

**Matthew W. Blair**, PhD. Full Professor  
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### **1. PROFESSIONAL PREPARATION**

Cornell University	Plant Biology	B.S.	1987
University of Puerto Rico	Agronomy	M.S.	1989-1992
University of Florida	Agronomy	pre-doc	1992
Cornell University	Plant Breeding	Ph.D.	1993-1997
Cornell University	Biotechnology	Postdoc	1997-1999

### **2. APPOINTMENTS**

2019 –	Full Professor, Tennessee State University, Department of Agricultural and Environmental Sciences, Nashville TN. <i>Research</i> supervision of 3 Ph.D., 3 M.S., 4 summer bridge and 4 Dean's scholar students as well as a research associate.
2019 -	Affiliated Professor, Vanderbilt University, Center for Latin American Studies, Nashville, TN, USA. Ethnobotanical studies of Latin American Crops.
2013 – 2019	Associate Professor, Tennessee State University, Department of Agricultural and Environmental Sciences, Nashville TN, USA
2012 – 2013	Erasmus (European Union) Fellow, ENSAM – INRA, Montpellier France. <i>Special Course</i> on genomics and marker assisted selection applied to plant breeding.
2010 - 2014	Adjunct Associate Professor, Cornell University, Ithaca NY, USA
2010 - 2013	International Agricultural Researcher, FIDAR. Palmira, Colombia
2010 – 2012	Profesor Adscrito, Universidad Nacional de Colombia, Palmira, Colombia
2006 – 2010	Assistant Adjunct Professor, Cornell University, Ithaca NY, USA
1999 – 2010	Senior Scientist, Germplasm Specialist, CIAT-CGIAR, Bean Breeder, Cali, Colombia Molecular Breeding and QTL analysis of Andean beans with East/Southern Africa and Latin America.
1999-2010	Post –doctoral Research Fellow, Cornell University, Ithaca NY, USA

### **3. RELATED PRODUCTS/PUBLICATIONS**

- Dharajiya DT, Trivedi GT, Thakkar NJ, Pachchigar KP, Teli B, Tiwari KK, Blair MW\* (2022) Genomics-Assisted Design of Biotic Stress Resistant Vegetable Amaranths. In Chitta Kole (ed) Genomic Design of Biotic Stress Tolerance Elsevier Press Inc.
- Ambachew D, Blair MW (2021) Genome Wide Association Mapping for Root Traits in the Andean genepool of common beans (*Phaseolus Vulgaris* L.) grown under toxic level of aluminium and control treatments. Frontiers in Plant Science
- Blair MW\*, Asfaw A, Ambachew D, Kimani P (2021) Regional and Global Inter-Connectivity among Common Bean Breeding Programs. (ed.) I. Goodman. Plant Breeding Reviews. Chapter 5.
- Riggins CW, Barba de la Rosa AP, Blair MW, Espitia-Rangel E (2021) Amaranthus: Naturally Stress-Resistant Resources for Improved Agriculture. Front Pl Sci.12:726-875

- Thapa R, Edward R, Blair MW (2021) Relationship of Cultivated Grain Amaranth Species and Wild Relative Accessions. *MDPI Genes* 12(12), 1849;
- Wu X, Islam ASM F, Limpot N, Cortes AJ, Mackasmiel L, Mierzwa J, Cortés AJ, Blair MW\* (2020). Genome-wide SNP identification and association mapping for seed mineral concentration in Mung bean (*Vigna radiata* L.) *Frontiers in Genetics*.
- Assefa T, Rubyogo JC, Mahama AA, Cannon EKS, Brown AV, Rao IM, Blair MW, Cannon SB (2019) A Review of Breeding and Genomics Resources for Common Bean (*Phaseolus vulgaris* L.) *Molecular Breeding* 39:20.
- Yahaya D\*, Denwar N, Blair MW\* (2019) Effects of Moisture Deficit on the Yield of Cowpea Genotypes in the Guinea Savannah of Northern Ghana. *Agricultural Sciences* 10, 577-595. DOI: 10.4236/as.2019.104046
- Yahaya D\*, Denwar N, Mohammed M, Blair MW\* (2019) Screening of Cowpea (*Vigna unguiculata* (L.) Walp) Genotypes for Enhanced N<sub>2</sub> Fixation and Water Use Efficiency under Field Conditions in Ghana. *American Journal of Plant Sciences* 10:4.
- Wu J, Wang LF, Fu J, Chen J, Zhang J, Zhang SL, Wei SH, Tang YS, Zhu J, Lei L, Chen ML, Geng Q, Liu CL, Wu L, Li XM, Wang X, Wang Z, Wang Q, Xing S, Zhang H, Blair MW\*, Wang S\* (2019) Resequencing of 683 common bean genotypes identifies yield component trait associations across a north-south cline. *Nature Genetics*.
- Wu X, Blair MW\* (2017) Genotyping by Sequencing (GBS) Polymorphism Diversity in Grain Amaranths and Relatives. *Frontiers in Plant Science* 8:1960

#### 4. SYNERGISTIC ACTIVITIES

##### *International Science Mentoring*

- Current Co-President, Amaranth Institute ([www.amaranthinstitute.org](http://www.amaranthinstitute.org)) (2020-2024)
- Fulbright Specialist visiting Scholar, Colombia: Scientific Committee for Plant Breeding, across four research stations in Agrosavia network. Nation-wide seminar and regional field visits. Bogota, Medellin, Palmira and Villavicencio
- Faculty host for USDA Borlaug Fellows from Morocco (chickpea), Kenya and Ethiopia (Biotechnology) and for USDA Cochran Fellows from Pakistan
- Advisor for BHEARD student, Dr. Damba Yahaya Ghana (Univ. Development Studies).

*Service:* Organizer New Crops Conference for Southeast (2022)  
 President, Amaranth Institute (2016-2020)  
 Member, Genetics Committee, Bean Improvement Cooperative (2008-2012)  
 Member, Crop Science Society of America Member (1992 – 2012)  
 Minority Students Committee, American Society of Plant Biology (2018)

##### **Other Publications and Teaching Activities**

*Refereed Journal Articles (200 +) ; Non-Refereed Journal Articles (80). Crop Germplasm Registrations (2) • Pamphlets (10) Technical Annual Reports (15). Book Chapters (12). Posters / Presentations (61, since 2013) Radio / Television Interviews (25). Short courses on molecular breeding (19).*

*Teaching: at Tennessee State University (TSU), Cornell University, Universidad Nacional de Colombia, ECABREN, WACCI, IRRI, • TSU: Teaching Lectures: Undergraduate Plant Genetics and Graduate Advanced Plant Breeding as well as Introduction to Biotechnology • Cornell: Teaching Assistant : Genomics (for S. Tanksley); Plant Breeding (for S. McCouch) • student supervision: Ph.D. (36). M.S. Graduate student supervision (30). Undergraduate students (48) Training and fellowship students (20). Post-doctoral fellows (8).*