

EDUCATION:

Texas A&M University, College Station, Texas
Ph.D. To Be Conferred Fall 2014
Major: Horticulture
Dissertation: Identification and Purification of Bitter Melon (*Momordica charantia* L.) Molecules and their Biological Properties

Texas A&M University, College Station, Texas
MS May 2007
Major: Horticulture
Thesis: Citrus Bioactive Compounds Influencing Phase II Detoxifying Enzyme: Potential For Cancer Chemoprevention.

University of Texas Pan- American, Edinburg, Texas
BS December 2004
Major: Biology Minor: Chemistry/Psychology

Texas State Technical College, Harlingen, Texas
AAS August 2002
Major: Biomedical Engineering Technology

Mc Allen Memorial High School, Mc Allen, Texas
High School Degree 1998

EXPERIENCE:

RJJ Citrus L.L.C. *April 2011-Present*
Managing Partner
Description:

- High Density Solo & Red Lady Papaya Production in Edinburg TX

United States Department of Agriculture-ARS *January 2008 - Present*
Chemist
Description:

- Analyze levels of polyphenols, polyamines, amino acids, carbohydrates, and pigments by High Performance Liquid Chromatography and Colorimeter
- Design greenhouse and field trials to determine physiological reactions to various stress factors.
- Evaluate antioxidant and quality parameters of various crops (olives, pecans, citrus, sweet potato, bitter melon, peppers, olives, and squash.
- Compose and evaluate manuscripts in conjunction with supervisor.
- Present poster and oral presentation.
- Collaborate with neighborhood labs and institution on various projects.

Texas State Technical College, Harlingen *August 2007- May2013*
Adjunct Instructor
Description:

- Lecture Anatomy and Physiology I &II and Biology.
- Prepare and administer examinations.
- Coordinate and evaluate laboratory exercises, tests, quizzes and homework assignments.

Texas A&M University Kingsville-Citrus Center

May 2007-December 2007

Research Assistant

Description:

- Survey orchards, nurseries, and dooryards for the Asian citrus psyllid, citrus greening disease, and root-knot nematodes.
- Collect soil, plant, and insect specimens for examination.
- Maintain detailed records of activity and GPS locations.
- Process samples for further examination by USDA.

Texas A&M University, College Station

September 2005- May2007

Graduate Research Assistant

Description:

- Isolation and purification of limonoids found in citrus and evaluating their effects on human health.
- Carry seasonal study on enzymes that convert bitter limonoids to tasteless limonoids.
- Supercritical extraction of natural compound from citrus seeds.
- Evaluate antioxidant activity of grapefruit varieties.
- Direct field crews for harvesting for precision sample collection of treatment grapefruit plots.

University of Texas Pan American

February 2006- March 2006

Graduate Research Assistant

Description:

- Carry out animal studies to evaluate the chemopreventive properties of limonoids isolated from citrus by enzymatic assays
- Evaluate induction of GST and QR activities in Hep G2 and Hepa 1c1c7 by flavonoids.

Texas A&M University Kingsville

January 2005-August 2005

Research specialist

Description:

- Identify plant pathogenic fungi (*Phytophthora* spp. and *Ganoderma* spp.)
- Develop methods for the examination of soil for the nematode *Tylenchulus semipenetrans*
- Conduct field surveys, collect soil samples, produce field maps, DNA extraction, PCR, DNA purification, media preparation, transformation, cloning, and electrophoresis.

Texas A&M University, Citrus Center

June 2003-December2004

Research Assistant- Summer Student

Description:

- Carry out extraction, column separations, chromatography (HPLC, MPLC, Flash, size exclusion, ion affinity) anti-oxidant activity assays.
- Keep a detail log book of all procedures, and research on subject.

University of Texas Pan American

January 2004- December 2004

Research Student

Description:

- Isolate and identify mycological flora found on citrus leaves affected by "Sooty Mold" through microscopy.

University of Texas Pan American

June 2003- July 2003

Research Student

Description:

- Synthesis of organic compounds, NMR, and Column Chromatography.

Edinburg Regional Hospital

May 2002-August 2002

Jose Luis Perez, MS

Intern

Description:

- Perform safety test, perform periodic maintenance on equipment, troubleshoot, repair, and calibrate biomedical equipment.

Texas Laboratory and Medical Supplies

January 1999 – August 2002

Repair and Sales

Description:

- Repair and sell medical equipment and supplies.

MediLab

May 1998- March 2003

Co-Owner

- Description: Purchasing, auctioning, refurbishing, sales, and maintenance of used hospital equipment.

CURRENT RESEARCH INTEREST:

- Influence of cultivation methods on the levels of human health benefiting compounds
- Finding alternative methodologies in managing food safety issues
- Investigating way to manage plant pathogens threatening our food supply
- Relation between plant growth and metabolite changes in olives, potatoes and citrus
- Metabolic profiles of plants under insect attack
- Insect attractant and repellants in citrus (Chemical and Organic)
- Role of temperature changes in olive and citrus flowering
- Use of bitter melon and its components in developing natural technologies for food safety and elucidating its role in diabetes

COURSES TAUGHT:

At Texas State Technical College

Human Anatomy and Physiology (I&II)

Biology for Non-Science Majors (Online)

Harlingen, Texas

FALL 2007- Present

SPRING 2011-FALL2012

AWARDS:

- 2nd Place Subtropical Plant Science Society Poster Competition (2011)
- Rio Red License Plate Scholarship (Spring 2010, Fall 2010, Spring 2011)
- 2nd Place RGV Horticulture Society Meeting Poster Competition (2007)
- Louise Stokes Alliance for Minority Program Bridge to Doctorate Fellowship (Fall 2004)
- Dean's List (Fall 2000, Fall2005)
- USDA-HSI Scholarship (Summer 2003)
- Eddie Lucio Scholarship (Fall 1998)
- Texas Scholar (Summer 1998)

LICENSES AND CERTIFICATIONS:

- Private Pesticide Applicator License
- Heartsaver AED Certified
- EPA Pesticide Handler Training

PUBLICATIONS (Peer-Reviewed):

PUBLISHED OR SUBMITTED:

- 1) Nasir Malik, **Jose Perez**. Changes in free amino acid and polyamines levels in Satsuma leaves in response to Asian citrus psyllid infestation and water stress. (*Accepted- Insect Science*)

Jose Luis Perez, MS

- 2) Nasir Malik, **Jose L. Perez**, Madhurababu Kunta. Changes in free amino acid levels in sour orange leaves in response to cold stress and during recovery from cold stress. (*In Press- Journal of Food Agriculture & Environment*)
- 3) Nasir Malik, **Jose L. Perez**, Madhurababu Kunta. The effect of leaf presence on the rooting of stem cutting of bitter melon and on changes in polyamine levels. *Agricultural Sciences* (2012) 3:936-940.
- 4) Selin Sahin, Nasir Malik, **Jose L. Perez**, Jim Brockinton. Seasonal changes of individual phenolic compounds in leaves of twenty olive cultivars grown in Texas. *Journal of Agricultural Science and Technology* (2012) 2: 242-247.
- 5) Nasir S.A. Malik, **Jose L. Perez**, Joseph E. Patt, Larry M. Zibilske, Robert L. Mangan. Increased Infestation of Asian citrus psyllid in cold treated sour orange seedlings: its possible relation to biochemical changes in leaves. *Journal of Food, Agriculture & Environment* (2012) 10: 424-429.
- 6) Xiang-Bing Yang, Nasir S.A. Malik, **Jose L. Perez**, Tong-Xian Liu., Effects of potato psyllid (Hemiptera: Trioizidae) feeding impact on free amino acid composition in potato. *Insect Science* (2011) 18:663-670.
- 7) Nasir S.A. Malik, **Jose L. Perez**. The effect of high temperature interruptions during inductive period on the time and extent of flowering and metabolic response, in olives (*Olea europaea* L.). *Scientia Horticulturae* (2011) 129: 207-212.
- 8) Madhurababu Kunta, H. Miao, T. Shigaki, **Jose L. Perez**, Mani Skaria. Ganoderma Infecting Citrus in Texas is a Unique Taxon withing the *Ganoderma lucidum* complex: Evidence From the ITS Region. Texas. *Pest Technology* (2010) 4: 62-64.
- 9) Nasir S. A. Malik and **Jose L. Perez**. Quantitative Assessment of Different Phenolic Compounds in Texas Olive Oils Versus Foreign Oils. *Journal of Agriculture Science and Technology* (2010) 4:61-67.
- 10) **Jose L. Perez**, G.K. Jayaprakasha, Adriana Cadena, Elvia Martinez, Hassan Ahmad, Bhimanagouda S. Patil. In vivo Induction of Phase II Detoxifying Enzymes, Glutathion Transferatse and Quinone Reductase by Citrus Triterpenoids. *BMC Complimentary and Alternative Medicine* (2010) 10:51.
- 11) **Jose Luis Perez**, Annita Davelos-Baines, Victor J. French , Kenneth R. Summy, Christopher R. Little. Fungal Phylloshpere Communities are Altered by Indirect Interactions Among Trophic Levels. *Microbial Ecology* (2009) 57:766-774.
- 12) **Jose Luis Perez**, G.K. Jayaprakasha, Violeta Valdevia, Diana Munoz, Deepak V. Dandekar, Hassan Ahmad, Bhimanagouda S. Patil. Limonin Methoxylation Influences Induction of Glutathione S- Transferase and Quinone Reductase. *Journal of Agriculture and Food Chemistry* (2009)57:5279-5286.
- 13) Nasir S. A. Malik, **Jose L. Perez**, Leonardo Lombardini, Rosaria Cornacchia, Luis Cisneros-Zevallos, Joe Braford. Phenolic Compounds and Fatty Acid Composition of Organic and Conventional Grown Pecan Kernels. *Journal of the Science of Food and Agriculture* (2009) 89:2207-2213.
- 14) **Jose Luis Perez**, G.K. Jayaprakasha, Kil S. Yoo, Bhimanagouda S. Patil. Development of a method for the determination of D-glucaric acid in different varieties of grapefruit by high performance liquid chromatography and mass spectra. *Journal of Chromatography A* (2008) 1190: 394-397.

- 15) Xiang-Bing Yang, Nasir S.A. Malik, **Jose L. Perez**, Tong-Xian Liu. Effects of potato psyllid (*Bactericera cockerelli* Sulc) feeding on phenolic profile in potato. *Arthropod-Plant Interactions* (Submitted)
- 16) Nasir Malik, **Jose L. Perez**, Robert Mangan The effect of defoliation on new flush growth in citrus and the associated biochemical changes. (Submitted)

IN PREPARATION

Manuscripts

- 1) **Jose L. Perez**, GK Jayaprakasha, Bhimanagouda S. Patil. Differences in antioxidant capacities of grapefruit varieties grown in the Rio Grande Valley.
- 2) **Jose L. Perez**, Deepak Dandekar, Bhimanagouda S. Patil. Comparison of extraction methods of citrus limonoids from sour orange seeds.
- 3) Nasir Malik, **Jose Perez**. Effect of different post harvest storage conditions and drying methods on the polyphenolic contents and antioxidant activities in Bitter melon.
- 4) Nasir Malik, **Jose Perez**. Variation of nitrogen source influence pepper production.
- 5) Aditi Satpute, Mani Skaria, **Jose Luis Perez**, Nasir Malik. Changes in levels of different polyphenols in grapefruit leaves in response to *Elsinoë australis* infection
- 6) Aditi Satpute, Mani Skaria, **Jose Luis Perez**, Nasir Malik. Amino acid response in grapefruit leaves in response to *Elsinoë australis* infection.

OTHER PUBLICATIONS:

- 1) Welcome Back , Jose Luis Perez, *Citrus Center News Letter*, August 2009
- 2) Meet the New Generation of Scientists, *VFIC Partnership News*, August 2009
- 3) Organically Grown Pecans Contain Higher Levels of the Natural Antioxidant, Ellagic Acid. Nasir Malik, **Jose L. Perez**, Jim Brockington, Joe Bradford. *Organic Pecan / Fruit Orchard Field Day*, Lamkin, Texas. June 2008
- 4) Education efforts from Pre-K to Ph.D. www.vfic.tamu.edu 2008
- 5) Orange, grapefruit juice for breakfast builds bones in rats. www.physorg.com
- 6) Veggies to Love, *Better Health and Living*
- 7) Students Win Poster Prizes at Horticulture Society Meeting, *AgNRHS NOW*, Spring/ Summer 2007
- 8) Two Students Who Started at the Citrus Center Graduate From The Vegetable and Fruit Improvement Center, TexasA&M University., *Citrus Center News Letter*, June 2007
- 9) Texas Students Win Science Honors at National Meeting, *VFIC Partnership News*, Fall 2006

Jose Luis Perez, MS

- 10) Young Man's Journey from Hidalgo to College Station, Texas Via the Weslaco Citrus Center, *Citrus Center News Letter*, October 2005

POSTERS /ABSTRACTS SUBMITTED:

- 1) Screening of Phenolic Secondary Metabolites in Citrus Leaves by High Performance Liquid Chromatography for Possible Psyllid Management. **Jose Luis Perez**, Nasir Malik. Subtropical Plant Science Society, Weslaco, Texas, February 9, 2011.
- 2) Producing New Flush at Will in Citrus to Study ACP-Plant Interactions. Nasir S. A. Malik, Jim Brockington, **Jose L. Perez**, Robert L. Mangan, International Research conference on Huanglongbing, Orlando, Florida January 10-14, 2011.
- 3) Exploring Metabolic Profiles of Plant Tissue with Increased or Decreased Susceptibility Nasir S. A. Malik, **Jose L. Perez**, Jim Brockington, Robert L. Mangan, International Research conference on Huanglongbing, Orlando, Florida January 10-14, 2011.
- 4) Recovery and Stability of Oleuropein and Other Phenolic Compounds during extraction and Processing of olive leaves. Nasir Malik, **Jose Luis Perez**, Selin Sahin, Jim Brockington, The Texas International Olive Oil Festival, Elmhurst, Texas, March 27, 2010.
- 5) Evidence of Superior Quality of Texas Olive Oil, Nasir Malik, **Jose Luis Perez**, Jim Brockington, The Texas International Olive Oil Festival, Elmhurst, Texas, March 27, 2010.
- 6) Superior quality of Texas Olive Oil, **Jose Luis Perez** and Nasir Malik, Subtropical Plant Science Society, Weslaco, Texas, January 25, 2010.
- 7) Bioactive Compound in Organically Grown Pecans, **Jose Luis Perez**, Nasir Malik, Luis Cisneros, Leo Lombardini and Joe Bradford, ASHS Southern Plains Region Annual Meeting, Atlanta, Georgia, January 30-Feb 2 2009.
- 8) High Performance Liquid Chromatography Determination of Chemoprotective D-Glucaric Acid Levels in Grapefruit (*Citrus Paradisi* Macf.) Varieties, **Jose Luis Perez**, G.K. Jayaprakasha, and Bhimanagouda S. Patil, FAV HEALTH 2nd annual Symposium, Houston, Texas, October 9-13, 2007
- 9) Nomilin and its Deacetylated Form Induce Phase II Detoxifying Enzymes: Citrus Bioactive Compounds Combating Cancer, **Jose Luis Perez**, G.K. Jayaprakasha, Hassan Ahmad, and Bhimu S. Patil. ASHA Annual Conference in Scottsdale Arizona, July 16-19, 2007.
- 10) Structural Differences of Citrus Limonoids Influence Induction of Glutathione S- Transferase and Quinone Reductase, **Jose Luis Perez**, G.K. Jayaprakasha, Hassan Ahmad, and Bhimu S. Patil. Rio Grande Valley Horticulture Society Meeting in Edinburg, Texas- Jan 31, 2007
- 11) Cancer Prevention by Citrus Limonoids: Glutathione S-Transferase and Quinone Reductase Induction . **Jose L. Perez**, G.K. Jayaprakasha, Hassan Ahmad and Bhimu S. Patil. VFIC Biannual Conference in College Station, Texas- June 1-5, 2006
- 12) Determination of Glucaric Acid Content in Grapefruit. **Jose L. Perez**, G.K. Jayaprakasha, and Bhimu S. Patil. ASHS Annual Conference in New Orleans, Louisiana- July 27-30, 2006
- 13) Management of citrus nematode in Texas- Madhurababu Kunta , **Jose L. Perez**, Sandra Ozuna, and Mani Skaria. APS Annual Meeting in Austin, Texas –July 30-August 3, 2005

PRESENTED WORK:

- 1) Separation of cucurbitane-type triterpenoids from bitter melon using flash chromatography, American Chemical Society Meeting, Indianapolis, IN, September 9, 2013.

Jose Luis Perez, MS

- 2) Changing How the Hispanic Community Perceives ARS Science, Southern Plains Area Leadership Conference, Temple, Texas, April 22, 2013.
- 3) Plant “Biochemical Warfare”: Nature’s Arsenal Against Plant Pests and Human Diseases. Jose **L. Perez**. South Texas ACS Meeting, South Texas College, October 21, 2011.
- 4) Phytochemistry for Human Health, Plant Well-Being, and Knowledge Acquisition. **Jose L. Perez**, Citrus Center Seminar Series, Weslaco Texas, September 9, 2011.
- 5) Changes in Chemopreventive D-Glucaric Acid Levels of Grapefruit due to Variety and Season by HPLC. **Jose L. Perez**, Jayaprakasha G.K, and Bhimanagouda S. Patil-, 236th ACS National Meeting & Exposition, Philadelphia, Pennsylvania, August 17-21, 2008
- 6) Assessment of Phenolic Content and Radical Scavenging Capacity of Nine Cultivars of Grapefruits. Jayaprakasha G.K, **Jose L. Perez** , and Bhimanagouda S. Patil-, 236th ACS National Meeting & Exposition, Philadelphia, Pennsylvania, August 17-21, 2008
- 7) Structural Differences of Limonin Influence Induction of Glutathione S-Transferase and Quinone Reductase. **Jose L. Perez** , Jayaprakasha G.K., Deepak V. Dandekar, Hassan Ahmad, and Bhimanagouda S. Patil- FAV HEALTH 2007 2nd annual symposium in Houston, Texas- Oct. 9-13 2007
- 8) Life on the Phyllosphere: Honeydew Secretion, Insect Parasitism, and the Mycobiota of Citrus. Christopher R. Little, **Jose L. Perez**, Saulina Orizaga, and Kenneth R. Summy – Rio Grande Valley Horticulture Society meeting in Weslaco, Texas- Jan 2005

WORKSHOPS:

- 1) Genetic transformation-Universidad Autonoma de Nuevo Leon.
Use of *Agrobacterium tumefaciens*, Tissue culture, Electroporation, Biobalistics, Co-cultivation, Electrophoresis. Monterrey, Mexico, 2004.
- 2) NOPHNRCSE Training Conference 2005- Effective public speaking, Effective power point presentations, Effective media relations, Texas/Mexico Boarder coalition, and Hispanic Leadership Program, Lafayette, LA. 2005.

CONFERENCES and MEETINGS:

- 1) Subtropical Plant Science Society, January 25, 2010, Weslaco, Texas
- 2) Subtropical Plant Science Society, January 25, 2010, Weslaco, Texas.
- 3) HLB-ZebraChip International Meeting, November 16-18, 2009, Mc Allen, Texas.
- 4) ASHS Southern Plains Region Annual Meeting, January 30-Feb 2 2009, Atlanta, Georgia.
- 5) 236th ACS National Meeting & Exposition, August 17-21, 2008, Philadelphia, Pennsylvania
- 6) XII Symposium De Citricultura, June 12-15, 2008, CD Victoria, Tamps, Mexico
- 7) FAV HEALTH 2007 2nd Annual Symposium, Oct. 9-13, 2007, Houston, Texas
- 8) American Society Horticulture Sciences Annual Conference, July 16-19, 2007 Scottsdale, Arizona
- 9) 34 Annual Texas Human nutrition Conference, Feb 2, 2007, College Station, Texas

Jose Luis Perez, MS

- 10) 2006 National Allium Research Conference, Dec 6-8, 2006, College Station, Texas
- 11) American Society Horticulture Sciences Annual Conference, July 27-30 2006, New Orleans, Louisiana
- 12) Vegetable and Fruit Improvement Center Biannual Conference, June 1-5, 2007, College Station, Texas
- 13) American Phytopathological Society Annual Meeting. July30-August 3, 2005. Austin, Texas
- 14) National Organization of Professional Hispanic Natural Resources Conservation Service Employees Annual Training Conference. June 27-30, 2005. Lafayette, LA
- 15) Rio Grande Valley Horticulture Society Meeting. Jan 2005. Weslaco, Texas
- 16) I Congreso Internacional de Agrobiotecnología. Dec. 2004. Monterrey, Nuevo Leon, MEXICO

ACTIVITIES:

American Chemical Society – MEMBER

Gamma Sigma Delta- MEMBER

American Chemical Society Press- BOOK CHAPTER REVIEWER

Subtropical Plant Science Society- EDITORIAL BOARD MEMBER

Environmental Management Safety Committee- MEMBER

Pi Alpha Xi- Honorary Horticulture Society- MEMBER

American Society of Horticultural Sciences-MEMBER

MENTORING ACTIVITIES:

Selin Sahin, Visiting Graduate Student from Turkey

Xiang-Bing Yang, Graduate Student from China

Joshua Moreno, Undergraduate Student South Texas College

Michael Perez, High School Student, Science Fair Competition, Weslaco

COMMUNITY SERVICE, OUTREACH AND AWARENESS

Texas Plant and Soil Lab- Volunteer- soil, plant, and compost testing- July 2011-May2012

Careers In Science and Agriculture- Edcouch-Elsa ISD-May 10, 2011

Career Scene Investigator- La Joya ISD- March 10, 2011

USDA-ARS /TAMUK Citrus Center Ag Information Tour- June 25, 2010

Science Fair Judge-Rico Elementary, 2008-2010

Jose Luis Perez, MS

Chemistry and Ag Career Awareness- Lyford ISD Career fair May 27, 2009

Science Fair Judge- Weslaco ISD Fair, November 19, 2008

LANGUAGES

English- Fluent

Spanish- Fluent

French- Elementary

Italian- Novice

Tagalog- Novice

Jose Luis Perez, MS