

Jesse P. Bamba

P.O. Box 697 Hagatna, Guam 96932

Work number: 671-735-2091

## **Curriculum Vitae**

### **Education**

**High School Diploma**, Reidsville Senior High School, North Carolina, 1988.

**Bachelor of Science in Agriculture**, University of Guam, 1997.

**Master's in Environmental Science**, University of Guam, 2008.

**Graduate Thesis** – Studies on the biology, host specificity, and feeding behavior of *Acythopeus cocciniae* O'Brien and Pakaluk (Coleoptera: Curculionidae) on *Coccinia grandis* (L.) Voigt (Cucurbitaceae) and *Zehneria guamensis* (Merrill) Fosberg (Cucurbitaceae).

### **Work Experience**

**December 7, 2020 – Present. Job Title: Extension Agent II. Production Technologies and Methods/Emerging Issues in Agriculture.**

**Employer:** University of Guam, College of Natural and Applied Science, Cooperative Extension Service Agriculture and Natural Resources.

- I provide technical assistants for fruit and crop production, pest management, and agriculture issues to farmers, homeowners, landscapers, pesticide companies, schools, various government agencies, and non-profit organizations on Guam.
- I engage with local farmers on market and management issues, identify their issues and needs for program development.
- I conduct workshops that target vegetable/ fruit cultivation, Agriculture marketing and New and emerging issues in agriculture.
- Develop new or update Extension fact sheets, booklets, leaflets, etc.

### **Grants - I am the coordinator**

#### Pesticide Safety Education Funds Management (PSEFMP)

- 2022 (\$17,025.00) - Pesticide Safety Education Funds Management Program (PSEFMP) grant.
- 2021 (\$16,625.00) - Pesticide Safety Education Funds Management Program (PSEFMP) grant.
- 2020 (\$17,750.00) - Pesticide Safety Education Funds Management Program (PSEFMP) grant.
- 2019 (\$18,750.00) - Pesticide Safety Education Funds Management Program (PSEFMP) grant.

### Integrated Pesticide Management (IPM) 2021 Coordinator

- WERA-1017 Integrated Pest Management (IPM) (\$22,685.00)

### Western Sustainable Agriculture Research and Education (PI)

- WSARE 2022-2025 grant Professional + Producer Grant. “5 Future Trainers: Developing a farmer run agriculture production monitoring program for the Farmer’s Cooperative Association of Guam (FCAG)”. (\$58,401.00)
- 2018 “Seven Trees Seven Practices” Western SARE grant.

### CO-PI:

- 2021-2023 - U.S. Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS). “Forecasting daily reference evapotranspiration and rainfall for water resources conservation and sustainable agriculture”.
- 2016 -2020 - National Conservation Innovation Grants (CIG) Program "Real-time Optimization of Irrigation Scheduling for Farmlands in Hawaii, Guam, and American Samoa".

### - I was a collaborator for the following grants:

- 2015 – 2019. Hatch Proposal: Evaluation of Important Vegetable Varieties Grown in a Local Soil Type in the Tropical Environment of Guam.
- 2010-2011. United States Environmental Protection Agency, 2009 Strategic Agriculture Initiative Food Quality Protection Act Grant Program, G. V. P. Reddy (PI); Studies on the interaction between the predatory mite and petroleum spray oil, and threshold levels for the control of invasive mites on eggplant.
- 2009 – 2011. USDA-NRCS. G. V. P. Reddy (PD), “Integrated control tactics for the New Guinea sugarcane weevil”.
- 2009-2011. Western Region SARE-USDA, Professional Development Program (PDP). G. V. P. Reddy (PI), Increasing ecological insect pest management on Guam through building agriculture professionals’ understanding of semiochemicals”.
- 2008-2010. USDA-NRCS. G. V. P. Reddy (PD), “Comparative effectiveness of an integrated pest management system for managing the insect pests on cabbage in Guam”.

### - I was the technical advisor for the following Western Region SARE grants:

- 2015. "Off-Grid Solar Applications in Aquaponics with Tilapia, Tomatoes, and Papaya Production" Farmer Rancher Grant - David Crisostomo.
- 2007. “Growing papaya using aquaculture effluent in an automated drip irrigation system” Farmer Rancher Grant - David Crisostomo.

- I assisted in grant preparation:
  - 2006. Conservation Innovative Grant and Sanctuary ANA grant.

### **Pesticide Safety Education Program (PSEP)**

- 2019-2022. I am the Coordinator for the Pesticide Safety Education Program (PSEP)
- 2019. I updated the 2005-2008 CORE Pesticide Safety Education Program (PSEP) PowerPoint presentations using the Pesticide Safety Education Funds Management Program (PSEFMP) 2019 grant. The new and updated CORE PSEP PowerPoints will be used to train future pesticide applicators on Guam.
- (2005-2008). I developed and conducted Pesticide Safety Education Program (PSEP) trainings for six different Pesticide Applicator Training categories.
- (2005-2008). I was the Co-Coordinator and Co-Instructor for the PSEP.

### **Extension internship program (E2)**

Assisted with development, implementation and supervised E2 intern. 2019.

### **CNAS 101 Workshop Series**

I was the CNAS 101 Workshop Coordinator: 2017-2019

### **University of Guam Representative**

#### **1. I am the University of Guam representative for the:**

- Farmer's Cooperative Association of Guam
  - o I provided technical advice pertaining to agricultural production, fruit tree health, crop production, pest management, landscape management, and agriculture produce marketing.
    - Attended the monthly meetings and provided updates on the University of Guam E&O activities.
    - I was involved in validating the FCAG 2020 election results.

#### **2. I was the Chairperson for the: University of Guam Agriculture and Life Sciences Charter Day Committee. (2016-2019)**

#### **3. I am a member of the Western Region Program Leaders Committee: 2019-2020**

- Attend monthly meetings with program leaders across western Extension systems.
- Attend two meetings for strategic development related to Extension system programming, research, and reporting for Guam, Western Region, and national systems.
- Served on review committee for Western Region Awards of Excellence committee in 2019.

### **University of Guam Community Service**

1. **I am a member of the:** University of Guam Faculty Election Commission.
2. **I am a member of the:** University of Guam's Institutional Review Board (IRB)
3. **I am a member of the:** University of Guam Faculty Senate.

### **Community Service**

1. I serve on the Mongmong-Toto-Maite (MTM) Municipal Planning Council (MPC).
2. I serve on the Hospitality Ministry for the Dulce Nombre De Maria Cathedral-Basilica.
3. I serve on the Marriage Ministry for the Roman Catholic Archdiocese of Hagatna and I am one of the coordinators for the Western Vicariate.

### **Television/YouTube**

- I was the Co-Host on the Joint Region Marianas Guam Network Island Images Productions:
  1. Joint Region Marianas Guam Island Images "Dragon Fruit Pitaya". 7-minute Television segment shown on the Joint military news network. 2014.  
<https://www.youtube.com/watch?v=S9WDZTxrfeA>
  2. Joint Region Marianas Guam Island Images "Fruits of Guam". 9-minute Television segment shown on the Joint military news network. 2014.  
<http://youtu.be/ce31nkL675o>
  3. Joint Region Marianas Guam Network "Dig It" television program: "Yigo Citrus". 8-minute Television segment shown on the Joint military news network. 2016.  
<https://www.youtube.com/watch?v=bkWJcG9JLcM>

### **University of Guam Courses**

- Over the past 9 years I developed and taught basic agricultural pest management, tropical fruit and vegetable production, plant propagation, and asexual propagation (Air layering and Grafting) techniques for fruit and ornamental plants for the University of Guam Agriculture Spring, Summer and Fall courses. I have also developed and taught 2 basic Grafting workshops, which were attended by home gardeners for fruit and ornamental plants for the UOG Cooperative Extension Service.

### **Guest lecturer for the following University of Guam classes:**

#### **2011**

- AG - 101 Spring (2 classes) and Fall (2 classes).
- AG - 281 Principals of Horticulture Science - Tropical Plant Propagation (2 classes).
- AG - 345 General Entomology - Agriculture Pests Management (2 classes).

#### **2012**

- AG - 101 Spring (2 classes), Summer (2 classes) and Fall (2 classes).
- AG - 281 Principals of Horticulture Science - Tropical Plant Propagation (2 classes).
- AG - 340 Pest Management - Integrated Pest Management (3 classes).
- AG - 485 Tropical Fruit Production - Mango Cultivation (3 classes).

#### **2013**

- AG - 101 (4 classes), Summer session B (4 classes), Spring (4 classes).
- AG - 281 Principals of Horticulture Science - Tropical Plant Propagation (2 classes).
- AG - 345 General Entomology - Agriculture Pests Management (2 classes).

#### **2014**

- AG - 101 (4 classes) Spring, AG 101 (3 classes) Summer (Session B).
- AG - 340 Spring Pest Management - Integrated Pest Management (3 classes).
- AG - 484 Tropical Vegetable Production - Tropical vegetable production (3 classes).

## **2015**

AG - 101 Spring section 1 (3 classes), AG 101 Spring section 2 (4 classes).

AG - 101 Summer 3 classes.

AG - 101 Fall 3 classes.

AG - 281 Spring Principals of Horticulture Science - Tropical Plant Propagation (2 classes).

AG/BI - 345 Fall General Entomology Agricultural Pest management (2 classes).

## **2016**

AG - 101 section 1 Spring (3 classes), Asexual propagation (Grafting plants), Asexual propagation (Air layering plants), Plant structure (Flower, Stem, Root, Leaf).

Ag - 101 section 2 Spring (4 classes), Asexual propagation (Grafting plants), Asexual propagation (Air layering plants), Plant structure (Flower, Stem), Plant structure (Root, Leaf).

AG - 101 Summer (3 classes), Asexual propagation (Grafting plants), Asexual propagation (Air layering plants), Plant structure (Flower, Stem, Root, Leaf).

AG - 101 Fall (3 classes), Asexual propagation (Grafting plants), Asexual propagation (Air layering plants), Plant structure (Flower, Stem, Root, Leaf).

AG - 281 Spring - Principals of Horticulture Science (2 classes), Vegetable crop production, Fruit production.

AG - 340 - Pest Management. Integrated pest management for horticultural crops. Fall 2016.

AG/BI - 345 Fall - General Entomology (2 classes), Agricultural insect pests, Integrated pest management.

AG - 380 - Principles of Soil Science. Mulching crops. Fall 2016.

## **2017**

AL - 101- Introduction to Agriculture. Asexual propagation (air layering/grafting) of plants. Spring and Fall 2017.

BA - 352 - Food and Beverages. Crop Production on Guam. Spring 2017.

AL - 281- Principles of Horticultural Science. Asexual propagation (air layering/grafting) of plants. Spring 2017.

AL/BI - 345 - General Entomology. Insect pests and control methods for agriculture crops. Fall 2017.

## **2018**

AL -101- Introduction to Agriculture. Asexual propagation (air layering/grafting) of plants. Spring and Fall 2018.

AL - 281- Principles of Horticultural Science. Asexual propagation (air layering/grafting) of plants. Spring 2018.

AL - 340 - Pest Management. Integrated pest management for horticultural crops. Spring 2018.

AL/BI - 345 - General Entomology. I presented information on insect pests and control methods for agriculture crops. Fall 2018.

## **2019**

AL - 281- Principles of Horticultural Science. Asexual propagation (air layering/grafting) of plants. Spring 2019.

## **2020**

AL - 340 - Pest Management. Integrated pest management for horticultural crops. Spring 2020.

## **2021**

AL/BI - 345 - General Entomology. I presented information on insect pests and control methods for agriculture crops. Fall 2021.

**Instructor for the following University of Guam classes:**

**2013**

AG - 101 Summer lab Session A (June 4 - July 4, 2013).

AG -101 (1 month of instruction time) Fall 2013.

**2014**

AG -101 (1 month of instruction time) Fall 2014.

**2016**

AG -101 Lab Spring 2016.

**2017**

AL - 485 Tropical Fruit Horticulture. Lecture and lab Fall 2017.

**2018**

I was the instructor for a workshop on Pest management, crop production, fruit tree production, and producing vegetable crops using high wind tunnel structures in Kosrae. September 14<sup>th</sup>-18<sup>th</sup>, 2018.

**2019**

AL - 485 Tropical Fruit Horticulture. Lecture and lab Spring 2019.

**Student Evaluations Spring 2019**

- The means reported for this class are indistinguishable from the college means (3.76, CNAS 3.51, UOG 3.58 – based on a 4-point scale). My average was the eighteenth highest from across the college. The evaluation means are based on approximately ninety percent of the enrolled students reporting. With those that submitted evaluations, participants reported that the (I) instructor was fair to the students, knew the subject matter, conveyed the subject matter in effective manner, and instructor was prepared.

**2020**

AL - 485 Tropical Fruit Horticulture. Lecture and laboratory Spring 2020.

AL – 101 Lab Fall 2020.

**2022**

AL - 485 Tropical Fruit Horticulture. Lecture and laboratory Spring 2022.

AL- 340 Pest Management. Lecture and laboratory in Spring 2022.

**2023**

AL- 340 Pest Management. Lecture and laboratory in Spring 2023.



## **Collaboration with 4H**

### **2006**

- Developed and conducted Horticulture and Entomology 4-H Summer Workshop (20 kids attended) - (20 hours each workshop).
- Developed and conducted a DEED agricultural workshop at P. C. Lujan elementary school (90 kids attended) and M. A. Ulloa elementary school (100 kids attended).
- Developed and conducted 1-hour Horticulture lesson for 4-H Military Kids Workshop (24 kids attended).

### **2007**

- Developed and conducted Horticulture 4-H Summer Workshop (10 kids attended) - (20-hour workshop).

### **2008**

- I conducted a fruit tree grafting workshop and a plant health class for the 4-H unit (50 people attended).

### **2009**

I presented information on gardening at the following places:

- M. U. Lujan Elementary School Gardening Workshop April 30<sup>th</sup>, 2009 (20 kids attended).
- 4H Horticulture Summer Workshop June 8<sup>th</sup> – 11<sup>th</sup>, 2009 (10 kids attended).
- Gardening workshop for Inarajan summer camp June 16<sup>th</sup>, 2009 (35 kids attended).
- Hurao Summer camp Gardening workshop June 17<sup>th</sup>, 2009 (70 kids attended).

### **2010**

I presented information on gardening at the following places:

- The 4H Horticulture Summer Workshop June 2010 (10 kids attended).
- Gardening workshop for Shepard's Fold summer camp June 16<sup>th</sup>, 2010 (30 kids attended).

### **2011**

I was a Science Fair Judge

- FBLG Middle School
- GATE students, Inarajan Elementary School

I was a guest Science lecturer for

- Harvest Christian Academy
- Saint Frances Catholic School

I presented information on gardening at the following places:

- The 4H Horticulture Summer Workshop
- Gardening workshop for Shepard's Fold summer camp

### **2012**

I presented information on gardening for

- 4H Horticulture Summer Workshop.
- Shepard's Fold summer camp.
- Welcome Home Garden Project for our Military families.

### **2017**

- I conducted a presentation on Fruits and Vegetables grown Guam at F. B. Leon Guerrero Middle School Yigo. (150 students attended)

### **Extension Publications/Television Segments**

Kuan-Ju Chen, Jesse P. Bamba, Mary Catherine Wiley, and Laarnie Vinca. Head Start For Agriculture On Guam: FOCUS GROUP STUDIES ON CHALLENGES AND OPPORTUNITIES AHEAD. TR 01-22. August 11, 2022. Cooperative Extension & Outreach, College of Natural & Applied Sciences, University of Guam.

Kuan-Ju Chen, Jesse P. Bamba, Mary Catherine Wiley, and Laarnie Vinca. Reinforcing a Sustainable Guam. 2022. GEDA QCCC grant. **YouTube Video: Reinforcing a Sustainable Guam**

San Nicolas, P. J., J. P. Bamba, S. Dresbach. Electric Fence for Feral Swine: Materials, Installation Guidelines, & Maintenance. 2021.

Bamba, J. P. and P. Wall. Growing Avocado on Guam. 2018.

Eat Fresh, Eat Local Fruit (Vegetable poster/EFNP). 2017.

Joint Region Marianas Guam Network “Dig It” television program: “Yigo Citrus”. 8-minute Television segment shown on the Joint military news network. 2016.  
<https://www.youtube.com/watch?v=bkWJcG9JLcM>

Eat Fresh, Eat Local Fruit (Vegetable poster/EFNP). 2016.

Bamba, J. P. and P. Wall. Mango Tree Care on Guam. 2016.

Tuquero J. and J. P. Bamba. Bell Pepper (*Capsicum annuum*) A Potential Commercial Crop for Guam. 2016.

Tuquero J., J. P. Bamba, M. Maritani, P. Wall. Guam Crop Charts. 2016.

Bamba, J. P., J. McConnell, F. J. Cruz, L. R. Barber, J. A. Cruz, J. Tuquero. 2009. Buy Guam Grown. Local Fresh Fruits. Guam Seasonality Chart. Updated 2015.

Bamba, J. P., J. McConnell, F. J. Cruz, L. R. Barber, J. A. Cruz, J. Tuquero and M. Maritani. 2009. Buy Guam Grown. Local Fresh Vegetables. Guam Seasonality Chart. Updated 2015.

Artero V. T., F. J. Cruz, V. M. Santos. 1993. Revised by R. T. Laguña, J. P. Bamba, and J. Tuquero. “Common, Chamoru, and Scientific Names of Fruits and Vegetables”. Updated 2015.

Bevacqua R., with J. Tuquero and J. P. Bamba. Growing Pineapples in Guam. Updated 2015.

Scully B. T., R. Bevacqua, with J. Tuquero and J. P. Bamba. A Guide to Growing Bananas on Guam. Updated 2015.

“Mariana islands Homeowner's Handbook to prepare for Natural Hazards”. 2015.

“Island images: Dragon Fruit “Pitaya” production on Guam” 7-minute Television Segment done by the Military News Network Joint Region Marianas Public Affairs office. November 2014.

<https://www.youtube.com/watch?v=S9WDZTxrfeA>

"Island images: Fruits of Guam" 9-minute Television Segment done by the Military News Network Joint Region Marianas Public Affairs office. June 2014. <http://youtu.be/ce31nkL675o>

Aubrey Moore and Jesse P. Bamba, University of Guam. January 8, 2014. Guam New Invasive Species Alert No. 2014-02. Spotted Cucumber Beetle (Southern Corn Rootworm) *Diabrotica undecimpunctata* (Coleoptera: Chrysomelidae). Updated January 17, 2014.

Aubrey Moore and Jesse P. Bamba, University of Guam. December 13, 2013. Guam New Invasive Species Alert No. 2013-01. Eggplant Mealybug *Coccidohystrix insolita* (Green 1908) (Hemiptera: Pseudococcidae). Updated January 10, 2014.

Robert Schlub, Jesse P. Bamba, and Roger Brown, Investigating a tomato virus on Guam. 2012.

Bamba, J. P., J. McConnell, F. J. Cruz, L. R. Barber, J. A. Cruz, J. Tuquero and M. Maritani. Guam Island Fresh Vegetables. Guam Vegetable Availability Chart. 2010.

Bamba, J. P., J. McConnell, F. J. Cruz, L. R. Barber, J. A. Cruz, J. Tuquero. Guam Island Fresh Fruits. Guam Fruit Availability Chart. 2009.

I developed publications for the Natural Resource Conservation Service (NRCS) Conservation Service Program No-till workshops for Bernard Watson, Ernie Wusstig, and Rick Guererro (2006 - 2015).

## **Research Publications**

Robert L. Schlub, Rugang Li, Jesse P. Bamba, Mari Marutani, Kai-Shu Ling. Complete Genome Sequence of Tomato Leaf Curl Guam virus, a Novel Tomato-Infecting Begomovirus from Guam, USA. Journal of Microbiology Resources Announcements. Volume 10 Issue 49 e00954-21. February 07, 2022. [Complete Genome Sequences of Tomato Leaf Curl Guam Virus, A novel Tomato-infecting Begomovirus from Guam, USA](#)

Joseph Casila, Maegan Delfin, Ferdinand Galsim, Mohammad H. Golabi, Sayed M. Bateni, and Jesse Bamba. Improving Irrigation Efficiency on Vegetable Crops Using Smart Irrigation Technologies in Guam. Western Pacific Tropical Research Center (WPTRC). Technical Report No. 1 October 2021. [NRCS CIG/WPTRC-Tech-Rept-4-ebook](#)

Reddy, G. V. P., and J. P. Bamba. 2011. Impact of reduced-risk insecticides against the insect pests on cabbage (*Brassica* spp.). Proceedings of the Sixth International Workshop on the Management of the Diamondback Moth and Other Cruciferous Insect Pests, The AVRDC, The World Vegetable Center, Taiwan, 255–259.

Reddy G. V. P., S. Balakrishnan, J. E. Remolona, R. Kikuchi and J. P. Bamba. 2011. Influence of Trap Type, Size, Color, and Trapping Location on the Capture of the New Guinea Sugarcane Weevil, *Rhabdoscelus obscurus* (Coleoptera: Curculionidae). Ann. Entomol. Soc. Am. 104: 594–603.

Bamba, J. P., R. H. Miller and G.V. P. Reddy. 2009. Studies on the biology, host specificity, and feeding behavior of *Acythopeus cocciniae* O'Brien and Pakaluk (Coleoptera: Curculionidae) on *Coccinia grandis* (L.) Voigt (Cucurbitaceae) and *Zehneria guamensis* (Merrill) Fosberg (Cucurbitaceae). Micronesica. 41 (1): 71-82.

Reddy, G.V.P., R. Muniappan, Z.T. Cruz, F. Naz, J. P. Bamba and J. Tenorio. 2009. Present status of *Macronellicoccus hirsutus* (Hemiptera: Pseudococcidae) in the Mariana Islands and Its Control by Two Fortuitously Introduced Natural Enemies. Journal of Economic Entomology. 102: 1431-1439.

Muniappan, R., J. Bamba, J. Cruz and Reddy G. V. P. 2004. Field response of Guam populations of the New Guinea sugarcane weevil, *Rhabdoscelus obscurus* (Boisduval) (Coleoptera: Curculionidae), to aggregation pheromones and food volatiles in Guam. *Micronesica*, 37 (1): 55-66.

Meyerdirk, D. E., R. Muniappan, R. Warkentin, J. Bamba, and G. V. P. Reddy. 2004. Biological control of the papaya mealybug, *Paracoccus marginatus* (Hemiptera: Pseudococcidae) in Guam. *Plant Protection Quarterly*, 19 (3): 110-114.

Muniappan, R., Bamba, J., Cruz, J. and Reddy, G. V. P. 2004. Biology, rearing and field release on Guam of *Euplectrus maternus*, a parasitoid of the fruit-piercing moth, *Eudocima fullonia*. *BioControl*, 49 (5): 537-551.

Muniappan, R., Bamba, J., Cruz, J. and Reddy, G. V. P. 2003. Current status of the red coconut scale, *Furcaspis oceanica* Lindinger (Homoptera: Diaspididae) and its parasitoid, *Adelencyrtus oceanicus* Doutt (Hymenoptera: Encyrtidae), in Guam. *Plant Protection Quarterly*, 18 (2): 52-54.

Muniappan, R. and Bamba, J. 2002. Host specificity testing of *Cecidochares connexa*, a biological control agent for *Chromolaena odorata*, Proceedings of the Fifth International Workshop on Biological Control and Management of *Chromolaena odorata*, Durban, South Africa, 134-136.

Muniappan, R., Cruz, J. and Bamba, J. 2002. Invasive plants and their control in Micronesia. *Micronesica* Supplement, 6: 85-92.

Muniappan, R. and Bamba, J. 2000. *Chromolaena* in Micronesia, *Proceedings of the South*

*Africa Chromolaena Conference*, abstract published.

Muniappan, R. and Bamba, J. 1999. Biological Control of *Chromolaena odorata*: Successes and Failures, Proceedings of International Symposium on Biological Control of Weeds, Montana, 67-71.

Bamba, J., J. A. Cruz, O.H. Diambra, and R. Muniappan. 1999. Head cabbage variety study for tipburn resistance. Papua New Guinea Journal of Agriculture, Forestry and Fisheries. Vol. 42. pp. 38-39.

Richardson, J., Tuquero, J. Bamba, and J. Santos. Soil condition rough on plants; Northern calcareous soils limit 3 vital nutrients. Gardening Section, Pacific Sunday News. January 12, 1997.

Richardson, J., J. Bamba, J. Tuquero, and J. Santos. Reaping what you sow; Flower power plays a big role in raising perfect fruit. Gardening Section, Pacific Sunday News. January 5, 1997

Bamba, J., J. Richardson, J. Santos, and J. Tuquero. Getting trees to bear fruit; Questions commonplace among Guam homeowners. Gardening Section, Pacific Sunday News. December 29, 1996.

Tuquero, J., J. Richardson, K. Perez, J. Santos, and J. Bamba. What's your fruit fly IQ?; Commonly asked questions about protecting Guam from infestation. Gardening Section, Pacific Sunday News. November 10, 1996.

Richardson, J., J. Tuquero, J. Santos, K. Perez, and J. Bamba. Hitchhiker pests hard to detect; Inspections help keep eggs from reaching Guam. Gardening Section, Pacific Sunday News. November 3, 1996.

### **Conferences Presented**

“Guam Extension Climate Forum”, Hyatt Regency Hotel from 8:00am-4:30pm. October 26<sup>th</sup>, 2017.

I presented a poster on “Investigating a tomato virus on Guam” at the "IPM on the World Stage-Solutions for Global Pest Challenges" Memphis Cook Convention Center Tennessee. Robert Schlub, Jesse P. Bamba, and Roger Brown March 27-29, 2012.

"IPM on the World Stage-Solutions for Global Pest Challenges", Memphis Cook Convention Center Tennessee. I presented Pheromone-based trapping method for the weevil pests on Guam. March 27-29, 2012.

“Integrated Pest Management VS Traditional Spray Schedule for Managing the insect Pests on Cabbage” (Conservation Innovation Grant (CIG) NRCS), Yigo Agriculture Experiment Station Guam. September 12<sup>th</sup>, 2009.

Pacific Science Intercongress. Session on Invasive Species. Guam Hilton Hotel. June 1 -6, 2001, Guam. I presented orally at the session – Bamba, J. Biocontrol of *Chromolaena odorata* in Micronesia. Muniappan, R., J. Cruz and J. Bamba. Invasive Plants and Their Control in Micronesia.

“IV International Workshop on Biological Control and Management of *Chromolaena odorata*”, Durban, South Africa. October 23 – 25, 2000. I presented orally at the workshop “Host Specificity Testing of *Cecidochares connexa* in Guam”, Bamba, J. and “*Chromolaena* in Micronesia”, Muniappan, R. and J. Bamba.

“X International Symposium on Biological Control of Weeds”, Bozeman, Montana, U.S.A. July 4-14, 1999. Muniappan, R., J. Bamba. Biological Control of *Chromolaena odorata*: Successes and Failures. Presented poster.

## **Workshops Presented**

CORE Pesticide Applicator Review. Dededo Farmer's Co-op. October 27 - 28, 2022 (5:00 - 8:00 pm).

CORE Pesticide Applicator Review. Dededo Farmer's Co-op. September 21 - 22, 2022 (6:00 - 9:00 pm).

Farmer Focus Workshop: Wellness Talks with Diverse Farmer/Rancher Community. Dededo Farmer's Co-op. Tuesday, August 30, 2022.

IPM and Tomato Virus Workshop University of Guam- Cooperative Extension Service Crop Protection and Pest Management Program- Extension Implementation Program Area for Guam. July 13, 2022.

Field workshop on mango propagation. UOG Ija Research & Education Center. May 7<sup>th</sup>, 2022.

"Agriculture on Guam: Challenges and Opportunities Ahead". Farmer focus group. Hyatt Regency Guam, Magellan Ballroom. June 19<sup>th</sup>, 2021.

Ensure Food Security Initiative: "Fruit Tree – Ring Vegetable Garden". The 5-workshop series teaches the University of Guam (UOG) AmeriCorps Volunteers how to establish a Fruit Tree – Ring Vegetable Garden. The specialized agriculture work force that will increase agricultural production, stabilize produce pricing, decrease dependence on imported commodities, create a path for food security and increase Guam's labor force. February 29<sup>th</sup>, 2020.

"Agriculture on Guam: Challenges and Opportunities Ahead". Farmer focus group. Hyatt Regency Guam, Magellan Ballroom. November 9<sup>th</sup>, 2019.

"Citrus tree health on Guam" Citrus disease focus group. Farmers' Cooperative of Guam, Dededo. August 29<sup>th</sup>, 2019.

"Growing Kale & Zucchini on Guam" CNAS/ALS room 124. June 8<sup>th</sup>, 2019.

"Seven Trees Seven Practices" field visits to three Dededo farms. 2018.

"Seven Trees Seven Practices" field visits to Umatac and Piti farms. 2018.

"Seven Trees Seven Practices" Introduction to the seven trees seven practices UOG and field visit to Yona farm. 2018.

"Pest management, crop production, fruit tree production, and producing vegetable crops using high wind tunnel structures" in Kosrae. September 14<sup>th</sup>-18<sup>th</sup>, 2018.

"Growing Bok Choy on Guam" workshop. **CNAS 101 workshop**. 2018.

"Non-seasonal Winged Beans for Guam" workshop. **CNAS 101 workshop**. 2018.

“Bring your own Bug” (BYOB) insect ID workshop. [CNAS 101 workshop](#). 2018.

“Growing Mango on Guam”. [CNAS 101 workshop](#). 2018.

“Pesticide Safety Education Program (PSEP)” Agriculture/structural pest management and agricultural crop production at the EPA CORE Pesticide Applicator Training. 2018.

“Avocado history, cultivation, and propagation on Guam”. [CNAS 101 workshop](#). 2018.

“Home Gardening on Guam”. [CNAS 101 workshop](#). 2017.

“Bring your own Bug” (BYOB) insect ID workshop. [CNAS 101 workshop](#). 2017.

“Growing Mango on Guam”. [CNAS 101 workshop](#). 2017.

“Citrus history and cultivation on Guam” Yigo Citrus Festival. [CNAS 101 workshop](#). 2017-2018.

“Sustainable Agriculture Concepts for Tropical Island”, Compost Tea, Agritainment, and Cover crops. [CNAS 101 workshop](#). 2017.

“Growing Leafy Lettuce on Guam”. [CNAS 101 workshop](#). 2017.

“Chili Pepper Variety Trials on Guam”. [CNAS 101 workshop](#). 2017.

“Growing Bell Pepper on Guam” University of Guam Extension & Outreach. 2016.

“Growing Chinese Kale on Guam” University of Guam Extension & Outreach. 2016.

“Pesticide Safety Education Program (PSEP)” Agriculture/structural pest management and agricultural crop production at the EPA CORE Pesticide Applicator Training. 2016.

“Citrus history and cultivation on Guam” Yigo Citrus Festival. 2016.

“Mango Tree Care” Agat Mango festival. 2007- 2018.

"Sheet Mulching Workshop" University of Guam Cooperative Extension Service March 28<sup>th</sup>, 2015.

"New Farmer Workshop" University of Guam Cooperative Extension Service offers at the January 24<sup>th</sup>, 2015.

"Eggplant Production on Guam Workshop" University of Guam Cooperative Extension Service October 4<sup>th</sup>, 2014.

"The Extension Integrated Pest Management (EIPM) Farmer hosted Workshop on Sweet Corn and Bittermelon", University of Guam Cooperative Extension Service January 18<sup>th</sup>, 2014.



“Grafting Workshop” University of Guam Cooperative Extension Service October 26<sup>th</sup>, 2013.

"Welcome Home Garden Project for our Military families", University of Guam Cooperative Extension Service June 30<sup>th</sup>, 2012.

“Fruit Availability Chart” Guam Hotel and Restaurant Association (GHRA) Pacific Hotel and Restaurant Expo (PHARE) at the Hyatt Hotel April 2010.

“Fruit tree grafting workshop and a plant health for 4-H” University of Guam Cooperative Extension Service (2008).

I provided technical assistance and developed publications for the Natural Resource Conservation Service (NRCS) Conservation Service Program No-till workshops from 2006 -2015. The 2-half day on site yearly workshops were held at three different farms in northern Guam: Bernard Watson’s in Yigo, Ernie Wusstig’s in Dededo and Rick Guererro’s in Dededo.

### **Conferences Attended**

Northeast Pesticide Applicator Certification and Training Meeting “Connecting the Dots ” October 18<sup>th</sup> – 20<sup>th</sup>, 2022. Toftrees Resort in State College, Pennsylvania.

USDA NIFA RIIA “planning activity” titled Linking Insular Institutions for Higher Education Success supports the meeting of educators of insular institutions to initiate our collaboration to improve agriculture and food science education activities. June 28<sup>th</sup> - July 2<sup>nd</sup>, 2022. Palau Community College (PCC) in Koror, Palau.

10th International IPM Symposium on February 28 to March 3, 2022 at the Sheraton Denver Downtown Hotel in Denver, Colorado.

National Pesticide Application and Certification Training Conference Sheraton Denver Downtown Hotel Colorado. July 18-22, 2021.

"National Association of County Agricultural Agents Annual Meeting and Professional Improvement Conference NACAA" which was held in the Grand Wayne Convention Center 120 W. Jefferson Blvd. Fort Wayne, IN 46802 from September 8<sup>th</sup> - September 12<sup>th</sup>, 2019.

North Central Region NCR/ American Association of Pesticide Safety Educators AAPSE joint fall meeting that was held at the Sheraton Duluth in Duluth MN from July 22-24, 2019.

WAAESD/WEDA/WRPLC joint spring meeting that was held at the Humphreys Half Moon Inn – Shelter Island, San Diego, California from April 1-5, 2019.

National Association of County Agricultural Agents Annual Meeting and professional Improvement Conference NACAA AM/PIC Chattanooga, Tennessee. July 29, 2018.

“Guam Extension Climate Forum”, Hyatt Regency Hotel from 8:00am-4:30pm. October 26<sup>th</sup>, 2017.

Real-time Optimization of Irrigation Scheduling in Hawaii, Guam, and American Samoa”  
National Conservation Innovation Grants (CIG) Program HI - August 7- 8, 2017  
Training at University of Hawaii at Manoa and Ma'o Organic Farm Wai'anae, Hawai'i.

“Local Foods, Local Places” Workshop Honolulu, HI - Sullivan Conference Room,  
University of Hawaii Cancer Center 701 Ilalo Street. August 3-5, 2016.

"Strengthening Agriculture's Infrastructure in the Western Pacific Area" Western SARE Hilton  
Guam Resort May 19<sup>th</sup> - 21<sup>st</sup>, 2014.

"IPM on the World Stage-Solutions for Global Pest Challenges," Memphis, Tennessee at the  
Memphis Cook Convention Center. March 27-29, 2012.

“Postharvest Technology Short Course”, University of California Davis. June 13<sup>th</sup> to June 17<sup>th</sup>  
2011.

The “Cucurbit Pest Management Strategic Plan” (PMSP), Pearl Country Club Aiea, Hawaii.  
October 3<sup>rd</sup> - 4<sup>th</sup>, 2009.

Western Region Sustainable Agriculture Research & Education Sub regional Conference  
“Sustaining Pacific Islands Agriculture”, Guam Hilton Hotel. October 17-18, 2007.

Western Region Sustainable Agriculture Research & Education national/regional  
gathering “*Sharing a New Tradition of Sustainability*” in Oconomowoc, Wisconsin from August 12<sup>th</sup> to  
August 19<sup>th</sup>, 2006.

“Western Region Sustainable Agriculture Research & Education SARE Workshop” New CYFAR  
Project Orientation, Washington D.C. 2005.

### **Workshops Attended**

“Tomato variety workshop” workshop that screened tomato varieties suitable for Guam in response to the arrival of whitefly transmitted virus, known as Ageratum Yellow Vein Virus Guam strain. October 21st, 2015.

ISA Arborist Workshop, University of Guam, 2015.

"Breadfruit Workshop" Guam Community College May 19<sup>th</sup>, 2014.

"The Extension Integrated Pest Management workshops", University of Guam November 7<sup>th</sup>, December 18<sup>th</sup>, 2013.

Extension Integrated Pest Management (EIPM) strategic planning meeting November 7<sup>th</sup> and December 18<sup>th</sup>, 2012.

"Master Gardener Workshop", University of Guam July 2012.

"Farmer Chief Conference", Guam Community College July 2012.

“Basic Course for Organic Inspection of Crops”, University of Guam. November 29<sup>th</sup> – December 3<sup>rd</sup>, 2010.

“Organic Agricultural Training”, University of Guam. June 7<sup>th</sup> – 10<sup>th</sup>. 2010.

“Nutrition and Plant Disease Management in the Mariana Islands”, University of Guam. May 10<sup>th</sup>-12<sup>th</sup>, 2010.

“Community Food Security Focus Group”, Guam. January 26<sup>th</sup>, 2010.

Professional Development Program (PDP) workshop “Enhancing Guam’s Agriculture Professionals’ Knowledge of Ecological Disease Management Through Soil Nutrients,” at the Agriculture Experiment Station May 7<sup>th</sup>, 2009.

The “Mariana Grazing Management Academy Workshop”, University of Guam. January 27<sup>th</sup> - 29<sup>th</sup> 2009.

“Fruit Tree Windbreak” Conservation Innovative Grant (CIG) workshop. University of Guam Cooperative Extension Service. 2008.

“Fruit Trees for Windbreaks Workshop”, University of Guam. July 2007.

**March 7, 2005 – December 6, 2020. Job title: Agricultural Extension Associate III**

**Employer:** University of Guam, College of Natural and Applied Science, Cooperative Extension Service Agriculture and Natural Resources.

- I provided technical assistants for fruit and crop production, pest management, and agriculture issues to farmers, homeowners, landscapers, pesticide companies, schools, various government agencies, and non-profit organizations on Guam.

**February 1997 – March 2005. Job title: Research Assistant III**

**Employer:** University of Guam, College of Agriculture and Life Science, Agriculture Experiment Station.

I worked on the following plants, biological control organisms and invasive weeds on Guam and Micronesia.

- Siam Weed, *Chromolaena odorata*. 1998- 2005
- Fruit Piercing Moth, *Eudocima fullonia*. 1998 – 2005
- Trap cropping for cabbage pests. 1998 – 2002
- Head cabbage variety study for tip burn resistance. 1999
- New Guinea Sugarcane weevil, *Rabdoloscelus obscurus*. 2000 - 2005
- Red coconut Scale, *Furcaspis oceanica*. 2000 - 2001
- Papaya Mealybug, *Paracoccus marginatus* attacks Papaya, Plumeria, Hibiscus and many other plant species. Parasitoids were mass released on Guam (2002) to suppress the papaya mealybug population.
- *Coccinia grandis* (L.) Voigt (Curcuitaceae), Ivy Gourd is a perennial vine that has become a weed on Guam. Insects were evaluated for release and biocontrol of the Ivy Gourd in Guam. 2001- 2005
- I worked on the following native and endemic plants of Guam
  - *Zehneria guamensis* (Merrill) Fosberg (Cucurbitaceae)
  - *Erythrina variegata*
  - *Tinospora homosepala*
  - *Serianthes nelsonii*

**October 1995 - February 1997. Job title: Extension Assistant I**

**Employer:** University of Guam. College of Agriculture and Life Science, Agriculture & Natural Resources.

-Part time 20 hours a week.

I maintained experimental systems, collected data and performed daily maintenance on project equipment (30%). I assisted Extension Agents in the delivery of technical and educational programs, in water quality and agriculture (20%), at farm sites, in research areas (30%) and any general office duties (20%).