Brad D. Thada

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Objective

I am a 4th year PhD student in plant breeding and genetics from Purdue University researching thermal adaptation of multiple cereal species, focusing on maize and sorghum. I aspire to graduate and advance my career as a plant breeder in the industry, reducing global hunger by improving crop yield and nutrition.

Education

Purdue University GPA 3.91/4.00 *West Lafayette, IN* 2013-Present
Doctor of Philosophy Candidate: Plant Breeding and Genetics Expected 2017
Major Professor: Dr. Mitch Tuinstra
Graduate Research Assistant

Indiana Wesleyan University GPA 3.57/4.00 *Marion, IN* 2010
Bachelor of Science: Biochemistry
Academic Advisor: Dr. Daniel Jones
Honors: Cum Laude

Professional Experience

Research Assistant – Purdue University *West Lafayette, IN* 2013-2017
- Plan, execute and publish plant breeding and genetics related research projects fulfilling degree requirements
- Contributor and occasional leader of advisor's maize and sorghum abiotic stress research program

Teaching Assistant – Purdue University *West Lafayette, IN* 2015-2017
- Contribute to teaching, grading and curriculum development for AGRY285: World Crop Adaptation and Distribution
- Seek constructive feedback from students and professor and implement changes to improve classroom experience

Plant Breeding Intern – AgReliant Genetics *Lebanon, IN* 2016
- Performed Genomic Selection on a calibration panel of maize inbreds to select against green snap susceptibility
- Assisted maize breeders in leading summer field crews to perform inoculations, pollinations and data collection

Chemist – Chemtool Inc. *Lafayette, IN* 2013
- Analyzed oil samples and filters of Caterpillar engines for wear metals
- Maintained coolant and washer systems at optimal concentrations and compositions

Customer Service Rep. – Lafayette Bank & Trust *Lafayette, IN* 2011-2013
- Engaged in extensive problem solving while maintaining positive customer relations
- Assisted customers with personal financial goals by supporting bank products and services

Produce Harvester – Tranquil Ridge Farms *Crawfordsville, IN* 2011
- Harvested organic beans, peppers and potatoes by hand on a CSA farm
- Cleaned and prepared produce for distribution to members and sale at farmers markets

Soybean Research Assistant – Syngenta *Brookston, IN & Kunia, HI* 2007-2010 (Seasonal)
- Supervised an international team in planting, tissue sampling, field testing and harvesting
- Collected soybean data and organized distribution processes for mature germplasm

Teaching Assistant – Indiana Wesleyan University *Marion, IN* 2007-2009
- Assisted in teaching the lab of Chemistry and Artists' Colors Class and researched better methodologies
- Tested, critiqued and streamlined new organic chemistry lab curriculum

Field Skills

Improved efficiency and led through complete seasonal cycles of plant breeding operations including seed packaging, seed treatment, preparing seed in planting order, weed control, plant selections, harvest, threshing, winnowing and storage organization

Phenotyped soybean, maize, sorghum, millet, oat, rye, wheat, barley and rice plants for a multitude of traits including flowering characteristics, plant architecture, biomass, lipid content and photochemical productivity

Operated farm machinery ranging in size from single-ear corn shellers to single-row soybean combines to commercial farming tractors through involvement with Syngenta, Purdue University, AgReliant Genetics and local farmers

Conducted self- and cross-pollinations on hundreds of Maize and Sorghum plants

Completed and implemented safety and operational training for forklift operations in 2013 and 2016

Spent dozens of hours dumping Maize and Sorghum seed on a research planter

Analytical Skills

Experienced in coding SAS and R statistical programs and completed a course titled “Introduction to SAS for Statistical Analysis” at Purdue University in 2013

Performed Principle Component Analyses (PCA), extracted Best Linear Unbiased Predictors (BLUPs) and conducted Genomic Selection (GS) on complex data sets

Prepared and processed extremely large data sets in Microsoft Excel, Microsoft Access and other software programs designed to handle such data sets

Optimized Genome Wide Association (GWA) analyses on a heat tolerant association panel and streamlined output for easy gene identification on over 700 traits from 2015 to 2016

Attended a hands-on workshop titled “Data Handling and Analysis Tricks” at the ASA, CSSA and SSSA International Annual Meeting in Minneapolis, MN in 2015

Completed a full-semester course titled “Statistical Methods for Association Mapping” at Purdue in 2014

Joined a week-long workshop titled “Statistical and Genomic Analysis” by The International Maize and Wheat Improvement Center (CIMMYT) at Hyderabad, India in 2014

Participated in “Introduction to Plant Quantitative Genetics” and “Advanced Statistical Plant Breeding” classes at the Tucson Plant Breeding Institute in 2014

Leadership Skills

Trained, supervised, and led students and part time help in field skills through roles at Syngenta, Purdue and AgReliant Genetics

Facilitated and planned group discussions and continually met with members to give support and guidance as a Small Group Leader at Clear River Church since 2015

Partook in an intensive two-week management class titled “Applied Management Principals” in 2015 through Purdue’s Krannert School of Management to gain a wide array of leadership skills including, but not limited to, business law, finance, operations, strategy, accounting, marketing and economics

Provided technical assistance and know-how to maximize efficiency as a front-line supervisor and relief branch manager for Lafayette Bank & Trust from 2011 to 2013

Taught and led a crew of three previously unexperienced cooks to prepare and provide 300^{+} meals per day as the Head cook at Horn Creek Conference Grounds from 2010 to 2011

Planned, facilitated and debriefed high adventure trips and events through the Center for Adventure Learning at Indiana Wesleyan University from 2009 to 2010

Trained and advised Resident Assistants how to socially, spiritually and academically lead their residents as the Assistant Resident Director for Reed Hall at Indiana Wesleyan University from 2009 to 2010

Developed and implemented opportunities to foster an environment of spiritual, academic, professional and personal growth as a Resident Assistant at Indiana Wesleyan University from 2008 to 2009

Communication Skills

Presented poster titled "Improvement of Heat Stress Tolerance in Maize by Lipid Alterations of the Plastidic Membrane" at the 70th Annual Corn and Sorghum Seed Research Conference of the American Seed Trade Association in Chicago, IL in Dec., 2016

Presented poster titled "Towards Understanding Heat Stress Tolerance of Maize in the Tropics" at the Annual Meeting of University and Industry Consortium in Indianapolis, IN in Oct., 2016

Gave oral presentation titled "Analysis and Prediction of Green Snap using AgReliant's GS pipeline" at internship summary meeting with AgReliant in Lebanon, IN in July, 2016

Participated in workshop titled "Effective College Teaching" in 2016 by Purdue Colleges of Agriculture and Engineering to develop teaching skills and understand how to maximize student learning

Gave oral presentation with Khangura, R. titled "GWAS Using TASSEL" at the 1st Collaborative Meeting of Purdue Scientists and Punjab Agriculture University in Ludhiana, Punjab, India in Dec., 2015

Completed semester-long class titled "Professional Presentations" to improve multiple communication skills across a wide range of audiences at Purdue University in 2015

Presented poster titled "Towards Understanding Heat Stress Tolerance of Maize in the Tropics" at the International Annual Meeting of ASA, CSSA and SSSA in Minneapolis, MN in Nov., 2015

Presented poster titled "Improvement of Heat Stress Tolerance in Maize by Lipid Alterations of the Plastidic Membrane" at the Board for International Food and Agricultural Development meeting in West Lafayette, IN in Oct., 2015

Presented poster titled "Towards Understanding Heat Stress Tolerance of Maize in the Tropics" at the 57th Annual Maize Genetics Conference in St. Charles, IL in March, 2015

Presented poster titled "Heat Stress Tolerance in Maize" at the 68th Annual Corn and Sorghum Seed Research Conference of the American Seed Trade Association in Chicago, IL in Dec., 2014

Presented poster titled "Heat Tolerant Maize for Asia" at the 67th Annual Corn and Sorghum Seed Research Conference of the American Seed Trade Association in Chicago, IL in Dec., 2013

Awards

Graduate Teaching Certificate – Purdue University	2016
Overall Second Best in Poster Competition – American Seed Trade Association	2016
Wayne P. Rothgeb Memorial Award – Purdue University	2016
John Axtell Graduate Student Award in Plant Breeding and Genetics – Purdue University	2015
Eagle Scout – Boy Scouts of America	2006

Service Activities

Sound Board Operator/Mixer – Clear River Church	2012-Present
College of Agriculture Grade Appeals Committee – Purdue University	2015-Present
College of Agriculture Grad Student Advisory Council– Purdue University	2015-Present
Purdue Agronomy Graduate Student Representative – Purdue University	2014-2016
Natural Science Guest Speaker – Crawfordsville Middle School	2011-2016
District Advancement Committee Member – Boy Scouts of America	2014-2016

Memberships

National Association of Plant Breeders	2014-Present
American Society of Agronomy	2014-Present
Crop Science Society of America	2014-Present
American Association for the Advancement of Science	2016-Present

References

Available upon request