

JAIMIN PATEL

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EDUCATION

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

RESEARCH AND PROFESSIONAL EXPERIENCE

- *Senior Editor*, Plant Health Progress, USA (January 2018 – Present)
- *Research Scientist*, Lighting Research Center, Rensselaer Polytechnic Institute (August 2016 – present)
- *Associate Editor*, Plant Health Progress, USA (January 2015 – December 2017)
- *Postdoctoral Associate*, Department of Plant Pathology, Tropical Research and Education Center, University of Florida, Homestead, FL 33031 (October 2012 – August 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 58102 (August 2007 – September 2011)

AWARDS/RECOGNITION

- APS Office of International Programs Global Experience Program Award 2016.
- Oomycetes Molecular Genetics Workshops Travel Award 2012
- Nominated and selected as a member of the Gamma Sigma Delta - The Honor Society of Agriculture in the United States - 2010

SYNERGISTIC ACTIVITIES

- 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
- Technical reviewers of 5 plant pathology related peer-reviewed journals
- 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
- Delivered research findings to several stakeholders in meetings, conferences, and field days

REFEREED PUBLICATIONS

1. **Patel, J. S.**, Radetsky, L., Rea, M. S. The value of red light at night for increasing basil yield. *Canadian Journal of Plant Science*. (Accepted) <https://doi.org/10.1139/CJPS-2017-0343>
2. **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.
3. **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
4. **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.
5. 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.
6. **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>
7. 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.
8. **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.
9. 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.
10. **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.
11. 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
12. **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
13. **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
14. **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

15. **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
16. **Patel, J. S.**, Meinhardt, S. W., Sierotzki, H., Stammer, G., Gudmestad, N. C., and Adhikari, T. B. 2011. A two-step molecular detection method for *Pyrenophora tritici-repentis* isolates insensitive to QoI fungicides. *Plant Disease*. 95:1558-1564
17. Gurung, S., Bonman, J. M., Ali, S., **Patel, J.**, Myrfield, M., Mergoum, M., and Adhikari, T. B. 2009. New and diverse sources of multiple disease resistance in wheat. *Crop Science*. 49:1655-1666
18. Adhikari, T. B., Bai, J., Meinhardt, S. W., Gurung, S., Myrfield, M., **Patel, J.**, Ali, S., Gudmestad, N. C. and Rasmussen, J. B. 2009. *Tsn1*-Mediated host responses to ToxA from *Pyrenophora tritici-repentis*. *Molecular Plant-Microbe Interaction*. 22:1056-1068
19. **Patel, J. S.** and Patel, S. J. 2008. Influence of foliar sprays of fungicides, phytoextracts and bioagent on powdery mildew and yield of mustard. *Karnataka Journal of Agricultural Science*. 21:462-463
20. **Patel, J. S.** and Patel, S. J. 2008. Seed health status of mustard seeds as influenced by foliar sprays against powdery mildew disease. *Karnataka Journal of Agricultural Science*. 21:464-465

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. **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
5. **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
6. 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
7. **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
8. **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

ABSTRACT/POSTER PRESENTATIONS IN NATIONAL AND INTERNATIONAL CONFERENCES

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. (Abstr.) *Phytopathology* 107: S5.52.
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. (Abstr.) *Phytopathology* 107: S5.48.
3. **Patel, J.**, Zhang, S. 2016. Effect of red light on morphology of *Peronospora belbahrii* sporangia. 2016 Annual American Phytopathological Society meeting. Tampa, FL. July 30 – Aug 3 (abstr.) *Phytopathology* 106:S4.7
4. **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 American Phytopathological Society Meeting, Pasadena, CA. Aug 1-5, 2105. (Abstr.) *Phytopathology* 105:S4.108
5. **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
6. **Patel, J. S.**, Zhang, S. 2015. Evaluation of fungicides for managing downy mildew of basil. Basil workshop, New Brunswick, NJ Feb 5-6, 2015.
7. **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
8. **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
9. **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
10. 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
11. 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
12. **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

13. **Patel, J. S.**, Brennan, M. S., Norman, D., and Ali, G. S. 2012. Characterization of *Phytophthora* species collected from ornamental plants in Florida. (Abstr.) *Oomycetes Molecular Genetics Network Annual Meeting 2012*, Nanjing, China, May 26-28, 2012.
14. **Patel, J. S.**, and Adhikari, T B. 2009. *Pyrenophora tritici-repentis* isolates cause necrosis in a wheat cultivar Glenlea without the *ToxA* gene. Annual Phytopathological Society Meeting, Portland, OR, Aug 1-5, 2009. *Phytopathology*. 99:S101.
15. **Patel, J. S.**, and Adhikari, T. B. 2009. Changes in expression patterns of pathogenesis-related genes in wheat after treatment with chemical inducers against *Pyrenophora tritici-repentis*. Annual Phytopathological Society Meeting, Portland, OR, Aug 1-5, 2009. *Phytopathology*. 99:S101.
16. Adhikari, T., Bai, J., Meinhardt, S. W., Gurung, S., **Patel, J.**, Ali, S., Gudmested, N. C. and Rasmussen, J. B. 2009. Wheat Transcriptional changes in response to ToxA from *Pyrenophora tritici-repentis*: In Annual Meeting, Winnipeg, Manitoba, 2009. *Can. J. Pl. Pathol.* 31: 475
17. Adhikari, T. Bai, J., M. Myrfield, Meinhardt, S. W., Gurung, S., **Patel, J.** Ali, S., Gudmestad, N. C. and Rasmussen, J. B. 2009. Tsn1-mediated host response to Ptr ToxA. Annual Phytopathological Society Meeting, Portland, OR, Aug 1-5, 2009. *Phytopathology*. 99:S2.
18. Gurung, S., Bonman, J. M., Ali, S., **Patel, J. S.**, Myrfield, M., Mergoum, M., Singh, P. K., Adhikari, T. B. 2009. Broad-spectrum disease resistance in winter and spring wheat. Annual Phytopathological Society Meeting, Portland, OR, Aug 1-5, 2009. *Phytopathology*. 99:S49.