

PRATIBHA SRIVASTAVA

1911 SW 34th St

Gainesville, FL 32608

☎: 850-339-0927 (C), 352-395-4740 (O)

E-mail: pratibha6@yahoo.com, Pratibha.srivastava@freshfromflorida.com

EDUCATION

2000 Ph. D. Bioscience, Pt. Ravishankar Shukla University, Raipur, India

1995 M. Sc. Bioscience, Pt. Ravishankar Shukla University, Raipur, India

1993 B. Sc. Plant Science, Pt. Ravishankar Shukla University, Raipur, India

PROFESSIONAL EXPERIENCE

2015 – Present Biological Scientist IV (SES), Molecular Diagnostics,
Division of Plant Industry, Florida Department of Agriculture and
Consumer Services, Gainesville, Florida.

Supervisor Dr. Leroy Whilby

Present Goal

Identification/confirmation of various plant pests (Diptera, Lepidoptera, Hemiptera, etc.), plant pathogens (bacteria, fungi and viruses) and nematodes (*Meloidogyne* spp.) of regulatory concerns using different molecular techniques.

Ongoing project:

- a) Enhancement of fruit fly immature stage identification and taxonomy.
- b) Development of knowledge and technologies to manage sweet potato whiteflies, *Bemisia tabaci* (Gennadius) 'B' (MEAM1) and 'Q' (MED) biotypes and their transmitted Bean Golden Yellow Mosaic Virus in beans in Florida.

2012-2013 Biological Scientist, Department of Soil Microbiology, Citrus
Research and Education Center, University of Florida/Institute of
Food and Agricultural Sciences, Lake Alfred, FL

Supervisor Dr. Jim Graham

2007-2012 Biological Scientist, Department of Plant Pathology, North Florida Research and Education Center, University of Florida/Institute of Food and Agricultural Sciences, Quincy, FL

Supervisor Dr. Jim Marois

Research projects:

- a) Etiology of Hardlock Cotton
- b) Searching for Partial Resistance to Soybean Rust through Studies on the Timeline of Resistance Components to *Phakopsora pachyrhizi* on Soybean and Alternative Hosts
- c) Screening of germplasm for resistance to Asian soybean rust
- d) Identification and management of fungal disease (*Botryosphaeria* spp.) in woody plants

2005 – 2007 Post Doctoral Associate, Agronomy Department, University of Florida, Gainesville

Supervisor Dr. Maria Gallo

Research projects:

- a) Sugarcane fall armyworm resistance and agronomic performance of transgenic sugarcane plants expressing an untranslated cry gene;
- b) Peanut micro propagation

2000 – 2005 Assistant Professor, G. H. Rasoni International University, Raipur, India

1997 – 2000 Senior Research Fellow, Department of Bio Sciences, Pt. Ravishankar Shukla University, Raipur, India

1995 – 1997 Junior Research Fellow, Department of Bio Sciences, Pt. Ravishankar Shukla University, Raipur, India

PROFESSIONAL AFFILIATION AND SERVICE

American Phytopathological Society

Indian Phytopathological Society

American Society of Agronomy

AD HOC JOURNAL REVIEWER

African Journal of Microbiology Research

American Journal of Experimental Agriculture

Current Microbiology

Journal of Hazardous Material,

Journal of Environmental Biology,

Proceedings of the National Academy of Sciences, India

PUBLICATIONS

Bruce D Sutton, Gary J Steck, Allen L. Norrbom, Eric Rodriguez, and **Pratibha Srivastava**, Norma Nolazco Alvarado, Fredy Colque, Erick Yábar Landa, Juan José Lagrava Sánchez, Elizabeth Quisberth, Emilio Arévalo Peñaranda, P. A. Rodriguez Clavijo, Jeniffer K. Alvarez-Baca, Tito Guevara Zapata, and Patricio Ponce (2015). Nuclear ribosomal internal transcribed spacer 1 (ITS1) variation in the *Anastrepha fraterculus* cryptic species complex (Diptera, Tephritidae) of the Andean region. **ZooKeys 540: 175-191.**

Carlye Baker, Tim Schubert, **Pratibha Srivastava**, Mathews Paret, and Binoy Babu (2014). *Rose Rosette* Disease (*Rose Rosette* Virus) Found in Florida. **Pest Alert.** Florida Department of Agriculture and Consumer Services, Division of Plant Industry.
http://www.freshfromflorida.com/content/download/35585/832827/rose_rosette_disease.pdf

Pratibha Srivastava, Peter C. Andersen, James J. Marois, David L. Wright, Mrittunjai Srivastava and Philip F. Harmon (2013). Effect of phenolic compounds on growth and ligninolytic enzyme production in *Botryosphaeria* isolates. **Crop Protection.**

43: 146-156.

Pratibha Srivastava, Heather M. Young, James J. Marois, David L. Wright, Nicholas S. Dufault and Hank Dankers (2012). First Report of Downy Mildew (*Hyaloperonospora camelinae*) on *Camelina* in Florida. **Plant Disease. 96 (11): 1692.**

H. M. Young, **P. Srivastava**, M. L. Paret, , H. Dankers, D. L. Wright, J. J Marois, N. S. Dufault (2012). First Report of *Sclerotinia* Stem Rot Caused by *Sclerotinia sclerotiorum* on *Brassica carinata* in Florida. **Plant Disease. 96 (10): 1581.**

Heather M. Young, Sheeja George, Dario F. Narváez, **Pratibha Srivastava**, Andrew C. Schuerger, David L. Wright, and James J. Marois (2012). Effect of Solar Radiation on Severity of Soybean Rust. **Phytopathology. 102 (8): 794-803.**
<http://dx.doi.org/10.1094/PHYTO-10-11-0294>

Pratibha Srivastava, Sheeja George, Jim J. Marois, David L. Wright and David R. Waker. (2011). Systemic protection against rust infection in Soybean by saccharin: effects on growth and development. **Crop Protection. 30 (6): 726-732.**

Pratibha Srivastava, D.J. Mailhot, B. Leite, J.J. Marois, D.L. Wright, and R.L. Nichols. (2010). *Fusarium verticillioides* associated with hardlock of cotton. **Current Microbiology. 61: 79–84.**

Mrittunjai Srivastava, G.A. G. Santos, **Pratibha Srivastava**, and L.Q. Ma. (2010). Comparison of arsenic accumulation in 18 fern species and four *Pteris vittata* accessions. **Bioresource Technology. 101: 2691-2699.**

Mrittunjai Srivastava, L.Q. Ma, B. Rathinasabapathi, and **Pratibha Srivastava**. (2009). Effects of selenium on arsenic uptake in arsenic hyperaccumulator *Pteris vittata* L. **Bioresource Technology. 100 (3): 1115-1121.**

Il-Ho Kang, **Pratibha Srivastava**, Peggy Ozias-Akins, and Maria Gallo. (2007). Temporal and Spatial expression of the Major Allergens in developing and

germinating Peanut seed. **Plant Physiology 144 (2): 836-845.**

Chenault, K. D., M. Gallo, P. Ozias-Akins and **Pratibha Srivastava**. (2007). Peanut. In: A Compendium of Transgenic Crop Plants. C. Kole and T.C. Hall (eds.), Blackwell Publishing. Volume 2 'Oilseeds & Oil Palm'.

Pratibha Srivastava, M.K. Verma and S.K. Mishra. (2004). Variation in protein, peroxidase isoenzymes and RAPD profiles of *Cannabis sativa* L. **In Recent Trends in Biotechnology**. MK Rai, NJ Chikhale, PA Wadegaonkar, PV Thakare, AP Ramteke (eds.), Scientific Publishers, Jodhpur (India).

Pratibha Srivastava, M.K. Verma and S.K. Mishra. (2000). Difference in weight of callus of male and female seedling explants of *Cannabis sativa*. **Bionature 21(1): 25-29.**

Pratibha Srivastava, S. Srivastava, M.K. Verma and S.K. Mishra. (1999). Karyological studies in root-tip cells of *Cannabis sativa* var *indica*. **Cytologia 66: 135-140.**

MANUSCRIPTS COMMUNICATED OR IN PREPARATION

Pratibha Srivastava, Ratna Karan, Cheryl Roberts, Gary Steck, Eric Rodrigues, Jason Stanly and Leroy Whilby (2017). DNA barcoding, species-specific PCR techniques for the identification of *Anastrepha striata* and *Anastrepha psidivora* larvae. **(Manuscript in preparation).**

Mrittunjai Srivastava, **Pratibha Srivastava**, Ratna Karan, Cheryl Roberts (2017). Molecular detection of *Apanteles opuntiarum* (Hymenoptera: Braconidae) parasitoids. **(Manuscript in preparation).**

Pratibha Srivastava, Daniel J. Mailhot, Enock A. Osekre, James J. Marois, and David L. Wright (2017). Effect of temperature on severity of Fusarium hardlock in cotton. **Cotton Science (under review).**

Pratibha Srivastava, L. Leandro, Jim J. Marois, David L. Wright, David R walker. (2017). Changes in susceptibility to soybean rust caused by *Phakopsora pachyrhizi* associated with plant age and leaf node position. (**Manuscript in preparation**).

Pratibha Srivastava, James J. Marois, Peter C. Andersen and David L. Wright (2017). Survey and virulence of *Botryosphaeria* spp. occurring in persimmon trees in North Florida (**Manuscript in preparation**)

Brian **Davis**, **Pratibha Srivastava**, Diane Rowland, James J. Marois, David L. Wright (2017). Effect of cattle grazing on peanut root dimensions in a Bahiagrass-based rotation (**Manuscript in preparation**)

PRESENTATION / POSTERS / ABSTRACTS IN NATIONAL AND INTERNATIONAL CONFERENCES

Pratibha Srivastava, Ayyamperumal Jeyaprakash, Gary Steck, Jason Stanley and Leroy Whilby (2017). Nuclear Mitochondrial Pseudogenes in *Anastrepha fraterculus* Complex. ICE, Oct 19-20, 2017, Paris, France

Pratibha Srivastava, Ayyamperumal Jeyaprakash and Gary Steck (2016). Elongation Factor 1 alpha Molecular Phylogenetic Analysis for *Anastrepha fraterculus* Complex. ICMBM, November 21-22 2016, Singapore, SG

Pratibha Srivastava and Gary Steck (2016). The *Anastrepha* project: fruit fly diagnostics and explorations in South America. FDACS Scientific Forum, May 4, 2016 Tallahassee, FL.

Pratibha Srivastava, Peter C. Andersen, James J. Marois, David L. Wright, Mrittunjai Srivastava, and Philip. F. Harmon (2012). Effect of phenolic compounds on reduction of growth and laccase of *Botryosphaeria* spp. APS meeting, August 4-8, 2012 Providence, RI.

Pratibha Srivastava, Heather M. Young, James J. Marois, David L. Wright, Nicholas S. Dufault, and Hank Dankers (2012). First Report of Downy Mildew (*Hyaloperonospora camelinae*) on *Camelina. sativa* in Florida. APS meeting, August 4-8, 2012 Providence, RI.

Pratibha Srivastava, Peter C. Andersen, James J. Marois, Russell F. Mizell III, and David L. Wright (2011). An *in vitro* evaluation of Chemical and Biological Agents for Control of *Botryosphaeria* species APS meeting, August 6-11, 2011 Hawaii.

P.C. Andersen, **P. Srivastava**, J.J. Marois R.F. Mizell III, and P.F. Harmon (2011). Chemical and Biological Control of *Botryosphaeria* spp on Oriental Persimmon (*Diospyros kaki*). ASHS meeting, September 25-28, 2011 Hawaii.

Pratibha Srivastava, Sheeja George, Jim J. Marois, David L. Wright and David R. Waker. (2010). Saccharin-induced systemic acquired resistance in Soybean. APS Annual meeting, Aug. 8-11, 2010, Charlotte, NC.

Pratibha Srivastava, Sheeja George, Jim J. Marois, David L. Wright and David R. Waker. (2010). Age-dependent variations in systemic defense responses of soybean plants towards soybean rust caused by *Phakopsora pachyrhizi*. MCBS conference, Aug. 8-11, 2010, Durham, NC.

Pratibha Srivastava, David R. Waker, Sheeja George, Jim J. Marois and David L. Wright. (2009). Evaluations of soybean germplasm accessions and F5 Recombinant Inbred Lines for resistance to *Phakopsora pachyrhizi*. National Soybean Rust Symposium, Dec. 9-11, 2009, New Orleans, Louisiana.

Pratibha Srivastava, Marois, J., Wright, D., Walker, D. and L. Leandro, and David R. Walker. (2009). Changes in susceptibility to soybean rust caused by *Phakopsora pachyrhizi* associated with plant age and leaf node position. National Soybean

Rust Symposium, Dec. 9-11, New Orleans, Louisiana.

David R. Walker, **Pratibha Srivastava**, Jim J. Marois and David L. Wright. (2009). Tolerance to soybean rust in cultivars from southeastern U.S. public soybean breeding programs. National Soybean Rust Symposium, Dec. 9-11, 2009, New Orleans, Louisiana.

Pratibha Srivastava, Jim Marois, David Wright, and Randall L. Nelson. (2009). Characterization of Variation in Soybean Germplasm Accession Reactions to Soybean Rust (*Phakopsora pachyrhizi*). World Soybean Research Conference VIII, Aug. 10-15, 2009, Beijing, China.

Pratibha Srivastava, Jim Marois, Leonor Leandro, David Wright and David R Walker. (2009). Effect of plant age and leaf maturity on the susceptibility to soybean rust caused by *Phakopsora pachyrhizi*. APS Annual meeting, Aug. 1-5, 2009, Portland Oregon.

Pratibha Srivastava, Daniel Mailhot, Jim Marois and David Wright. (2009). Influence of Temperature on Effectiveness of Hardlock Disease Management. American Society of Agronomy meeting October 5-8 2008, Houston, Texas.

Pratibha Srivastava, Daniel Mailhot, Breno Leite, Jim Marois and David Wright. (2008). Monitoring the infection process of GFP-expressing *Fusarium verticillioides* in hardlock cotton. Beltwide Cotton Conferences, Jan. 8-11, 2008, Nashville, TN.

J. J. Marois, D. J. Wright, D. J. Mailhot, **Pratibha Srivastava**, B. Leite and E. Osekre. (2008). *Fusarium* Hardlock on Cotton—Etiology and Control. Beltwide Cotton Conferences, Jan. 8-11, 2008, Nashville, TN

D. Mailhot, J. Marois, D. Wright, **Pratibha Srivastava** and E. Alves. (2007). *Fusarium*

Hardlock: a recently characterized disease of cotton. Emerging Pathogens
Institute Fall Research Retreat, Dec. 13, 2007, Gainesville, FL

Pratibha Srivastava, Breno Leite, Jim Marois, David Wright, Daniel Mailhot and E. Alves. (2007). Hardlock symptom types, fiber quality and molecular identification of *Fusarium* isolates. American Phytopathological Society meeting, July 28 - Aug 1, 2007, San Diego, CA.

D. Mailhot, B. Leite, J. Marois, D. Wright, **Pratibha Srivastava**. (2007). Growth, conidial germination and fumonisin production of *Fusarium verticillioides* on cottonseed agar, cotton flower agar and potato dextrose agar. American phytopathological Society meeting, July 28-Aug 1, 2007, San Diego CA

B. Leite, J. Marois, D. Wright, E. Osekre, D. Mailhot and **Pratibha Srivastava**. (2007). Naturally infected and inoculated cotton flowers: A *Fusarium* hardlock investigation. American Phytopathological Society meeting, July 28-Aug 1, 2007, San Diego, CA.

Pratibha Srivastava, M.K. Verma, and S.K. Mishra. (2001). Variation in protein, peroxidase isoenzymes and DNA profiles in a population of *Cannabis sativa*. In: Souvenir and Abstract: National seminar on Recent Advances in Biochemical Researches Related to Separation of Biomolecules. Department of Botany, Govt. Agrasen College, Bilha, Bilaspur (C.G.), November 9-10, 2001, pp: 14.

Pratibha Srivastava, M.K. Verma, and S.K. Mishra. (2000). RAPD analysis of a population of *Cannabis sativa*. In: Abstracts: National Conference on Recent Trends in Biotechnology. Organized by Department of Biotechnology Amravati University, February 3-5, 2000, Amravati pp: CP-25.

S.K. Mishra, M.K. Verma, and **Pratibha Srivastava**. (1998). Sex dependent internodal differences in *Cannabis sativa* L. In: Proc of 85th Indian Science Congress part IV. Form of Forensic Science. January 1-3, 1998, Hyderabad PP: 262.

M.K. Verma and **Pratibha Srivastava**. (1996). A biological review - sex determination in *Cannabis sativa* L. In: Souvenir: Scientific Meeting of Indian Academy of Forensic Sciences. Organized by National Institute of Criminology and Forensic Science, October 3-4, 1996, New Delhi pp: 26.

INVITED LECTURE

Pratibha Srivastava (2011). Fungal Biotechnology in 1st Annual International Symposium of Mycology (ISM), July 30-August 1, 2011 in Beijing, China.

Pratibha Srivastava (2010). Progress in Developing Soybean Resistant to Soybean Rust. Soybean Short Course, NFREC, Quincy, Fl. Aug. 19-22, 2010.

Pratibha Srivastava (2007). Use of Green Fluorescent Protein (GFP) Tagged *Fusarium* for Studying Hardlock Disease in Cotton. 2nd Asian Congress of Mycology and Plant Pathology", Dec. 19-22, 2007, Hyderabad, India.

Pratibha Srivastava (2007). Hardlock disease in cotton. Allahabad University, India. Dec 10, 2007.

GRANT PRAPOSALS

- a) CO-PI "Enhancement of fruit fly immature stage identification and taxonomy".2015-2016
- b) CO-PI "Development of More Rapid and Reliable Diagnostic Tools for All Life Stages of *Anastrepha* and Other Pest Fruit Flies". Farm Bill Grant 2017-2018 (\$100,000)
- c) CO-PI "Development of knowledge and technologies to manage sweet potato whiteflies,

Bemisia tabaci (Gennadius) 'B' (MEAM1) and 'Q' (MED) biotypes and their transmitted Bean Golden Yellow Mosaic Virus in beans in Florida". USDA-NIFA-SCRI Grant (2017-2020) (\$899,115)

NEWS

1. Pratibha Srivastava, P.C. Andersen, J.J. Marois R.F. Mizell III, and P.F. Harmon Chemical and Biological Control of *Botryosphaeria* species on Oriental Persimmon (*Diospyros kaki*) published in NFREC News Continuing Volume 12, Issue 9 September 20, 2010
2. Artificial sweetener could help soybean plants resist rust disease. University of Florida News. August 10, 2010 <http://news.ifas.ufl.edu/2010/08/10/artificial-sweetener-could-help-soybean-plants-resist-rust-disease-uf-researchers-say/>

TRAINING

1. Attended training programme on "Q Biotype Identification Technique " at USDA-ARS in Ft Pierce from August 6th to 8th, 2016
2. Attended training programme on "DNA Marker Technology " at Bio-Technology Department of Indira Gandhi Agriculture University, Raipur, Chattisgarh from September 19th to 26th, 2000

REFERENCES

Dr. Leroy Whilby

Bureau Chief - Entomology, Nematology and Plant Pathology
Division of Plant Industry
Florida Department of Agriculture and Consumer Services, Gainesville, FL

Dr. Jim Marois

Professor of Plant Pathology
North Florida Research and Education Center
155 Research Road, Quincy, FL 32351-5677
Phone: (850) 875-7120; Fax: (850) 875-7188
Email: jmarois@ufl.edu

Dr. Maria Gallo

Dean and Director
College of Tropical Agriculture and Human Resources
3050 Maile Way, Gilmore Hall 202, Honolulu, Hawai'i 96822-2231

Phone: (808) 956-8234; Fax: (808) 956-9105
Email: Gallom@ctahr.hawaii.edu

EXPERIENCE, PROFICIENCY IN TECHNIQUES AND INSTRUMENTS

- (a) Identification of various plant pests (Diptera, Lepidoptera, Hemiptera, etc.), plant pathogens (bacteria, fungi and viruses) and nematodes (*Meloidogyne* spp.) of regulatory concerns using different molecular techniques.
- (b) Diagnosis of plant problems in particular plant disease caused by viruses such as Tospovirus, Tobamovirus, Potexvirus, Potyvirus, Geminivirus etc using TEM, inclusions, host range inclusions, immunostrip, serology and PCR .
- (c) Experience in identification of Bacteria using Gas Chromatography.
- (d) Expertise in PCR, Cloning , Sequencing
- (e) Well versed with biochemical methods for the analyses of various enzymes, protein
- (f) Knowledge and working experience of Tissue Culture
- (g) Western Blot, southern blot
- (h) Transformation

Pratibha Srivastava

Gainesville, FL