fellowship Award, Japan Society for the Promotion of Science 1998-2000

Magna cum laude, University of Bonn, Germany

Scholarship Award (4 years), German Academic Exchange Services (DAAD) 1993-1997

Scholarship Award (2 years), British Council and Cambridge Overseas Trust 1990-1991

B.M. Gonzales "Best Thesis" award, University of the Philippines

Cum Laude, University of the Philippines Los Baños

Best Officer award, University of the Philippines Los Baños (UPLB) Agricultural Economics Circle

Scholarship Award (4 years), International Rice Research Institute Junior Researchers Association 1984-1988

Trainings

Global Environmental Change Institute on Globalization and Food Systems Scientific Workshop and Science-Policy Forum, IHDP-IAI, Nicoya, Costa Rica November 2004

Advanced Institute on Vulnerability to Global Environmental Change, International Institute for Applied Systems Analysis (IIASA), Laxenburg, Austria May 2004

Climate change science, impacts and policy responses, Imperial College of Science, Technology and Medicine, London, England April 2002

German language course, Goethe Institute, Freiburg, Germany April 1993

Food and Agriculture Organization (FAO) Seminar on population carrying capacity modeling, Center for Economic Development of the Philippines, Manila September 1991

Statistical methods for forecasting and control, Center for Statistics of the University of the Philippines, Manila June 1989

Agricultural project evaluation, National Economic and Development Authority July 1988

Researches

Completed

Integrated sustainability assessment of bioenergy potentials in Asia: An application of a hybrid approach on trade-offs and pathways (PIC-STRAP)

Security Diagrams: Improving a New Approach to Assessing the Risk of Extreme Climate Events on Society

Advanced Terrestrial Ecosystem Analysis and Modeling (ATEAM) project

Intervulnerability Assessment (INVA) project

Vulnerability And Resilience In Practice (VARIP)

From local Urban Trends Up to Regional Evolution (FUTURE) simulator for the Tyndall Coastal Project

Vulnerability of Ecosystem Services to Land Use Change in Traditional Agricultural Landscapes (VISTA) project

Peri-urban Land Use Relationships - Strategies and Sustainability Assessment Tools for Urban – Rural Linkages (PLUREL) Project

Biodiversity and Ecosystem Changes in Europe (EcoChange) Project

Assessing vulnerability of communities and understanding policy implications of adaptation responses to flood-related landslides in Asia (VALE)

A Multiscalar and Multiagent Modeling Framework for Assessing Sustainable Futures in a Globalised Environment (MultiMode)

Bioenergy Planet Project

Livelihoods vulnerabilities to typhoon associated hazards in Southeast Asia: a comparative study in Taiwan and the Philippines

Communication influences on Decision Making in Disaster Recovery and Reconstruction: Implications for RIA framework

World Trade Organization (WTO) and ASEAN Free Trade Agreements (AFTA) on Agricultural Commodities

Ongoing

Agent-based Modeling of sustainable livelihoods for vulnerable people to adapt to the impacts of flood-related landslides in the Philippines

Papers Presented

Eugenio, E.A., Acosta, L.A., Abucay, E.R., Macandog, P.B.M., Magcale-Macandog, D.B., Eugenio, J.M.A., & Lin, E.K.H. (2014 October). Livelihood adaptation to impacts of extreme events in the Philippines: A decade after the typhoon-induced disasters in Infanta, Quezon, National Conference on Integrated Natural Resources and

Environment Management (NC-INREM 2014), Learning Lessons, Sharing Knowledge: Strengthening the Role of INREM in Sustainable Development, held in SEARCA, Los Baños, Laguna.

Eugenio, E.A., Acosta, L.A., Magcale-Macandog, D.B., Macandog, P.B.M., Lin, E.K.H., Eugenio, J.M.A., Abucay, E.R., Cura, A.L., & Manuta, J. (2014 May). Livelihood vulnerabilities and adaptive capacity of local communities to typhoon-induced landslides in the Philippines: The case of Compostela Valley in Mindanao, Philippines Network of Educators on Environment (PNEE) 7th International Conference and Scientific Meeting on Traditional, Local Environment Knowledge and Practices to Address Climate Change Impacts held in Lucban, Quezon, Philippines.

Eugenio, E.A., Acosta, L.A., Enano, N.H., Jr., Magcale-Macandog, D.B., Macandog, P.B.M., Talubo, J.P.P., Salvacion, A.R., Lucht, W., & Eugenio, J.M.A. (2013 November). Typology of Farmers' Awareness on Sustainability of Alternative Bioenergy Feedstocks in the Philippines, 2013 International ISSAAS (International Society for Southeast Asian Agricultural Sciences) Congress in Muntinlupa City, Philippines.

Acosta, L.A., Magcale-Macandog, D.B., Engay, K.G., Herrera, M.N.Q., Nicopior, O.B.S., Sumilang, M.I.V., Lucht, W., & Espaldon, V. (2012). Conjoint segmentation of policy preferences for a sustainable biofuel production in the Philippines, International Symposium on Alcohol Fuels, CREAR, University of Florence.

Acosta-Michlik, L., Klein, R.J.T., Kumar, K., Eierdanz, F., Alcamo, J., Krömer, D., Cairus, A., Tänzler, D. (2005 June). How vulnerable is India to climatic stress? Measuring vulnerability to drought using the Security Diagram concept, Human Security and Climate Change. An International Workshop Holmen Fjord Hotel, Asker, near Oslo.

Alcamo, J., Acosta-Michlik, L., Cairus, A., Eierdanz, F., Klein, R., Krömer, D., Tänzler, D. (2005 May). A new approach to the assessment of vulnerability to drought, Concluding Symposium of the German Climate Research Programme (DEKLIM).

Schröter, D., Acosta-Michlik, L., Reidsma, P., Metzger, M., & Klein, R.J.T. (2003 October). Modelling the vulnerability of eco-social systems to global change: Human adaptive capacity to changes in ecosystem service provision, Open Meeting of the Global Environmental Change Research Community, Montreal, Canada.

Publications

- 2016 Acosta L.A., Eugenio, E.A., Macandog, P.B.M., Magcale-Macandog, D.B., Lin, E.K., Abucay, E.R., Cura, A.L., & Primavera, M.G., Loss and damage from typhoon-induced floods and landslides in the Philippines: Community Perceptions on climate impacts and adaptation options. *International Journal of Global Warming*, 2016, 9(1):33-65.
- 2014 Acosta, L.A., Eugenio, E.A., Enano, N.H., Jr., Magcale-Macandog, D.B., Vega, B.A., Macandog, P.B.M., Eugenio, J.M.A., Lopez, M.A., Salvacion, A.R., & Lucht, W., Sustainability trade-offs in bioenergy development in the Philippines: An application of conjoint analysis. *Biomass and Bioenergy*, 2014, 24:20-41.
- Acosta, L.A., Magcale-Macandog, D.B., Eugenio, E.A., Macandog, B.M., Cui, X., & Kavi Kumar, K.S., Knowledge and Opinion on the Sustainability of Bioenergy Production in Asia: Cases in China and the Philippines. *Asia Pacific Network (APN) Science Bulletin*, 2014:189-191.
- Acosta, L.A., Rounsevell, M.D.A., Bakker, M., Doorn, A.V., Gómez-Delgado, M., &

- Delgado, M., An Agent-Based Assessment of Land Use and Ecosystem Changes in Traditional Agricultural Landscape of Portugal. *Intelligent Information Management*, 2014, 6:55-80.
- 2013 Acosta, L.A., & Galli, F., Crisis Probability Curves (CPCs): A Model for Assessing Vulnerability Thresholds Across Space and Over Time. *Journal of Environmental Science and Management*, 2013, 16(1):36-49.
- Herzele, A.V., Gobin, A., Gossum, P.V., Acosta, L., Waas, T., Dendoncker, N., & de Frahan, B.H., Effort for money? Farmers' rationale for participation in agri-environment measures with different implementation complexity. *Journal of Environmental Management*, 2013, 131:110-120.
- Acosta, L.A., Enano, N.H., Jr., Magcale-Macandog, D.B., Engay, K.G., Herrera, M.N.Q., Nicopior, O.B.S., Sumilang, M.I.V., Eugenio, J.M.A., & Lucht, W., How sustainable is bioenergy production in the Philippines? A conjoint analysis of knowledge and opinions of people with different typologies. *Applied Energy*, 2013, 102:241-253.
- Acosta, L., Klein, R.J.T., Reidsma, P., Metzger, M.J., Rounsevell, M.D.A., Leemans, R., & Schröter, D., A spatially explicit scenario-driven model of adaptive capacity to global change in Europe. *Global Environmental Change*, 2013, 23(5):1211-1224.
- 2012 Asuero, M.P., Nelson, G.L.M., Espaldon, M.V.O., Acosta, L.A., Macandog, D.M., Lalican, N.M., Abucay, E.R., Malenab, M.C.T., & Talubo, J.P.P., Social Characteristics and Vulnerabilities of Disaster-Prone Communities in Infanta, Quezon, Philippines. *Journal of Environmental Science and Management*, 2012, 15(2):19-34.
- 2011 Herzele, A., Dendoncker, N., Acosta-Michlik, L., Mobilisation capacity for agri-environmental management. *Journal of Environmental Management*, 2011, 92(3):1023-1032.
- Acosta-Michlik L., Lucht W., Bondeau L., & Beringer, T., Integrated assessment of sustainability trade-offs and pathways for global bioenergy production: Framing a novel hybrid approach. *Renewable and Sustainable Energy Review*, 2011, 15(6):2791-2809.
- Murray-Rust, D., Dendoncker, N., Dawson, T.P., Acosta-Michlik, L., Karali, E., Guillem, E., & Rounsevell, M., Conceptualising the analysis of socio-ecological systems through ecosystem services and agent-based modelling. *Journal of Land Use Science*, 2011, 6(2-3):83-99.
- 2009 Fontaine, C.M., Mokrech, M., Rounsevell, M.D.A., Nicholls, R.J., Acosta-Michlik, L., Nicholson-Cole, S.A., Scenarios of urban land use change and impact assessment of climate change. *IOP Conference Series: Earth and Environmental Science*, 2009, 6(4).
- Fontaine, C., Mokrech, M., Rounsevell, M.D.A., Nicholls, R.J., Acosta-Michlik, L., Nicholson-Cole, S.A., Scenarios of urban land use change and impact assessment of climate change. *IOP Conference Series: Earth and Environmental Science*, 2009, 6(34).
- Alcamo, J., Acosta-Michlik, L., Carrius, A., Eierdanz, F., Reply to commentary of Carr and Kettle, the challenge of quantifying susceptibility to drought-related crisis. *Regional Environmental Change*, 2009, 9(2):137-138.
- 2008 Eierdanz, F., Alcamo, J., Acosta-Michlik, L., Krömker, D., Tänzler, D., Using fuzzy set theory to address the uncertainty of susceptibility to drought. *Regional Environmental Change*, 2008, 8(4):197-205.
- Alcamo, J., Acosta-Michlik, L., Carrius, A., Eierdanz, F., Klein, R., Krömker, D., Tänzler, D., A new approach to quantifying and comparing vulnerability to drought. *Regional Environmental Change*, 2008, 8(4):137-149.
- Acosta-Michlik, L.A., Kavi Kumar, K.S., Richard, J., Klein, T., Campe, S., Application

- of fuzzy models to assess susceptibility to droughts from a socio-economic perspective. *Regional Environmental Change*, 2008, 8(4):151-160.
- Acosta-Michlik, L., A critical overview: Local evidence on vulnerabilities and adaptations to global environmental change in developing countries. *Global Environmental Change*, 2008, 18(4):539-542.
- Acosta-Michlik, L., Espaldon, V., Assessing Vulnerability of Selected Farming Communities in the Philippines Based on a Behavioural Model of agent's Adaptation to Global Environmental Change. *Global Environmental Change*, 2008, 18(4):554-563.
- 2006 Metzger, M. J., Rounsevell, M.D.A., Acosta-Michlik, L., Leemans, R., Schröter, D., The vulnerability of ecosystem services to land use change. *Agriculture Ecosystems & Environment*, 2006, 114(1):69-85.
- Acosta-Michlik, L., Eierdanz, F., Alcamo, J., Krömer, D., Galli, F., An empirical application of the security diagram to assess the vulnerability of India to climatic stress. *Die Erde: journal of the Geographical Society of Berlin*, 2006, 137.2006(3):199-219.
- 2005 Acosta-Michlik, L., & Rounsevell, M., From Generic Indices to Adaptive Agents: Shifting Foci in Assessing Vulnerability to the Combined Impacts of Climate Change and Globalization. *Newsletter of the International Human Dimensions Programme on Global Environmental Change*, 2005:14-16.
- 2003 Acosta, L.A., Kagatsume, M., ASEAN Rice Sector in the WTO: Analysis of Demand and Supply in a Liberalized Trade Environment. *ASEAN Economic Bulletin*, 2003, 20(3):233-243.

Name Nelly S. Aggangan

Gender Female

Organizational Affiliations

University Researcher, National Institute of Molecular Biology and Biotechnology, UPLB, College, Laguna

Education

Doctor of Philosophy in Plant Pathology, Murdoch University, Perth Western, Australia 1996

Fields of Specialization

Agriculture

Forestry

Forest Biotechnology

Mycorrhiza Technology for Agriculture and Forestry

Plant Nutrition

Bioremediation

Phytoremediation

Association Membership

Member, National Research Council of the Philippines

Trainings

Mycological Society of the Philippines Symposium, PhilRice, Maligaya, Nueva Ecija 2012 April 24

Researches

Ongoing

Production and Promotion of Mycovam and Mycogroe (PL-NSA). Study 1. Mass Production of Mycovam and Mycogroe biofertilizers

Production and Promotion of Mycovam and Mycogroe (PL-NSA). Study 2. Efficacy Trial and Product Licensing of Mycovam for Cassava, sugarcane, okra and fruit trees

Production and Promotion of Mycovam and Mycogroe (PL-NSA). Study 3. Promotion and Marketing of Mycovam and Mycogroe

Improvement of production protocol for Mycova (PL-NSA). Study 1. Determination of the rate of sporulation of mycoohizal fungi present in the Mycovam biofertilizer as affected by Bio-N and other additives

Improvement of production protocol for Mycova (PL-NSA). Study 2. Assessment of survival Azosporillium spp. in the Mycovam biofertilizer during Storage

Establishment of biotechnology mediated forest park in Caliraya Springs Barangay Talaongan, Cavinti, Laguna. (PL-NSA) Study 1-5

Papers Presented

- 2012 July 11-12 Aggangan, N. (2012 July 11-12). Nickel tolerance of three isolates of actinomyces fungus *Pisolithus* inoculated onto *Eucalyptus urophylla* S.T. Blake seedlings, NAST Symposium.
- 2012 July 11-12 Guy, A.T., & Aggangan, N.S. (2012 July 11-12). Chemical fertilizer replacement capability of Mykovam biofertilizer for increased growth and fruit yield of okra, NAST Symposium.
- 2012 April 24 Aggangan, N.S. (2012 April 24). Fungi as Business: The Case of Mycorrhizal Inoculants, Mycological Society of the Philippines Symposium held on at the PhilRice, Maligaya, Nueva Ecija.
- 2009 Aggangan, N.S., Choi, Y.I., & Noh, E.W. (2009). Ectomycorrhizal response of non-transgenic and transgenic heavy metals tolerant *Populus alba* x *P. glandulosa*, Society of Korea Lim regular Conference Proceedings.

Publications

- 2016 Yoon, S.Y., Kim, D.J., Sung, Y.J., Han, S.H., Aggangan, N.S., & Shin, S.J., Enhancement of enzymatic hydrolysis of kapok [*Ceiba pentandra* (L.) Gaertn.] seed fibers with potassium hydroxide pretreatment. *Asia Life Sciences*, 2016, 25(1):17-29.
- 2015 Aggangan, N.S., Pampolina, N.M., Cadiz, N.M., & Raymundo, A.K., Assessment of Plant Diversity and Associated Mycorrhizal Fungi in the Mined-out Sites of Atlas Mines in Toledo City, Cebu for Bioremediation. *Journal of Environmental Science and Management*, 2015, 18(1):71-86.
- Aung-aud-chariya, A., Bangrak, P., Lumyong, S., Phupong, W., Aggangan, N.S., & Kamlangdee, N., RNA Polymerase II Second Largest Subunit Molecular Identification of *Boletus griseipurpureus* Corner From Thailand and Antibacterial Activity of Basidiocarp Extracts. *Jundishapur Journal of Microbiology*, 2015, 8(3):e15552.
- 2013 Aggangan, N.S., Moon, H.K., & Han, S.H., Growth and nutrient accumulation of *Eucalyptus pellita* F. Muel. In response to inoculation with edible ectomycorrhizal mushrooms. *Asia Life Sciences*, 2013, 22(1):95-112.
- Aggangan N.S., Choi, Y.I., & Noh, E.W., Ectomycorrhizal response of non-transgenic and transgenic heavy metals tolerant *Populus alba* x *P. glandulosa*. *Bioremediation Journal*, 2013.
- Han, S.H., Shin, S.J., Kim, B.R., Aggangan, N.S., & Yun, C.W., Growth, chemical composition and energy contents of seven clones of one-year-old *Salix caprea* as short-rotation coppice. *Asia Life Sciences*, 2013, 22(2):413-426.
- Aggangan, N.S., Edradan, M.R.R., Alvarado, G.B., Macana, P.P.C., Noel, L.K.S., & Edradan, D.R.R., Mycorrhizal Fungi from Mine Sites and Rehabilitation of Marginal and Mine Sites in Surigao, Philippines. Chapter 18. *Seedlings: Ecology, Growth and Environmental Influences/Published by Nova Publishers, Inc. Hauppauge, New York, USA. Accepted February 10, 2012, 2013.*
- Aggangan, N.S., Tamayao, P.J.S., Aguilar, E.A., Anarna, J.A., & Dizon, T.O., Arbuscular Mycorrhizal Fungi and Nitrogen Fixing Bacteria as Growth Promoters and as Biological Control Agents Against Nematodes in Tissue-Cultured Banana var. *Philippine Journal of Science*, 2013, 142(2):153-165.
- Shin, S.J., Han, S.H., Aggangan, N.S., & Seong, H.A., Different fermentation ability of *Saccharomyces cerevisiae* and *Scheffersomyces stipitis* for acid hydrolysates of hybrid poplar wood. *Asia Life Sciences*, 2013, 22(2):539-548.
- Adiova, J.M., Pampolina, N.M., & Aggangan, N.S., Effect of arbuscular mycorrhizal fungi inoculation on growth and Cu uptake and toxicity of *desmodium cinereum* (Kunth) D.C.. *Philippine Journal of Science*, 2013, 142(1):87-96.
- Aggangan, N.S., Albano, A.B., Kasahara, E.S., & Ragrario, E.M., Survival, Growth and

- Cu Accumulation by Non-Mycorrhizal and Mycorrhizal *Jatropha curcas* L. Seedlings or Cuttings in a Grassland and in Mine Tailing Soils. *Journal of Environmental Science and Management*, 2013, 16(2):74-87.
- Aggangan, N.S., Pollisco, M.A.T., Bruzon, J.B., & Gilbero, J.S., Growth of *Shorea contorta* Vid. Inoculated with Eucalypt Ectomycorrhizal Fungi in the Nursery and in a Logged-Over Dipterocarp Forest in Surigao, Philippines. *American Journal of Plant Sciences*, 2013, 4:896-904.
- 2012 Macana, P.P.C., Noel, L.K.S., Edradan, D.R.R., Edradan, M.R.R., Alvarado, G.B., Manliguis, M.J., Pampolina, N.M., & Aggangan, N.S., Assessment of mycorrhizal diversity and their growth effects on *Acacia mangium*, *Paraserianthes falcata* and *Xanthostemon verdugonianus* in marginal and mine waste soils of Manila Mining Corporation, Placer, Surigao Norte, Philippines. *NAST Monograph Series 18*, 2012:145.
- Cadiz, N.M., Aggangan, N.S., Pampolina, N.M., Llamado, A.L., Zarate, J.T., Livel, S., Jr., & Raymundo, A.K., Bioremediation efforts in an abandoned mine area: The Mogpog, Marinduque Experience. *NAST Monograph Series 18*, 2012:33-39.
- Aggangan, N.S., Aggangan, J.S., Bulan, J.C.O., & Limos, C.A.S., Inoculation of Dipterocarps *Anisoptera thurifera* and *Shorea guiso* with Ectomycorrhizal fungi in Philippine Red Soil. *Philippine Journal of Science*, 2012, 141(2):229-241.
- Aggangan, N.S., & Aggangan, B.J.S., Selection of Ectomycorrhizal Fungi and Tree Species for Rehabilitation of Cu Mine Tailings in the Philippines. *Journal of Environmental Science and Management*, 2012, 15(1):59-71.
- Han, S.H., Kim, D.H., Ultra, V.U., Jr., Kim, P.G., & Aggangan, N.S., Physiological response of Cd- and Pb-treated *Populus alba x glandulosa* seedlings amended with SCB liquid fertilizer. *Asia Life Sciences*, 2012, 21(2):481-498.
- Aggangan, N.S., & Moon, H.K., The effects of soil sterilization, mycorrhizal inoculation and rates of phosphorus on growth and survival of *Kalopanax septemlobus* microplants during acclimatization period. *Plant Biotechnology Reports*, 2012, 7:71-82.
- Ultra, V.U., Jr., Han, S.H., Kim, D.H., & Aggangan, N.S., Changes in growth, photosynthetic parameters, carbon and nitrogen uptake of *Pinus densiflora* S. et Z. under elevated temperature and CO₂ level. *Asia Life Sciences*, 2012, 21(2):523-536.
- 2011 Aggangan, N.S., Kim, Y.W., Han, S.H., Park, S.Y., & Moon, H.K., Selection of Arbuscular Mycorrhizal Inoculants for Improved Growth of Somatic Embryo-derived *Liriodendron tulipifera* (Magnoliaceae) Plantlets. *Philippine Journal of Science*, 2011, 140(1):59-67.
- 2009 Aggangan, N.S., Moon, H.K., & Han, S.H., Growth response of *Acacia mangium* Willd. seedlings to arbuscular mycorrhizal fungi and four isolates of the ectomycorrhizal fungus *Pisolithus tinctorius* (Pers.) Coker and Couch. *New Forests*, 2009, 39:215-230.
- Aggangan, N.S., Choi, Y.I., & Noh, E.W., Ectomycorrhizal response of non-transgenic and transgenic heavy metals tolerant *Populus alba x P. glandulosa*. *한국임학회 정기 학술발표논문집*, 2009:253-256.
- 1998 Aggangan, N.S., Dell, B., & Malajczuk, N., Effects of chromium and nickel on growth of the ectomycorrhizal fungus *Pisolithus* and formation of ectomycorrhizas on *Eucalyptus urophylla* S.T. Blake. *Geoderma*. *Geoderma*, 1998, 84:15-27.
- 1996 Aggangan, N.S., Dell, B., & Malajczuk, N., Effects of soil pH on the ectomycorrhizal response of *Eucalyptus urophylla* seedlings. *New Phytologist*, 1996, 134:539-546.
- Aggangan, N.S., Dell, B., Malajczuk, N., & Dela Cruz, R.E., Soil fumigation and phosphorus supply affect the formation of *Pisolithus-Eucalyptus urophylla* ectomycorrhizas in two acid Philippine soils. *Plant and Soil*, 1996, 180:259-266.
- 1988 Dela Cruz, R.E., Manalo, M.Q., Aggangan, N.S., & Tambalo, J.D., Growth of three legume trees inoculated with VA mycorrhizal fungi and *Rhizobium*. *Plant and Soil*, 1988, 108(1):111-115.

Name Socorro E. Aguja

Gender Female

Organizational Affiliations

Professor, St. Paul University-Manila, Graduate School Department 680 Pedro Gil St. Malate, Manila

Professor, Graduate School Department, De La Salle Araneta University, Malabon, Philippines

Education

Doctoral, United Graduate School of Agricultural Sciences, Ehime University, 2000

Master's, College of Agriculture, Ehime University, 1997

Bachelor, Visayas State University (formerly Visayas State College of Agriculture), 1983

Fields of Specialization

Citriculture

Horticulture

Teaching and Learning

Pedagogy and Education

Cellular Ultrastructure

Environmental Science

Agricultural Plant Science

Agronomy

Association Membership

Member, Philippine Society of Microbiology

Research Associate, JSPS-DOST ACORE Philippines

Member, International Organization of Virologists in Citriculture

Member, Professional Women's Advisory Board, American Biographical Institute

Member, Board of Research Advisor, American Biographical Institute

Member, Philippine Association of Japan Ministry of Education Scholars

Member, International Society of Citriculture

Member, Japanese Horticultural Society

Member, Advancement of Computing in Education

Technical Editor, Editorial Board-Science Alert Journals

Honors / Awards

International Conference on "Environmental Threats to the Health of Children: Hazards and Vulnerab, Chulabhorn Research Institute Centre 3-7 March, 2002

LIPI-JSPS Asian CORE Program Joint International Seminar on Coastal Ecosystems, Southeast Asia (COMSEA). LIPI Convention Hall November 12-14, 2012

Science and Technology Congress 2012, De La Salle University Manila February 16, 2012

2nd DLSU International Education Conference, Angelo King International Hotel, College of St. Benilde, De La Salle University September 29-October 1, 2011

29th General Assembly International Council for Science Union (ICSU), Joaquim Chissano International Conference Center, Maputo October 20-25, 2008

JSPS-HORIBA International Conference, Atmosphere and Ocean Research Institute (AORI), Tokyo University October 26-29, 2010

8th Hawaii International Conference on Education, Waikiki Marriott Hotel January 7-10, 2010

Sediment Sampling in Manila Bay, A Joint International Workshop, DLSU-CSB Angelo King International Center December 4-7, 2004

1st Hawaii International Conference on Education, Waikiki Sheraton Hotel January 7-10, 2003

8th Congress of the International Society of Citriculture, Sun City Resort May 12-17, 1996

EDMEDIA 2013 World Conference, Victoria Convention Centre June 24-28, 2013

Papers Presented

- 2013 Pangan, N.J., Prudente, M., & Aguja, S. (2013). Exploring the Dimensions of an Effective Web-based Learning Package on Chemical Equilibrium, ED-MEDIA: World Conference on Educational Multimedia, Hypermedia & Telecommunications Association for the Advancement of Computing in Education (AACE).
- 2013 March 7-9 Prudente, M., Kim, J.W., Isobe, T., Tanabe, S., & Aguja, S. (2013 March 7-9). Organophosphorous Flame Retardants in House Dust From the Philippines, Research Congress, De La Salle University Manila.
- 2012 Prudente, Maricar S. (2012). Teachers and Computers: Exploring Attitude and Efficacy, DLSU Congress 2012: Science and Technology Conference.
- 2012 Prudente, M.S., Isobe, T., & Tanabe, S. (2012 November 12 - 14). Introspective Assessment of Human Exposure to Brominated Flame Retardants in the Philippines, LIPI - JSPS Asian CORE International Seminar 2012: Coastal Ecosystems in Southeast Asia.
- 2011 Prudente, M.S. (2011 September 29 - 2011 October 1). Teachers' Attitude and Self-efficacy Towards Use of Computers: Drawing Implications for Teacher Training and Research, 2nd DLSU International Education Conference 2011. Angelo King International Hotel, College of St. Benilde, De La Salle University.
- September 29 - 2011 October 1
- October 28, 2005 Prudente. M., Wattayakorn, G., & Miyazaki, N. (October 28, 2005). Joint International Workshop on Sediment Core Sampling in Manila Bay, Philippines: Activities and Preliminary Results, 3rd ARRPET-DLSU National Workshop 2005.
- February 18, 2005 Prudente, M., Kunisue, T., S. Tanabe S., & Watanabe, I. (February 18, 2005). Accumulation of Toxic Contaminants in Resident and Migratory Waders from Calatagan Bay, Philippines, 2nd National Workshop of ARRPET (Asian Regional Research Programme on Environment and Technology).

- 2004 February 27 Prudente, M., Kunisue, T., & Tanabe, S. (2004 February 27). Persistent Organic Pollutants in Human Breast Milk, 1st National Workshop of ARRPET (Asian Regional Research Programme on Environment and Technology).
- 1999 Mohammad, P., & Shiraishi, M. (1999). Development of Chloroplast in the Mesophyll of Satsuma Mandarin Foliar Sprayed with Urea Pakistan, Journal of Biological Sciences.
- 1999 Mohammad, P., Shiraishi, M., & Soga, T. (1999). Ontogeny of Chloroplast in Satsuma Mandarin Young Leaves Sprayed with Urea Pakistan, Journal of Biological Sciences.
- 1999 Mohammad, P., Shiraishi, M., Toda, J., & Yoko Y. (1999). Characterization with Scanning Electron Microscope of the Pollen of Citrus Plants, Sarhad Journal of Agriculture.
- 1999 Mohammad, P., Hossain, M.A., Farmanullah Khan (1999). Leaf Blight Disease Tolerance/Resistance in Diploid Relatives of Wheat, Sarhad Journal of Agriculture.
- 1999 Mohammad, P., Hossain, M.A., Khan, F. (1999). Responses of Some Tetraploid Relatives of Wheat Against Leaf Blight Disease, Sarhad Journal of Agriculture.
- 1998 Shiraishi, M. (1998). Ultrastructure of chloroplast in the young leaves of Satsuma mandarin top sprayed with different fertilizers under plastic house conditions, Asia Life Sciences.
- 1996 Shiraishi, M., & Kinomoto, K. (1996). Electron Microscopic Observations on Satsuma Mandarin (*Citrus unshiu* Marc. cv. Okitsu Wase) Young Leaves Sprayed with Urea, International Society of Citriculture.

Publications

- 2016 Watanabe, Y., Bach, L.T., Van Dinh, P., Prudente, M., Aguja, S., Phay, N., & Nakata, H., Ubiquitous Detection of Artificial Sweeteners and Iodinated X-ray Contrast Media in Aquatic Environmental and Wastewater Treatment Plant Samples from Vietnam, The Philippines, and Myanmar. Archives of Environmental Contamination and Toxicology, 2016, 70(4):671-681.
- 2015 Pilar, G.A., Prudente, M.S., & Aguja, S.E., Using Interactive Applications in Enhancing Students' Knowledge and Technical Skills and Process Skills in Grade 4 Science. Advanced Science Letters, 2015, 21(7):2266-2270(5).
Prudente, M.S., Aguja, S.E., & Anito, J., Exploring Climate Change Conceptions and Attitudes: Drawing Implications for a Framework on Environmental Literacy. Advanced Science Letters, 2015, 21(7):2413-2418.
Anito, J.C., Prudente, M.S., Aguja, S.E., & Rubi, P.S., Tracking Conceptual Saturation in Classical Grounded Theory Using Lead and Link Technique. Advanced Science Letters, 2015, 21(7):2479-2482(4).
Mohammad, P., Shiraishi, M., Toda, J., Aguja, S.E., & Ohmine, Y., Characterization with scanning electron microscope of the pollen of citrus plants. Sarhad Journal of Agriculture, 2015, 15:29-35.
- 2013 Pangan, N.J., Prudente, M., & Aguja, S., Exploring the Dimensions of an Effective Web-based Learning Package on Chemical Equilibrium. In J. Herrington, A. Couros & V. Irvine (Eds.), Proceedings of EdMedia: World Conference on Educational Media and Technology, 2013:324-333.
Dasas, L.B., Prudente, M.S., Aguja, S.E., Efficacy of Integrating 21st Century Skills in an Understanding by Design (UbD21) Pedagogical Plan on Life Energy and Processes. Proceedings of EdMedia: World Conference on Educational Media and Technology, 2013, 1:167-175.
- 1999 Mohammad, P., Hossain, M.A., & Aguja, S.E., Relative incidence of leaf blight disease in some diploid relatives of wheat. Philippine Agricultural Scientist, 1999, 82:129-136.

- Aguja, S.E., Mohammad, P., Shiraishi, M., & Soga, T., Ontogeny of Chloroplast in Satsuma Mandarin Young Leaves Sprayed with Urea. *Pakistan Journal of Biological Sciences*, 1999, 2(2):571-574.
- Aguja, S.E., Mohammad, P., & Shiraishi, M., Development of Chloroplast in the Mesophyll Cells of Satsuma Mandarin Foliar Sprayed with Urea. *Pakistan Journal of Biological Sciences*, 1999, 2(1):45-52.
- Mohammad, P., Hossain, M.A., Khan, F., & Aguja, S.E., Leaf blight disease tolerance/resistance in diploid relatives of wheat. *Sarhad Journal of Agriculture*, 1999, 15:311-316.
- Mohammad, P., Hossain, M.A., Khan, F., & Aguja, S.E., Responses of some tetraploid relatives of wheat against leaf blight disease. *Sarhad Journal of Agriculture*, 1999, 15:437-442.
- 1998 Aguja, S.E., & Shiraishi, M., Ultrastructure of chloroplast in the young leaves of Satsuma mandarin top sprayed with different fertilizers under plastic house conditions. *Asia Life Sciences*, 1998, 7:109-119.
- 1996 Aguja, S.E., Shiraishi, M., & Kinomoto, K., Electron microscopic observations on satsuma mandarin (*Citrus unshiu* Marc. cv. okitsu wase) young leaves sprayed with urea. *Proceedings of the International Society of Citriculture*, 1996, 2:949-952.

Name Aldwin M. Anterola

Gender Male

Organizational Affiliations

Associate Professor, Department of Plant Biology Southern Illinois University, Carbondale Illinois, 62901-6509 USA

Education

Doctor of Philosophy in Plant Physiology, Washington State University, Washington, U.S.A. 2001

Bachelor of Science in Agricultural Chemistry (Cum Laude), University of the Philippines Los Baños, College, Laguna 1994

Fields of Specialization

Plant Physiology

Genome Analysis

Phytochemistry

Biochemistry

Molecular Biology

Biotechnology

Phytohormones

Gibberellins

Honors / Awards

Balik Scientist Awardee, DOST 2009

Helen and Loyal H. Davis Fellowship, Washington State University

Student Award for Best Paper, Phytochemical Society of North America

Graduate Student Award (Cellulose and Paper Division), American Chemical Society

Papers Presented

2010 Hughes, S., & Anterola, A. (2010). Taxol Precursor Production in *Physcomitrella patens*, Southern Illinois University Carbondale.

Publications

2014 Sipes, S.D., Hartz, K.E.H., Amin, H., Anterola, A., & Nickrent, D.L., Floral scent and pollinators of the holoparasite *Pilostyles thurberi* (Apodanthaceae). *Journal of Pollination Ecology*, 2014, 12(5):31-39.

2010 Anterola, A., Ham, R., Perroud, P.F., & Quatrano, R., Taxane Bryotechnology Production of Anticancer Compounds Using Transgenic Moss. *In Vitro Cellular and Developmental Biology - Anilam*, 2010, 46(Suppl):95.

2009 Anterola, A., Göbel, C., Hornung, E., Sellhorn, G., Feussner, I., & Grimes, H., *Physcomitrella patens* has lipoxygenases for both eicosanoid and octadecanoid pathways. *Phytochemistry*, 2009, 7(1):40-52.

- Morrone, D., Chambers, J., Lowry, L., Kim, G., Anterola, A., Bender, K., & Peters, R.J., Gibberellin biosynthesis in bacteria: Separate *ent*-copalyl diphosphate and *ent*-kaurene synthases in *Bradyrhizobium japonicum*. *FEBS Letters*, 2009, 583:475-480.
- Anterola, A., Shanle, E., Mansouri, K., Schuette, S., & Renzaglia, K., Gibberellin precursor is involved in spore germination in the moss *Physcomitrella patens*. *Planta*, 2009, 229(4):1003-1007.
- Anterola, A.M., Shanle, E., Perroud, P.F., & Quatrano, R., Production of taxa-4(5),11(12)-diene by transgenic *Physcomitrella patens*. *Transgenic Research*, 2009, 18(4):655-660.
- 2008 Rensing, S.A., Lang, D., Zimmer, A.D., Terry, A., Salamov, A., Shapiro, H., Nishiyama, T., Perroud, P.F., Lindquist, E.A., Kamisugi, Y., Tanahashi, T., Sakakibara, K., Fujita, T., Oishi, K., Shin-I, T., Kuroki, Y., Toyoda, A., Suzuki, Y., Hashimoto, S., Yamaguchi, K., Sugano, S., Kohara, Y., Fujiyama, A., Anterola, A., Aoki, S., Ashton, N., Barbazuk, W.B., Barker, E., Bennetzen, J.L., Blankenship, R., Cho, S.H., Dutcher, S.K., Estelle, M., Fawcett, J.A., Gundlach, H., Hanada, K., Heyl, A., Hicks, K.A., Hughes, J., Lohr, M., Mayer, K., Melkozernov, A., Murata, T., Nelson, D.R., Pils, B., Prigge, M., Reiss, B., Renner, T., Rombauts, S., Rushton, P.J., Sanderfoot, A., Schween, G., Shiu, S.H., Stueber, K., Theodoulou, F.L., Tu, H., de Peer, Y.V., Verrier, P.J., Waters, E., Wood, A., Yang, L., Cove, D., Cuming, A.C., Hasebe, M., Lucas, S., Mishler, B.D., Reski, R., Grigoriev, I.V., Quatrano, R.S., & Boore, J.L., The *Physcomitrella* Genome Reveals Evolutionary Insights into the Conquest of Land by Plants. *Science*, 2008, 319(5859):64-69.
- Anterola, A., & Shanle, E., Genomic insights in moss gibberellin biosynthesis. *The Bryologist*, 2008, 111(2):218-230.
- 2007 Cho, M.H., Corea, O.R.A., Yang, H., Bedgar, D. L., Laskar, D.D., Anterola, A.M., Moog-Anterola, F.A., Hood, R.L., Kohalmi, S.E., Bernards, M.A., Kang, C., Davin, L.B., & Lewis, N.G., Phenylalanine Biosynthesis in *Arabidopsis thaliana*. Identification and characterization of arogenate dehydratases. *Journal of Biological Chemistry*, 2007, 282(42):30827-30835.
- 2005 Murphy, K.A., Kuhle, R.A., Fischer, A.M., Anterola, A.M., & Grimes, H.D., The functional status of paraveinal mesophyll vacuoles changes in response to altered metabolic conditions in soybean leaves. *Functional Plant Biology*, 2005, 32(4):335-344.
- 2003 Costa, M.A., Collins, R.E., Anterola, A.M., Cochrane, F.C., Davin, L.B., & Lewis, N.G., An in silico assessment of gene function and organization of the phenylpropanoid pathway metabolic networks in *Arabidopsis thaliana* and limitations thereof. *Phytochemistry*, 2003, 64:1097-1112.
- 2002 Anterola, A.M., & Lewis, N.G., Trends in Lignin Modification: A Comprehensive Analysis of the Effects of Genetic Manipulations/Mutations on Lignification and Vascular Integrity. *Phytochemistry*, 2002, 61(3):221-294.
- Anterola, A.M., Jeon, J.H., Davin, L.B., & Lewis, N.G., Transcriptional control of monolignol biosynthesis in *Pinus taeda*: Factors affecting monolignol ratios and carbon allocation in phenylpropanoid metabolism. *Journal of Biological Chemistry*, 2002, 277(21):18272-18280.
- 2000 Bernards, M.A., Susag, L.M., Bedgar, D.L., Anterola, A.M., & Lewis, N.G., Induced phenylpropanoid metabolism during suberization and lignification: A comparative analysis. *Journal of Plant Physiology*, 2000, 157(6):601-607.
- 1999 Anterola, A.M., van Rensburg, H., van Heerden, P.S., Davin, L.B., & Lewis, N.G., Multi-Site Modulation of Flux during Monolignol Formation in Loblolly Pine (*Pinus taeda*). *Biochemical and Biophysical Research Communications*, 1999, 261(3):652-657.
- van Rensburg, H., Anterola, A.M., Levine, L.H., Davin, L.B., & Lewis, N.G., Chapter 3: Monolignol Compositional Determinants in Loblolly Pine: Aromatic Amino Acid Metabolism and Associated Rate-Limiting Steps. *Lignin: Historical, Biological, and Materials Perspectives*. ACS Symposium Series, 1999, 742:118-144.

Name Mary Janet Madrono Arnado

Gender Female

Organizational Affiliations

Founder President, Research Institute for Gender and Women, Inc., Malaybalay City

Gust Lecturer, Bukidnon State University, Malaybalay City

Education

Doctor of Philosophy in Sociology, Virginia Tech - Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA 2002

Master of Arts on Health Social Science (*With Distinction*), De La Salle University, Taft Ave., Manila 1997

Bachelor of Science in Development Communication, Xavier University, Corrales Ave., Cagayan de Oro, Philippines 1991

Master of Arts in Sociology and Anthropology (all but thesis), Xavier University, Cagayan de Oro, Philippines 1994

Fields of Specialization

Globalization and Gendered Migration

Natural Resources, violent conflict and internal displacement

Colonialism and Filipina feminism

Sustainable Agriculture

Southern Asia (Philippines, Singapore) and Europe (Germany)

Employment

Editorial Board Member, Liceo Journal of Higher Education Research, 2010-Present

Founding President, Research Institute for Gender and Women, Inc., Malaybalay City, 2009-Present

Consultant, for Organizational Climate Study, Agrinanas Development Company, Inc., 2009 September 10

Consultant, for Baseline Research on the Informal Sector in Northern Mindanao, Xavier University - Social Protection and Social Health Insurance Project, 2009 September 10-

Consultant, for A Situationer on Reproductive Health, Asian Institute of Management, Makati, 2006

Adjunct Professor/Instructor, Department of Sociology and Women's Studies Program, Virginia Tech, 2006

ASIA Fellow and Visiting Affiliate, Asia Research Institute, National University of Singapore, 2006 October - 2007

Research Fellow, Social Development Research Center, De La Salle University, Manila, 2004-2008

Adjunct Professor/Instructor, Department of Sociology and Women's Studies

Program, Virginia Tech, 2003

Associate Professor, Behavioral Sciences Department, De La Salle University, Manila, 2002-2006

Adjunct Professor/Instructor, Department of Sociology and Women's Studies Program, Virginia Tech, 2001

Adjunct Professor/Instructor, Department of Sociology and Women's Studies Program, Virginia Tech, 1999

Project Sociologist, Urban and Peri-urban Vegetable Production Project, Xavier University, 1997-1998

Consultant, for Health and Environment Policy Impact Project, Environmental Health Service, Department of Health, 1997 March 12

Instructor, Department of Sociology and Development Communication Unit, Xavier University, 1994-1995

Teacher, Corpus Christi School, Cagayan de Oro, 1992-1993

Association Membership

Member, International Sociological Association

Member, Philippine Population Association

Member, Jesuit Volunteers Philippines Foundation

Research Fellow, Social Development Research Center, De La Salle University, Manila

ASIA Fellow and Visiting Affiliate, Asia Research Institute, National University of Singapore

Member, Board of Directors, Mindanao Peace Partners

Member, Philippine Health Social Science Association

Honors / Awards

Outstanding Young Scientist Award (Sociology), National Academy of Science and Technology 2010

ASIA Fellows Awards, Asian Scholarship Foundation, Bangkok 2006

REPUBLICA Regional Award in Social Sciences (Outstanding Research and Publication Awards), Commission on Higher Education, Philippines 2005

Miguel Febres Cordero Research Award, De La Salle University 2004

Ph.D. Scholarship and Graduate Teaching Assistantship, Virginia Tech, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA 1999-2000

Development Project Award, Virginia Tech, Virginia Polytechnic Institute and State University, Blacksburg, Virginia, USA

Ford Foundation Scholarship Award, De La Salle University

Researches

Completed

Confessions from the Field: On Ethnographic Fieldwork Dilemmas

ICT in the Island City of Samal: Towards transparent governance and community empowerment

Case Studies from Philippine Indigenous Communities

Longing for Home, Longing for Work: Temporary Return, Cyclical Migration and Reintegration of Filipina Domestic Workers

Wage work and Substitute Housewives: Employed Women's Housewifization of Poor Third World Women

Abandoned by (Abandoning) Men: Economic Stress and Gender Relations in Filipina Labor Migrants' Families

Organizational Climate Study on Agrinanas Development Company, Inc., Cagayan de Oro: Yahshua Consultancy, 190pp.

The Bride-Machine and the Paradox of Global Hypergamy: Narratives of Filipina Wives in Germany

Casualties of Globalization: Economic Interest, War, and Displacement of Indigenous Communities in Liguasan Marsh, Philippines

Ongoing

After Labor Migration: Narratives of Return, Family and Gender in the Philippine South

Papers Presented

2010 September 28-29 Arnado, J.M. (2010 September 28-29). Gender and Money: Case Studies from Philippine Indigenous Communities. Conference organized by the Institute for Money, Technology & Financial Inclusion, University of California, Irvine, USA.

2007 September 13-14 Arnado, J.M. (2007 September 13-14). Drama in Filipina domestic workers' global households (Jointly organized by Asian Research Institute and the Asian Metacentre for Population and Sustainable Development, National University of Singapore), International Workshop on Female Labor Migration.

2006 November 2 Arnado, J.M. (2006 November 2). Filipina marriage migration to Germany: Online discourses on everyday life. Organized by Migration and Diaspora Group Seminar, Asia Research Institute, Singapore.

2005 June 8 Arnado, J.M. (2005 June 8). Women's emancipation in the Philippines; A legacy of western feminism?, Workshop on Cultural Globalization in Southeast Asia, sponsored by Institute of Southeast Asian Studies.

2005 June 19-24 Arnado, J.M. (2005 June 19-24). The declining significance of third world and western feminist distinction, 9th International Interdisciplinary Congress on Women.

2005 March 14 Arnado, J.M. (2005 March 14). Armed conflict in the Philippine South: The unanticipated consequence of Christian migration since 1913, Inaugural professorial chair lecture in Population studies, De La Salle University, Manila.

2004 November 30 Arnado, J.M., & Arnado, M.A. (2004 November 30). Casualties of globalization: Economic interest, war, and displacement along Ligawasan marsh, Philippines, De La Salle University, Manila.

2004 September 16-18 Arnado, J.M., & Arnado, M.A. (2004 September 16-18). Mental health and coping behavior of internally displaced women in southern Philippines, British Sociological Association's Medical Sociology 36th Annual Conference, York, United Kingdom.

- 2004 July 7-11 Arnado, J.M. (2004 July 7-11). Filipina feminist perspective: A bifurcation between western and third world views, 36th World Congress, International Institute of Sociology, Beijing, People's Republic of China.
- 2002 July 4-7 Arnado, J.M. (2002 July 4-7). Feminisms, inequality and paid domestic work, Asia Pacific Sociological Association Conference, Brisbane, Australia.
- 2002 July 7-13 Arnado, J.M. (2002 July 7-13). Class mobility and social status in paid domestic work: Filipina local and transnational domestics, 15th World Congress of Sociology of the International Sociological Association, Brisbane, Australia.
- 2002 April 3-6 Arnado, J.M. (2002 April 3-6). Class Relations among Third World women: Employers and domestic helpers in the Philippines, 65th Annual Meeting of the Southern Sociological Society.
- 2002 April 2 Arnado, J.M. (2002 April 2). The working conditions of domestic helpers in the Philippines, 18th Annual Research Symposium, Virginia Tech, Blacksburg, Virginia, USA.

Publications

- 2013 Arnado, J.M., Abandoned or Abandoning Men: Economic Stress, Gender Relations, and Migration of Filipinas to Singapore. *Economic Stress, Human Capital, and Families in Asia*, 2013:91-104.
- 2010 Arnado, Janet M., Performance across time and space: Drama in the Global Households of Filipina Transmigrant Workers. *International Migration*, 2010, 48(6):132-154.
- 2009 Arnado, J.M., Localizing the global and globalizing the local: Global households of Filipina transmigrant workers and Singapore employers. *Reframing Singapore: Memory, Identity and Trans-Regionalism (Selected Papers from the 5th International Conference of Asian Scholars)*, Eds. D. Heng & S.M.K. Aljunid. Amsterdam: Amsterdam University Press, 2009:229-246.
- 2008 Arnado, J.M., Women's Emancipation in the Philippines: A Legacy of Western Feminism? *Globalization and its Counter-forces in Southeast Asia*, ed. Terence Chong. Singapore: Institute of Southeast Asian Studies, 2008:296-312.
 Arnado, J.M., & Arnado, M.A.M., *Casualties of Globalization: Natural Resources, Violent Conflict and Displacement in Mindanao, Philippines* (Saarbrücken, Germany). VDM Verlag, 2008:157 pp.
- 2007 Arnado, J.M., Class and Status Mobility of Filipina Local and Transnational Domestic Workers. *Asian Journal of Women's Studies*, 2007, 13(4):7-33.
- 2006 Arnado, J.M., & Macasaet, J.A.A., *A Situationer on Reproductive Health*. Makati: Asian Institute of Management, 2006.
 Arnado, J.M., & Arnado, M.A.M., *Opfer der Globalisierung: Ökonomische Interessen und Krieg in den Liguasan-Sümpfen*. *Südostasien Informationen*, 2006, 1:70-74.
- 2003 Arnado, J.M., *Mistresses and Maids: Inequality Among Third World Women Wage Earners*. De La Salle University Press, 2003:200 pp.
 Arnado, J.M., *Maternalism in Mistress-Maid Relations: The Philippine Experience*. *Journal of International Women's Studies*, 2003, 4(3):154-177.
- 2000 Arnado, J.M., & Heinrich, V., *Cebuano [Visaya] für die Philippinen Wort für Wort (Cebuano [Visaya] for the Philippines: word for word)*. Kauderwelsch Band 136. Bielefeld: Reise Know-How Verlag Peter Rump GmbH., 2000:144 pp.
 Potutan, G.E., Schnitzler, W.H., Arnado, J.M., Janubas, L.G., & Holmer, R.J., *Urban*

- agriculture in Cagayan de Oro: a favourable response of city government and NGOs. Growing Cities, Growing Food: Urban Agriculture on the Policy Agenda, eds. N. Bakker, M. Dubbeling, S. Guendel, U. Sabel-Koschella & H. Zeew, 2000:413-428 ref. 13.
- 1999 Schnitzler, W.H., Potutan, G.E., Arnado, J.M., Janubas, L.G., & Holmer, R.J., Urban Agriculture in Cagayan de Oro (Philippines). Gate - Technology and Development, 1999, 2:46-47.
- 1998 Arnado, J.M., Holmer, R.J., & Schnitzler, W.H., Sozio-ökonomische Untersuchungen zu Produktion, Verbrauch und Vermarktung von Gemüse aus periurbanem Anbau in den Philippinen (Socio-economic investigation on production, consumption, and marketing of vegetables from peri-urban areas in the Philippines). Mitteilug der Gesellschaft für Pflanzenbauwissenschaften, 1998, 11:149-150.
- 1997 Potutan, G.E., Janubas, L.G., Arnado, J.M., Holmer, R.J., & Schnitzler, W.H., Peri-urban Vegetable Production, Consumption and marketing in Cagayan de Oro, Philippines. Kasetsart Journal (Natural Sciences), 1997, 32(5):61-66.

Name Axel H. Arriola

Gender Male

Organizational Affiliations

Assistant Professor, Dept. of Biology, College of Arts and Sciences, University of the East, Manila

Fields of Specialization

Conservation Biology

Botany

Plant-Microorganism Interaction

Biological Sciences

Systematics (Taxonomy)

DNA Barcoding

Phylogenetics

Researches

Completed

Growth of *Intsia bijuga* (Colebr.) Kuntze in Response to *Rhizobium* sp. and Vesicular - Arbuscular Mycorrhiza for Upland Reforestation

Growth Responses of *Intsia bijuga* (Colebr.) Kuntze to *Rhizobium* sp., Vesicular-Arbuscular Mycorrhiza and Chemical Fertilizer

Mycorrhizal Infection and Growth Responses of Mahogany (*Sweitennia macrophylla* King.) to VAM fungi and Chemical Fertilizer

Papers Presented

2004 December 16-18 Arriola, A.H. (2004 December 16-18). Growth of *Intsia bijuga* (Colebr.) Kuntz in Response to *Rhizobium* sp and Vesicular - Arbuscular Mycorrhiza for Upland Reforestation, Chulalongkorn University, Bangkok, Thailand.

2004 July 14-15 Arriola, A.H. (2004 July 14-15). Soil Amendments for Better Growth of Macropropagated Ipil (*Intsia bijuga* Colebr.) Seedlings in the Nursery, 26th National Academy of Science and Technology, Annual Scientific Meeting, Manila Hotel.

2004 April 16 Arriola, A.H. (2004 April 16). Growth Responses of *Intsia bijuga* (Colebr.) Kuntze to *Rhizobium* sp., Vesicular-Arbuscular Mycorrhiza and Chemical Fertilizer, 6th Annual Scientific Meeting and Symposium, Mycological Society of the Philippines, University of the Philippines Los Baños, College, Laguna.

Publications

2016 Arriola, A.H., Paraguison, L.D., & Alejandro, G.J.D., *Kanapia* (Vanguerieae): a new endemic genus of Philippine Rubiaceae. *Plant Systematics and Evolution*, 2016, 302(7):911-920.

2015 Arriola, A.H., Camacho, P.D., Calaramo, M.J.A., & Alejandro, G.J.D., *Pyrostria triflora*, a new species of Vanguerieae (Rubiaceae) from Luzon, Philippines. *Bangladesh Journal of Plant Taxonomy*, 2015, 22(1):55-58.

- Arriola, A.H., & Alejandro, G.J.D., A new species of *Discospermum* (Coffeae, Rubiaceae) from Luzon, Philippines including its conservation status. *Phytotaxa*, 2015, 206(1):043-046.
- 2014 Alejandro, G.J.D., Magdaleno, C.M.M., Pacia, J.A.T., Paraguison, L.D., Quiogue, K.K.C., Wong, A.E.D., Yayen, K.M.R., & Arriola, A.H., Generic affiliations of *Canthium* species placed under *Pyrostria* group B sensu Bridson (*Vanguerieae*, Rubiaceae) inferred from morphology and molecular data. *Botanical Studies*, 2014, 55.
- 2013 Arriola, A.H., & Alejandro, G.J.D., A new species of *Psydrax* (*Vanguerieae*, Rubiaceae) from Luzon, Philippines. *Phytotaxa*, 2013, 149(1):27-30.
- Arriola, A.H., & Alejandro, G.J.D., A new species of *Villaria* (*Octotropideae*, Rubiaceae) from Luzon, Philippines including its conservation status. *Phytotaxa*, 2013, 111(1):57-60.
- Alejandro, G.J.D., Arenas, E.H., Cremen, M.C.M., & Arriola, A.H., A New Record of *Pyrostria* (*Vanguerieae* - Rubiaceae) from the Philippines Inferred from Molecular and Morphological Data. *Philippine Journal of Systemic Biology*, 2013, VII.

Name Victor B. Asio

Gender Male

Organizational Affiliations

Vice-Chair, Soil Geography Commission of IUSS,

Professor and Department Head, Dept. of Agronomy, Leyte State University, Baybay, Leyte 6521-A

Education

Doctor scientiarum agrariarum in Soil Science (minor in Site Ecology) magna cum laude, University of Hohenheim, Germany 1996

Master of Science in Soil Science (minor in Crop Physiology), University of the Philippines Los Baños, Laguna, Philippines

Bachelor of Science in Agriculture major in Soil Science, Visayas State University, Baybay, Leyte

Postgraduate Studies in Soil Science, Geography and Plant Nutrition, Justus-Liebig Universität, Giessen, Hesse, Germany

Fields of Specialization

Geo-Ecology

Soil Science (Pedology)

Crops and Soils

Agriculture and Forestry

Soil Development

Soil Degradation

Soil Pollution

Nutrient Cycling

Soil Management

Employment

Dean, College of Agriculture, Visayas State University, 2009-Present

Professor, Soil Science and Geo-ecology, Visayas State University, 2000-Present

Association Membership

Member, National Research Council of the Philippines

Honors / Awards

Best Paper 2011 (3rd Place, Senior Category) awarded by the, 14th PSSST Conference on 25-27 May 2011 at VSU, Baybay, Leyte 2011

Elected Secretary-General, Humboldt Fellows Association (Philippines), Alexander von Humboldt Foundation, Bonn, Germany 2011

Outstanding Academician Award, Visayas State University 2011 August 11

NAST Outstanding Scientific Paper Award for 2011, National Academy of Science and Technology (NAST) 2011 July 14

PARRFI Professorial Chair Award, Philippine Agricultural Resources Research Foundation, Inc.

Achievement Award, Philippine Soil Science Society

President F.E. Marcos-Cocofed National Scholar, Philippine Coconut Producers Federation Inc.

CHED-COE Professorial Chair Award, Commission on Higher Education - Center of Excellence

Recipient of the world renowned & highly competitive (senior scientist), Humboldt Research Fellowship

SEARCA Regional Professorial Chair award, Southeast Asian Regional Center for Graduate Study and Research in Agriculture

Researches

Completed

Physiological responses of abaca (*Musa textilis*) to light, water and nutrient availability

Evaluation of Silvicultural Management, Ecological Changes and Market Study of Products of Existing Rainforestation Demo and Cooperators' Farms

Papers Presented

2009 May 20-23 Magahud, J.C., & Asio, V.B. (2009 May 20-23). Nitrate and Phosphate Leaching from Lake Danao Andisol Treated with Manure and Chemical Fertilizer, National Scientific Conference of the Philippine Society of Soil Science and Technology (PSSST).

Publications

- 2015 Asio, V.B., Demain, K.L.B., Olguera, D.T., & Villasica, L.J.D., Characteristics and Nutrient Status of Two Degraded Upland Soils in Samar, Philippines. *Annals of Tropical Research*, 2015, 37(1):142-166.
- 2014 Asio, V.B., Lina, S.B., Maranguit, D.S., Bolledo, A.B., Doguilles, R.J.T., Quiñones, C.M.O., Sabijon, J.R., & Demain, K.L.B., Characteristics of Soils in the Marginal Uplands of Inopacan, Leyte. *Annals of Tropical Research*, 2014, 36(Supplement):1-15.
- Lina, S.B., Maranguit, D.S., Asio, V.B., Sabijon, J.R., Demain, K.L.B., & Bolledo, A.B., Growth Performance of Corn as Influenced by the Combined Application of Organic and Inorganic Fertilizers in a Marginal Upland Soil. *Annals of Tropical Research*, 2014, 36(Supplement):16-29.
- Navarrete, I.A., & Asio, V.B., Research productivity in soil science in the Philippines. *Scientometrics*, 2014, 100(1):261-272.
- 2013 International Union of Soil Sciences, 5 questions to Victor B. Asio. *International Union of Soil Sciences (IUSS) Bulletin*, Wageningen, Netherlands, 2013, 122:31.
- Navarrete, I., Lina, S., Corre, M., Veldkamp, E., & Asio, V., Soil organic matter dynamics and mechanisms of carbon stabilization in soils with conversion from secondary forest to grassland in central Philippines. *Geophysical Research Abstracts*. EGU General Assembly 2013, 2013, 15:EGU2013-10893.
- Bande, M.M., Grenz, J., Asio, V.B., & Sauerborn, J., Fiber yield and quality of abaca (*Musa textilis* var. Laylay) grown under different shade conditions, water and nutrient management. *Industrial Crops and Products*, 2013, 42:70-77.

- Maranguit, D.S., & Asio, V.B., Morpho-Physical and Chemical Characteristics of Mountain Soils in Central Leyte. *Annals of Tropical Research*, 2013, 35(1):35-60.
- Navarrete, I.A., Tsutsuki, K., & Asio, V.B., Characteristics and fertility constraints of degraded soils in Leyte, Philippines. *Archives of Agronomy and Soil Science*, 2013, 59(5):625-639.
- 2011 Navarrete, I.A., Tsutsuki, K., Asio, V.B., Tani, M., & Sueta, J., Chemical, mineralogical, and morphological characteristics of a late Quaternary sedimentary rock-derived soils in Leyte, Philippines. *Soil Science*, 2011, 176(12):699-708.
International Union of Soil Sciences (IUSS), Favorite soil science books. International Union of Soil Sciences (IUSS) Bulletin, Wageningen, Netherlands, 2011, 118:30.
- 2010 Aragon, M.R.J., & Asio, V.B., Nitrogen mineralization and phosphorus solubilization due to rewetting of forest and paddy soils. *Annals of Tropical Research*, 2010, 32(1):72-91.
Susaya, J.P., Kim, K.H., Asio, V.B., Chen, Z.S., & Navarrete, I., Quantifying nickel in soils and plants in an ultramafic area in Philippines. *Environmental Monitoring and Assessment*, 2010, 167(1):505-514.
- 2009 Navarrete, I.A., Tsutsuki, K., Asio, V.B. & Kondo, R., Characteristics and formation of rainforest soils derived from late Quaternary basaltic rocks in Leyte, Philippines. *Environmental Geology*, 2009, 58:1257-1268.
Magahud, J.C., & Asio, V.B., Nitrate and Phosphate Leaching from Lake Danao Soil (Leyte, Philippines). *Journal of Nature Studies*, 2009, 8(3).
Asio, V.B., Jahn, R., Perez, F.O., Navarrete, I.A., & Abit, S.M., Jr., A review of soil degradation in the Philippines. *Annals of Tropical Research*, 2009, 31(2):69-94.
- 2008 Navarrete, I.A., Tsutsuki, K., Kondo, R., & Asio, V.B., Genesis of soils across a late Quaternary volcanic landscape in the humid tropical island of Leyte, Philippines. *Australian Journal of Soil Research*, 2008, 46(5):403-414.
- 2007 Navarrete, I.A., Asio, V.B., Jahn, R., Tsutsuki, K., Characteristics and genesis of two strongly weathered soils in Samar, Philippines. *Australian Journal of Soil Research*, 2007, 45:153-163.
Wu, C.C., Tsui, C.C., Hseih, C.F., Asio, V.B., & Chen, Z.S., Mineral nutrient status of tree species in relation to environmental factors in the subtropical rain forest of Taiwan. *Forest Ecology and Management*, 2007, 239(1-3):81-91.
Ilan A. Navarrete, Victor B. Asio, Reinhold Jahn, and Kiyoshi Tsutsuki,, Characteristics and genesis of two strongly weathered soils in Samar, Philippines. *Australian Journal of Soil Research*, 2007, 45:153-163.
Asio, V.B., & Jahn, R., Weathering of basaltic rock and clay mineral formation in Leyte, Philippines. *The Philippine Agricultural Scientist*, 2007, 90(3):222-230.
- 2006 Asio, V.B., Cabunos, C.C., Jr., & Chen, Z.S., Morphology, Physiochemical Characteristics, and Fertility of Soils from Quaternary Limestone in Leyte, Philippines. *Soil Science*, 2006, 171(8):648-661.
Lee, C.H., Wu, M.Y., Asio, V.B., & Chen, Z.S., Using A Soil Quality Index to Assess the Effects of Applying Swine Manure Compost on Soil Quality Under A Crop Rotation System in Taiwan. *Soil Science*, 2006, 171(3):210-222.
Jahn, R., Blume, H.P., Asio, V.B., Spaargaren, O., & Schad, P., Guidelines for Soil Description, 4th edition. Food and Agriculture Organization of the United Nations, 2006.
- 2005 Asio, V.B., Comments on "Historical development of soil and weathering profile concepts from Europe to the United States of America". *Soil Science Society of America Journal*, 2005, 69(2):571-572.
- 2001 Chen, Z.S., Tsou, T.C., Asio, V.B., & Tsai, C.C., Genesis of Inceptisols on a Volcanic Landscape in Taiwan. *Soil Science*, 2001, 166(4):255-266.

- 1999 Chen, Z.S., Asio, V.B., & Yi, D.F., Characteristics and Genesis of Volcanic Soils Along A Toposequence Under a Subtropical Climate in Taiwan. *Soil Science*, 1999, 164:510-525.
- 1998 Asio, V.B., & Chen, Z.S., Study of Andesite Weathering in Northern Taiwan Using Micromorphological Approaches. *Taiwan Journal of Forest Science*, 1998, 13(4):259-269.
- Jahn, R., & Asio, V.B., Soils of the tropical forests of Leyte, Philippines I: Weathering, soil characteristics, classification and site qualities. *Soils of Tropical Forest Ecosystems*, 1998:29-36.
- 1996 Asio, V.B., Characteristics, Weathering, Formation and Degradation of Soils from Volcanic Rocks in Leyte, Philippines. *Hohenheimer bodenkundliche Hefte*, 1996, 33:209 pp.

Name Solita Evangeline S. Bañez

Gender Female

Organizational Affiliations

Coordinator, Natural Science and Environmental Researches, University of Northern Philippines Vigan City

Education

Doctor of Education, University of Northern Philippines, Quirino Boulevard, Vigan City, 2700 Ilocos Sur 2003

Fields of Specialization

Agricultural Science

Horticulture

Agricultural Plant Science

Plant Protection and Animal Health

Agronomy

Food Science

Environmental Science

Irrigation and Water Management

Biochemistry

Ecology

Employment

Professor IV, University of Northern Philippines

Association Membership

Regular member, National Research Council of the Philippines

Honors / Awards

Won in the Commodity R & D, 2002 May 14

Researches

Completed

Implementation of Fishery Laws in Ilocos Sur

Therapeutic Properties of Barsanga (*Cyperus rotundus*)

Lone Researcher. Versality of Taltalikod (*Phyllanthus niruri* Linn)

Main Proponent. Paper Making Using Sablot, Tawa-Tawa and Karimbuaya Leaves as Muscilages

Analysis of the UNP CTE graduates' Performance in the Licensure Examination for Teachers (LET)

Pharmaceutical Analysis of Linlinna-aw

Versatility of "TALTALI KOD" (*Phyllanthus carolinianus*)

Therapeutical, Toxicological and Pesticidal Properties of Barsanga (*Cyperus rotundus*)

Paper Making Using Sablot, Tawa- Tawa & Karimbuaya Leaves as Mucilages

Papers Presented

- 2003 December 3-5 Bañez, S.E.S. (2003 December 3-5). Implementation of Fishery Laws in Ilocos Sur, Nueva Vizcaya State Institute of Technology.
- 2003 May 22 Bañez, S.E.S. (2003 May 22). Phytochemical Screening of Linlinnaaw (*Peperomia pellucida* Linn), Bacnotan, La Union.
- 2002 December Bañez, S.E.S. (2002 December). Fishing Industry in Ilocos Sur: An Occupation, OASIS Pampanga.
- 2002 May 14 Bañez, S.E.S. (2002 May 14). Toxicologic Studies on Lin-linnaaw (*Peperomia pellucida* Linnaeus), UNP Research Journal Vol. IX. Presented in Commodity Review at DMMMSUS. Pilang, Bacnotan, La Union.
- 2001 November 14-16 Bañez, S.E.S. (2001 November 14-16). Fishing Industry in Ilocos Sur: An Occupation (with co-researcher) Vol. X, 6th Zonal Commodity Review as Oasis Hotel, Clarkville Compound, Angeles City. Journal (UNP).
- 1998 Bañez, S.E.S. (1998). Molluscan Soil Neutralizer (with co-researcher) Vol. 7, R & D Commodity Review at ILARRDEC Batac, Ilocos Norte and published in UNP Research Journal.
- 1996 Bañez, S.E.S. (1996). Versality of Biowastes (with a co-researcher), R & D Commodity Review, San Fernando and Pulished in UNP Research Journal Vol. VI.
- 1995 Bañez, S.E.S. (1995). Phytochemical Screening and Pharmacological Testing of "Sanggumay" Orhid (*Dendrobium superbum*), R & D Community Review, MMSU, Batac, Ilocos Norte and Published in UNP Research Journal 1995.
- Bañez, S.E.S.. Status and Prospects of Fruit Production in Ilocos Sur (with co-researchers). Vol. IX., UNP Research Journal.

Publications

- 2013 Bañez, S.E.S., & Ilupa, N.A., The Effects of Sansevieria Insecticide on the Growth of String Beans (*Phaseolus vulgaris*). *Iamure International Journal of Terrestrial Ecology*, 2013, 1(1).
- Bañez, S.E.S., & Castor, L.A., Phytochemical Screening and Insecticidal Testing of Mother in Law's Tongue (*Sansevieria trifasciata*). *Iamure International Journal of Science and Clinical Laboratory*, 2013, 3(1).
- Bañez, S.E.S., Florendo, P.E., & Queddeng, M.Q., Alternative Source of Herbal Medicine: Add-On to Buri (*Corypha elata* Roxb.) Leaf Industry. *Iamure International Journal of Science and Clinical Laboratory*, 2013, 4(1).
- 2012 Bañez, S.E.S., & Racadio, S.P., The Antioxidant Property of Pomelo (*Citrus maxima*) Fruit Parts. *Iamure International Journal of Ecology and Conservation*, 2012, 4(1).
- 2011 Bañez, S.E.S., & Castor, L., Phytochemical and Pesticidal Properties of Barsanga (*Cyperus rotundus* Linn.). *JPAIR Multidisciplinary Journal*, 2011, 6(1).
- 2002 Bañez, S.E.S., Phytochemical Screening of Linlinna-aw (*Peperomia pellucida* Linn) and Its Analgesic, Diuretic and Antihypertensive Properties. *UNP Research Journal*,

2002, 11.

Bañez, S.E., Toxicologic Analysis of Lin-linnaaw (Peperonia Pellucida Lin). UNP Research Journal, 2002, 9.

Bañez, S.E.S., Cabanting M., Azares E. & Banes S.E., "Status and Prospects of Fruit Production in Ilocos Sur". UNP Research Journal, 2002, 9.

2001

Bañez, S.E., Azares, C., Cabanting, M., & Felicitas, A., Jr., Fishing Industry in Ilocos Sur: An Occupation. UNP Research Journal, 2001, 10.

Name Teodora D. Balangcod

Gender Female

Organizational Affiliations

Assistant Professor, Department of Biology, College of Science, UP, Baguio, Governor Pack Road, 2600 Baguio City

Education

Doctor of Philosophy in Botany (Plant Ecology), University of the Philippines, 2009

Fields of Specialization

Plant Ecology and Systematic Botany

Biological Sciences

Phytochemicals

Secondary Metabolites

Medicinal Plants

Ecology

Ethnobotany

Plant Taxonomy

Association Membership

Member, National Research Council of the Philippines (NRCP)

Chairman, Marine Science Institute – Harmful Algal Blooms/Red Tide Committee, University of the Philippines,

UP-MSI representative to the Philippine Seaweed Industry Council, Bureau of Fisheries and Aquatic Resources

Expert Reviewer, Environmental Impact Assessment, Department of Environment and Natural Resources (DENR)

Chairman, Environmental Science Committee, Commission on Higher Education (CHED)

Member, National Committee on Biosafety, Department of Science and Technology(DOST)

Honors / Awards

2015 Presidential Lingkod Bayan Award, Civil Service Commission 2015

2014 Metrobank Foundation Outstanding Teacher, Metrobank Foundation (MBFI) 2014

International Publication Award, University of the Philippines 2011

BAR Director's Award for R&D Paper Published in an International Refereed Scientific Journal, Department of Agriculture - Bureau of Agricultural Research (DA-BAR) 2001

Trainings

IOC/WESTPAC 8th International Scientific Symposium, Paradise Hotel, Busan,

Republic of Korea 2011 March 28

39th Annual Convention and Scientific Meeting - Microbes at Work, Naga City 2010
April 29

Researches

Completed

Revision of the manual "Exercises in Plant Taxonomy"

Ethnobotany, Phytochemical Screening and Antimicrobial Properties of Traditional Medicinal Plants in Bayabas, Sablan, Benguet Province

The Online Herbarium Database of the UP Baguio Herbarium

A Teacher's Guide for General Botany

Plants and Culture: The role of plants in the cultural practices of the *Kalanguya* in Tinoc, Ifugao

Poisonous plants of Baguio City and vicinity

Plant Resources Used as Building Materials in Tinoc, Ifugao, Cordillera Administrative Region, Luzon, Philippines

A Picture Guide to the Flowering Plants of Baguio City and La Trinidad, Benguet

Medicinal Plants of Plants of Tinoc, Ifugao, Luzon, Philippines

Ongoing

Soil Stabilization Through Revegetation of Natural Landslides in Atok, Benguet Province to Increase Resilience of Local Communities

Vegetation Analysis of Areas Affected by Mine Tailings in Benguet and Vicinity

Establishing biodiversity information of Bayabas Communal Forest, Sablan, Benguet

Harnessing the Potential Uses of Underutilized Plants in Benguet Province for the Improvement of Livelihood and Food Security in Indigenous Communities in Benguet Province, Luzon, Philippines

Taxonomy and Distribution of Compositae in the Cordillera Central Mountain Range, Luzon, Philippines, Ph.D. Dissertation

Benguet A Faculty Grant Ethnobotany, Phytochemical Screening and Antimicrobial Properties of Traditional Medicinal Plants in Bayabas, Sablan, Benguet Province

Ex-situ Conservation of *Lilium philippinense* through soil enhancement using vermicompost

Herbal extracts from the Cordillera fro Bioactivity and ADMETox Assays

Papers Presented

2012 July 11-12 Balangcod, T.D. (2012 July 11-12). Geographic variation in vegetative and flower morphometry among populations of *Lilium philippinense*, an endemic species in the Philippines, 34th NAST Annual Scientific Meeting. Manila Hotel, Manila.

2012 January 14 Balangcod, T.D. (2012 January 14). Indigenous Knowledge on Forest Management in Benguet Province, RP-Japan Forum on Globally Important Agricultural Heritage Systems: Current Scenario, Challenges and Future Development. Ifugao State University, Lamut Ifugao.

- 2011 December 15-18 Balangcod, T.D. (2011 December 15-18). Antibacterial and phytochemical screening of selected medicinal plants in Bayabas, Sablan, Benguet Province, International Conference (Empress Hotel, Chiangmai, Thailand).
- 2011 June 25 - July 1 Balangcod, T.D. (2011 June 25 - July 1). Harnessing the Potential of Underutilized Tubers as Substitute for Wheat Flour, Crops for the Future, Beyond Food Security Symposium.
- 2011 June 25 - 2011 July 1 Balangcod, T.D. (2011 June 25 - 2011 July 1). Crops for the Future, Beyond Food Security, Royale Chulan, Kuala Lumpur, Malaysia.
- 2011 May 6 Balangcod, T.D. (2011 May 6). Environmental Wellness and Biodiversity, Easter College, Baguio City.
- 2011 April 27 Balangcod, T.D. (2011 April 27). The Indigenous Uses of Plants Among Kalanguya in Tinoc, Ifugao, Commission on Higher Education - Zonal Research Center, Saint Louis University.
- 2011 March 28-31 Balangcod, T.D. (2011 March 28-31). Philippine Harmful Algal Blooms: Recent Progress and Concerns in Research and Management, IOC/WESTPAC 8th International Scientific Symposium. Paradise Hotel, Busan, Republic of Korea.
- 2010 August 23-27 Balangcod, T.D., Cuevas, V.C., & Balangcod, A.K.D. (2010 August 23-27). Cultivation of Benguet Lily (*Lilium philippinense*), an initial effort towards conservation of this endemic species in the CCR, 8th Flora Malesiana. Singapore Botanic Gardens.
- 2010 April 29-30 Gutierrez, R., Baculi, R., Pastor, N., Puma-at, T., Balangcod, T., & Addawe, R. (2010 April 29-30). Evaluation of Antimicrobial Properties of Common Medicinal Plants of the Cordillera, 39th Annual Convention and Scientific Meeting - Microbes at Work in Naga City.
- 2008 March 3-7 Balangcod, T.D., & Balangcod, A.K.D. (2008 March 3-7). The underutilized plants of Tinoc, Ifugao, International Symposium for Underutilized Plant Species for Food, Nutrition, Income and Sustainable Development, Arusha, Tanzania.
- 2008 February 7-9 Balangcod, T.D. (2008 February 7-9). The Ecology of Benguet Lily, an endemic species in the Cordillera Central Range, Luzon, Philippines, 1st International Conference on Cordillera Studies.
- 2008 February 7-9 Balangcod, T.D., & Balangcod, A.K. (2008 February 7-9). The Kalanguya and the Forests, 1st International Conference on Cordillera Studies.
- 2005 November 17 - 18 Balangcod, T.D. (2005 November 17 - 18). The Online Database of the Cordillera Flora Cordillera Studies Center, 2nd National Conference, UP Baguio, Baguio City.
- 2005 April 30 - May 2 Balangcod, T.D. (2005 April 30 - May 2). Pampanga Agricultural College, Networking for Nature Conservation.
- Balangcod, T.D. Plant Resource Utilization Among Ka/anguya in Tinoc, Ifugao: Its Impact to Nature Conservation.

Publications

- 2015 Balangcod, K.D., Wong, F.M., & Balangcod, T.D., *Chrysopogon zizanioides* (vetiver grass) as a potential plant for landslide bioengineering at Atok, Benguet, Philippines. Australian Journal of Botany, 2015, 63(4):216-221.
- Balangcod, K.D., Wong, F.M., & Balangcod, T.D., Vegetation Analysis of a Four Year Old Landslide Scar in Poblacion Central, Atok, Benguet Province, Philippines. Electronic Journal of Biology, 2015, 11(2): 52-56.

- 2014 Patacsil, M., Manuel, J., Laruan, L.M.V.A., Cortez, S.M., & Balangcod, T.D., Phytochemical and antimicrobial studies of selected aromatic plants in the Philippines. International Society for Horticultural Science (ISHS) in International Symposium on Medical and Aromatic Plants, 2014:143-148.
Luis, G.D.S., Balangcod, T.D., Abucay, J.B., Jr., Wong, F.M., Balangcod, K.D., affi, N.I.G., & Apostol, O.G., Phytochemical and antimicrobial screening of indigenous species that have potential for revegetation of landslides in Atok, Benguet, Philippines. Indian Journal of Traditional Knowledge, 2014, 13(1):56-62.
- 2013 Balangcod, T.D., & Balangcod, S.M., Involving the Local Communities in Developing Communal Forest Management Plans in Benguet Province, Luzon, Philippines. Iamure International Journal of Ecology and Conservation, 2013, 7(1).
Cuevas, A.G., Balangcod, K., Balangcod, T., & Jasmin, A., Surface Morphology, Optical Properties and Antibacterial Activity of Zinc Oxide Films Synthesized via Spray Pyrolysis. Procedia Engineering, 2013, 68:537-543.
Gutierrez, R.M., Baculi, R., Pastor, N., Puma-at, T., & Balangcod, T., Antibacterial potential of some medicinal plants of the Cordillera Region, Philippines. Indian Journal of Traditional Knowledge, 2013, 12(4):630-637.
Laruan, L.M.V., Balangcod, T., Balangcod, K., & Patacsil, M., Phytochemical and antibacterial study of *Lagerstroemia speciosa* (L.) Pers. and its ethnomedicinal importance to indigenous communities of Benguet Province, Philippines. Indian Journal of Traditional Knowledge, 2013, 12(3):379-383.
Balangcod, T.D., & Vallejo, V.L., Harnessing the potential of underutilized root tubers in Benguet province, Luzon, Philippines, as a substitute for wheat flour to enhance food security. Acta Horticulturae, 2013, 979:165-172.
- 2012 Hu, G.X., Balangcod, T.D., & Xiang, C.L., Trichome micromorphology of the Chinese-Himalayan genus *Coquhounia* (Lamiaceae), with emphasis on taxonomic implications. Biologia, 2012, 6(5):867-874.
Balangcod, T.D., Vallejo, V.L., Patacsil, M., Apostol, O., Laruan, L.M.V.A., Manuel, J., Cortez, S., & Gutierrez, R.M., Phytochemical screening and Antibacterial activity of selected medicinal plants of Bayabas, Sablan, Benguet Province, Cordillera Administrative Region, Luzon, Philippines. Indian Journal of Traditional Knowledge, 2012, 11(4):580-585.
- 2011 Balangcod, T.D., Cuevas, V.C., Buot, I.E., & Balangcod, A.K.D., Geographic Distribution of *Lilium philippinense* Baker (Liliaceae) in the Cordillera Central Range, Luzon Island, Philippines. Taiwaniana, 2011, 56(3):186-194.
Balangcod, T.D., & Balangcod, A.K., Ethnomedicinal knowledge of plants and healthcare practices among the Kalanguya tribe in Tinoc, Ifugao, Luzon, Philippines. Indian Journal of Traditional Knowledge, 2011, 10(2):227-238.
- 2010 Balangcod, T.D., Indigenous plant resources for Houses and Construction Materials used by the Kalanguya in Tinoc, Ifuago, Philippines. The Philippine Scientist, 2010, 47:1-26.
- 2009 Balangcod, T.D., & Balangcod, A.K.D., Underutilized Plant Resources in Tinoc, Ifugao, Cordillera Administrative Region, Luzon Island, Philippines. ACTA Horticulturae, 2009, 2(806):647-654.
- 2005 Balangcod, T.D., Plant Resource Utilization Among Kalanguya in Tinoc, Ifugao: Its Impact to Nature Conservation. PSSN Nature News, 2005, 4(1).
- 2003 Balangcod, T.D., The ritual plants of the Kalanguyas in Tinoc, Ifugao. USM R. & D. Journal, 2003, 11(1):97-109.
- 2001 Dogup-Balangcod, T., The University of the Philippines College Baguio Herbarium. Flora Malesiana Bulletin, 2001, 12(7/8):400-401.

Name Zenaida Gutay Baoanan

Gender Female

Organizational Affiliations

Associate Professor 2, Dept. of Biology, College of Science, UP Baguio, Baguio City
Consultant / Undergraduate Adviser, University of the Philippines Baguio,

Education

Doctor of Philosophy in Biology, University of the Philippines, Diliman, Quezon City 2007

Fields of Specialization

Biological Sciences
Invertebrate Taxonomy
Systematics
Malacology

Association Membership

Regular Member, National Research Council of the Philippines

Honors / Awards

UP Scientist 1 Award, Scientific Productivity System, University of the Philippines Diliman 2011-2013

International Publication Award 2011, Philippine Agricultural Scientist 2011

Researches

Completed

Documentation of terrestrial gastropods in Benguet Province, Philippines
Conchological and anatomical studies of selected Philippine cone snails
Ecological and Hydrologic Survey of Selected Communities in Tinglayan, Kalinga
Exploring the molluscan fauna of Mt. Polis, Central Cordillera Range
Micro-geographic populations, habitat differences, and heritability of shapes and allometry of Pomacea
Pila sp collection from various parts of the Philippines
UPS Creative and Research Scholarship Program: Exploring the Molluscan Fauna of Mt. Polis, Central Cordillera Range

Papers Presented

2011 November 19 -20 Mendoza, M.P., Serra, K.M.S., Halili, J.F.A., Fontanilla, I.K.C., & Baoanan, Z.G. (2011 November 19 -20). COI barcodes demonstrate lack of genetic variation in the native *Pila conica* and the high genetic variability in the introduced *Pomacea canaliculata*, 5th Annual Scientific Conference of the Philippine Society for the Study of Nature-Cordillera Administrative Region Chapter with the theme "Strategies Towards the Conservation and Restoration of Natural Resources, Benguet State University, Philippines.

- 2011 June 27-28 Baoanan, Z.G. (2011 June 27-28). Plenary Talk on Climate Change Effect on Natural Resources and Ecology: A Case Study on the Effect to Molluscan Population and its Impact to Ecological Dynamics. (Security in Developing Countries), International seminar on "Natural Resources, Climate Change, and Food", Surabaya, Indonesia.
- 2011 June 27-29 Baoanan, Z.G., & Obanan, S.P. (2011 June 27-29). Land Snail diversity of Mt. Polis, Central Cordillera Range, Luzon Island, Philippines, International seminar on "Natural Resources, Climate Change, and Food Security in Developing Countries", Surabaya, Indonesia.
- 2008 December 6 Baoanan, Z.G. (2008 December 6). Exploring molluscan biodiversity of Mt. Polis: A preliminary report, 4th National Malacological Society of the Philippines, held at the Institute of Biology, College of Science, UP Diliman, Quezon City.
- 2005 September 16-17 Baoanan, Z.G. (2005 September 16-17). Cone snail: A Model for Statistical Studies BCNHS Domogan Laboratory, Statistical Methods in Teaching and Research.
- 2005 April 30 - May 2 Baoanan, Z.G. (2005 April 30 - May 2). Understanding the Biology of cone snails for developing conservation strategies, Pampanga Agricultural College. Networking for Nature Conservation.

Publications

- 2015 Addawe, R.C., & Baoanan, Z.G., Ensembling Classifiers: An Application to Food Type Classification of Genus *Conus*. *International Journal of Applied Mathematics and Statistics*, 2015, 53(4):242-249.
- 2013 Torres, M.A., Cabahug, C., Joshi, R., Baoanan, Z., & Demayo, C., Variability in Populations of Golden Apple Snail, *Pomacea canaliculata*, (Lamarck, 1822) in selected locations from the Philippines. *Research Journal of Recent Sciences*, 2013, 2(8):12-19.
- 2011 Torres, M.A.T., Amarillo, L.R.T., Joshi, R., Sebastian, L., Baoanan, Z., & Demayo, C.G., Intra- and Inter-Population Variability in the Golden Apple Snail *Pomacea canaliculata*. *Australian Journal of Basic and Applied Sciences*, 2011, 5(6):789-800.
- 2008 Baoanan, Z.G., Lagunzad, D.A., Pagulayan, R.C., & Cruz, L.J., Anatomy of six Philippine cone snails (*Conus*) (Gastropoda: Conidae). *Vita Malacologia*, 2008, 6:51-62.
Baoanan, Z.G., Addawe, R.C., Cruz, L.J., Lagunzad, D.A., & Pagulayan, R.C., Mathematical evaluation of cone shell forms. *Journal of Statistics, Econometrics and Applied Finance (REEFA)*, Mexico, 2008.
Baoanan, Z.G., Pagulayan, R.C., Lagunzad, D.A., & Cruz, L.G., Comparative morphology of some Philippine Cone snails (*Conus*) in the Light of Phylogeny. *Nautilus*, 2008.
- 2006 Baoanan, Z., Pagulayan, R.C., Joshi, R.C., & Sebastian, L.S., Taxonomy of golden apple snails (ampullariidae). *Global advances in ecology and management of golden apple snails*, 2006:25-36.
- 2005 Baoanan, Z.G., Understanding the Biology of cone snails for developing conservation strategies. *PSSN Nature News*, 2005, 4(1).
- 2003 Baoanan, Z.G., Pangulayan, R.C., & Herrera, A.A., Embryonic development of the shell gland and protoconch of *Vivipara costata* (Quoy and Gaimard) (Mollusca: Viviparidae) using paraffin and alizarin method. *USM R & D Journal*, 2003, 11(1):86-96.
- 1994 Pagulayan, I.F., Baoanan, Z.G., & Villa, L.Q., The effect of Methyl Parathion on the Sperm head morphology of the ICR Strain mice. *Asia Life Sciences*, 1994, 3(1):45-54.

1993

Pagulayan, I.F., & Gutay-Baoanan, Z.P., Effect of Malathion on Sperm Morphology of Mice. *Science Diliman*, 1993, 5(1):19-40.

Name Ramon Cabanos Barba

Gender Male

Organizational Affiliations

Assistant Professor, University of the Philippines Los Baños, Los Baños, Laguna, Philippines

Education

Doctor of Philosophy in Horticulture, University of Hawaii, 2500 Campus Rd, Honolulu, HI 96822, United States 1967

Master of Science in Horticulture, University of Georgia, Athens, GA 30602, United States 1962

Bachelor of Science in Agronomy (Fruits), University of the Philippines Los Baños, College, 4031 Los Baños, Laguna 1958

Fields of Specialization

Horticulture

Tissue Culture

Physiology of Growth and Flowering

Plant Growth Regulator

Fruit and Ornamental Crops

Weed Control

Plant Propagation

Employment

Senior Consultant, Institute of Plant Breeding, University of the Philippines Los Baños

Director of Research (part-time), Plantek, 1985-1988

Project Director, CORE Foundation, 1984-1988

Professor I, College of Agriculture, University of the Philippines Los Baños, 1981-

Assistant Professor, College of Agriculture, University of the Philippines Los Baños, 1969-1975

Consultant, Quimara Farms on Mango Production, 1969-1985

Assistant Instructor, Department of Agronomy, Fruit Crops Section, College of Agriculture, University of the Philippines L, 1958-1960

Honors / Awards

Asia's Top 100 Scientist, The Asian Scientist Magazine 2016

National Scientist, Republic of the Philippines 2013

Dioscoro L. Umali Achievement Award in Agricultural Development, Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) 2011 November 23

Most Distinguished Alumni Award, University of the Philippines 2004
 Elected Academician, National Academy of Science and Technology 2004
 Gamma Sigma Delta Distinguished Award, 2004
 DA-Khush Achievement Award, 1995
 Gamma Sigma Delta Achievement Award, 1995
 IBM/DOST Science and Technology Award, International Business Machines /
 Department of Science and Technology 1989
 Best Paper Award, Crop Science Society of the Philippines 1981
 Rizal Pro Patria Presidential Award for Tissue Culture, 1980
 The Outstanding Young Men of the Philippines for Agriculture, Philippine Jaycees
 1974
 Best Paper Award for Induction of Flowering of Mango by Chemical Spray, 1974
 Best Paper Award, Crop Science Society of the Philippines 1974

Researches

Completed

Induction of mutation in sugarcane using tissue culture
 Rapid asexual propagation methods for white potato

Publications

- 2009 Avenido, R.A., Dimaculangan, J.G., Carandang, J.M., Pateña, L.F., Siar, S.V., & Barba, R.C., Tissue Cultured Avocado (*Persea Americana* Miller): A Journey from Laboratory to Field. *Transactions of the National Academy of Science and Technology. Abstracts of Papers*, 2009, 31(1):17-18.
- 2007 Pateña, L.F., Cardenas, L.B., Brar, D.S., & Barba, R.C., Use of SSR markers for characterizing different strains of Carabao mango. *Transactions of the National Academy of Science and Technology Philippines*, 2007, 29(1).
 Bariring, A.L., Dolores, L.M., Miranda, M.B., Barg, E., Green, S.K., Barba, R.C., & Pateña, L.F., Propagation of lanzones by rooting of terminal stem cuttings. *Transactions of the National Academy of Science and Technology Philippines*, 2007, 29(1).
- 2006 Pateña, L.F., Dacumos, C.N., & Barba, R.C., Somatic embryogenesis in coconut using plumule explants of 'Makapuno,' 'Laguna Tall,' and 'Baybay Tall. *Transactions of the National Academy of Science and Technology. Abstracts of Papers*, 2006, 28(1):28.
 Pateña, L.F., Rudolfo, G.S., Garcia, R.N., Juanillas, J.L., & Barba, R.C., Organic, virus free and true-to-type tissue-cultured garlic (*Allium sativum*, L.). *Transactions of the National Academy of Science and Technology Philippines*, 2006, 28(1):27.
 Pateña, L.F., Rudolfo, G.S., Dolores, L., Garcia, R.N., Juanillas, J.L., & Barba, R.C., Organic, virus free and true-to-type tissue-cultured garlic (*Allium sativum* L.). *Philippine Journal of Crop Science*, 2006, 31:76.
- 2005 Avenido, R.A., Endonela, L.E., Pateña, L.F., & Barba, R.C., Developing plant regeneration systems for *in vitro* conservation of mandarin (*Citrus reticulata* Blanco) and pummelo (*Citrus maxima* (Burm.) Merr.). *Acta Horticulturae*, 2005, 694:133-136.
 Pateña, L.F., Endonela, L.E., Rafuerzo, L.C., & Barba, R.C., Somatic embryogenesis and plantlet regeneration in calamansi (*X Citrofortunella microcarpa* Bunge). *Acta*

- Horticulturae, 2005, 694:141-144.
- Pateña, L.F., Dolores, L.M., Bariring, A.L., Alcachupas, A.L., Laude, N.P., Barg, E., Green, S.K., & Barba, R.C., Improved technique for virus elimination in and production of certified planting materials of garlic (*Allium sativum* L.). *Acta Horticulturae*, 2005, 694:271-276.
- Barba, R.C., Patena, L.F., Lanzones (Lansium Domesticom Correa) propagation by rooting of terminal stem cuttings to advance first fruiting. *Philippine Journal of Crop Science*, 2005.
- 2003 Laurena, A.C., Laureles, L.R., Pateña, L.F., Barba, R.C., & Mendoza, E.M.T., Coconut (*Cocos nucifera* L.) expresses *Gus* in selected plant parts. *Transactions of the National Academy of Science and Technology*, 2003, 25(1):61.
- 2001 Pateña, L.F., Carlos-Refuerzo, L.R., Barba, R.C., A simple and reliable protocol for somatic embryogenesis and plantlet regeneration in mango (*Mangifera indica* L.). *NAST 25th Anniversary and 23rd Annual Scientific Meeting*, 2001:94.
- Pateña, L.F., Sotto, R.C., Altoveros, N.C., Bariring, A.L., Dioneda, M.A.A., & Barba, R.C., In vitro germination of freshly harvested and conserved indigenous orchid seeds. *NAST 25th Anniversary and 23rd Annual Scientific Meeting*, 2001:94.
- Pateña, L.F., Bariring, A.L., Dolores, L.M., Miranda, M.B., Barg E., Green, S.K., & Barba, R.C., Production of virus-free and true-to-type planting materials of garlic (*Allium sativum* L.). *NAST 25th Anniversary and 23rd Annual Scientific Meeting*, 2001, 23:299-300.
- Pateña, L.F., Carlos-Refuerzo, L.R., & Barba, Ramon C., A simple and reliable proto for somatic embryogenesis and plantlet regeneration in mango (*Mangifera indica* L.). *Transactions of the National Academy of Science and Technology Philippines*, 2001, 23.
- 1984 Villareal, R.L., Hilario, F.I., Jr., Barba, R.C., Rasco, E.T., Mendoza, E.M.T., & Zamora, A.B., Plant Biotechnology Program of the Institute of Plant Breeding. *2nd ASEAN Science and Technology Week Proceedings*, 1984, 2.
- 1971 Barba, R.C., & Hilario, F.I., Jr., How to grow Anthurium. *Agriculture at Los Baños*, 1971, 10(3):2-4.
- Barba, R.C., Hilario, F.I., Jr., Rasco, E.T., Mendoza, E.M.T., Zamora, A.B., & Cuevas, S.E., Weed control in herbicides in banana plantations. *Agriculture at Los Baños*, 1971, 10(3):5, 15.
- 1970 Cuevas, S.E., Hilario, F.I., Jr., & Barba, R.C., Pineapple culture for small growers. *Agricultural and Industrial Life*, 1970, 10(2):1-3, 5, 15.

Name Aimee Lynn Adato Barrion-Dupo

Gender Female

Organizational Affiliations

Associate Professor, Environmental Biology Division, Institute of Biological Sciences, UP Los Baños, College, Laguna

Curator, UPLB Museum of Natural History, UP Los Baños, College, Laguna

Education

Doctor of Philosophy in Entomology, University of the Philippines Los Baños, College, 4031, Laguna 2011

Master of Science in Entomology minor in Genetics, University of the Philippines Los Baños, College, 4031, Laguna 2003

Bachelor of Science in Agriculture major in Entomology, University of the Philippines Los Baños, College, 4031, Laguna 1999

Fields of Specialization

Entomology

Spider Taxonomy (Araneae: Araneidae)

Insect Taxonomy (Lepidoptera: Geometridae)

Insect Ecology

Employment

University Extension Associate I, UPLB Museum of Natural History, 2004 October-2006 June

University Research Associate II, National Institute of Molecular Biology and Biotechnology (BIOTECH), University of the Philippines L, 2000 January-2002 October

Association Membership

Member, Association of Systematic Biologists

Lifetime Member, Biology Teachers' Association (BIOTA)

Member, Philippine Association of Entomologists

Regular Member, National Research Council of the Philippines

Charter Member, U.P. Entomological Society Alumni Association

Lifetime Member, University of the Philippines Alumni Association

Honors / Awards

Outstanding Young Scientist Award, National Academy of Science and Technology (NAST) 2015

Junior Biologist In Focus 2009, Philibioscientia 2009 August 13

International Publication Award, UP System 2008

CSC Pag-asa Award (Group Category), Civil Service Commission 2008 September

2nd Best Paper Awardee for Research Category (AFNR), Northern Mindanao Consortium for Agriculture and Resources Research and Development (NOMCARRD) 2008 August

International Publication Award, UP System 2006

AFMA R&D Paper Award Crop Science Upstream Sub-Category Unpublished Category, Department of Agriculture - Bureau of Agricultural Research (DA-BAR) 2001 October

Luisito Cuy Memorial Award for Systematics (BSc Level), Luisito Cuy Memorial Fund 2000 June

Trainings

47th BIOTA Annual National Convention and Scientific Sessions, Ateneo de Naga University, Naga City, Bicol 2012 April 12

40th Anniversary and Scientific Conference of the Pest Management Council of the Philippines, Hotel Supreme, Baguio City 2009

20th NOMCARRD Regional Symposium on Research & Development (R&D) Highlights, Philtown Hotel, Cagayan de Oro City 2008

39th Pest Management Council of the Philippines, Inc., Asturias Hotel, Puerto Princesa City 2008

UPLB-PIA Workshop Series on Publishing and Photography for the Print Media and the Web, UP Los Baños 2006 April 4

Accredited Researchers Training for Pesticide, Continuing Education Center 2003 December 10

Researches

Completed

Taxonomy of Philippine Derby Spiders

Nutritional Quality of Philippine Edible Insects

Systematics of Geometridae in Selected Forested Areas of Luzon

Papers Presented

- 2014 Barrion-Dupo, A.L.A., Jose, E.C., Silalahi, D.D., Ballesteros, V.A., Briñas, B.A.A., Obrador, A.N., & Walican, J.P.J. (2014). Are Antlion Larvae (*Myrmeleon angustipennis*) Nocturnal?, BIOTA Philippines Conference System, 49th BIOTA Annual National Convention and Scientific Sessions.
- 2012 April 12-14 Barrion-Dupo A.L.A., et al. (2012 April 12-14). The spatial distribution pattern of pit-making antlion larvae, *Myrmeleon angustipennis* Banks (Neuroptera: Myrmeleontidae), 47th BIOTA Annual National Convention and Scientific Sessions, Ateneo de Naga University, Naga City, Bicol.
- 2009 Barrion, A.A. (2009). The How's and Why's of Life through GES (Genetics, Evolution and Systematics), 27th Annual Scientific Conference of The Association of Systematic Biologists of the Philippines, National Museum.
- 2009 Barrion-Dupo, A.L. (2009). Sabong ng Gagamba: Facts and Issues on the Taxonomy and Conservation of Philippine Derby Spiders, 27th Annual Scientific Conference of The Association of Systematic Biologists of the Philippines. National Museum.
- 2009 Barrion-Dupo, A.L. (2009). Larentiinae of the Philippine Highlands, 40th Anniversary

and Scientific Conference of the Pest Management Council of the Philippines, Hotel Supreme, Baguio City.

- 2008 Barrion-Dupo, A.L. (2008). Patterns and Trends in the Study of Philippine Geometrine Moths, 1st UPLB-CAS Student-Faculty Research Conference, CAS, UP Los Baños.
- 2008 Demayo, C.G., Torres, M.A.J., Barrion, A.T., Joshi, R.C., & Barrion, A.A. (2008). Systematic Relationships of the Rice Black Bugs, *Scotinophara* spp. Inferred Using Nonmetric Multidimensional Scaling Technique and Parsimony Analysis, 20th NOMCARRD Regional Symposium on Research & Development (R&D) Highlights, Philtown Hotel, Cagayan de Oro City.
- 2008 Barrion-Dupo, A.L. (2008). Pollen Characteristics and Floral Visitors of Some Common Weeds, 39th Pest Management Council of the Philippines, Inc. Asturias Hotel, Puerto Princesa City.
- 2007 Barrion-Dupo, A.L. (2007). Floral Ecology of *Jatropha curcas* L., 13th BEENET Conference and Technofora, ATI-RTC, Km. 5, La Trinidad, Benguet.

Publications

- 2016 Cervancia, C.R., de Guzman, L.I., Polintan, E.A., Dupo, A.L.B., & Locsin, A.A., Current status of small hive beetle infestation in the Philippines. *Journal of Apicultural Research*, 2016, 55(1):74-77.
- Aguhob, J., Dupo, A.L., & Nuñezza, O., Spider wrestling in Zamboanga Peninsula, Mindanao, Philippines. *Bulletin of Environment, Pharmacology and Life Sciences*, 2016, 5(2):11-19.
- Pepito, P.J.G., Barrion-Dupo, A.L., & Nuñezza, O., The practice of spider-wrestling in Northern Mindanao, Philippines: its implications to spider diversity. *Advances in Environmental Sciences - International Journal of the Bioflux Society*, 2016, 8(2):111-124.
- Quiñonez, L.E., Barrion-Dupo, A.L., & Nuñezza, O.M., Salticidae species richness in Rajah Sikatuna Protected Landscape (RSPL), Bohol, Philippines. *Extreme Life, Biospeology & Astrobiology - International Journal of the Bioflux Society*, 2016, 8(1):18-26.
- Patiño, S.C., Barrion-Dupo, A.L.A., & Nuñezza, O.M., Rapid assessment of spider fauna in Marilog District, Davao City, Philippines. *Journal of Biodiversity and Environmental Sciences*, 2016, 8(1):95-109.
- Juario, J.V., Nuñezza, O.M., & Dupo, A.L.B., Species richness of spiders in Sacred Mountain, Marawi City, Philippines. *Journal of Biodiversity and Environmental Sciences*, 2016, 8(1):86-94.
- 2015 Lalisan, J.A., Dupo, A.L.B., & Nuñezza, O.M., Diversity of spiders along an elevation gradient in Mt. Pinukis, Zamboanga del Sur, Philippines. *Journal of Biodiversity and Environmental Sciences*, 2015, 7(5):190-201.
- Rasalan, J.B., Barrion-Dupo, A.L.A., Bicaldo, P.R.D., & Sotto, M.P., Spider Assemblages of Puting Bato Cave 3-4 and Surrounding Karst Forest Environs, with Additional Notes on the Cave-Dwelling Nature of *Phlogiellus kwebaburdeos*. *Museum Publications in Natural History*, 2015, 4:18-25.
- Barrion-Dupo, A.L.A., & Barrion, A.T., *Chryso makiling*, a new species of comb-footed spider (Araneae: Theridiidae) from Mt. Makiling, Laguna, Luzon Island, Philippines. *Asia Life Sciences*, 2015, 24(1):21-26.
- Dacanay, C.C., Barrion-Dupo, A.L.A., & Nuñezza, O.M., Rapid assessment of spider fauna of Pulacan falls, Zamboanga Del Sur, Philippines. *Journal of Biodiversity and Environmental Sciences*, 2015, 5(1):455-464.
- 2014 Lit, I.L., Jr., Caasi-Lit, M.T., & Barrion-Dupo, A.L.A., Three New Records of

- Defoliators (Lepidoptera: Noctuidae, Pyralidae & Sphingidae) on Some Ornamental Plants in Laguna, Philippines. *Philippine Agricultural Scientist*, 2014, 97(1):67-72.
- Garciano, D.M.P., Nuñez, O.M., & Barrion-Dupo, A.L., Species richness of spiders in Mt. Matutum, South Cotabato, Philippines. *Journal of Biodiversity and Environmental Sciences*, 2014, 4(6):214-224.
- 2013 Barrion-Dupo, A.A., Barrion, A.T., Villareal, S., Catindig, J.L., Cai, D., Yuan, Q., & Heong, K.L., Book: Pictorial Handbook of Hainan Spiders. University of the Philippines, 2013.
- Barrion-Dupo, A.L.A., New Records of two species of *Cleora* Curtis (Lepidoptera: Geometridae) from Mt. Makiling, Luzon, with a full checklist of species known from the Philippines. *Check List, Journal of Species List and Distribution*, 2013, 9(2):452-454.
- Perez, J.E.J., & Barrion-Dupo, A.L.A., Diversity and Colonization Pattern of Leaf-Litter Arthropods During Early Stages of Decomposition in Mt. Makiling, Los Baños, Laguna. *Philippine Journal of Systematic Biology*, 2013, VII:39-52.
- Barrion-Dupo, A.L.A., Banaay, C.G.B., Lambio, I.A.F., Maranan, F.S., Rabena, M.A.F., Flores, R.J.D., Deyto, R.C., Fajardo, A.M., & Lit, I.L., Jr., Effect of population density on larval dispersion and pit construction of the antlion, *Myrmeleon angustipennis* Banks (Neuroptera: Myrmeleontidae). *Asian Journal of Biological Sciences*, 2013, 6(2):131-137.
- Perez, J.E.J., & Barrion-Dupo, A.L.A., Arthropod Community Structure during the Early Stages of Leaf Litter Decomposition. *Asian Journal of Biodiversity*, 2013, 4:84-98.
- Adamat, L.A., Bermudo, E.E., Torres, M.A.J., Barrion-Dupo, A.L.A., & Demayo, C.G., Describing frequency of occurrence, size and stabilimentum-building behavior of four species of orb-web building *Argiope* spiders. *Extreme Life, Biospeology & Astrobiology - International Journal of the Bioflux Society*, 2013, 5(1):28-37.
- 2012 Barrion-Dupo, A.L.A., Banaay, C.G.B., Lambio, I.A.F., Maranan, F.S., Rabena, M.A.F., Flores, R.J.D., Deyto, R.C., Fajardo, A.M., & Lit, I.L., Jr., The spatial distribution pattern of pit-making antlion larvae, *Myrmeleon angustipennis* Banks (Neuroptera: Myrmeleontidae). 47th BIOTA Annual National Convention and Scientific Sessions held on at the Ateneo de Naga University, Naga City, Bicol, 2012.
- Barrion, A.T., Barrion-Dupo, A.L., Catindig, J.L.A., Villareal, S.C., Cai, D., Yuan, Q., & Heong, K.L., New species of spiders (Araneae) from Hainan Island, China. *UPLB Museum Publications in Natural History*, 2012, 3:1-103.
- 2011 Barrion-Dupo, A.L., Terrestrial Arthropods in Selected Caves of Polillo Island, Quezon, Philippines. *Transactions of the National Academy of Science and Technology. Abstracts of Papers*, 2011, 33(1).
- Barrion, A.T., Barrion-Dupo, A.L.A., Villareal, S.S., & Ducheng, C., *Tetragnatha heongi*, a new species of long-jawed orb spider (Araneae: Tetragnathidae: Tetragnathinae) from Hainan Island, China. *Asia Life Sciences*, 2011, 20(2):385-394.
- Adamat, L.A., Torres, M.A.J., Gorospe, J.A., Barrion-Dupo, A.L.A., & Demayo, C.G., Orb web design of garden spider, *Argiope appensa* (Walckenaer, 1841) (Araneae: Araneidae). *Australian Journal of Basic and Applied Sciences*, 2011, 5(3):175-184.
- 2010 Barrion-Dupo, A.L.A., Costales, E.F., & Ngaloy, I.T., Annotated List of Described *Milionia* (Lepidoptera: Geometridae) Species in the Philippines with Notes on their Distribution. *Journal of Nature Studies*, 2010, 9(1):49-52.
- Torres, M.A.J., Barrion, A.T., Joshi, R.C., Sebastian, L.S., Barrion, A.A., Barrion-Dupo, A.L.A., & Demayo, C.G., Systematic relationships of rice black bugs, *Scotinophara* spp. inferred using nonmetric multidimensional scaling technique and parsimony analysis. *Egyptian Academic Journal of Biological Sciences*, 2010, 3(1):113-131.

- 2009 Barrion-Dupo, A.L., Preliminary Cytogenetic Characterization of the Golden Birdwing, *Troides Rhadamantis* (Lucas) (Lepidoptera: Papilionidae). Transactions of the National Academy of Science and Technology. Abstracts of Papers, 2009, 31(1).
 Abrenica-Adamat, L.R., Torres, M.A.J., Barrion, A.A., Dupo, A.L.B., & Demayo, C.G., The influence of prey on size, capture area and mesh height of the orb-web of The garden spider, *Argiope aemula* (Walckenaer, 1841) (Araneae: Araneidae). Egyptian Academic Journal of Biological Sciences, 2009, 1(1):65-71.
 Abrenica-Adamat, L.R., Torres, M.A.J., Barrion, A.A., Dupo, A.L.B., & Demayo, C.G., Salient features of the orb-web of the garden spider, *Argiopeluzona* (Walckenaer, 1841) (Araneae: Araneidae). Egyptian Academic Journal of Biological Sciences, 2009, 1(1):73-83.
 Barrion-Dupo, A.L.A., Lambio, I.A.F., Maranan, F.S.M., & Honrade, T.L.A., Community Structure of a Fragmented Mossy Forest in Bauko, Mt. Province. Journal of Nature Studies, 2009, 8(3):1-8.
 Barrion-Dupo, A.L.A., Arachnophagy by the Philippine Scops Owl, *Otus megalotis* Walden. Philippine Entomologist, 2009, 23(2):174-178.
- 2008 Barrion-Dupo, A.L., Taxonomy of Philippine Derby Spider. Asia Life Sciences, 2008, 17(2):231-248.
- 2007 Genil, F.G.D.M., Barrion, A.A., Villamael, L.N., Barrion-Dupo, A.L.A., & Barrion, A.T., Testicular cells and chromosomes of the Rice Black bug, *Scotinophara* sp. (coarctata group) (Hemiptera: Pentatomidae) sampled from rice fields in the Bicol Region. Philippine Entomologist, 2007, 21(2):173-185.
 Genil, F.G.D.M., Villamael, L.N., & Barrion, A.A., Comparative karyology of Philippine Black Bugs (Hemiptera: Pentatomidae) sampled from the Bicol Region and Laguna. Rice black bugs: Taxonomy, Ecology, and Management of Invasive Species (Chapter in a Book), 2007:191-202.
 Barrion, A.T., Joshi, R.C. & Sebastian, L.C., Systematics of the Philippine Rice Black Bug, *Scotinophara* Stal (Hemiptera: Pentatomidae). Rice black bugs: Taxonomy, Ecology, and Management of Invasive Species (Chapter in a Book), 2007:1-179.
- 2006 Velasco, C.M.V., Barrion, A.A., & Barrion, A.L.A., Egg chromosomes of the subterranean termites *Hospitalitermes luzonensis* OSHIMA ISOPTERA: TERMITIDAE). Philippine Entomologist, 2006, 20(1):94-101.
- 2002 Barrion, A.T. & Barrion, A.L.A., Rice Entomology: Recent Developments in the Management of Insect Pests in the Philippines. Philippine Entomologist, 2002, 16(2):117-127.
- 2001 Barrion, A.L.A., Barrion, A.A., & Barrion, A.T., Diversity of Philippine derby spiders *Neoscona* species (Araneidae, Aranea). Transactions of the National Academy of Science and Technology, 2001.
- 2000 Barrion, A.T., Barrion, A.A., & Barrion, A.L.A., Checklist of Philippine Spiders (Araneae: Arachnida). UPLB Museum Publications in Natural History, 2000:1-17.

Name Abigail Morales Baticados

Gender Female

Organizational Affiliations

Assistant Professor 4, Dept. of Veterinary Paraclinical Sciences (DVPS), College of Veterinary Medicine (CVM), UPLB

Research Staff, UPLB Bee Program, University of the Philippines at Los Baños

Education

Doctor of Veterinary Medicine, College of Veterinary Medicine, University of the Philippines Los Baños, College, 4031 Laguna 2000

Fields of Specialization

Pathology of Parasitic and Rickettsial Diseases

Oncology

Apitherapy

Establishment of Specific Molecular Diagnostic System for Rickettsial and Protozoan Parasite of Small and Large Animals

Molecular Biology

Entomology

Microbiology

Cancer Biology

Parasitic Diseases

Small Animal Handling

RNA Interference

Cancer Biomarkers

Gene Silencing

Employment

Assistant Professor 4, Dept. of Veterinary Paraclinical Sciences - College of Veterinary Medicine, University of the Philip, 2010-Present

Academic Personnel Committee Member, Dept. of Veterinary Paraclinical Sciences - College of Veterinary Medicine, University of the Philip, 2010-2012

Head, Pathology Section, Dept. of Veterinary Paraclinical Sciences - College of Veterinary Medicine, University of the Philip, 2008-2010

Assistant Professor 2, Dept. of Veterinary Paraclinical Sciences - College of Veterinary Medicine, University of the Philip, 2008-2010

Assistant Professor 1, Dept. of Veterinary Paraclinical Sciences - College of Veterinary Medicine, University of the Philip, 2004-2008

Association Membership

Member, Veterinary Practitioners Association of the Philippines

Regular Member, National Research Council of the Philippines

Honors / Awards

Distinguished Alumnus Award for Veterinary Research, University of the Philippines Los Baños 2012 - 2013

Dianne Lieberman Professorial Chair Lecture, University of the Philippines Los Baños 2012 - 2013

Dianne Lieberman Professorial Chair Lecture, University of the Philippines Los Baños 2011 - 2012

Basic Research Award, University of the Philippines Los Baños 2009 May - 2011 April

Zoilo M. Lapuz Academic Excellence Award in Zootechnics, College of Veterinary Medicine, University of the Philippines Los Baños 2000

Top 10 Veterinary Licensure Board Examination, UPLB, College of Veterinary Medicine 2000

Undergraduate Scholarship Grant, Merial Philippines 1998 - 2000

Dean's Lister / Honor Roll (5 semesters), University of the Philippines Los Baños

Trainings

6th International Symposium, Korean Division of the C.L. Davis DVM Foundation, Chonnam University, College of Veterinary Medicine, Chonnam National University in Gwangju City 2012 October 29

18th BEENET Conference and Technofora, Punta Villa, Arevalo District, Iloilo City 2012 July 19-21

Researches

Completed

Histopathological and in vitro antimicrobial study of post incisional wound with 30% ethanol extracted propolis as cicatrization agent in felines (*Felis catus*), 2012

Evaluation of Ethanol Extracted Propolis as Topical Antimicrobial and Healing Agent on Post-operative Wound in Laboratory Animals, 2012-13

Papers Presented

2012 October 31 Baticados, A.M., et. al (2012 October 31). A Different Breed of Philippine Hero Korea, College of Veterinary Medicine, Gyeongsang National University, Gazwa, Jinju, Gyeongnam, Republic of Korea.

2012 October 29 Valdez, C.A., Marte, B.R.G., Baticados, W.N., Baticados, A.M., & Park, N.Y. (2012 October 29). Animal Welfare and Hero Dog of the Philippines, International Conference - 60th Anniversary of the College of Veterinary Medicine, Chonnam National University.

2012 September 28 - October 2 Baticados, W.N., Baticados, A.M., Favila, M., Estacio, M.A.C., Cervancia, C.R., & Fajardo, A. (2012 September 28 - October 2). Antimicrobial property and cicatrization-enhancing activity of ethanol extracted Philippine Propolis, World Propolis Science Forum: 11th Asian Apicultural Association (AAA) Conference and ApiEXPO 2012, The Primula Hotel Kuala Terengganu, Terengganu, Malaysia.

- 2012 July 19 - 2012 July 21 Baticados, A.M. (2012 July 19 - 2012 July 21). Preliminary Study on Propolis as Topical Antimicrobial and Healing Agent on Post-Operative Wound in Laboratory Animals, 18th BEENET Conference and Technofora. Punta Villa, Arevalo District, Iloilo City.
- 2012 June 14-15 Caperina, L.L., Carlos, S.M., Carlos, E.T., Baticados, A.M., & Baticados, W.N. (2012 June 14-15). Mapping-out Canine Heartworm infection in the Philippines: A Preliminary Data, 40th Annual Scientific Conference, Veterinary Practitioners Association of the Philippines, The Peninsula Manila Hotel, Makati City, Philippines.

Publications

- 2013 Baticados, A., Baticados, W., Coz, G., Carlos, S.M.E.A.S., & Carlos, E., Microscopy and Serological Assessment for Heartworm Infection in Cats in Makati, Philippines Showing Clinical Signs of Dirofilariosis. Iranian Journal of Parasitology, 2013, 8(1):53-59.
- 2012 Baticados, A.M., & Baticados, W.N., Histopathology of Protozoal Infection in Animal Cases at University of Philippines College of Veterinary Medicine: retrospective study (1972-2010). Veterinaria Italiana, 2012, 48(1):99-107.
- 2011 Del Valle, F.P., Baticados, A.M., & Baticados, W.N., Evaluation of Babesia spp. Inspection among Native Horses in Quezon Province, Philippines, Using Molecular and Microscopical Examination. Iranian Journal of Veterinary Science and Technology, 2011, 3(1):23-30.
- Baticados, W.N., Castro, D.L., & Baticados, A.M., Parasitological and PCR detection of *Trypanosoma evansi* in buffaloes from Luzon, Philippines. Ceylon Journal of Science (Biological Sciences), 2011, 40(2):141-146.
- Baticados, A.M., Inoue, N., Sumimoto, C., Nagasawa, H., & Baticados, W.N., Complete coding sequence, sequence analysis and transmembrane topology modelling of *Trypanosoma brucei rhodesiense* putative oligosaccharyl transferase (TbOST II). International Journal of Data Mining and Bioinformatics, 2011, 5(5):574-592.
- Baticados, W.N., Inoue, N., Sumimoto, C., Nagasawa, H., & Baticados, A.M., *Trypanosoma evansi* possesses a gene similar to putative *Trypanosoma brucei rhodesiense* oligosaccharyl transferase clone I. Veterinarski Archiv, 2011, 81(4):433-442.
- Baticados, W.N., Fernandez, C.P., & Baticados, A.M., Molecular Detection of *Trypanosoma evansi* in cattle from Quirino Province, Philippines. Veterinarski Archiv, 2011, 81(5):635-646.
- 2010 Baticados, A.M., Pera, G.M.T., & Baticados, W.N., Detection of Bovine *Ehrlichiosis* in the Philippines by PCR. Online Journal of Veterinary Research, 2010, 14(2):246-252.
- Foronda, J.C., Baticados, W.N., & Baticados, A.M., Molecular Evidence of Babesia spp. in Cattle in the Philippines. Online Journal of Veterinary Research, 2010, 14(2):188-193.
- Baticados, W.N., Inoue, N., Sumimoto, C., Nagasawa, H., & Baticados, A.M., Putative oligosaccharyl transferase from *Trypanosoma brucei rhodesiense* is conserved in family Trypanosomatidae. Online Journal of Veterinary Research, 2010, 14(2):253-259.
- Baticados, W.N., Inoue, N., Sumimoto, C., Nagasawa, H., & Baticados, A.M., Genomic Cloning and Sequence Analysis of *Trypanosoma brucei rhodesiense* gene encoding Putative N-glycosylation enzyme. Acta Scientiae Veterinariae, 2010, 38(3):257-264.
- Baticados, W.N., Inoue, N., Sumimoto, C., Nagasawa, H., & Baticados, A.M., Molecular Characterization of *Trypanosoma brucei rhodesiense* Putative Oligosaccharyl Transferase STT3 subunit (TbOST 1). Online Journal Veterinary

- Research, 2010, 14(2):163-175.
- Baticados, W.N., Inoue, N., Sumimoto, C., Nagasawa, H., & Baticados, A.M., Molecular Cloning and Sequencing of *Trypanosoma brucei rhodesiense* putative oligosaccharyl transferase. Online Journal of Veterinary Research, 2010, 14(1):56-65.
- Baticados, W.N., Inoue, N., Sumimoto, C., Nagasawa, H., & Baticados, A.M., RNA Interference of *Trypanosoma congolense* P74 encoding putative ABC1 family protein. Online Journal of Veterinary Research, 2010, 14(1):8-17.
- Morales, A.B., & Baticados, W.N., Hematology and Cytopathology of *Ehrlichia* spp. Infection in Bomb Sniffing Belgian Mallinois Dogs in the Philippines. Philippine Journal of Veterinary Medicine, 2010, 44(2):76-84.
- Baticados, A.M., Baticados, W.N., Carlos, E.T., Carlos, S.M.E.A.S., Villarba, L.A., Subiaga, S.G., & Magcalas, J.M., Parasitological detection and molecular evidence of Hepatozoon canis from canines in Manila, Philippines. Veterinary Medicine: Research and Reports, 2010, 1:7-10.
- 2010 Baticados, A.M., Pera, G.M.T., & Baticados, W.N., Detection of Bovine *Ehrlichiosis* in the Philippines by PCR. Online Journal of Veterinary Research, 2010, 14(2):246-252.
- Foronda, J.C., Baticados, W.N., & Baticados, A.M., Molecular Evidence of Babesia spp. in Cattle in the Philippines. Online Journal of Veterinary Research, 2010, 14(2):188-193.
- Baticados, W.N., Inoue, N., Sumimoto, C., Nagasawa, H., & Baticados, A.M., Putative oligosaccharyl transferase from *Trypanosoma brucei rhodesiense* is conserved in family Trypanosomatidae. Online Journal of Veterinary Research, 2010, 14(2):253-259.
- Baticados, W.N., Inoue, N., Sumimoto, C., Nagasawa, H., & Baticados, A.M., Genomic Cloning and Sequence Analysis of *Trypanosoma brucei rhodesiense* gene encoding Putative N-glycosylation enzyme. Acta Scientiae Veterinariae, 2010, 38(3):257-264.
- Baticados, W.N., Inoue, N., Sumimoto, C., Nagasawa, H., & Baticados, A.M., Molecular Characterization of *Trypanosoma brucei rhodesiense* Putative Oligosaccharyl Transferase STT3 subunit (TbOST 1). Online Journal Veterinary Research, 2010, 14(2):163-175.
- Baticados, W.N., Inoue, N., Sumimoto, C., Nagasawa, H., & Baticados, A.M., Molecular Cloning and Sequencing of *Trypanosoma brucei rhodesiense* putative oligosaccharyl transferase. Online Journal of Veterinary Research, 2010, 14(1):56-65.
- Baticados, W.N., Inoue, N., Sumimoto, C., Nagasawa, H., & Baticados, A.M., RNA Interference of *Trypanosoma congolense* P74 encoding putative ABC1 family protein. Online Journal of Veterinary Research, 2010, 14(1):8-17.
- Morales, A.B., & Baticados, W.N., Hematology and Cytopathology of *Ehrlichia* spp. Infection in Bomb Sniffing Belgian Mallinois Dogs in the Philippines. Philippine Journal of Veterinary Medicine, 2010, 44(2):76-84.
- Baticados, A.M., Baticados, W.N., Carlos, E.T., Carlos, S.M.E.A.S., Villarba, L.A., Subiaga, S.G., & Magcalas, J.M., Parasitological detection and molecular evidence of Hepatozoon canis from canines in Manila, Philippines. Veterinary Medicine: Research and Reports, 2010, 1:7-10.

Name **Waren Navarra Baticados**

Gender Male

Organizational Affiliations

Associate Professor, and Scientist I, College of Veterinary Medicine, University of the Philippines Los Baños, College, 4031 Laguna

Education

Doctor of Philosophy in Veterinary Science, Gifu University, 1-1 Yanagido, Gifu, Gifu Prefecture 501-1193, Japan 2005

Doctor of Veterinary Medicine, University of the Philippines Los Baños, College, 4031 Laguna 1996

Fields of Specialization

Veterinary Parasitology

Microbiology

Pathology

Employment

Research Associate, University of British Columbia, Dept. of Pathology & Laboratory Medicine, 2015 January 12-2016 March 31

Research Associate, BC Centre for Disease Control, 2015 January 12-2016 March 31

Laboratory Assistant 2, ALS Environmental, 2014 July 21-2014 November 28

Tool Town - Part Time Retail Floor Associate, Canadian Tire, 2014 July 11-2014 August 30

Employee, Nutri-Nation Functional Foods, 2013 October 10-2014 January 24

Member, Institutional Animal Care and Use Committee, College of Veterinary Medicine, University of the Philippines Los Baños, 2011-2013

Chair, Committee on Research Coordination, College of Veterinary Medicine, University of the Philippines Los Baños, 2011-2013

Intellectual Property Representative, College of Veterinary Medicine, University of the Philippines Los Baños, 2011-2013

Researcher / Research Staff, UPLB Bee Program, College of Arts and Sciences, University of the Philippines Los Baños, 2011-2013

UP Scientist I, University of the Philippines System, 2011-2013

Head, Veterinary Molecular Biology Laboratory, College of Veterinary Medicine, University of the Philippines Los Baños, 2010-2012

Associate Professor III, College of Veterinary Medicine, University of the Philippines Los Baños, 2010-2013

Head, Parasitology Section, College of Veterinary Medicine, University of the Philippines Los Baños, 2005-2010

Research Assistant, National Research Center for Protozoan Diseases, Obihiro

University of Agriculture and Veterinary Medicine, 2002-2003

Assistant Professor (I-VII), College of Veterinary Medicine, University of the Philippines Los Baños, 1997-2009

Resident Veterinarian, College of Veterinary Medicine, University of the Philippines Los Baños, 1997-2000

Instructor III, College of Veterinary Medicine, University of the Philippines Los Baños, 1996-1997

Association Membership

Member, Entomological Society of British Columbia

Member, Food and Environmental Parasitology Network (Canada)

Member, Gamma Sigma Delta Honor Society of Agriculture

Member, Philippine Academy of Young Scientists/OYSI

Member, Philippine Veterinary Medical Association

Regular Member, National Research Council of the Philippines

Member, Beekeepers' Network Philippines Foundation, Inc. (BEENET)

Member, The Outstanding Young Men of The Philippines

Member, Vancouver Bioinformatics Users Group (VanBUG)

Member, UBC Global Health Online Network

Member, Canadian Association for Clinical Microbiology and Infectious Diseases (CACMID)

Member, Pueblo Science Organization

Member, International Society for Microbial Ecology (ISME)

Honors / Awards

2016 Canadian Association for Clinical Microbiology and Infectious Diseases (CACMID) Technologist Poster Award (Group award), Canadian Association for Clinical Microbiology and Infectious Diseases - Association of Medical Microbiology and Infectious Diseases Canada (CACMID-AMMI) 2016

2013 NSTW Outstanding R&D Award for Basic Research (Eduardo Quisumbing Medal), National Academy of Science and Technology 2013

2012 The Outstanding Young Men (TOYM) of the Philippines, Junior Chamber International-Philippines 2012

2012 Distinguished Alumnus Award for Veterinary Research, University of the Philippines, College of Veterinary Medicine Alumni Association, Philippines 2012

Finalist (citation award), 2012 GAWAD SAKA Outstanding Agricultural Scientist, Department of Agriculture-Bureau of Agricultural Research (DA-BAR) 2012

Southeast Asia, SEARCA Regional Professorial Chair Award, Southeast Asian Regional Center for Graduate Study and Research in Agriculture 2012

2011 Outstanding Young Scientist (OYS) of the Philippines, National Academy of Science and Technology 2011

UP Scientist I (UP Scientific Productivity Award: 2011-2013), University of the Philippines System 2011-2013

Dianne Lieberman Professorial Chair Lecture Award, University of the Philippines Los Baños 2010

UPLB Alumni Association Professorial Chair Lecture Award, University of the Philippines Los Baños 2009

San Miguel Corporation Professorial Chair Lecture Award, University of the Philippines Los Baños 2008

UPLB Alumni Association Professorial Chair Lecture Award, University of the Philippines Los Baños 2007

International Publication Awards (2005-2013), University of the Philippines System 2005

Professor Lope M. Yutuc Research Award in Veterinary Parasitology, College of Veterinary Medicine University of the Philippines Los Baños 1996

Trainings

Introduction to Linux and Microbial Informatics, Public Health Agency of Canada-National Microbiology Laboratory, Canadian Centre for Human and Animal Health, Winnipeg 2016 April 15

Privacy and Confidentiality (All PSHA Agencies), Provincial Health Service Authority, Canada 2016 April 3

World Propolis Science Forum: 11th Asian Apicultural Association (AAA) Conference and ApiEXPO 2012, The Primula Hotel Kuala Terengganu, Terengganu, Malaysia 2012 September 28

18th BEENET Conference and Technofora, Punta Villa, Arevalo District, Iloilo City 2012 July 19

40th Annual Scientific Conference, Veterinary Practitioners Association of the Philippines, The Peninsula Manila Hotel, Makati City, Philippines 2012 June 14

Researches

Completed

Apitherapy in Animals: I. Clinical Testing and Therapeutic Application of Formulated Bee Products as Antimicrobial and Wound Healing Enhancing Agent using Animal Models

Evaluation of Ethanol Extracted Propolis as Topical Antimicrobial and Healing Agent on Post-operative Wound in Laboratory Animals

Mapping-out Canine Heartworm infection in the Philippines

Erythron and Thrombon Profile, Serology and PCR Assay of Canine Monocytic Ehrlichiosis

Histopathological and in vitro antimicrobial study of post incisional wound with 30% ethanol extracted propolis as cicatrization agent in felines (*Felis catus*)

Comparison of Polymerase Chain Reaction and Clinicopathological Examination in the Diagnosis of *Ehrlichia spp.* infection in Canines

PCR-Based Diagnostic Method for Livestock Trypanosomosis in Quezon

Ongoing

Detection of Antibiotic Residues and Resistome Profile from an Agricultural Impacted Watershed in British Columbia

Papers Presented

- 2016 August 21-26 Baticados, W., Himsforth, C., Prystajecy, N., Jassem, A., Coombe, M., Tang, P., Zhan, S., Alamouti, S., Kwok, B., Qadir, M., & Hsiao, W. (2016 August 21-26). Avian Influenza Virus Surveillance and Characterization using Real-Time PCR and Targeted Resequencing of Wetland Sediments, 16th International Symposium on Microbial Ecology. 1001 Place Jean-Paul-Riopelle, Montréal, QC H2Z 1H5, Canada.
- 2016 July 31 - August 5 Himsforth, C., Baticados, W., Coombe, M., Jassem, A., Qadir, M., Tang, P., Prystajecy, N., Zhan, S., & Hsiao, W. (2016 July 31 - August 5). Genomic Analysis of Wetland Sediment as a Tool for Avian Influenza Surveillance and Prevention, 65th Annual International Conference of the Wildlife Disease Association (host: Cornell University Greek Peak Mountain Resort Cortland, New York, USA).
- 2016 July 31 - August 5 Coombe, M., Gadsden, G., Baticados, W., Zhan, S., Qadir, M., Jassem, A., Prystajecy, N., Hsiao, W., Tang, P., & Himsforth, C. (2016 July 31 - August 5). Using the citizen science database "eBird" to inform avian influenza surveillance on wild waterfowl i the Fraser Valley, British Columbia, Canada, 65th Annual International Conference of the Wildlife Disease Association (host: Cornell University Greek Peak Mountain Resort Cortland, New York, USA).
- 2016 May 13 Baticados, W., Himsforth, C., Jassem, A., Coombe, M., Prystajecy, N., Tang, P., Zhan, S., Alamouti, S., Kwok, B., Qadir, M., & Hsiao, W. (2016 May 13). Metagenomics Sequencing of Wetland Sediments for Influenza A Virus Surveillance in Wild Migratory Birds, 14th British Columbia Genomics Forum - Global Impacts of Genomics. University of British Columbia. Life Science Centre, 2350 Health Sciences Mall.
- 2016 May 3 Baticados, W., & Coombe, M. (2016 May 3). The Proof is in the Pond Scum: use of citizen science and molecular analyses of wetland sediments for the surveillance of avian influenza virus, British Columbia Centre for Disease Control Public Health Grand Rounds. Lane Level Lecture Hall, BCCDC, 655 West 12th Avenue, Vancouver, British Columbia V5Z 4R4.
- 2016 April 24-27 Himsforth, C., Baticados, W., Coombe, M., Jassem, A., Prystajecy, N., Tang, P., & Hsiao, W. (2016 April 24-27). A New Molecular and Genomics-Based Approach for Avian Influenza Surveillance in Wild Waterfowl using Environmental Samples, 65th Western Poultry Disease Conference, Vancouver Marriott Pinnacle Downtown, Vancouver, BC V6E 4R5.
- 2016 March 30 - April 2 Baticados, W., Jassem, A., Himsforth, C., Coombe, M., Prystajecy, N., Tang, P., & Hsiao, W. (2016 March 30 - April 2). Mining for Avian Influenza Virus RNA in Wetland Soil Sediments, Canadian Association for Clinical Microbiology and Infectious Diseases - Association of Medical Microbiology and Infectious Diseases Canada 2016 Annual Conference, Sheraton Vancouver Wall Centre, Vancouver BC V6Z 2R9.
- 2016 March 30 - April 2 Himsforth, C., Coombe, M., Baticados, W., Jassem, A., Prystajecy, N., Tang, P., & Hsiao, W. (2016 March 30 - April 2). Genomic Analysis of Wetland Sediments as a Tool for Avian Influenza Surveillance in Wild Waterfowl, Canadian Association for Clinical Microbiology and Infectious Diseases - Association of Medical Microbiology and Infectious Diseases Canada 2016 Annual Conference, Sheraton Vancouver Wall Centre, Vancouver BC V6Z 2R9.

- 2016 March 30 - April 2 Coombe, M., Himsforth, C., Gadsden, G., Tang, P., Prystajecy, N., Baticados, W., Hsiao, W., & Jassem, A. (2016 March 30 - April 2). Binoculars to Bird Flu: Using Citizen Science to Study the Ecology of Avian Influenza in Wild Waterfowl, Canadian Association for Clinical Microbiology and Infectious Diseases - Association of Medical Microbiology and Infectious Diseases Canada 2016 Annual Conference, Sheraton Vancouver Wall Centre, Vancouver BC V6Z 2R9.
- 2014 July Zhong, E., Kariminia, A., Sung, S., Rozmus, J., Bohm, A., Baticados, W., & Schultz, K. (2014 July). Ruxolitinib induces YB-1/MDR pathway in a subpopulation of cutaneous T cell lymphoma, The Child & Family Research Institute Summer Student Research Program Poster Day, CFRI 28th Ave., Vancouver, BC, Canada.
- 2012 October 31 Baticados, W. (2012 October 31). Molecular Researches on Surra in the Philippines, College of Veterinary Medicine, Gyeongsang National University, Gazwa, Jinju, Gyeongnam, Republic of Korea.
- 2012 October 29 Valdez, C.A., Marte, B.R.G., Baticados, W.N., Baticados, A.M., & Park, N.Y. (2012 October 29). Animal Welfare and Hero Dog of the Philippines, International Conference - 60th Anniversary of the College of Veterinary Medicine, Chonnam National University.
- 2012 September 28 - October 2 Baticados, W.N., Baticados, A.M., Favila, M., Estacio, M.A.C., Cervancia, C.R., & Fajardo, A. (2012 September 28 - October 2). Antimicrobial property and cicatrization-enhancing activity of ethanol extracted Philippine Propolis, World Propolis Science Forum: 11th Asian Apicultural Association (AAA) Conference and ApiEXPO 2012, The Primula Hotel Kuala Terengganu, Terengganu, Malaysia.
- 2012 July 19-21 Baticados, A.M., Estacio, M.A.C., Baticados, W.N., Favila, M., & Fajardo, A. (2012 July 19-21). Preliminary Study on Propolis as Topical Antimicrobial and Healing Agent on Post-Operative Wound in Laboratory Animals, 18th BEENET Conference and Technofora. Punta Villa, Arevalo District, Iloilo City.
- 2012 June 14-15 Caperina, L.L., Carlos, S.M., Carlos, E.T., Baticados, A.M., & Baticados, W.N. (2012 June 14-15). Mapping-out Canine Heartworm infection in the Philippines: A Preliminary Data, 40th Annual Scientific Conference, Veterinary Practitioners Association of the Philippines, The Peninsula Manila Hotel, Makati City, Philippines.
- 2011 February 15-18 Fajardo, P.V.D., Carlos, S.M.E.A.S., Baticados, W.N., & Baticados, A.M. (2011 February 15-18). Control of external parasites of PSG Working Dogs using Fipronil/(S)-methoprene at different intervals of application, The Joint 78th PVMA Annual Convention and Scientific Conference and 16th FAVA Congress. Waterfront Cebu City Hotel and Casino Lahug, Cebu City.
- 2009 June 18-19 Baticados, W.N. (2009 June 18-19). Molecular Diagnosis in Veterinary Practice, 37th Veterinary Practitioners Association of the Philippines Annual Scientific Conference, The Heritage Hotel Manila, EDSA, Pasay City, Manila, Philippines.
- 2008 June 12-13 Divina, B.P., Baticados, W.N., & Amparo, M.R.G. (2008 June 12-13). Efficacies of Mebendazole-Nicosamide-Levamisole and Albendazole-Praziquantel against Digestive Tract Helminths of Chicken, 36th Veterinary Practitioners Association of the Philippines Annual Scientific Conference, Hotel Renaissance, Makati City, Philippines.
- 2004 September 10-12 Baticados, W.N. (2004 September 10-12). Towards the Development of *Trypanosoma congolense* species-specific diagnostic methods, 138th Japanese Veterinary Congress. Hokkaido University, Sapporo, Japan.

Publications

- 2016
- Baticados, W., Himsworth, C., Prystajecy, N., Jassem, A., Coombe, M., Tang, P., Zhan, S., Alamouti, S., Kwok, B., Qadir, M., & Hsiao, W., Avian Influenza Virus Surveillance and Characterization using Real-Time PCR and Targeted Resequencing of Wetland Sediments. Proceedings of the 16th International Symposium on Microbial Ecology. 1001 Place Jean-Paul-Riopelle, Montréal, QC H2Z 1H5, 2016.
- Himsworth, C., Coombe, M., Baticados, W., Jassem, A., Prystajecy, N., Tang, P., & Hsiao, W., Genomic Analysis of Wetland Sediments as a Tool for Avian Influenza Surveillance in Wild Waterfowl. Proceedings of Canadian Association for Clinical Microbiology and Infectious Diseases - Association of Medical Microbiology and Infectious Diseases Canada 2016 Annual Conference, Sheraton Vancouver Wall Centre, Vancouver BC V6Z 2R9, 2016.
- Himsworth, C., Baticados, W., Coombe, M., Jaasem, A., Prystajecy, N., Tang, P., & Hsiao, W., A New Molecular and Genomics-Based Approach for Avian Influenza Surveillance in Wild Waterfowl using Environmental Samples. Proceedings of the 65th Western Poultry Disease Conference, Vancouver Marriott Pinnacle Downtown, Vancouver, BC V6E 4R5, 2016.
- Baticados, W., Jassem, A., Himsworth, C., Coombe, M., Prystajecy, N., Tang, P., & Hsiao, W., Mining for Avian Influenza Virus RNA in Wetland Soil Sediments. Proceedings of Canadian Association for Clinical Microbiology and Infectious Diseases - Association of Medical Microbiology and Infectious Diseases Canada 2016 Annual Conference, Sheraton Vancouver Wall Centre, Vancouver BC V6Z 2R9, 2016.
- Coombe, M., Himsworth, C., Gadsden, G., Tang, P., Prystajecy, N., Baticados, W., Hsiao, W., & Jassem, A., Binoculars to Bird Flu: Using Citizen Science to Study the Ecology of Avian Influenza in Wild Waterfowl. Proceedings of Canadian Association for Clinical Microbiology and Infectious Diseases - Association of Medical Microbiology and Infectious Diseases Canada 2016 Annual Conference, Sheraton Vancouver Wall Centre, Vancouver BC V6Z 2R9, 2016.
- 2014
- Baticados, W.N., Agricultural Competitiveness through Clinical Genomics of Priority Diseases. Southeast Asian Regional Center for Graduate Study and Research in Agriculture (SEARCA) Agriculture & Development Discussion Paper Series No. 2014-1, 2014.
- 2013
- Baticados, A., Baticados, W., Coz, G., Carlos, S.M.E.A.S., & Carlos, E., Microscopy and Serological Assessment for Heartworm Infection in Cats in Makati, Philippines Showing Clinical Signs of Dirofilariosis. Iranian Journal of Parasitology, 2013, 8(1):53-59.
- 2012
- Italia, J.T., Rovira, H.G., Masangkay, J.S., Yoshikawa, Y., Perez, M.T.M., Reyes, A.W.B., & Baticados, W.N., Conventional isolation and polymerase chain reaction of *Escherichia coli* O157:H7 from intestines of Philippine Bats. Veterinarski Arhiv, 2012, 82(3):283-294.
- Baticados, A.M., & Baticados, W.N., Histopathology of protozoal infection in animal cases at the University of Philippines College of Veterinary Medicine (1972-2010). Veterinaria Italiana, 2012, 48(1):99-107.
- Italia, J.T., Rovira, H.G., Masangkay, J.S., Yoshikawa, Y., Perez, M.T.M., Reyes, A.W.B., & Baticados, W.N., Conventional isolation and polymerase chain reaction assay for detection of *Escherichia coli* O157:H7 from intestines of Philippine bats. Veterinarski Arhiv, 2012, 82(3):283-294.
- 2011
- Baticados, W.N., Inoue, N., Sugimoto, C., Nagasawa, H., & Baticados, A.M., Complete coding sequence, sequence analysis and transmembrane topology modelling of *Trypanosoma brucei rhodesiense* Putative Oligosaccharyl transferase (TbOST II). International Journal of Data Mining and Bioinformatics, 2011, 5(5):574-

592.

Reyes, A.W.B., Rovira, H.G., Masangkay, J.S., Ramirez, T.J., Yoshikawa, Y., & Baticados, W.N., Polymerase Chain Reaction Assay and Conventional Isolation of *Salmonella spp.* from Philippine Bats. *Acta Scientiae Veterinariae*, 2011, 39(1):1-7.

Baticados, W.N., Inoue, N., Sugimoto, C., Nagasawa, H., & Baticados, A.M., *Trypanosoma evansi* possesses a gene similar to Putative *Trypanosoma brucei rhodesiense* Oligosaccharyl Transferase clone I. *Veterinarski Arhiv*, 2011, 81(4):433-442.

Del Valle, F.P., Baticados, A.M., & Baticados, W.N., Evaluation of *Babesia Spp.* Infection among Native Horses in Quezon Province, Philippines, Using Molecular and Microscopical Examination. *Iranian Journal of Veterinary Science and Technology*, 2011, 3(1):23-30.

Baticados, A.M., Baticados, W.N., Villarba, L.A., Carlos, E.T., Carlos, S.M.E.A.S., & Fajardo, P.V., PCR assay and microscopy for examination of mixed *Ehrlichia canis* and *Babesia spp.* infection in bomb sniffing dogs and other canines in the National Capital Region, Philippines. *Eurasian Journal of Veterinary Sciences*, 2011, 27(2):111-115.

Baticados, W.N., Castro, D.L., & Baticados, A.M., Parasitological and PCR detection of *Trypanosoma evansi* in buffaloes from Luzon, Philippines. *Ceylon Journal of Science*, 2011, 40(2):141-146.

Baticados, W., Fernandez, C.P., & Baticados, A.M., Molecular detection of *Trypanosoma evansi* in cattle from Quirino Province, Philippines. *Veterinarski Arhiv*, 2011, 81(5):635-346.

Arayan, L.T., Reyes, A.W.B., Masangkay, J.S., Yoshikawa, Y., Baticados, W.N., & Rovira, H.G., Serological examination of Philippine bats for *Histoplasma capsulatum*. *Ceylon Journal of Science*, 2011, 40(2):183-186.

Baticados, A.M., & Baticados, W.N., Serological evidence of *Ehrlichia canis* Exposure in Military dogs and other canines in Metropolitan Manila, Philippines. *Israel Journal of Veterinary Medicine*, 2011, 66(4):151-156.

Fajardo, P.V.D., Carlos, S.M.E.A.S., Baticados, W.N., & Baticados, A.M., Control of external parasites of PSG Working Dogs using Fipronil/(S)-methoprene at different intervals of application. *Proceedings of The Joint 78th Philippine Veterinary Medical Association Annual Convention and Scientific Conference and 16th Federation of Asian Veterinary Associations Congress*, 2011.

2010

Baticados, A.M., Baticados, W.N., Carlos, E.T., Carlos, S.M.E.A.S., Villarba, L.A., Subiaga, S.G., & Magcalas, J.M., Parasitological detection and molecular evidence of *Hepatozoon canis* from Canines in Manila, Philippines. *Veterinary Medicine: Research and Report*, 2010, 1:7-10.

Fernandez, C.P., Baticados, A.M., & Baticados, W.N., Parasitological Examination for *Trypanosoma theileri* infection of cattle from Quirino Province, Philippines. *Veterinary Medicine: Research and Reports*, 2010, 1:3-6.

Baticados, W.N., Inoue, N., Sugimoto, C., Nagasawa, H., & Baticados, A.M., RNA interference of *Trypanosoma congolense* P74 encoding putative ABC1 family protein. *Online Journal of Veterinary Research*, 2010, 14(1):8-17.

Baticados, W.N., Inoue, N., Sugimoto, C., Nagasawa, H., & Baticados, A.M., *In vitro* Cultivation and Adaptation of *Trypanosoma congolense* IL3000 in Semi-defined Medium with Different Concentrations of Fetal Bovine Serum. *Philippine Journal of Veterinary and Animal Sciences*, 2010, 36(2):195-203.

Baticados, W.N., Inoue, N., Sugimoto, C., Nagasawa, H., & Baticados, A.M., Molecular Characterization of *Trypanosoma brucei rhodesiense* Putative Oligosaccharyl Transferase STT3 subunit (TbOST I). *Online Journal of Veterinary Research*, 2010, 14(2):163-175.

Baticados, W.N., Inoue, N., Sugimoto, C., Nagasawa, H., & Baticados, A.M.,

- Genomic cloning and sequence analysis of *Trypanosoma brucei rhodesiense* gene encoding Putative N-glycosylation enzyme. *Acta Scientiae Veterinariae*, 2010, 38(3):257-264.
- Baticados, A.M., Pera, G.M.T., & Baticados, W.N., Detection of Bovine *Ehrlichiosis* in the Philippines by PCR. *Online Journal of Veterinary Research*, 2010, 14(2):246-252.
- Baticados, W.N., Inoue, N., Sugimoto, C., Nagasawa, H., & Baticados, A.M., Putative Oligosaccharyl Transferase from *Trypanosoma brucei rhodesiense* is conserved in Family Trypanosomatidae. *Online Journal of Veterinary Research*, 2010, 14(2):253-259.
- Baticados, W.N., Inoue, N., Sugimoto, C., Nagasawa, H., & Baticados, A.M., Molecular cloning and sequencing of *Trypanosoma brucei rhodesiense* putative oligosaccharyl transferase. *Online Journal of Veterinary Research*, 2010, 14(1):56-65.
- Foronda, J.C., Baticados, W.N., & Baticados, A.M., Molecular evidence of *Babesia* spp. in cattle in the Philippines. *Online Journal of Veterinary Research*, 2010, 14(2):188-193.
- Baticados, W.N., Inoue, N., Sugimoto, C., Nagasawa, H., & Baticados, A.M., Full-length DNA Cloning, Sequence Analysis and Transmembrane Topology Modelling of Putative *Trypanosoma brucei rhodesiense* Oligosaccharyl Transferase (TbOST I). *Online Journal of Bioinformatics*, 2010, 11(1):162-176.
- 2009 Padilla, M.A., Baticados, W.N., Desamero, J.M., & Lucas, S.F., Prevalence and factors associated with *Eimeria* infection in goats in Laguna, Philippines. *Philippine Journal of Veterinary and Animal Sciences*, 2009, 35(2):108-118.
- Baticados, W.N., Inoue, N., Sugimoto, C., & Nagasawa, H., Initiation of *Trypanosoma congolense* IL3000 procyclic and epimastigote forms in 109-c medium. *Philippine Journal of Veterinary and Animal Sciences*, 2009, 35(2):119-126.
- Baticados, W.N., Molecular Diagnosis in Veterinary Practice. Proceedings of 37th Veterinary Practitioners Association of the Philippines Annual Scientific Conference, 2009.
- 2008 Divina, B.P., Baticados, W.N., & Amparo, M.R.G., Efficacies of Mebendazole-Niclosamide-Levamisole and Albendazole-Praziquantel against Digestive Tract Helminths of Chicken. Proceedings of the 36th Veterinary Practitioners Association of the Philippines Annual Scientific Conference, Hotel Renaissance, Makati City, Philippines, 2008.
- Baticados, W.N., Hands-on Training on Routine Laboratory Diagnosis of Parasites and Rickettsiae of Dogs and Cats: Examination for rickettsiae. UP College of Veterinary Medicine - Department of Veterinary Paraclinical Sciences / Carchimilican Marketing / Bayer Animal Healthcare Phils. Inc., University of the Philippines Los Baños, Laguna, 2008.
- 2007 Morales, A.B., & Baticados, W.N., Hematology and Cytopathology of *Ehrlichia* spp. Infection in Bomb Sniffing Belgian Mallinois Dogs in the Philippines. *Philippine Journal of Veterinary Medicine*, 2007, 44(2):76-84.
- 2006 Hara, O.A., Liao, M., Baticados, W., Bannai, H., Zhang, G., Zhang, S., Lee, E., Nishikawa, Y., Claveria, F., Igarashi, M., Nagasawa, H., & Xuan, X., Expression of recombinant dense granule protein 7 of *Neospora caninum* and evaluation of its diagnostic potential for canine neosporosis. *Journal of Protozoology Research*, 2006, 16:34-41.
- 2005 Baticados, W.N., Witola, W.H., Inoue, N., Kim, J.Y., Kuboki, N., Xuan, X., Yokoyama, N., & Sugomoto, C., Expression of a Gene Encoding *Trypanosoma congolense* Putative Abc1 Family Protein is Developmentally Regulated. *Journal of Veterinary Medical Science*, 2005, 67(2):157-164.
- 2004 Baticados, W.N., Towards the Development of *Trypanosoma congolense* species-

- specific diagnostic methods. Proceedings of 138th Japanese Veterinary Congress, Hokkaido University, Sapporo, Japan, 2004.
- 2003 Pronuevo, J.C., Baticados, W.N., Celiz, M.G.D.A., Esguerra, V.C., & Dalisay, B.E., Reduction of the number of suspected Trombiculid mite lesions by cypermethrin in game cocks. *Philippine Journal of Veterinary Medicine*, 2003, 40(2):107-110.
- 2000 David, O.D., Marte, B.R.G., Baticados, W.N., & Acorda, J.A., Efficacy of *Gliricidia* (*Gliricidia sepium*) Against Generalized Canine Demodicosis. *Philippine Journal of Veterinary Medicine*, 2000, 37(2):106-108.
- Andales, S.A., Marte, B.R.G., Baticados, W.N., & Acorda, J.A., Clinico-pathological Findings in *Sarcoptes* Mite-infested Dogs Treated with *Gliricidia* (*Gliricidia sepium*). *Philippine Journal of Veterinary and Animal Sciences*, 2000, 26:153-168.
- 1999 Baticados, W.N., Coccidiosis - Back to the Basics. Roche / UP College of Veterinary Medicine Workshop on Poultry Diseases, Los Baños, Laguna, 1999:1-10.
- 1997 Baticados, W.N., Fecal collection and Examination for the Identification of Helminth Ova. Short-Term Training on Serology / Parasitology, UP College of Veterinary Medicine, Los Baños, Laguna, 1997:13-32.

Name Corazon Veron Cruz-Barba

Gender Female

Organizational Affiliations

Director, Institute of Human Nutrition and Food, University of the Philippines Los Baños, College, 4031 Laguna

Scientific Advisor, International Life Sciences Institute,

Professor Emeritus, Institute of Human Nutrition and Food, College of Human Ecology, University of the Philippines Los Baños, College, 4031 Laguna

Executive Trustee, Nutrition Foundation of the Philippines,

Fellow, East-West Center,

Fellow, World Bank,

Fields of Specialization

Food Fortification

Food and Nutrition

Nutrition Assessment

Malnutrition

Nutritional and Nutrition Education

Clinical Nutrition

Child Nutrition

Nutritional and Metabolic Diseases

Nutritional Epidemiology

Applied Nutrition

Community Nutrition

Anthropometry

Childhood/Pediatric Obesity

Non-Communicable Diseases

Dietary Supplements

Indigenous Foods

Abdominal Obesity

Complementary Feeding

Growth and Development

Diet

Employment

Professor Emeritus, University of the Philippines Los Baños

Papers Presented

- 2005 May 1-6 Ramirez, M.A.R.M., Pedro, M.R.A., Magsadia, C.R., & Barba, C.V.C. (2005 May 1-6). Availability, access and perception of nutrition programs among selected urban poor and indigenous, upland farming households, Hanoi, Vietnam.

Publications

- 2015 Angeles-Agdeppa, I., Capanzana, M.V., Barba, C.V., Florentino, R.F., & Takanashi, K., Efficacy of Iron-Fortified Rice in Reducing Anemia Among Schoolchildren in the Philippines. *International Journal for Vitamin and Nutrition Research*, 2015, 78(2):74-86.
- 2011 Barba, C.V., Stunting: there is more than meets the eye. *Malasian Journal of Nutrition*, 2011, 17(1): v-vi.
- 2008 Barba, C.V.C., & Cabrera, M.I.Z., Recommended energy and nutrient intakes for Filipinos 2002. *Asia Pacific Journal of Clinical Nutrition*, 2008, 17(S2):399-404.
Barba, C.V.C., & Cabrera, M.I.Z., Recommended dietary allowances harmonization in Southeast Asia. *Asia Pacific Journal of Clinical Nutrition*, 2008, 17(S2):405-408.
Bumanlag, M.M., Barba, C.V.C., & Capanzana, M.V., Setting-up and operating a school/community-based supplementary feeding program: the FNRI experience. Food and Nutrition Research Institute, 2008.
- 2007 Pedro, M.R.A., Barba, C.V.C., & Benavides-de Leon, R., Nutrition Transition in the Philippines. *Philippine Population Review*, 2007, 6(1):1-19.
- 2005 Candelaria, L.V., Magsadia, C.R., Velasco, R.E., Pedro, M.R.A., Barba, C.V.C., & Tanchoco, C.C., The effect of vitamin A-fortified coconut cooking oil on the serum retinol concentration of Filipino children 4-7 years old. *Asia Pacific Journal of Clinical Nutrition*, 2005, 14(1):43-53.
Ramirez, M.A.R.M., Barba, C.V.C., Magsadia, C.R., & Pedro, M.R.A., Availability, access and perception of nutrition programs among selected urban poor and indigenous, upland farming households. FNRI, 2005.
- 2004 Pedro, M.R.A., Madriaga, J.R., Barba, C.V.C., Habito, R.C.F., Gana, A.E., Deitchler, M., & Mason, J.B., The National Vitamin A Supplementation Program and subclinical vitamin A deficiency among preschool children in the Philippines. *Food and Nutrition Bulletin*, 2004, 25(4):319-329.
- 2003 Angeles-Agdeppa, I, Lana, R.D., & Barba, C.V.C., A case study on dual forms of malnutrition among selected households in District 1, Tondo, Manila. *Asia Pacific Journal of Clinical Nutrition*, 2003, 12(4):438-446.
Mendoza, T.S., & Barba, C.V.C.,
A handbook on International Reference Standard (IRS) growth tables and charts adopted for use in the Philippines. Food and Nutrition Research Institute, DOST and UNICEF, 2003.
Mendoza, T.S., Barba, C.V.C., & Ocampo, M.L., User's manual on the international reference standard (IRS) growth tables and charts adopted for field use in the Philippines. Food and Nutrition Research Institute, 2003.
- 2002 Ramirez, M.A.R.M., & Barba, C.V.C., Vegetable gardens and nutrition in SSS Gardens, Barangay Pinyahan, Diliman, Quezon City. *Philippine Journal of Nutrition*, 2002, 49(3-4):38-53.
Barba, C.V.C., & Feliciano, E.A., Micronutrient deficiency and its alleviation: The Philippine experience. *Asia Pacific Journal of Clinical Nutrition*, 2002, 11(S1):S371-S376.

- 2001 Pedro, M.R.A., & Barba, C.V.C., Nutritional issues and status of older persons of the Philippines: the IUNS, CRONOS and other studies. *Journal of Nutrition Health and Aging*, 2001, 5(2):92-96.
- 2000 Barba, C., The Philippine Plan of Action for Nutrition: An Overview. *Food and Nutrition Bulletin*, 2000, 21(4):507-511.
- 1999 Abilgos, R.G., & Barba, C.V.C., Utilization of Malunggay (*Moringa oleifera* Lam.) Leaves in Rice (*Oryza sativa* L.) Flat Noodle Production. *Philippine Journal of Science*, 1999, 128(2):79-84.
- 1991 Bisgrove, E.Z., Popkin, B.M., & Barba, C.V.C., Profiling infant feeding patterns in Cebu, Philippines. *Ecology of Food and Nutrition*, 1991, 26(4):291-302.
- 1990 Guthrie, H.A., Guthrie, G.M., Fernandez, T., & Barba, C.V.C., Nutritional intervention: a key to child survival. *Asia Pacific Journal of Public Health*, 1990, 4(1):53-58.
- 1989 Bisgrove, E.Z., Popkin, B.M., & Barba, C.V.C., Infant feeding in the Philippines: A cluster analysis approach. *Ecology of Food and Nutrition*, 1989, 23(2):75-90.
- 1982 Barba, C.V.C., Guthrie, H.A., & Guthrie, G.M., Dietary Intervention And Growth Of Infants And Toddlers In A Philippine Rural Community. *Ecology of Food and Nutrition*, 1982, 11(4):235-244.
- 1981 Palmer, C.F., & Barba, C.V.C., Mental Development after Dietary Intervention - A Study of Philippine Children. *Journal of Cross-Cultural Psychology*, 1981, 12(4):480-488.
- 1976 Oñate, L.U., Cabotaje, E., & Barba, C.V.C., Human Nutrition in Southeast Asia. Agix. Pub. Corp., 1976.

Name Maria Victoria Ortega-Espaldon

Gender Female

Organizational Affiliations

Professor 12, School of Environment Science and Management, University of the Philippines Los Baños

Education

Bachelor of Science in Biology (Program in Ecology), University of the Philippines Los Baños, College, 4031 Laguna 1984

Master of Science in Forestry (Major in Social Forestry), University of the Philippines Los Baños, College, 4031 Laguna 1992

Doctor of Philosophy in Geography (Rural Resource Assessment and Environmental Analysis), University of Guelph, Ontario, Canada 1995

Fields of Specialization

Environmental Science

Higher Education

Sustainable Development

Geography

Science Education

Waste Management

Environmental Impact Assessment

Climate Change Adaptation

Disaster Management

Disaster Risk Reduction

Vulnerability Analysis

Vulnerability Assessment

Agricultural Science

Geoscience

Ecology

Social Forestry

Employment

Vice-Chancellor for Research and Extension, University of the Philippines Los Baños

Dean, School of Environment Science and Management, University of the Philippines Los Baños

Association Membership

Member, Technical Committee on Environmental Science, Commission on Higher Education (CHED)

Papers Presented

- 2015 June 11-13 Tiongco, M.M., Espaldon, M.V.O., Guzman, L.E., Ancog, R.C., Quiray, A.E., Jafee, S., Frias, J. (2015 June 11-13). Green Agriculture in the Philippines: An old wine in a new bottle? 16th Global Development Network Conference, Casablanca, Morocco.
- 2008 February 23-27 Espaldon, M.V.O. (2008 February 23-27). Knowledge Systems in Upland Farming Practices in the Philippines and Implications for Climate Change Adaptation, International Conference on Climate Change Adaptation in Southeast Asia, Bali, Indonesia.

Publications

- 2015 Demafelis, R.B., Alcantara, A.J., Movillon, J.L., Pacardo, E.P., Espaldon, M.V.O., Flavier, M.E., Eleazar, P.J.M., & Tongko, B.D., Comparative Analysis of Sugarcane and Sweet Sorghum Bioethanol Carbon Footprints, Carbon Savings and Carbon Debt Payback Periods. *Philippine Journal of Crop Science*, 2015, 40(3):10-22.
- Villanueva, J.D., Le Coustumer, P., Denis, A., Abuyan, R., Huneau, F., Motelica-Heino, M., Peyraube, N., Celle-Jeanton, H., Perez, T.R., & Espaldon, M.V.O., Trends of labile trace metals in tropical urban water under highly contrasted weather conditions. *Environmental Science and Pollution Research*, 2015, 22(18):13842-13857.
- Tiongco, M.M., Espaldon, M.V.O., Guzman, L.E., Ancog, R.C., Quiray, A.E., Jafee, S., Frias, J., Green Agriculture in the Philippines: An old wine in a new bottle? 16th Global Development Network Conference Paper, 2015, Session 23.
- Malenab, M.C.T., Espaldon, M.V.O., Lalicán, N.M., Balangue, T.O., & Abucay, E.R., Analysis of climate variability and dengue occurrence in social-ecological systems: the case of Bay, Los Baños and Calamba in Laguna, the Philippines. *International Journal of Sciences: Basic and Applied Research*, 2015, 21(1):350-367.
- Sisongkham, B., Rebancos, C.M., Alcantara, A.J., & Espaldon, M.V.O., Land Cover Changes and Resource Use Patterns of Selected Communities in Phou Phanang National Protected Area, Sangthong District, Vientiane Capital, Lao PDR. *Journal of Environmental Science and Management*, 2015, 18(2):33-43.
- Talubo, J.P.P., Jacildo, A.J., Espaldon, M.V.O., Acosta, L.A., Macandog, D.M., Nelson, G.L.M., Lalicán, N.M., Abucay, E.R., Malenab, M.C.T., Pabico, J.P., & Dorado, M.A., Vulnerability to Rainfall-Induced Landslide of Three Communities in Infanta, Quezon, Philippines. *International Journal of Sciences: Basic and Applied Research*, 2015, 23(1):138-166.
- 2014 Comiso, J.C., Blanche, C.A., Sarigumba, T.I., Espaldon, M.V.O., Lansigan, F.P., Baguion, N.T., Birosel, R.C., Coladilla, J.O., Cruz, R.V.O., Florece, L.M., Guerrero, R.D., III, Lasco, R.D., Perez, R.T., Pulhin, J.M., Tibig, L.V., *Changing Philippine Climate: Impacts on Agriculture and Natural Resources*. University of the Philippines Press, 2014.
- 2013 Villanueva, J.D., Le Coustumer, P., Huneau, F., Motelica-Heino, M., Perez, T.R., Materum, R., Espaldon, M.V.O., & Stoll, S., Assessment of Trace Metals during Episodic Events using DGT Passive Sampler: A Proposal for Water Management Enhancement. *Water Resources Management*, 2013, 27(12):4163-4181.
- 2012 Asuero, M.P., Nelson, G.L.M., Espaldon, M.V.O., Acosta, L.A., Macandog, D.M., Lalicán, N.M., Abucay, E.R., Malenab, M.C.T., & Talubo, J.P.P., Social Characteristics and Vulnerabilities of Disaster-Prone Communities in Infanta, Quezon, Philippines. *Journal of Environmental Science and Management*, 2012, 15(2):19-34.
- Espaldon, M.V.O., Progress of the Modeling Approach on Land Change Science: Comments on Modelling the Dynamics and Consequences of Land System Change.

- Journal of Geographical Sciences, 2012, 22(3):575-576.
- Abucay, E.R., Magcale-Macandog, D.B., Espaldon, M.V.O., & Monsalud, F.C., Modeling the Spatial Distribution of Rainfall-Induced Landslide Susceptibilities in Infanta, Quezon, Philippines. *Journal of Environmental Science and Management*, 2012, 15(1):28-39.
- Truc, N.T.T., Sumalde, Z.M., Espaldon, M.V.O., Pacardo, E.P., Rapera, C.L., & Palis, F.G., Farmers' Awareness and Factors Affecting Adoption of Rapid Composting in Mekong Delta, Vietnam and Central Luzon, Philippines. *Journal of Environmental Science and Management*, 2012, 15(2):59-73.
- Acosta, L.A., Magcale-Macandog, D.B., Engay, K.G., Herrera, M.N.Q., Nicopior, O.B.S., Sumilang, M.I.V., Lucht, W., & Espaldon, V., Conjoint segmentation of policy preferences for a sustainable biofuel production in the Philippines. D. Chiaramonti and V.N. Raina (eds.), *Development and utilisation of alcohol fuels to promote sustainability*, Book of Proceedings of ISAF XIX International Symposium on Alcohol Fuels, CREAR, University of Florence, 2012:371-380.
- 2011 Acosta, L.A., Magcale-Macandog, D.B., Lucht, W., Engay, K.G., Herrera, M.N.Q., Nicopior, O.B.S., Sumilang, M.I.V., & Espaldon, V., Assessment of Trade-off Decisions for Sustainable Bioenergy Development in the Philippines: An Application of Conjoint Analysis. Potsdam: Potsdam-Institut für Klimafolgenforschung, 2011(Report 124):30p.
- Acosta-Michlik, L.A., & Espaldon, M.V., Reducing vulnerability of rural communities in the Philippines: Modelling social links between science and policy. *Deutsches Institut für Entwicklungspolitik*, 2011:307-334.
- 2010 Pailagao, C.T., Espaldon, M.V.O., Dorado, M.A., Catacutan, D.C., & Rebanco, C.M., Drivers of Land Use Change in Lantapan, Bukidnon, Philippines. *Journal of Environmental Science and Management*, 2010, 13(1):1-11.
- 2009 Espaldon, M.V.O., Laguna De Bay - A Tropical Lake under Pressure. In *Handbook of Catchment Management* (eds R. C. Ferrier and A. Jenkins), Wiley-Blackwell, Oxford, UK, 2009.
- Gaillard, J.C., Maceda, E.A., Stasiak, E., Le Berre, I., & Espaldon, M.V.O., Sustainable livelihoods and people's vulnerability in the face of coastal hazards. *Journal of Coastal Conservation*, 2009, 13:119-129.
- 2008 Acosta-Michlik, L., & Espaldon, V., Assessing vulnerability of selected farming communities in the Philippines based on a behavioural model of agent's adaptation to global environmental change. *Global Environmental Change*, 2008, 18(4):554-563.
- Espaldon, M.V.O., Knowledge Systems in Upland Farming Practices in the Philippines and Implications for Climate Change Adaptation. *Proceedings of the International Conference on Climate Change Adaptation, Southeast Asia, Bali, Indonesia*, 2008.
- 2007 Malayang, B.S., III, Hahn, T., Kumar, P., Maharaj, S., Bohensky, E., Domingos, T., Filer, C., Agard, J.B.R., Blanco, H., Dong, S., Espaldon, M.V., Fabricius, C., Gokhale, Y., Hefny, M., Lundberg, J., Patwardhan, A., Ramirez, E.C., Talukdar, B., Tomich, T., Responses to ecosystem change and to their impacts on human well-being. *Millennium Ecosystem Assessment, Ecosystems and Human Well-being: Multiscale Assessments: Findings of the Sub-Global Assessments Working Group*, 2007, 4(Chapter 9):203-226.
- 2005 Lasco, R.D., Espaldon, M.V.O., & Tapia, M.T., *Ecosystem and People: A Millennium Ecosystem Assessment of the Laguna Lake*. UP Los Baños, 2005.
- 2004 Thomalla, F., Cruz, R.V., Espaldon, V.O., Hilario, F., Klein, R.J.T., Lansigan, F., Lasco, R., Magcale-Macandog, D.B., Mallion, F.K., Zoleta-Nantes, D.B., Perez, R.T., Pulhin, F., Pulhin, J., & Ranola, R., Jr., A Comparative Analysis of Vulnerabilities, Responses and Adaptation Strategies to Tropical Cyclones in Asia: Defining the

- Philippines Country Study. Proceedings of the Coastal Zone Asia Pacific Conference, Brisbane, Queensland, Australia, 2004:647-653.
- 2002 Verburg, P.H., Soepboer, W., Veldkamp, A., Limpiada, R., Espaldon, V., Mastura, S.S.A., Modeling the spatial dynamics of regional land use: the CLUE-S Model. *Environmental Management*, 2002, 30(3):391-405.
- 1987 Cardenas, M.L., Francisco, F.R., Nepomuceno, D.N., & Espaldon, V.O., Assessment of environmental planning and management in Laguna Lake Region. *Regional Development Dialogue: RDD; an international journal focusing on Third World development problems.* - Nagoya: Centre, 1987, 8(3):100-132.

Name Joebert D. Toledo

Gender Male

Organizational Affiliations

Marine Finfish Seed Production Specialist, Feedmix Specialists Inc II, 53 National Rd., Dampol II A., Pulilan, 3005 Bulacan

Education

Doctor of Agriculture, Hiroshima University, Hiroshima, Japan 2002

Master of Science, Hiroshima University, Hiroshima, Japan 1990

Bachelor of Science in Fisheries, University of the Philippines, Diliman, Quezon City 1980

Fields of Specialization

Aquaculture

Aquaculture Fisheries

Fish Breeding

Agricultural Science

Fisheries Science

Project Management

Sustainable Development

Employment

Marine Finfish Seed Production Specialist, Feedmix Specialists Inc II, 2013-Present

Project Management Specialist, Pacific Rim Innovation and Management Exponents, Inc., 2012-2012

Chief, Aquaculture Department, Southeast Asian Fisheries Development Center (SEAFDEC), 2006-2012

Aquaculture Consultant, Entrepreneur, Integrated Services for the Development of Aquaculture and Fisheries, 2004 June-2006 April

Scientist, Aquaculture Department, Southeast Asia Fisheries Development Center, 1999 - 2004

Associate Scientist, Aquaculture Department, Southeast Asia Fisheries Development Center, 1995 - 1999

Marine Fish Seed Production Expert, Department of Fisheries Brunei Darussalam, 1992 - 1995

Research Associate, Aquaculture Department, Southeast Asia Fisheries Development Center, 1990 – 1992

Research Assistant, Aquaculture Department, Southeast Asia Fisheries Development Center, 1981 – 1990

Research Assistant, Fishery Industry Development Council Ministry of Natural Resources, 1980

Association Membership

Member, Graduate thesis committee memberships

Member, Asian Fisheries Society

Member, Physiology Section, American Fisheries Society

Member, Philippine Aquaculture Society

Member, Philippine Fisheries Association

Member, Philippine Association of Japan Ministry of Education Scholars

Reviewer, Aquaculture (Elsevier)

Reviewer, Philippine Journal of Science (Dept of Science and Technology, Philippines)

Reviewer, UPV Journal of Natural Sciences

Honors / Awards

Outstanding Professional of the Year (Fisheries Technologist), Professional Regulation Commission 2009

Licensed Fisheries Technologist, Professional Regulation Commission 2006

Outstanding Monograph Award "Husbandry and Health Management of Groupers", National Academy of Science and Technology 2004

Outstanding Fisheries Professional "Gawad Pangisdaan Award", Philippine Fisheries Association 2003

DA Secretary's Award - R & D Published Paper, 14th National Research Symposium, Bureau of Agricultural Research 2002 November

Best Published Paper in Marine Fisheries Category "Bangus Fry Assessment of the Philippines", 15th Elvira-Tan Memorial Awards 2001

Best Seminar Presenter, SEAFDEC AQD, Tigbauan, Iloilo 2000 December

Certificate of Achievement, DOST - FAO/UNDP (GAINEX) Milkfish Broodstock and Hatchery Project 1999

Career Sub-Professional, Civil Service Commission 1980

Trainings

Consultant, Rajiv Gandhi Center for Aquaculture, Andaman, India 2006

ASEM Breeding and Domestication Workshop, Bangkok, Thailand 2005

Consultant, Phatfish Hatchery, Vaung Chau, Vietnam 2005

Grouper Aquaculture Workshop, Northern Fisheries Cairns, DPI Queensland, Australia 2003

Workshop on "Culture of copepods and applications to marine finfish larval rearing", Oceanic Institute, Honolulu, Hawaii, USA 2003

Onsite Expert on "Production of good quality seeds", Vietnam and Myanmar 2003

Onsite Expert on "Grouper Seed Production", Queensland, Australia 2003
 Marine Finfish Aquaculture, Halong City, Vietnam 2002
 Advances on Grouper Aquaculture, ACIAR Project 97/73, Tigbauan, Iloilo 2001
 Onsite Training on Mangrove Friendly Aquaculture, Yangoon, Myanmar 2001
 Sustainable Seafarming and Grouper Aquaculture Workshop, Medan, Indonesia 2000
 First Annual Meeting, ACIAR Project FIS 97/73, Cairns, Australia 2000
 ACIAR-Project FIS 97/73 Meeting, Bali, Indonesia 1999
 Onsite Training on Mangrove Friendly Aquaculture, Haipong, Vietnam 1999
 First International Conference on the Culture of Portunid Crabs, Philippines 1998
 Grouper Aquaculture Workshop, Bangkok, Thailand 1998
 International Congress on the Biology of Fishes, San Francisco, California, USA 1996
 Marine Fish Hatchery Training Course, SEAFDEC AQD, Philippines 1995
 Third Asian Fisheries Forum, Singapore 1992
 First Asian Fisheries Forum, Manila, Philippines 1986

Papers Presented

- 2008 Toledo, J.D. (2008). Grouper aquaculture in the Philippines, The Aquaculture of Groupers. Asian Fisheries Society, Manila, Philippines, World Aquaculture 5 Society, Louisiana, USA, The Fisheries Society of Taiwan, Keelung, Taiwan, and National Taiwan Ocean University, Keelung, Taiwan.
- 2008 Toledo, J.D., & Agbayani, R.F.A. (2008). Institutional capacity development for sustainable aquaculture and fisheries: Sustainable partnership with local institutions, Fisheries for Global Welfare and Environment, 5th World Fisheries Congress.
- 2005 Toledo, J.D., Sim Y.S., Rimmer, M.A., Sugama, K., Rumengan, I., Williams, K.C., & Phillips, M.J. (2005). A Guide to Small-scale Marine Finfish Hatchery, NACA, Bangkok, Thailand.
- 2005 Toledo, J.D., Sim Y.S., Rimmer, M.A., Williams, K.C., Sugama, K., Rumengan, I., & Phillips, M.J. (2005). A Practical Guide to Feeds and Feed Management for Cultured Groupers, NACA, Bangkok, Thailand.
- 2003 March 6 Toledo, J. (2003 March 6). Broodstock management and spawning, early larval development, fatty acid nutrition in larvae, larval rearing, and grow-out techniques for grouper *Epinephelus coioides*, Grouper Aquaculture Workshop. Northern Fisheries Centre, Cairns, Australia.
- 2003 July 7-8 Toledo, J. (2003 July 7-8). Opportunities in grouper farming, Aquabiz Seminar. Sarabia Manor Hotel, Iloilo City.
- 2003 July 7-8 Toledo, J. (2003 July 7-8). Prospects in sea bass farming, Aquabiz Seminar. Sarabia Manor Hotel, Iloilo City.
- 2003 May 5-8 Toledo, J. (2003 May 5-8). Studies on the use of copepods in the semi-intensive seed production of grouper *Epinephelus coioides*. Workshop on Culture of Copepods and Applications to Marine Finfish Larval Rearing, Aquaculture Interchange Program. Honolulu, Hawaii.

- 2002 Toledo, J.D. (2002). Status of breeding and larval rearing of groupers, Report of the Regional Workshop on Sustainable Seafarming and Grouper Aquaculture. Medan, Indonesia. Collaborative APEC Grouper Research Development Network. Network of Aquaculture Centers in Asia Pacific, Bangkok, Thailand.
- 2002 Toledo, J.D. (2002). Larviculture of grouper, Seminar on "Sustainable seafarming and grouper aquaculture workshop". Medan, Indonesia.
- 2001 Toledo, J.D. (2001). Research on marine fishes, SEAFDEC AQD, Tigbauan, Iloilo, Philippines.
- 1998 Toledo, J.D., Qunitio, E.T., & Pedrajas, S.A. (1998). Feeding performance of early mud crab *Scylla serrata* fed with mixed zooplankton, First International Conference on the Culture of Portunid Crabs, Boracay, Aklan.
- 1996 Toledo, J.D., Doi, M., & Duray, M. (1996). Viability of milkfish eggs and larvae after simulated and actual transport, International Congress on the Biology of Fishes, San Francisco State University, California, USA.
- 1996 July 14-18 Qunitio, G.F., Coloso, R.M., Caberoy, N.B., & Toledo J.D. (1996 July 14-18). Egg quality of grouper *Epinephelus coioides* fed different fatty acid sources. MacKinlay, D., Eldbridge, M. (eds.). The Fish Egg: Its Biology and Culture, Symposium Proceedings of International Congress on the Biology of Fishes, San Francisco State University, California, USA.
- 1995 October 7-13 Toledo, J.D., Lavilla-Pitogo C.R., Emata A.C., Duray M.N., & Toledo J.D. (1995 October 7-13). Management of fish health in broodstock and larvae of milkfish, seabass and grouper, Workshop in Aquaculture Health Management Strategies for Marine Fishes, Honolulu, Hawaii, USA.
- 1991 Toledo, J.D., & Qunitio, G.F. (1991). Mariculture techniques for *Epinephelus* sp. in the Philippines, First Philippine-French Technical Workshop on Advances in Finfish and Shellfish Mariculture, Los Banos, Laguna, Philippines, Philippine Council for Aquatic and Marine Research and Development/Department of Science and Technology/French Embassy in the Philippines.
- 1986 Toledo, J.D., Marte, C.L., Qunitio, G., & Castillo, A. (1986). Collection of naturally-spawned milkfish eggs in floating cages, The First Asian Fisheries Forum, Asian Fisheries Society, Manila, Philippines.

Publications

- 2008 Agbayani, R.F., & Toledo, J.D., Institutional Capacity Development for Sustainable Aquaculture and Fisheries: Strategic Partnership with Local Institutions. *Fisheries for Global Welfare and Environment*, 2008:435-448.
de la Peña, L.D., Morki, K., Qunitio, G.F., Chavez, D.S., Toledo, J.D., Suarnaba, V.S., Maeno, Y., Kiryu, I., & Nakai, T., Characterization of Betanodaviruses in the Philippines. *Bulletin of the European Association of Fish Pathologists*, 2008, 28:230-237.
- 2007 Toledo, J.D., Overview - SEAFDEC International Workshop on Emerging Fish Diseases in Asia; *In: Proceedings of the SEAFDEC International Workshop on Emerging Fish Diseases in Asia; 6-7 December 2007; Bangkok, Thailand. Israeli Journal of Aquaculture - Bamidgeh*, 2007, 61:299p.
- 2005 Toledo, J.D., Naret, E.S.G., & Nakagawa, H., Comparison of fatty acid profile between cultured and wild-caught grouper, *Epinephelus coioides*. *Aquaculture Science*, 2005, 53(2):127-134.
Toledo, J.D., Salvacion Golez, M., & Ohno, A., Studies on the Use of Copepods in

- the Semi-Intensive Seed Production of Grouper *Epinephelus coioides*, in *Copepods in Aquaculture* (eds C.-S. Lee, P.J. O'Bryen & N.H. Marcus). Blackwell Publishing Professional, Ames, Iowa, USA, 2005:169-182.
- Seike, S., Toledo, J.D., Umino, T., & Nakagawa, H., Variation of otolith strontium concentration in elongate surgeonfish, *Acanthurus mata*. *International Technology Exchange, Inc. (ITE) Letters on Batteries New Technologies and Medicine*, 2005, 6:250-255.
- 2004 Toledo, J.D., Caberoy, N.B., & Qunitio, G.F., Environmental factors affecting embryonic development, hatching and survival of early stage larvae of grouper (*Epinephelus coioides*). In M.A. Rimmer, S. McBride, & K.C. Williams (Eds.), *Advances in grouper aquaculture. ACIAR Monograph*, 2004, 110:10-16.
- Toledo, J.D., Chavez, D., & Rodriguez, J.C., Jr., Studies on semi-intensive seed production of grouper (*Epinephelus coioides*). In M.A. Rimmer, S. McBride, & K.C. Williams (Eds.), *Advances in grouper aquaculture. ACIAR Monograph*, 2004, 110:55-60.
- Toledo, J.D., Qunitio, G.F., Sa-an, A.C., & Tan-Fermin, J.D., Changes in the gastrointestinal tract and associated organs during early development of the grouper (*Epinephelus coioides*). In M.A. Rimmer, S. McBride, & K.C. Williams (Eds.), *Advances in grouper aquaculture. ACIAR Monograph*, 2004, 110:26-29.
- Qunitio, G.F., Sa-an, A.C., Toledo, J.D., & Tan-Fermin, J.D., Localization of enzymes in the digestive system during early development of grouper (*Epinephelus coioides*). In M.A. Rimmer, S. McBride, & K.C. Williams (Eds.), *Advances in grouper aquaculture. ACIAR Monograph*, 2004, 110:30-34.
- Eusebio, P.S., Toledo, J.D., Mamauag, R.E.P., & Bernas, M.J.G., Digestive enzyme activity in developing grouper (*Epinephelus coioides*) larvae. In M.A. Rimmer, S. McBride, & K.C. Williams (Eds.), *Advances in grouper aquaculture. ACIAR Monograph*, 2004, 110:35-40.
- Alava, V.R., Priolo, F.M.P., Rodriguez, J.C., Jr., Qunitio, G.F., Sa-an, A.C., de la Peña, M.R. & Caturao, R.C., Lipid nutrition studies on grouper (*Epinephelus coioides*) larvae. In M.A. Rimmer, S. McBride, & K.C. Williams (Eds.), *Advances in grouper aquaculture. ACIAR Monograph*, 2004, 110:47-52.
- Alava, V.R., Priolo, F.M.P., Arnaiz, M., & Toledo, J.D., Amino acid and fatty acid profiles of wildsourced grouper (*Epinephelus coioides*) broodstock and larvae. In S. McBride & K.C. Williams (Eds.), *Advances in grouper aquaculture. ACIAR Monograph*, 2004, 110:53-54.
- Millamena O.M., & Toledo, J.D., Development of formulated feeds for grow-out culture of grouper (*Epinephelus coioides*) - tank and field studies. *ACIAR Monograph*, 2004, 110:115-118.
- Pomeroy, R.S., Agbayani, R., Duray, M., Toledo, J., & Qunitio, G., The financial feasibility of small-scale grouper aquaculture in the Philippines. *Aquaculture Economics and Management*, 2004, 8(1-2):61-83.
- 2002 Golez, M.S.N., Ohno, A., Toledo, J.D., Tanaka, Y., & Ishimaru, T., Population dynamics of the calanoid copepod, *Acartia tsuensis* in a brackishwater pond in the Philippines. *Fisheries Science*, 2002, 68(1):341 - 344.
- Toledo, J.D., Status of breeding and larval rearing of groupers. In: Report of the Regional Workshop on Sustainable Seafarming and Grouper Aquaculture. Medan, Indonesia. Collaborative APEC Grouper Research Development Network. Network of Aquaculture Centers in Asia Pacific, Bangkok, Thailand, 17-20 April 2000, 2002:47-54.
- Toledo, J.D., Caberoy, N.B., Qunitio, G.F., Choresca, C.H., Jr., & Nakagawa, H., Effects of salinity, aeration and light intensities on oil globule absorption, feeding incidence, growth and survival of early stage grouper *Epinephelus coioides* larvae. *Fisheries Science*, 2002, 68(3):478 - 483.

- 2001 Ahmed, M., Magnayon-Umali, G.A., Valmonte-Santos, R.A., Toledo, J., Lopez, N., & Torres, F., Jr., Bangus Fry Resource Assessment in the Philippines. ICLARM Tech. Rep., 2001, 58(ix):38p.
- 2000 Cruz-Lacierda E.R., Toledo, J.D., Tan-Fermin, J.D., & Burreson, E.M., Marine leech (*Zeylanicobdella arugamensis*) infestation, in cultured orange-spotted grouper, *Epinephelus coioides*. *Aquaculture*, 2000, 185(3-4):191-196.
- 1999 Toledo, J.D., Golez, M.S.N., Doi, M., & Ohno, A., Use of copepod nauplii during early feeding stage of grouper *Epinephelus coioides*. *Fisheries Science*, 1999, 65(3):390-397.
- Capinpin, E., Jr., Toledo, J.D., Encena, V., II & Doi, M., Density dependent growth of the tropical abalone *Haliotis asinina* in cage culture. *Aquaculture*, 1999, 171(3-4):227-235.
- 1998 De Jesus, E.G.T., Toledo, J.D., & Simpas, M.S., Thyroid hormones promote early metamorphosis in grouper (*Epinephelus coioides*) larvae. *General and Comparative Endocrinology*, 1998, 112(1):10-16.
- Parazo, M.M., Garcia, L.M.B., Ayson, F.G., Fermin, A.C., Almendras, J.M.E., Reyes, D.M., Jr., Avila, E.M., & Toledo, J.D., Seabass hatchery operations (2nd ed.). *Aquaculture Extension Manual*, Aquaculture Department, Southeast Asian Fisheries Development Center, Tigbauan, Iloilo, Philippines, 1998, 18:42p.
- 1997 Doi, M., Toledo, J.D., Golez, M.S.N., de los Santos, M., & Ohno, A., Preliminary investigation of feeding performance of larvae of early red-spotted grouper, *Epinephelus coioides*, reared with mixed zooplankton. *Hydrobiologia*, 1997, 358(1):259-263.
- Toledo, J.D., Golez, S.N., Doi, M., & Ohno, A., Food selection of Early Grouper, *Epinephelus coioides*, Larvae reared by the Semi-Intensive method. *Aquaculture Science*, 1997, 45(3):327-337.
- 1996 Toledo, J.D., Golez, S.N., Doi, M., Bravo, R.S., & Hara, S., Preliminary studies on the larval rearing of red-spotted grouper, *Epinephelus coioides*, using copepod nauplii as early food. *UPV Journal of Natural Sciences*, 1996, 1(2):119-129.
- 1993 Toledo, J.D., Nagai, A., & Javellana, D., Successive spawning of grouper, *Epinephelus suillus* (Valenciennes), in a tank and floating net cage. *Aquaculture*, 1993, 115:361-367.
- 1992 Cheong, R.M., Gallardo, W.G., & Toledo, J.D., Market survey of snappers (Genus *Lutjanus*) from Panay and Palawan waters. *Phillippine Journal of Science*, 1992, 121(1):1-15.
- Toledo, J.D., & Gaitan, A.G., Egg cannibalism by milkfish (*Chanos chanos* Forsskal) spawners in circular floating net cages. *Journal of Applied Ichthyology*, 1992, 8:257-262.
- 1991 Toledo, J.D., Marte, C.L., & Castillo, A.R., Spontaneous maturation and spawning of sea bass *Lates calcarifer* in floating net cages. *Journal of Applied Ichthyology*, 1991, 7(4):217-222.
- Toledo, J.D., Kurokura, H., & Nakagawa H., Cryopreservation of different strains of euryhaline rotifer *Brachionus plicatilis* embryos. *Nippon Suisan Gakkaishi*, 1991, 57:1347-1350.
- Toledo, J.D., Quintio G.F., Duller A.T. and Reyes, Jr., D.M., Survival of yolk-sac larvae of grouper (*Epinephelus suillus*) under simulated transport conditions. *Aquaculture Soc. Spec. Publ.*, 1991, 15:326 -327.
- 1990 Toledo, J.D., & Kurokura, H., Cryopreservation of the euryhaline rotifer *Brachionus plicatilis* embryos. *Aquaculture*, 1990, 91:385 -394.
- 1989 Toledo, J.D., Kurokura, H., & Kasahara, S., Preliminary studies on the Cryopreservation of the Blue Mussel Embryos. *Nippon Suisan Gakkaishi*, 1989,

55(9):1661.

1988

Garcia, L.M.B., & Toledo, J.D., Critical factors influencing survival and hatching of milkfish (*Chanos chanos* Forsskal) eggs during simulated transport. *Aquaculture*, 1988, 72(1-2):85-93.

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Honors / Awards

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Balik Scientist Award, Department of Science and Technology 2010

Outstanding Alumnus Award, Chemistry Department, University of San Carlos, Philippines 2006

Fellowship Award, for research on a policy framework to promote low-waste technologies, Canadian Environmental Research Council 1986

Certificate for Outstanding Scholarship in Chemistry, Cebu Chemical Society 1966

Scholarship, Southeast Asian Treaty Organization (SEATO) 1966

Trainings

Certificate of Training as Lead Internal Auditor (ISO 14001), 2003 Quality Management Institute, Canada 2003

Certificate in Coastal Zone Management, 1985 International Ocean Institute, Dalhousie University, Canada 1985

Researches

Completed

- Innovation for Sustainability among Micro and Small enterprises in India
- Environmental Capacity Enhancement Project (ECEP) in East, Central and Southern Africa
- Environmental Assessment Coherence Analysis
- State-Community management of community services in drinking water and sanitation. A Comparative analysis of Tri-national case studies in Mexico, U.S. and Canada
- Status of EA Post Rio: Progress, Challenges and Opportunities
- Environmental Capacity Enhancement Project in Cuba
- Towards an Inclusive Framework for Environmental Impact Assessment in Canada
- Participation, Negotiation and Contention in Environmental Assessment: Comparative Case Studies from the North and the South
- Reconciling productivity enhancement and environmental sustainability among small and medium enterprises
- Community Engagement in Adaptive Management in Environmental Assessment Follow-up
- Threat Response? Innovation among Micro and Small Industry Clusters
- Disaster Management, Communities and Climate Change
- Waste Management for Sustainable Development in India. Policy, Planning and Administrative Dimension

Papers Presented

- 2015 September 3-4 Yap, N.T. (2015 September 3-4). Disaster and development. Connecting the dots towards sustainable DRR, 2nd International Conference on Integrated Disaster Management, Eastern Samar State University, Borongan, Eastern Samar, Philippines.
- 2015 June 3 Yap, N.T., & Vaidyanathan, G. (2015 June 3). Social innovation (Industrial symbiosis): Naroda industrial estate, Ahmedabad, 2015 Congress of the Humanities and Social Ideas, Ottawa, Ontario, Canada.
- 2015 April 23 Yap, N.T. (2015 April 23). Legacy of legacy mines in Philippines and Canada: reflections, 2015 IAIA Conference, Florence, Italy.
- 2015 April 21 Yap, N.T. (2015 April 21). Integrating risk analysis in EA for fracking projects, 2015 IAIA Conference, Florence, Italy.
- 2011 October 20-22 Yap, N.T. (2011 October 20-22). Pursuing sustainability through cleaner production innovations: micro and small enterprises in developing countries, Network for Business Sustainability 2011 Conference on SMEs, Moving Toward Sustainable Development, Montreal.
- 2011 August 25 Yap, N.T. (2011 August 25). Greening Investments: Reflections on the Philippines BOI 2011 Priorities Investment Plan, University of San Carlos 75th Foundation Celebration Academic Forum, Cebu City Philippines.
- 2011 August 26 Yap, N.T. (2011 August 26). Lost, retained, discovered: values of an aspiring global citizen, University of San Carlos Foundation Celebration Academic Forum on Globalised Education, Reinventing our Future, Cebu City Philippines.

- 2011 May 20 Yap, N.T. (2011 May 20). Greening the economy. opportunities through industrial ecology and cleaner production, Environmental Management Bureau, Philippine Dept of Environment and Natural Resources, Quezon City, Philippines.
- 2010 November 17 Yap, N.T. (2010 November 17). Producción y consumo sostenible: de RIO 1992 a RIO 2012' [Sustainable production and consumption: from RIO 1992 to RIO 2012], National Congress on Environmental Sciences, Cali, Colombia.
- 2010 November 17 Yap, N.T. (2010 November 17). Producción y consumo sostenible: un paso atrás para avanzar' [Sustainable Production and Consumption Strategy. Stepping back to move forward], National Congress on Environmental Sciences, Cali, Colombia.
- 2010 June 22 Yap, N.T. (2010 June 22). Challenges on Greening Micro and Small Industry Clusters to Compete Globally, Southeast Asian Regional Centre for Research in Agriculture (SEARCA), Los Baños, Philippines.
- 2010 April 10 Yap, N.T. (2010 April 10). Greening small and medium industry clusters: institutions and policy, Annual Conference of the International Association for Impact Assessment, Geneva, Switzerland.
- 2010 February 24 Yap, N.T. (2010 February 24). Responding to the Crisis in Haiti: Lessons from disasters research, Responding to the Crisis Conference, University of Guelph, Haiti.
- 2009 May 6-7 Yap, N.T. (2009 May 6-7). Una Actualización sobre ISO 14001 y Producción más Limpia', [State of the art of ISO14001 and Cleaner Production], Closing Conference of the Environmental Capacity Enhancement Project – Havana, Cuba.
- 2008 December 22 Yap, N.T. (2008 December 22). Cleaner Production, Industrial Ecology and the Circular Economy: the experience in the Peoples' Republic of China, 50th Anniversary Symposium of the Department of Chemistry, University of San Carlos, Cebu City, Philippines.
- 2008 February 10 Yap, N.T. (2008 February 10). Municipalities and the sustainability crisis: daring to dream, Livable Peel Conference.
- 2007 November 6 Ng, A., & Yap, N.T. (2007 November 6). Integrating Disaster Preparedness in Development Planning: Experience on the Ground, 2007 Symposium of the Canadian Risk Hazards Network, Vancouver.
- 2007 June 4 Yap, N.T. (2007 June 4). Towards integrating poverty reduction and environmental sustainability among Base-of-the-Pyramid producers in Vietnam, 2007 Environmental Association of Canada Conference, Vancouver.
- 2006 December 22 Yap, N.T. (2006 December 22). Cleaner Production, Industrial Ecology and the Circular Economy: the experience in the Peoples' Republic of China, 50th Anniversary Symposium of the Department of Chemistry, University of San Carlos, Cebu City, Philippines.
- 2006 November 23-25 Yap, N.T., Eggenberger, M., Duyen, N., & Glazier, G. (2006 November 23-25). Chapter 1. The Challenge of introducing cleaner production in small-scale enterprises: the case of Van Chang Craft Village Vietnam, Launch conference of the Sustainable Consumption Research Exchange (SCORE!) Network, supported by the EU's 6th Framework Programme.
- 2006 November 24-25 Yap, N.T. (2006 November 24-25). The Challenges of Introducing Cleaner Production in Micro-enterprises: Case study of Van Chang Craft Village, Vietnam" in Charter, M (ed). Sustainable Production and Consumption: Opportunities and Challenges, Refereed Sessions II. Sustainable Consumption Research Exchange (SCORE!) Conference, Wuppertal, Germany.

- 2006 November 23 Yap, N.T. (2006 November 23). The challenge of introducing Cleaner Production to Micro-enterprises: the case of Van Chang Craft Village, Vietnam, SCORE Conference. Wuppertal Germany.
- 2006 February 10 Yap, N.T. (2006 February 10). Municipalities and the sustainability crisis: daring to dream, Livable Peel Conference.
- 2005 June 23-27 Yap, N.T., J.F. Devlin, & Weir, R. (2005 June 23-27). Good Governance and Environmental Assessment: Case Studies of EA Practice, International Rural Network Conference. Inverness, Scotland.
- 2005 April 25 Yap, N.T. (2005 April 25). Globalizing Environmental Impact Assessment: Comparing Legislative Regimes, Annual Canadian Council for Area Studies and Learned Societies. Montréal, Canada.
- 2003 November 28-29 Yap, N.T. (2003 November 28-29). Industrial Waste Management in Taiwan: who says command-and control doesn't work?, 1st Annual Conference of "Taiwan Studies" Scholars, Ottawa, Canada.
- 2002 September 5-6 Yap, N.T., Devlin, J.F., Wu, C.C., & Ton, S. (2002 September 5-6). Corporate Environmental Innovations and Public Policy: Case Studies from Taiwan, International Workshop on Technological Innovations and Public Policy. Maastricht, The Netherlands.
- 2002 May Yap, N.T., Caldwell, W, Brown, L., & Eggen, M. (2002 May). Drinking Water, Sanitation, and Solid Waste Services in Rural Communities: Municipality of South Huron, Canadian Case Study, Conference on Transboundary Environmental management. Tampico, México.
- 1999 October 13 Yap, N.T. (1999 October 13). Comentarios Generales Sobre el Manejo Integral de Desechos Sólidos, Meeting of the Municipalities of Tampico, Altamira and Madero. Tamaulipas, México.
- 1998 September Yap, N.T. (1998 September). Promotion of Cleaner Production and Consumption among SMEs, 1998 UNEP High Level Seminar on Cleaner Production. South Korea.
- 1998 September 23 Yap, N.T. (1998 September 23). Reconciling Industrialisation and Environmental Sustainability in Developing Regions: Cleaner Production in India and Southern Africa, Annual Conference of the Canadian Waste Management Association. Hamilton, Canada.
- 1998 May Yap, N.T. (1998 May). Firm-level Decision Criteria on Technology Choice: Case Studies from Harare, ECEP Networking Conference. Harare, Zimbabwe.
- 1995 December 16 Yap, N.T. (1995 December 16). Reconciling Industrialisation and Environmental Sustainability Through Low Waste Technologies: Conceptual Framework of the Kanpur Research Project, Kanpur, India.
- 1995 December 16 Yap, N.T. (1995 December 16). Waste Management for Sustainable Development in India: Policy Recommendations, Kanpur, India.
- 1995 November 1-3 Yap, N.T. (1995 November 1-3). Reconciling Industrialisation and Environmental Sustainability Through Low Waste Technologies in India: With Case Studies from Kanpur, 2nd European Roundtable on Cleaner Production and Cleaner Products. Rotterdam, The Netherlands.
- 1995 June Yap, N.T. (1995 June). The State, Private Choice and the Environment: Comfortable Marriage through Low-Waste Technologies? The Case of India, Joint CASA-CASID Conference. Montréal, Canada.
- 1995 June Yap, N.T., & Heathcote, I. (1995 June). Low-Waste Technologies: If it was a Low Hanging

- Fruit, Why Doesn't Industry Pick It?, Joint CASA-CASID Conference. Montréal, Canada.
- 1994 Guerrero, E., Yap, N.T., & FitzGibbon, J.E. (1994). Environmental Assessment in the Philippines: Prescription versus Implementation, 1994 IAIA Conference. Québec City, Canada.
- 1994 Yap, N.T. (1994). Industrialisation and Environmental Sustainability in ASEAN Countries: Reconciling the Contradictions, Canada-ASEAN Centre Seminar. Ottawa, Canada.
- 1993 Devlin, J.F., & N.T Yap (1993). Structural Adjustment Programmes and the UNCED Agenda: Explaining the Contradictions, CANADA-ASEAN Centre Seminar. Ottawa, Canada.
- 1992 October 16-18 Yap, N.T. (1992 October 16-18). The State, the Community and Environmental Impact Assessment: Thailand's Enhancement and Conservation of Environmental Quality Act, Northwest Consortium on Southeast Asian Studies Conference. Vancouver, Canada.
- 1992 Yap, N.T. (1992). Mainstreaming Women in Science and Technology Policy Formulation and Diffusion: The Barriers and Strategic Responses, Keynote Speech presented at the International Conference on Mainstreaming Women in Science and Technology. Bangkok, Thailand.
- 1992 Yap, N.T. (1992). Impact Assessment in Low-Consumption Countries: The Role of IFC's, Solicited paper for panel presentation at 1992 IAIA Annual Conference. Washington, U.S.A.
- 1992 January 31 - February 2 Yap, N.T. (1992 January 31 - February 2). Growth: At What Costs and For Whose Benefits? Canadian Environmental Network Conference. Winnipeg, Canada.
- 1991 August 23-29 Yap, N.T. (1991 August 23-29). The Global Pulse: Implications for Non-Governmental Organizations, Keynote Speech at the Global Assembly of the YW-MCA. Seoul, South Korea.
- 1990 January Yap, N.T. (1990 January). Your Health City, What will it be in 2020?, Healthy Cities Movement Conference. Sudbury, Canada.
- 1989 October Yap, N.T. (1989 October). Sustainable Development, First World, Third World, Keynote Speech at CUSO Annual General Assembly. Vancouver, Canada.
- 1989 June Yap, N.T. (1989 June). The Private Pursuit of Public Interest: A Framework for Low-waste Pollution Control Policy, Annual Conference of the International Association for Impact Assessment: Montréal, Canada.
- 1989 June Yap, N.T. (1989 June). KARMILAN: The Use of Simulation Game for Environmental Education, Annual Conference of the International Association for Impact Assessment: Montréal, Canada.
- 1988 July 7 Yap, N.T. (1988 July 7). Participatory Impact Assessment and Monitoring for LDCs: The Role of the Private Consultant, Annual Conference of the Internatioal Association for Impact Assessment. Brisbane, Australia.

Publications

- 2016 Yap, N.T., Unconventional shale gas development: challenges for environmental policy and EA practice. Impact Assessment and Project Appraisal, 2016:DOI: 10.1080/14615517.2016.1176405.
- Yap, N.T., Vaidyanathan, G., Pal, P., Sethi, G., & Joshi, V., Diffusion of low carbon innovation among Indian foundries: lessons from the improved divided blast cupola. International Journal of Innovation and Sustainable Development, 2016, 10(3):DOI:

- 10.1504/IJISD.2016.077506.
 Yap, N.T., & Devlin, J.F., Explaining Industrial Symbiosis Emergence, Development, and Disruption: A Multilevel Analytical Framework. *Journal of Industrial Ecology*, 2016:DOI: 10.1111/jiec.12398.
- 2015 Lim, A.K., Yap, N.T., & Devlin, J.F., Democracy and Enterprise: A Philippine Cooperative Balances Social and Business Demands. *International Journal of Community Development*, 2015, 3(2):51-63.
 Bersaglio, B., Devlin, J., & Yap, N., Contextualising emergency responses to famine among Turkana pastoralists in Kenya. *Development in Practice*, 2015, 25(5):688-702.
 Yap, N.T., CSR and the development deficit: part of the solution or part of the problem? *Multinational corporations and the global context*, 2015:134-162.
 Yap, N.T., & Devlin, J.F., Beekeeping innovation for sustaining rural livelihoods. A success story. *International Journal of Innovation and Sustainable Development*, 2015, 9(2):DOI: 10.1504/IJISD.2015.068771.
 Yap, N., Devlin, J., Otis, G., Dang, T.V., & Nguyen, H.T., Beekeeping, Wellbeing, Transformative Change: Development Benefits According to Small Farmers in Vietnam. *Journal of Rural and Community Development*, 2015, 10(1):19-31.
- 2011 Tubino, D.I.S., Yap, N.T., & Devlin, J.F., Vale and its corporate sustainability performance in Itabira, Brazil: Is the glass half full or half empty? *Impact Assessment and Project Appraisal*, 2011, 29(2):151-157.
 Yap, N.T., Disaster Management, Climate change and Communities. in *The Role of ICTs' in ICTs, Climate Change and Development*, R. Heeks and A. Ospina (eds), The Centre for Development Informatics, Institute for Development Policy and Management, SED, University of Manchester, UK, 2011.
 Tubino, D.I.S., Devlin, J.F. & Yap, N.T., 'A busca pela responsabilidae socioambiental em Itabira' (The search for social and environmental responsibility in Itabira). In *Recursos Minerais & Sustentabilidade Territorial. Vol 1. Grandes Minas (Natural Resources & Territorial Sustainability, vol 1 Large Mines)*, F.R.C. Fernandes, M.A.R. da Silva Enriquez & R. de Carvalho Jimenes Alamino (eds)., 2011.
 Ng, A., & Yap, N.T., Drought Preparedness and Response as if Development Matters: Case Studies from Kenya. *Journal of Rural and Community Development*, 2011, 6(2):15-34.
 Yap, N.T., Pursuing sustainability through cleaner production innovations: micro and small enterprises in developing countries. In *Proceedings of the Network for Business Sustainability 2011 Conference on SMEs, Moving Toward Sustainable Development*, 2011.
- 2008 Devlin, J.F., & Yap, N.T., Contentious Politics in Environmental Assessment: Blocked Projects and Winning Coalitions. *Impact Assessment and Project Appraisal*, 2008, 26(1):17-27.
 Yap, N.T., Kenneth E. Wilkening, Acid rain science and politics in Japan: a history of knowledge and action toward sustainability. *Environmentalist*, 2008, 28(2):167.
 Yap, N.T., Integrating poverty reduction and enviornmental protection among BOP producers: Van Chang Craft Village in Vietnam. In *Kandachar, P. and M. Halme (eds). Sustainability Challenges and Solutions at the Base of the Pyramid. Business Technology and the Poor*. Sheffield: Greenleaf Publishing Limited, 2008:132-145.
- 2007 Yap, N.T., Devlin, J.F., Wu, C.C. , & Ton, S., Corporate Environmental Innovations and Public Policy: Case Studies from Taiwan. In *Saeed Parto and B. Herbert-Copley (eds.) Industrial Innovation and Environmental Regulation: Developing Workable Solutions*. Tokyo: United Nations University Press/IDRC, 2007:22-50.
 Yap, N.T., Towards a Circular Economy: Progress and Challenges. In *Diener, B.J. and A.L Rowe (eds). China: The Challenges of Economic Growth and Environmental Sustainability. A special issue of Greener Management International*, 2007, 50:11-24.

- 2006 Yap, N.T., Eggenberger, M., Van Duyen, N., & Glazier, G., Chapter 1. The Challenge of introducing cleaner production in small-scale enterprises: the case of Van Chang Craft Village Vietnam. Proceedings: Sustainable Consumption and Production: Opportunities and Threats, 23-25 November 2006, Wuppertal, Germany, 2006:1-17.
 Yap, N.T., Cleaner Production and Eco-Efficiency: Charting a Course to Sustainability? In R. Cote, J. Tansey and A. Dale (eds.) Linking Industry and Ecology: A Question of Design. Vancouver: UBC Press, 2006:97-113.
 Yap, N. T., Eggenberger, M., Van Duyen, N., & Glazier, G., The Challenges of Introducing Cleaner Production in Micro-enterprises: Case study of Van Chang Craft Village, Vietnam. In Charter, M (ed). Sustainable Production and Consumption: Opportunities and Challenges. Proceedings: Refereed Sessions II. SCORE Conference, November 24-25, 2006, 2006:119-134.
- 2005 Devlin, J.F., Yap, N.T., & Weir, R., Public Participation in Environmental Assessment: Case Studies on EA Legislation and Practice. Canadian Journal of Development Studies, 2005, XXVI (3):487-500.
- 2004 Cortes-Posas, M., & Yap, N.T., Pursuing Financial Sustainability for a Cleaner Production Centre: The Experience of Honduras. UNEP I-E Newsletter, 2004, 27(2&3):68-71.
- 2000 Yap, N.T., Performance-based ISO 14001: Case Studies from Taiwan. In R. Hillary (ed.) ISO 14001: Case Studies and Practical Experience. London: Greenleaf Publishing, 2000:138-147.
 Yap, N.T., Who Says Command-and-Control Doesn't Work. Policy Options, 2000, 21(3):65-70.
- 1999 Yap, N.T. (ed.), Cleaner Production and Consumption: Challenges and Opportunities in East and Southern Africa. Devlin, John F. (ed.). Harare, Zimbabwe: Weaver Press, 1999:186p.
 Yap, N.T., & Zvuaya, R., Firm-level Decision Criteria on Technology Choice: Case Studies from Zimbabwe. In Yap, N.T. (ed.) Cleaner Production and Consumption: Challenges and Opportunities in East and Southern Africa. Harare: University of Guelph and Weaver Press, 1999:73-88.
 Yap, N.T., Introduction. In Yap, N.T. (ed.) Cleaner Production and Consumption: Challenges and Opportunities in East and Southern Africa. Harare: University of Guelph and Weaver Press, 1999:ix-xiv.
 Yap, N.T., Conclusions: Environmental Scarcity and Development Opportunities through Cleaner Production and Consumption in Southern Africa. In Yap, N.T. (ed.) Cleaner Production and Consumption: Challenges and Opportunities in East and Southern Africa. Harare: University of Guelph and Weaver Press, 1999:165-173.
- 1997 Yap, N.T., The State, Private Choice and Environmental Protection: Marriage through Low-waste Technologies? The Case of India. In R. Chowdhari Tremblay (ed.) Perspectives on South Asia at the Threshold of the 21st Century. Canadian Asian Studies Association, 1997:279-304.
 Yap, N.T., & Heathcote, I., Low-Waste Technologies: If it was a Low Hanging Fruit, Why Doesn't Industry Pick It? The Case of India. In R. Chowdhari Tremblay (ed.) Perspectives on South Asia at the Threshold of the 21st Century. Canadian Asian Studies Association, 1997:219-234.
- 1996 Yap, N.T., Impact Assessment in Thailand and Canada: A Comparative Assessment. In Goodland, R. and Edmunson (eds.). In Environmental Assessment and Sustainable Development. Washington, D.C.: The World Bank, 1996:35-47.
- 1995 Yap, N.T. and S.K. Awasthi (eds.), Waste Management for Sustainable Development in India. Policy, Planning and Administrative Dimensions with Case Studies from Kanpur. New Delhi: Tata McGraw-Hill Publishing Company Limited, 1995.
 Yap, N.T., Reconciling Industrialisation and Environmental Sustainability Through Low

- Waste Technologies: The Kanpur Research Project. In Yap, N.T and S.K. Awasthi (eds.). Waste Management for Sustainable Development in India: Policy, Planning, and Administrative Dimensions with Case Studies from Kanpur. New Delhi: Tata-McGraw-Hill Publishing Company Limited, 1995:1-27.
- Yap, N.T., Low Waste Industrial Technologies: If It is a Low Hanging Fruit, Why Doesn't Industry Pick It? In Yap, N.T and S.K. Awasthi (eds.). Waste Management for Sustainable Development in India: Policy, Planning, and Administrative Dimensions with Case Studies from Kanpur. New Delhi: Tata-McGraw-Hill Publishing Company Limited, 1995:36-60.
- Yap, N.T., Waste Management for Sustainable Development in India: Conclusions and Prospects. In Yap, N.T and S.K. Awasthi (eds.). Waste Management for Sustainable Development in India: Policy, Planning, and Administrative Dimensions with Case Studies from Kanpur. New Delhi: Tata-McGraw-Hill Publishing Company Limited, 1995:366-388.
- Yap, N.T., The State, the Community and Environmental Impact Assessment: Thailand's Enhancement and Conservation of Environmental Quality Act. *Journal of Business Administration*, 1995, 22&23:315-336.
- 1994 Yap, N.T., & Devlin, J.F., Structural Adjustment Programmes and the UNCED Agenda: Explaining the Contractions. In C. Thomas (ed.) *Rio: Unraveling the Consequences*. London: Frank Cass, 1994:65-79.
- Devlin, J., & Yap, N.T., Sustainable Development and the NIC's: Cautionary Tales for the South in the New World Disorder. *Third World Quarterly*, 1994, 15(1):39-62.
- 1992 Yap, N.T., Mainstreaming Women in Science and Technology Policy Formation and Diffusion: The Barriers and Strategic Responses. In *APPROTECH-ASIA and WISE- Thailand*. Bangkok, Thailand, 1992:42-43.
- 1990 Yap, N.T., Round the Peg or Square the Hole? Populists, Technocrats and Environmental Assessment in Third World Countries. *Impact Assessment Bulletin*, 1990, 8(1&2):69-84.
- Yap, N.T., NGOs and Sustainable Development. *International Journal*. XLV, 1990, 45(1):75-105.
- 1979 Yap, N.T., & Cavell, R.G., Phosphoranes. 9. Barrier to Exchange in $\text{CH}_3(\text{CF}_3)\text{PF}_3$. Comparison to Related Molecules Including $\text{CF}_3(\text{CH}_3)\text{PCl}_3$. *Inorganic Chemistry*, 1979, 18(5):1301-1305.
- Cavell, R.G., The, K.I., Gibson, A., & Yap, N.T., Phosphoranes. 10. Barriers to Five-Coordinate Permutations and/or Rotation of the Thiomethyl Group in Fluoro- and (Trifluoromethyl) phosphoranes by Means of Dynamic NMR Studies. *Inorganic Chemistry*, 1979, 18(12):3400-3407.

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- 2012 August 12-14 Sanglestsawai, S., Rejesus, R.M., Yorobe, & J.M., Jr. (2012 August 12-14). Production Risk, Farmer Welfare, and Bt Corn in the Philippines, Agricultural and Applied Economics Association 2012 AAEA Annual Meeting, Seattle, WA.
- 2012 August 18-24 Mutuc, M., Rejesus, R., & Yorobe, J.M., Jr. (2012 August 18-24). Which Farmers Benefit the Most from Bt Corn Adoption in the Philippines? Estimating Heterogeneity Effects, International Association of Agricultural Economists (IAAE) Triennial Conference, Foz do Iguaçu, Brazil.
- 2011 September 19 Yorobe, J.M., Jr. (2011 September 19). Issues and Concern on Biotech Crops: Socio-Economics and Trade, Farmer to Farmer Workshop: Agricultural Biotechnology Outreach and Capacity Building, New World Hotel.
- 2011 July 13-14 Yorobe, J.M., Jr. (2011 July 13-14). Insecticide Use Impacts of Integrated Pest Management (IPM) Farmer Field Schools: Evidence from Onion Farmers in the Philippines, NAST Annual Conference, Manila Hotel.
- 2011 June 26-29 Yorobe, J.M., Jr. (2011 June 26-29). Status of Socio-Economic Assessments and Implications on Biosafety Policies in the Philippines, 15th Conference on Bioeconomy, ICABR, Frascati, Italy.

Publications

- 2016 Yorobe, J.M., Jr., Ali, J., Pede, V.O., Rejesus, R.M., Velarde, O.P., & Wang, H., Yield and income effects of rice varieties with tolerance of multiple abiotic stresses: The case of green super rice (GSR) and flooding in the Philippines. *Agricultural Economics*, 2016, 47(3):261-271.
- 2015 Sanglestsawai, S., Rejesus, R.M., & Yorobe, J.M., Jr., Economic impacts of integrated pest management (IPM) farmer field schools (FFS): Evidence from onion farmers in the Philippines. *Agricultural Economics*, 2015, 46:149-162.

- 2014 Sanglestsawai, S., Rejesus, R.M., & Yorobe, J.M., Jr., Do lower yielding farmers benefit from Bt corn? Evidence from instrumental variable quantile regressions. *Food Policy*, 2014, 44:285-296.
- Balanay, R.M., Yorobe, J.M., Jr., Reyes, S.G., Castaños, A.M.J., Maglente, O.K., Panduyos, J.B., & Cuenca, C.C., Analyzing the Income Effects of Mining with Instrumental Variables for Poverty Reduction Implications in Caraga Region, Philippines. *Journal of International and Global Economic Studies*, 2014, 7(1):20-31.
- Balanay, R.M., & Yorobe, J.M., Jr., Analysis of mining's socioeconomic impacts with propensity score matching for insights on responsible mining in the Agusan Provinces of Caraga Region, Philippines. *International Journal of Development and Sustainability*, 2014, 3(7):1583-1594.
- 2013 Mutuc, M., Rejesus, R.M., & Yorobe, J.M., Jr., Which farmers benefit the most from Bt corn adoption? Estimating heterogeneity effects in the Philippines. *Agricultural Economics*, 2013, 44(2):231-239.
- 2012 Falck-Zepeda, J., Yorobe, J., Jr., Husin, B.A., Manalo, A., Lokollo, E., Ramon, G., Zambrano, P., Sutrisno, Estimates and implications of the costs of compliance with biosafety regulations in developing countries. *GM Crops Food*, 2012, 3(1):52-59.
- Mutuc, M.E.M., Rejesus, R.M., Pan, S., & Yorobe, J.M., Jr., Impact Assessment of Bt Corn Adoption in the Philippines. *Journal of Agricultural and Applied Economics*, 2012, 44(1):117-135.
- Yorobe, J.M., Jr., & Smale, M., Impacts of Bt maize on Smallholder Income in the Philippines. *AgBioForum. The Journal of Agricultural Biotechnology Management and Economics*, 2012, 15(2):152-162.
- 2011 Yorobe, J.M., Jr., Rejesus, R.M., & Hammig, M.D., Insecticide use impacts of Integrated Pest Management (IPM) Farmer Field Schools: Evidence from onion farmers in the Philippines. *Agricultural Systems*, 2011, 104(7):580-587.
- Mutuc, M.E., Rejesus, R.M., & Yorobe, J.M., Jr., Yields, Insecticide Productivity and Bt corn: Evidence from Damage Abatement Models in the Philippines. *AgBioForum. The Journal of Agricultural Biotechnology Management and Economics*, 2011, 14(2):35-46.
- 2010 Yorobe, J.M., Jr., Birol, E., & Smale, M., Farmer Preferences for Bt maize, Seed Information and Credit in the Philippines. *Choice Experiments in Developing Countries: Implementation, Challenges and Policy Implications*. Chapter 13, J.Bennett and E. Birol, eds., Edward-Elgar Publishing, Cheltenham, UK, 2010.
- 2009 Yorobe, J.M., Jr., Norton, G., & Hautea, D., Level and Implications of Regulatory Costs in Commercializing PRSV Resistant Papaya in the Philippines. Chapter 10 of *Projected Impacts of Agricultural Biotechnologies for Fruits and Vegetables in the Philippines and Indonesia (ISAAA/SEARCA)*, 2009.
- Yorobe, J.M., Jr., Costs and Benefits of Bioengineered Papaya with Resistance to Papaya Ringspot Virus in the Philippines. In Chap. 3, *Projected Impact of Ag. Biotechnologies for Fruits and Vegetables in the Philippines and Indonesia*. G. Norton and D. Hautea: editors, ISAAA/SEARCA, 2009.
- 2006 Yorobe, J.M., Jr., & Quicoy, C.B., Economic Impact of Bt Corn in the Philippines. *The Philippine Agricultural Scientist*, 2006, 89(3):258-267.

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