

Curriculum Vitae

Emily E. Wright

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Ames, Iowa
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1. Education

MSc degree, May 2014. Plant Breeding and Genetics. Department of Crop and Soil Environmental Sciences. Virginia Polytechnic Institute and State University – Blacksburg, VA
(*Major Professor Carl A. Griffey*)

Master thesis title: “Identification of Native FHB Resistance QTL in the SRW Wheat Cultivar Jamestown”

BSc degree, December 2010. **Major:** Biology. Minor: Chemistry and Physics. Department of Biological Science. Florida State University – Tallahassee, FL

Associate of Arts, April 2008. General Transfer. Tallahassee Community College - Tallahassee, FL

Research of interest: plant breeding/cultivar development and genetics, agronomy, plant pathology

2. Previous employment

October 2016 - present

Research Associate II, Iowa State University, Ames, Iowa

May 2016- October 2016

Research Intern, Iowa Soybean Association, Ankeny, Iowa

May 2014- April 2016

Research Assistant, Small Grains Breeding Program, Virginia Polytechnic Institute and State University – Blacksburg, Virginia

January 2011- May 2014

Graduate Research Assistant, Small Grains Breeding Program, Virginia Polytechnic Institute and State University – Blacksburg, Virginia

April 2010-December 2010

Undergraduate Research Assistant, McGinnis Corn Genetics Lab, Florida State University – Tallahassee, FL

April 2007 – December 2010

Research Assistant, Small Grains and Forage Breeding Programs, University of Florida Extension Station – Quincy, Florida

April 2006 – April 2007

Research Assistant, Environmental Horticulture Program, University of Florida Extension Station – Quincy, Florida

April 2003 – April 2006

Research Assistant, Agronomy and Plant Pathology Programs, University of Florida Extension Station – Quincy, Florida

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3. Skills and Experience in:

1. Managing 2-4 workers in: field data collection, seed processing, wet lab procedures, harvesting, biomass partitioning
 2. Procedures: DNA extractions (kit and hand-made solutions), PCR, ABI, and SNP protocols, combustion analysis on an Elementar MicroCube
 3. Computer work: data entry, file organization, seed inventory, map preparation, data analysis, poster prep.
 4. Writing: analysis and summary of lab and field experiments, editing and
 5. Field work: planting, harvesting, pollinating, plot care, disease scoring in small grains, corn and soybean, de-tasseling, transplanting, root extractions
 6. Equipment experience: tractor experience, plot combine, corn sheller, cotton mill, moisture and yield reader (Dickey-John), seed counter, Lysimeter, LAI, chlorophyll reader, etc.
 7. Planting prep: soil/media mixing, potting, pruning, replicating rhizomes, fertilizing
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4. Awards

Tallahassee Community College President's List	Spring 2005 and 2007
Tallahassee Community College Dean's List	Fall 2004-2007
	Spring 2006 and 2008
Florida State Universities Dean's List	Fall 2008-2010
	Spring 2009 and 2010
Florida Bright Futures Scholarship	July 2006-Dec. 2010
Francenia E. Fisher Scholarship Award - FSU	Fall 2010
Graduated with BSc in Biological Science - Magna Cum Laude	Fall 2010
Horace E. and Elizabeth F. Alphin Scholarship - VPI	Fall 2011

5. Research Grants

1. 2011-2013. Characterization and Mapping Native Scab Resistance in VT Wheat Varieties. Carl A. Griffey, Subas Malla, and Emily Wright
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6. Professional Memberships

1. American Society of Agronomy
 2. Crop Science Society of America
 3. Soil Science of America
 4. National Association of Plant Breeders
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7. Refereed Journal Articles Published:

1. Ordóñez, R.A., Castellano, M.J., Hatfield, J.L., Licht, M.A., **Wright, E.**, Archontoulis, S.V., (2018). Correcting sampling position errors in maize and soybean root mass and length estimations. *Under revision in European Journal of Agronomy.*
2. Ordóñez, R.A., Castellano, M.J., Hatfield, J.L., Helmers, M.J., Licht, M.A., Liebman, M., Dietzel, R., Martinez-Feria, R., Iqbal, J., Puntel, L.A., Córdova, S.C., Togliatti, K., **Wright, E.**, Archontoulis, S.V., (2017). Maize and soybean root front velocity and maximum depth in the Midwest USA. *Field Crop Research*, 215:122–131.

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3. Carpenter, N.R., C.A. Griffey, S. Malla, M. Barnett, D. Marshall, M.O. Fountain, J.P. Murphy, E. Milus, J. Johnson, J. Buck, S. Chao, G.L. Brown-Guedira and **E. Wright**. 2017. Identification of Quantitative Resistance to *Puccinia striiformis* and *Puccinia triticina* in the Soft Red Winter Wheat Cultivar 'Jamestown'. *Crop Sci.* 57:2991-3001. doi:10.2135/cropsci2017.03.0143

7.1 Manuscripts in preparation

1. **Wright, E.E.**, C.A. Griffey, S. Malla, D. Van Sanford, S. Harrison, J.P. Murphy, J. Costa, E. Milus, J. Johnson, A. McKendry, D. Schmale III, A. Clark, N. McMaster, S. Chao, G. Brown-Guedira, H. Wanjugi, M. Grosz, and N. Carpenter. 2018. Identification of QTL for FHB resistance in SRW wheat – Jamestown.

7.2 Extension publications

1. Archontoulis, S.V., Licht, M., Castellano, M., Ordóñez, R.A., Iqbal, J., Martinez-Feria, R., Edmonds, P., **Wright, E.**, Baum, M., Kessler, A., Huber, I., Sassman, A., Liebman, M., Helmers, M. 2017. How fast and deep do corn roots grow in Iowa? *Integrative Crop Management*. Iowa State University, Extension and outreach.
2. Licht, M., **Wright, E.**, Baum, M., Upah, N. 2017. Corn planting decisions: What's changed and what's the same? In: *Proceedings of the 28th annual Integrated Crop Management Conference*, Iowa State University, Ames, IA. 29-30 Nov 2017.

9. Non-Refereed Technical Publications, Proceedings and Professional Presentations:

1. Wright, E.E., Licht, M.A. 2017. Analysis of Maize Row Spacing and Plant Population Trials in Iowa. *In: ASA, CSSA, and SSSA 2017 International Annual Meeting Abstracts*; Oct. 22-25; Tampa, FL.
2. Ordóñez, R.A., Castellano M.J., Wright E.E., Archontoulis SV, (2017). Ecophysiological roots traits asses of maize and soybean under contrasting field conditions in Iowa. *ASA meeting* October 21–25, Tampa, FL. (presented by Ordóñez)
3. Carpenter, N.R., C.A. Griffey, S. Malla, E. Wright, M. Barnett, J.P. Murphy, A.M.H Ibrahim, D. Marshall, M.O. Fountain, E. Milus, J. Johnson, J. Buck, S. Chao, and G.L. Brown-Guedira. 2016. Identification of quantitative resistance to *Puccinia striiformis* and *Puccinia triticina* in the soft red winter wheat cultivar Jamestown. *NAPB Conference*. Raleigh, NC, August 15-18, 2016. (presented by Carpenter)
4. Carpenter, N.R., C. Griffey, S. Malla, M. Barnett, J. Murphy, A. Ibrahim, D. Marshall, M. Fountain, E. Milus, J. Johnson, J. Buck, S. Chao, G. Brown-Guedira, and E. Wright. 2015. Identification and Mapping of Resistance QTL for *P. Triticina*, *P. Striiformis*, *Mayetiola destructor* and *Lr18* in Soft Red Winter Wheat. pp 171. *In: K. Smith (Ed.), ASA-CSSA-SSSA Annual Meeting*, Minneapolis, MN, 13-18 Nov. (presented by Carpenter)
5. Wright, E.E., C.A. Griffey, S. Malla, D. Van Sanford, S. Harrison, J.P. Murphy, J. Costa, E. Milus, J. Johnson, A. McKendry, D. Schmale III, A. Clark, N. McMaster, S. Chao, G. Brown-Guedira, H. Wanjugi, M. Grosz, and N. Carpenter. 2015. Identification of QTL for FHB resistance in SRW

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- wheat – Jamestown. *In: Proceedings of the 2015 Eastern Wheat and Southern Small Grain Workers Conference, Richmond, VA, 28-30 Apr 2015.*
6. Griffey, C. A., W. E. Thomason, J. E. Seago, R. M. Pitman, N.R. Carpenter, W. S. Brooks, S. Malla, E.E. Wright, L. Liu, E. Hokanson, M. E. Vaughn, D. Dunaway, C. Barrack, M. Beahm, and R. Markham. 2015. Wheat Production and research in the Commonwealth of Virginia in 2014. Annual Wheat Newsletter 61 (In Press). <http://wheat.pw.usda.gov/ggpages/awn/>.
 7. Wright, E., C. Griffey, S. Malla, D. Van Sanford, S. Harrison, J. P. Murphy, J. Costa, E. Milus, J. Johnson, A. McKendry, D. Schmale, III, A. Clark, N. McMaster, S. Chao, and G. Brown-Guedira. 2014. Identification of new QTL for native resistance to FHB in SRW Wheat. Pp. 101. *In: S. Canty, A. Clark, N. Turcott and D. Van Sanford (Eds.), Proceedings of the 2014 National Fusarium Head Blight Forum; Dec. 7- 9; St. Louis, MO.*
 8. Griffey, C. A., W. E. Thomason, J. E. Seago, R. M. Pitman, W. S. Brooks, S. Malla, E. Wright, L. Liu, E. Hokanson, M. E. Vaughn, D. Dunaway, C. Barrack, M. Beahm, and R. Markham. 2014. Wheat Production and research in the Commonwealth of Virginia in 2013. Annual Wheat Newsletter 60 (In Press). <http://wheat.pw.usda.gov/ggpages/awn/>.
 9. Wright, E.E., C.A. Griffey, S. Malla, D. Van Sanford, S. Harrison, J. P. Murphy, J. Costa, G. Milus, J. Johnson, A. McKendry, D. Schmale III, A. Clark, and N. McMaster. 2013. Nested association mapping of FHB resistance in SRW wheat cultivar Jamestown. *In: Proceedings of the 2013 Plant and Animal Genome Conference XXI. Jan 11-16. San Diego, CA.*
 10. Wright, E.E., C.A. Griffey, S. Malla, D. Van Sanford, S. Harrison, J.P. Murphy, J. Costa, G. Milus, J. Johnson, A. McKendry, D. Schmale, III, A. Clark, and N. McMaster. 2013. Characterization of FHB resistance in SRW wheat Roane and Jamestown NAM populations. Pp. 45. *In: S. Canty, A. Clark, Y. Salat, and D. Van Sanford (Eds.), Proceedings of 2013 National Fusarium Head Blight Forum; Dec. 3-5; Milwaukee, WI.*
 11. Wright, E.E., C. Griffey, S. Malla, D. Van Sanford, S. Harrison, J.P. Murphy, J. Costa, G. Milus, J. Johnson, A. McKendry, D. Schmale, III, A. Clark, and N. McMaster. 2013. Mapping FHB resistance QTL in Jamestown x LA97113UC-124 RIL population. *In: Proceedings of the 2013 Southern Small Grain and Eastern Wheat Workers Conference. Mar 21-22. Wooster, OH.*
 12. Wright, E.E., C.A. Griffey, S. Malla, S. Harrison, J. Johnson, G. Milus, J.P. Murphy, J. Costa, D. Van Sanford, A. McKendry, and D. Schmale. 2012. Mapping Fusarium Head Blight Resistance QTL in the Soft Wheat Cultivar Jamestown. *In: ASA, CSSA, and SSSA 2012 International Annual Meeting Abstracts; Oct. 21-24; Cincinnati, OH.*
 13. Wright, E.E., C.A. Griffey, S. Malla, S. Harrison, G. Milus, J. Johnson, D. Schmale III, and N. McMaster. 2012. Mapping Fusarium Head Blight resistance QTL in the soft red winter wheat cultivar Jamestown. Pp. 56. *In: Sponsors, schedule, and abstracts for the 2012 joint meeting of the National Association of Plant Breeders (NAPB) and the Plant Breeding Coordinating Committee (PBCC); Aug. 6-8; Indianapolis, IN.*
 14. Wright, E.E., C.A. Griffey, S. Malla, D. Van Sanford, S. Harrison, J.P. Murphy, J. Costa, G. Milus, J. Johnson, A. McKendry, D. Schmale III, A. Clark, and N. McMaster. 2012. Mapping of FHB resistance in SRW wheat cultivar Jamestown. Pp. 108. *In: S. Canty, A. Clark, A. Anderson-Scully, and D. Van Sanford (Eds.), Proceedings of the 2012 National Fusarium Head Blight Forum; Dec. 4-6; Orlando, FL.*
 15. Wright, E.E., C.A. Griffey, S. Malla, D. Van Sanford, S. Harrison, J.P. Murphy, J. Costa, G. Milus, J. Johnson, A. McKendry, D. Schmale III and N. McMaster. 2011. Family Based Mapping of Fusarium Head Blight Resistance in Soft Wheat Cultivars Roane and Jamestown. Pp. 60. *In: S. Canty, A. Clark, A. Anderson-Scully, D. Ellis and D. Van Sanford (Eds.), Proceedings of the 2011 National Fusarium Head Blight Forum; Dec. 4-6; St. Louis, MO.*
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10. Conferences (oral presentations)

1. Wright, E., C. Griffey, S. Malla, D. Van Sanford, S. Harrison, J. P. Murphy, J. Costa, E. Milus, J. Johnson, A. McKendry, D. Schmale, III, A. Clark, N. McMaster, S. Chao, and G. Brown-Guedira. 2014. Identification of new QTL for native resistance to FHB in SRW Wheat. Pp. 101. In: S. Canty, A. Clark, N. Turcott and D. Van Sanford (Eds.), Proceedings of the 2014 National Fusarium Head Blight Forum; Dec. 7- 9; Saint Louis, MO.
 2. Wright, E.E., C. Griffey, S. Malla, D. Van Sanford, S. Harrison, J.P. Murphy, J. Costa, G. Milus, J. Johnson, A. McKendry, D. Schmale, III, A. Clark, and N. McMaster. 2013. Mapping FHB resistance QTL in Jamestown x LA97113UC-124 RIL population. *In: Proceedings of the 2013 Southern Small Grain and Eastern Wheat Workers Conference.* Mar 21-22. Wooster, OH.
 3. Virginia Small Grains Board meeting in both 2012 and 2013. Project summary.
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11. Training courses and workshops attended

- 2017 APSIM Agricultural Modeling Workshop
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12. Additional skills

1. Skilled/experince in MapDisto, QTLCartographer, GeneMarker, Genome Studio
 2. *Statistical Software:* Large data set analysis using SAS and JMP
 3. Experimental design and implementation of field experiments
 4. *Phenotyping equipment management:* ceptometer, SPAD, LAI meter, WinRhizo, Giddings hydraulic probe
 5. *Computer packages:* Microsoft Office: Word, Excel and Power Point; SigmaScan; IfranView;
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References: Please contact these people for personal references

Texas A&M

Dr. Subas Malla (worked closely with Dr. Malla in Dr. Griffey's Lab)

Assistant Professor

Department of Horticulture Sciences

Uvalde, TX

Phone: +1 830 278 9151, email: subas.malla@ag.tamu.edu

Virginia Polytechnic Institute and State University

Dr. Carl Griffey

Professor

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University of Florida

Dr. Ann Blount

Professor

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Iowa State University

Dr. Raziel A. Ordóñez

Post-Doc

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