

Curriculum Vitae

Gebisa Ejeta

*Distinguished Professor of Plant Breeding and Genetics
Purdue University, Department of Agronomy*

Lilly Hall of Life Sciences
915 West State Street
West Lafayette, IN 47907-2054

Phone: (765) 494-4320
Email: gejeta@purdue.edu

EDUCATION

B.Sc. Alemaya College, Ethiopia; Plant Sciences, 1973
M.S. Purdue University; Plant Breeding and Genetics, 1976
Ph.D. Purdue University; Plant Breeding and Genetics, 1978

PROFESSIONAL POSITIONS

2007-Present Distinguished Professor, Plant Breeding and Genetics, Purdue
1992-2007 Professor of Plant Breeding and Genetics, Purdue University
1988-1992 Associate Professor of Plant Breeding and Genetics, Purdue University
1984-1988 Assistant Professor of Plant Breeding and Genetics, Purdue University
1979-1983 Principal Plant Breeder, Sorghum at ICRISAT

ACADEMIC, PROFESSIONAL AND SCHOLARLY SOCIETIES

- American Society of Agronomy
- Crop Science Society of America
- American Association for the Advancement of Sciences
- Sigma Xi
- Gamma Sigma Delta
- Phi Beta Delta

AWARDS AND HONORS

- Appointed by President Obama to the Board for International Food and Agricultural Development (BIFAD), 2011
- US Government Presidential Science Envoy, 2010
- Special Advisor to USAID Administrator, 2010
- Outstanding Scientific Achievement Award, Society of Ethiopians in Diaspora, 2010
- Henry Bennett Fellow, School of International Studies, Oklahoma State Univ., 2010
- Member, CGIAR Consortium Board, 2010-
- Member, Board of Sasakawa Africa, 2010-
- Crop Science Society Presidential Award, 2009
- Dow Agro-Sciences Award for Outstanding Contribution to Global Agriculture, 2009
- Indiana Hero Award, Indiana Pacers, 2010
- Commemoration by Indiana General Assembly, 2009
- State of Indiana, P.E. Nelson Prize for Innovation, 2009
- Government of Ethiopia, National Hero Award, 2009
- The World Food Prize, World Food Prize Foundation, 2009

- Member, Science Council of the CGIAR, 2008-2010
- Distinguished Professor of Plant Breeding and Genetics, Purdue University, 2007
- Certificate of Recognition from Govt. of Ethiopia for contributions in combating *Striga* in Ethiopia and other African countries, 2007
- Fellow, American Association for Advancement of Sciences (AAAS), 2005
- Outstanding Research Paper of the Year on Plant Genetic Resources, Crop Sci. Soc of America, 2005
- Distinguished Career Achievement Award, INTSORMIL, 2002
- Purdue School of Agriculture Dean's Interdisciplinary Team Member Award, 1998
- Distinguished Scientific Career Award, African Crop Science Congress, 1997
- International Service in Agronomy Award, American Society of Agronomy, 1997
- International Service in Crop Science Award, Crop Science Society of America, 1994
- Fellow of American Society of Agronomy, 1995
- Fellow of Crop Science Society of America, 1994
- Citation, Who is Who in America, 1994
- Citation, Who is Who in the Midwest, 1993
- Citation, Who is Who in America in Science & Engineering, 1991
- A silver plaque for Outstanding Contribution to Agriculture of the Sudan, from the Sudan Agricultural Research Corporation, 1983
- Graduated with Highest Distinction and Special Award as the Outstanding Graduate from Alemaya College of Agriculture, Ethiopia, 1973

DISTINGUISHED LECTURES

- Keynote Address, World Science Forum, Budapest, Hungary, 2011
- Keynote Address, Ethiopian National Academy of Sciences First Science Congress, Addis Ababa, Ethiopia, 2011
- E.T. York Distinguished Lecture, Auburn University, 2011
- Thornton-Massa Lecture, Colorado State University, 2011
- York Distinguished Lecture, University of Florida, 2011
- Keynote Address, World Food Science Congress, Cape Town, South Africa, 2010
- Keynote Address, XXVII Brazilian Weed Science Congress, 2010
- Keynote Address, 2nd Int. Symp. Genomics of Plant Gen. Resources, Italy, 2010
- Keynote Address, 159th BIFAD Symposium, Washington DC, 2010
- 37th H. K. Hayes Distinguished Lecture, University of Minnesota, 2010
- Sigma Xi Distinguished Lecture, Purdue University, 2010
- Wes Watkins Distinguished Lecture, Oklahoma State University, 2010
- IDRC 40th Anniversary Inaugural Address, Speakers of Renown Series, Ottawa, 2010
- Roundtable on Global Food Security, US Treasury, Washington DC, 2010
- Roundtable with Charlie Ross, PBS, Global Challenges Genomic Solutions, 2010
- E. T. York Distinguished Lecture, American Society of Agronomy, 2009
- The Norman E. Borlaug Annual Lecture, Iowa State University, 2009
- Laureate Lecture, World Food Prize, 2009
- U. S. Senate Committee on Foreign Relations Testimony on Global Food Security, 2009

RESEARCH PUBLICATIONS: LAST 5 YEARS

Refereed Papers:

- Satish, K., Z. Gutema, C. Grenier, P. Rich, and G. Ejeta. 2011. Molecular tagging and validation of microsatellite markers linked to the low germination stimulant gene (lgs) for *Striga* resistance in sorghum [*Sorghum bicolor* (L.) Moench]. *Theor. Appl. Genetics* 122(11):1763-1769.
- Amusan, I., P. Rich, T. Housley, and G. Ejeta. 2011. An In Vitro Method for Identifying Post Attachment *Striga* Resistance in Maize and Sorghum. *Agron. J.* 103:1472-1478.
- Tesso, T. and G. Ejeta. 2011. Integrating Multiple Control Options Enhances *Striga* Management and Sorghum Yield on Heavily Infested Soils. *Agron. J.* 103:1464-1471.
- Kean, E., N. Bordenave, G. Ejeta, B. Hamaker, and M. Ferruzzi. 2011. Carotenoid bioaccessibility from whole grain and decorticated yellow endosperm porridge. *Jour. Cereal Science* 54(3):450-459.
- Ejeta, G. 2010. African Green Revolution Needn't Be a Mirage. *Science.* 327:831-832.
- Tesso, T., G. Ejeta. 2010. Stalk strength and reaction to infection by *Macrophomina phaseolina* of brown midrib maize (*Zea mays*) and sorghum (*Sorghum bicolor*). *Field Crops Research* 120:271-275.
- Deane, C., G. Ejeta, R. Rabbinge, and J. Sayer. 2010. Science for Development: Mobilizing Global Partnerships. *CGIAR Science Forum 2009. Crop Science Suppl.* 50:(2) 5-8.
- Mohamed, A., T. Housley, and G. Ejeta. 2010. Inheritance of hypersensitive response to *Striga* parasitism in sorghum (*Sorghum bicolor* (L.) Moench). *Afr. J. Ag. Res.* 5(19): 2720-2729.
- Mohamed, A., T. Housley, and G. Ejeta. 2010. An in vitro technique for studying specific resistance mechanisms in sorghum. *Afr. J. Ag. Res.* 5(19): 1868-1875.
- Ejeta, G. 2009. Revitalizing Agricultural Research for Global Food Security. *Food Security* 1 : 391-401.
- Saballos, A., G. Ejeta, E. Sanchez, C. Kang, and W. Vermerris. 2009. A genome-wide analysis of the cinnamyl alcohol dehydrogenase family in sorghum (*Sorghum bicolor* (L.) Moench) identifies SbCAD2 as the brown midrib6 gene. *Genetics* 181:783-795.
- Vogler, R., T. Tesso, K. Johnson, and G. Ejeta. 2009. Effect of allelic variation on forage quality of brown midrib sorghum mutants. *African J. of Biochem.* 3(3):70-76.
- Peters, P., M. Jenks, P. Rich, J. Axtell, and G. Ejeta. 2009. Mutagenesis, selection, and allelic analysis of epicuticular wax mutants in sorghum. *Crop Sci.* 49:1249-1258.
- Saballos, A., W. Vermerris, L. Rivera, and G. Ejeta. 2009. Allelic association, chemical characterization and saccharification properties of brown midrib mutants of sorghum (*S. bicolor* (L.) Moench). *Bioenerg. Res.* 1:193-204.
- Rich, P. J. and G. Ejeta. 2008. Towards effective resistance to *Striga* in African maize. *Plant Signaling & Behavior* 3:9, 618-621.

- Amusan, I. O., P. J. Rich, A. Menkir, T. Housley, and G. Ejeta. 2008. Resistance to *Striga hermonthica* in a maize inbred line derived from *Zea diploperennis*. *New Phytologist* 178:157-166.
- Knoll, J. E. and G. Ejeta. 2008. Marker-assisted selection for early season cold tolerance in sorghum: QTL validation across populations and environments. *Theor. Appl. Genet.* 116:541-553.
- Knoll, J., N. Gunaratna, and G. Ejeta. 2008. QTL analysis of early season cold tolerance in sorghum. *Theor. & Appl. Genet.* 116:577-587.
- Tesso, T., I. Kapran, C. Grenier, A. Snow, P. Sweeney, J. Pedersen, D. Marx, G. Bothma and G. Ejeta. 2008. The potential for crop-to-wild gene flow in sorghum in Ethiopia and Niger: A geographic survey. *Crops Sci.* 48: 1425-1431.
- Zhou, B., K. Ileleji, and G. Ejeta. 2008. Physical Properties Relationship of Bulk Maize Stover Properties. *Trans. Amer. Soc. Ag and Biol. Engineering.* 51(2): 1-10
- Tesso T., B. Hamaker and G. Ejeta. 2008. Sorghum protein digestibility is affected by dosage of mutant alleles in endosperm cells. *Plant Breeding* 127: 579-586.
- Ejeta, G. 2007. Breeding for *Striga* resistance in sorghum: Exploitation of an intricate host-parasite biology. *Crop Sci.* 47: S216-217.
- Wilfred Vermerris,^{1,2,3,*} Ana Saballos¹, Gebisa Ejeta¹, Nathan S. Mosier^{2,3}, Michael R. Ladisch^{2,3}, and Nicholas C. Carpita⁴. 2007. Molecular breeding to enhance production of ethanol from corn and sorghum stover. *Crop Sci.* 47:S142-153.
- Adeola, O., E. K. D. Nyannor, S. A. Adedokun, B. R. Hamaker, and G. Ejeta. 2007. Nutritional evaluation of high-digestible sorghums for pigs and broiler chicks. *J. Anim. Sci.* 85:196-203.
- Snow, A. A. and G. Ejeta. 2007. Biosafety of Transgenic Sorghums: A comment on Visaranda and Kishone (2007). *Information Systems for Biotechnology News Report.* May 2007, <http://www.isb.vt.edu/>
- Kean, E. G., G. Ejeta, B. R. Hamaker, and M. G. Ferruzzi. 2007. Carotenoid content of yellow endosperm sorghum varieties measured by high performance liquid chromatography with diode array detection. *J. Agric. Food Chem.* 55: 2619-2626.
- Joel, D.M., Y. Hershenhorn, H. Eizenberg, R. Aly, G. Ejeta, P.J. Rich, J.K. Ransom, J. Sauerborn and D. Rubiales. 2007. Biology and management of weedy root parasites. *in: J. Janick (ed.) Horticultural Reviews, Vol. 33.* John Wiley & Sons, Inc. Hoboken, NJ. pp. 267-350
- Ejeta, G. and J. E. Knoll. 2007. Marker-assisted selection in sorghum pp.187-205 In: R. Vashney and R. Tuberosa (eds) *Genomic Assisted Crop Improvement: Vol 2, Genomic Applications in Crops.* Springer-Verlag, Berlin.
- Ejeta, G. 2007. The *Striga* scourge in Africa: A growing pandemic, pp. 1-16. *In: Ejeta and Gressel (eds). Integrating New Technologies for Striga Control: Towards Ending the Witch-hunt,* World Scientific Press Co. Ltd., Singapore.

- Rich, P. J., and G. Ejeta. 2007. Biology of host-parasite interactions in *Striga* species. pp.19-32. . *In: Ejeta and Gressel (eds). Integrating New Technologies for Striga Control: Towards Ending the Witch-hunt*, World Scientific Press Co. Ltd., Singapore.
- Ejeta, G., P. J. Rich, and A. Mohamed. 2007. Dissecting a complex trait to simpler components for effective breeding of sorghum with a high level of *Striga* resistance. pp.87-98. *In: Ejeta and Gressel (eds). Integrating New Technologies for Striga Control: Towards Ending the Witch-hunt*, World Scientific Press Co. Ltd., Singapore.
- Menkir, A., B. Badu-Abraku, C. G. Yallou, A. Y. Kamara, and G. Ejeta. 2007. Breeding maize for broad-based resistance to *Striga hermonthica*. pp. 99-114. *In: Ejeta and Gressel (eds). Integrating New Technologies for Striga Control: Towards Ending the Witch-hunt*, World Scientific Press Co. Ltd., Singapore.
- Kapran, I., C. Grenier, and G. Ejeta. 2007. Introgression of genes for *Striga* resistance into African landraces of sorghum. pp.129-142. *In: Ejeta and Gressel (eds). Integrating New Technologies for Striga Control: Towards Ending the Witch-hunt*, World Scientific Press Co. Ltd., Singapore.
- Grenier, C., Y. Ibrahim, B. I. G. Haussmann, D. Kiambi, and G. Ejeta. 2007. Marker-assisted selection for *Striga* resistance in sorghum. pp.159-172. *In: Ejeta and Gressel (eds). Integrating New Technologies for Striga Control: Towards Ending the Witch-hunt*, World Scientific Press Co. Ltd., Singapore.
- De Framond, A., P. J. Rich, J. McMillan, and G. Ejeta. 2007. Effect on *Striga* parasitism of transgenic maize armed with RNAi constructs targeting essential *S. asiatica* genes. pp.185-196. *In: Ejeta and Gressel (eds). Integrating New Technologies for Striga Control: Towards Ending the Witch-hunt*, World Scientific Press Co. Ltd., Singapore.
- Tesso, T., Z. Gutema, A. Deressa, and G. Ejeta. 2007. An integrated *Striga* management (ISM) option offers effective control of *Striga* in Ethiopia. pp.199-212. *In: Ejeta and Gressel (eds). Integrating New Technologies for Striga Control: Towards Ending the Witch-hunt*, World Scientific Press Co. Ltd., Singapore.
- Mbwaga, A., C. Riches, and G. Ejeta. 2007. Integrated *Striga* management to meet sorghum demand in Tanzania. pp.253-264. *In: Ejeta and Gressel (eds). Integrating New Technologies for Striga Control: Towards Ending the Witch-hunt*, World Scientific Press Co. Ltd., Singapore.

Books Edited:

- Ejeta, G. and J. Gressel. 2007. Integrating New Technologies for *Striga* Control: Towards Ending the Witch-hunt. World Scientific Publishing Co., Singapore.