

## JAIMIN S. PATEL

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### **EDUCATION**

Ph.D.	Plant Pathology	North Dakota State University, USA	2011
M.Sc.	Plant Pathology	Anand Agricultural University, India	2006
B.Sc.	Agriculture	Anand Agricultural University, India	2004

### **RESEARCH AND PROFESSIONAL EXPERIENCE**

- *Research Scientist*, Lighting Research Center, Rensselaer Polytechnic Institute, (Aug 2016 – present)
- *Seminar Coordinator*, Tropical Research and Education Center, University of Florida (Fall 2015 seminar series)
- *Associate Editor*, Plant Health Progress, USA (January 2015 – Present)
- *Postdoctoral Associate*, Department of Plant Pathology, Tropical Research and Education Center, University of Florida, Homestead, FL 33031 (October 2012 – Aug 2016)
- *Postdoctoral Associate*, Department of Plant Pathology, Mid-Florida Research and Education Center, University of Florida, Apopka, FL (September 2011 – September 2012)
- *Graduate Research Assistant*, North Dakota State University, Department of Plant Pathology, Fargo, ND (August 2007 – September 2011)

### **SYNERGISTIC ACTIVITIES**

- Technical reviewers of 5 plant pathology related peer-reviewed journals
- Reported first occurrence of two new plant diseases in the world and one in Florida
- Designed and conducted research on multiple plant pathogens infecting diverse cropping systems
- Collaborated with interdisciplinary research teams in professional career
- Demonstrated diagnostic techniques to identify *Phytophthora* species to nursery owners and stakeholders in Central Florida during field day in 2012
- Assisted to my supervisor in mentoring of undergraduate and graduate students
- Assisted my supervisor in organizing a BASIL WORKSHOP in South Florida
- Organized a total of 8 field days with my supervisor at Tropical Research and Education Center of University of Florida during 2012-present
- Received funding for 5 professional trainings from national and international agencies
- Delivered research findings to several stakeholders in meetings, conferences, and field days

### **PUBLICATION SUMMARY**

- 19 peer-reviewed publications, 9 extension publications, and 17 abstracts of scientific meetings

## **SELECTED PUBLICATIONS (last 4 years only)**

1. **Patel, J. S.**, Zhang, S. 2017. First report of Alternaria blight of pitahaya (*Hylocereus undatus*) caused by *Alternaria* sp. in South Florida of the United States. *Plant Disease* 101:1046.
2. **Patel, J. S.**, Zhang, S., McGrath, M. T. 2016. Red light increases suppression of downy mildew in basil by chemical and organic products. *Journal of Phytopathology* 164:1022-1029
3. **Patel, J. S.**, Costa de Novaes, M. I., Zhang, S. 2015. Evaluation of a new compound oxathiapiprolin for control of downy mildew in basil. *Plant Health Progress* 16:165-172.
4. Ali G. S., El-Sayed, A., **Patel, J. S.**, Ali, M., Brennan, M, Norman, D. J. 2015. Ex vivo application of secreted metabolites produced by soil-inhabiting *Bacillus* spp. efficiently control foliar diseases caused by *Alternaria* spp. *Applied and Environmental Microbiology* 82:478-190.
5. **Patel, J. S.**, Brennan, M. S., Norman, D. J., Ali G. S. 2015. Characterization of *Phytophthora* spp. isolated from ornamental plants in Florida. *Plant Disease* <http://dx.doi.org/10.1094/PDIS-05-15-0598-RE>
6. Liu, Z., Li, Y. C., Zhang, S., Fu, Y., Fan, X., **Patel, J. S.**, Zhang, M. 2015. Characterization of phosphate-solubilizing bacteria isolated from calcareous soils. *Applied Soil Ecology* 96:217-224.
7. **Patel, J. S.**, Brennan, M. S., Khan, A., Ali G. S. 2015. Implementation of loop-mediated isothermal amplification methods in lateral flow devices for the detection of *Rhizoctonia solani*. *Canadian Journal of Plant Pathology*. 37:118-129.
8. Fu, Y., **Patel, J. S.**, Zhang, S. 2015. First report of anthracnose of common thyme (*Thymus vulgaris* L.) caused by *Colletotrichum destructivum* in Florida. *Plant Disease* 99: 1184.
9. **Patel, J. S.**, Zhang, S., Costa de Novaes, M. I. 2014. Effect of plant age and acibenzolar-S-methyl on development of downy mildew of basil. *HortScience*. 49:1392-1396.
10. Mallik, I., Arabiat, S., Pasche, J. S., Bolton, M. D., **Patel, J. S.**, Gudmestad, N. C. 2014. Molecular characterization and detection of mutations associated with resistance to succinate dehydrogenase inhibiting (SDHI) fungicides in *Alternaria solani*. *Phytopathology*. 104:40-49
11. **Patel, J. S.**, Costa de Novaes, M. I., Zhang, S. 2014. First report of *Colletotrichum higginsianum* causing anthracnose of arugula (*Eruca sativa*) in Florida. *Plant Disease*. 98:1269
12. **Patel, J. S.**, Norman, D., Brennan, M., Ali, G. S. 2013. First report of elm canker caused by *Pestalotiopsis mangiferae* in the United States. *Plant Disease*. 97:426
13. **Patel, J. S.**, Mamidi, S., Bonnman, J. M., Adhikari, T. B. 2013. Identification of QTL in spring wheat associated with resistance to a novel isolate of *Pyrenophora tritici-repentis*. *Crop Science*. 53:842-852
14. **Patel, J. S.**, Meinhardt, S., Gudmestad, N. C., Adhikari, T. B. 2012. Pyraclostrobin sensitivity of baseline and exposed isolates of *Pyrenophora tritici-repentis*. *Crop Protection*. 34: 37-41

## **ABSTRACT/POSTER PRESENTATIONS IN NATIONAL AND INTERNATIONAL CONFERENCES (Last 4 years only)**

1. **Patel, J. S.**, Radetsky, L., Plummer, T., Bierman, A., Gadoury, D., and Rea, M. S. 2017. Pre-inoculation treatment of basil plants with ultraviolet-B radiation induces resistance to downy mildew. *Phytopathology* (Abstr.). In Press.
2. Bierman, A., Radetsky, L., **Patel, J. S.**, Figueiro, M., Plummer, T., Rea, M., Gadoury, D. M., Suthaparan, A., Stensvand, A., Peres, N., and Onofre, R. 2017. Practical and accurate measurement of ultraviolet radiation for research and application in plant pathosystems. *Phytopathology* (Abstr.). In Press.
3. **Patel, J. S.** Zhang, S. Costa de Novaes, M. I. 2015. Factors affecting sporangial germination of *Peronospora belbahrii*, a causal organism of basil downy mildew. Annual Phytopathological Society Meeting, Pasadena, CA. Aug 1-5, 2105. (Abstr.) *Phytopathology* 105:S4.108
4. **Patel, J. S.**, Zhang, S. 2015. Assessment of biological and chemical fungicides for control of downy mildew of basil. American Phytopathological Society Southern Division Meeting, Atlanta, GA. Feb 1-2, 2015. (Abstr.) *Phytopathology*. 105: S2.8
5. **Patel, J. S.**, Zhang, S. 2015. Evaluation of fungicides for managing downy mildew of basil. Basil workshop, New Brunswick, NJ Feb 5-6, 2015.
6. **Patel, J. S.**, Zhang, S., Costa de Novaes, M. I. 2014. Oxathiapiprolin: A new chemistry for control of downy mildew of basil. Annual American Phytopathological Society meeting. Aug 9-13. (Abstr.) *Phytopathology*. 104:S3.90
7. **Patel, J. S.**, Zhang, S., Mersha, Z. 2013. Effect of plant age on downy mildew of basil. Annual American Phytopathological Society meeting, Austin, TX. Aug 10-14, 2013. (Abstr.) *Phytopathology* 103:S2.111
8. **Patel, J. S.**, Costa de Novaes, M. I. Zhang, S. 2013. Management of downy mildew of basil by seed treatment with oxathiapiprolin. Annual American Phytopathological Society meeting, Austin, TX. Aug 10-14, 2013. (Abstr.) *Phytopathology*. 103:S2.111
9. Zhang, S., Mersha, Z. Raid, R. N., Fu, Y., Liao, X. and **Patel, J. S.** 2013. Downy mildew of basil in US: What have we learned so far? *The 10th International Congress of Plant Pathology*, Beijing, China. August 25-30. (Abstr.) *Acta Phytopathologica Sinica*. 43:263
10. Mo, X., Fu, Y., **Patel, J. S.**, Zhang, S. 2013. Surfactin and biofilm production by *Bacillus subtilis* IN937b, a biological control agent for suppressing *Phytophthora* blight on squash. Austin, TX. Aug 10-14, 2013. (Abstr.) *Phytopathology*. 103 : S2.98
11. **Patel, J. S.**, Khan A., Brennan, M. S., and Ali, G. S. 2012. Development of loop-mediated isothermal amplification methods for detection of *Rhizoctonia solani*. Annual Phytopathological Society Meeting, Providence, RI, Aug 4-8, 2012. (Abstr.) *Phytopathology* 102:S4.91

## **EXTENSION PUBLICATIONS**

1. **Patel, J. S.**, Zhang, S. 2017. Greenhouse evaluation of Pyriofenone for control of powdery mildew in cucumber, 2016. *PDMR* No. 11:V105

2. **Patel, J. S.**, Zhang, S., Gell, I. 2016. Field evaluation of bactericides for management of bacterial spot of tomato, 2015-2016. *PDMR* No. 10: V116
3. Zhang, S., **Patel, J. S.**, Mersha, Z., Roberts, P. D., and Raid, R. 2016. Downy mildew of basil in South Florida. Electronic Data Information System (EDIS) of University of Florida. PP271.
4. Zhang, S., **Patel, J. S.**, Mersha, Z., Roberts, P. D., and Raid, R. 2016. Downy mildew of basil in South Florida. Electronic Data Information System (EDIS) of University of Florida. PP271. <https://edis.ifas.ufl.edu/pdf/PP/PP27100.pdf>
5. **Patel, J. S.**, Zhang, S., Fu, Y. 2015. Evaluation of Zorvec as a seed treatment or foliar spray for management of downy mildew of basil, 2013. *PDMR* No. 9: OT009
6. **Patel, J. S.**, Zhang, S., Barbier, M., Paret, M. 2014. Evaluation of biopesticides and difenconazole for management of downy mildew of basil, 2013. *PDMR* No. 8:V207
7. Costa de Novaes, M. I., **Patel, J. S.**, Zhang, S. 2014. Evaluation of oxathiapiprolin (QGU42) at different rates for management of downy mildew of basil under greenhouse conditions. *PDMR* No. 8:V208
8. **Patel, J. S.**, Costa de Novaes, M. I., Fu, Y., Zhang, S. 2013. Evaluation of chemicals and biologicals for control of bacterial spot of tomato under greenhouse conditions, 2013. *PDMR* No. 7:V148
9. **Patel, J. S.**, Costa de Novaes, M. I., Barbier, M., Zhang, S. 2013. Evaluation of biopesticides for managing downy mildew of basil, 2013. *PDMR* No. 7:V147