

MICHAEL R. BARING

Assistant Research Scientist

Dept. Soil and Crop Sciences, Texas A&M University, College Station, Texas

Education/Training

2006 MS Plant Breeding and Genetics, Texas A&M University
1989 BS Agronomy, Texas A&M University

Positions and Employment

2007- Assistant Research Scientist, Soil and Crop Sciences, Texas A&M
2006-2007 Sr. Research Associate, Soil and Crop Sciences, Texas A&M
1999-2006 Research Associate, Soil and Crop Sciences, Texas A&M
1992-1999 Research Assistant, Soil and Crop Sciences, Texas A&M
1990-1992 Research Technician, Soil and Crop Sciences, Texas A&M

Program Overview

My research focuses on developing improved peanut cultivars for the growers of Texas, the United States, and developing countries. Specifically my research has been to develop multiple disease resistance in new peanut cultivars, but also includes working on early maturity, drought tolerance, and chemical characteristics such as fatty acid contents and total oil contents. My position is 100% research.

Significant 5 Year Accomplishments

I am one of three PI's on the Peanut Breeding team. I helped to acquire \$833,993 of which \$275,405 went to my program over the past five years. Conducted nearly 200 yield trials over this period which resulted in several peanut cultivar releases and one germplasm release. First author release of Tamrun OL11 in 2011 which was released for high grade potential and improved resistance to Sclerotinia blight. Second author release of Tamrun OL12 in 2012 which was released as an early maturing runner-type peanut. Co-author on joint release with USDA/ARS of Red River Runner which was released as a high grading peanut for the Southwest region. Co-author on release of Webb peanut which was the first high oleic, Rootknot nematode resistant peanut ever released. Co-author on release of ARSOK-S1 Spanish-type germplasm line with improved resistance to Sclerotinia blight. Second author on 2013 release of Schubert which was released as a new Spanish-type peanut with improved yield, grade, and early maturity. Co-author on release of TAMVal14, a new high oleic Valencia-type peanut with improved yield and grade. Since 2011, authored/co-authored 13 peer-reviewed publications.

Publications

Ten most recent publications

1. M. D. Burow, M. R. Baring, J. L. Ayers, A. M. Schubert, Y. López and C. E. Simpson. Registration of 'Tamrun OL12' Peanut. *Journal of Plant Registrations* 2014 8: 2: 117-121 doi:10.3198/jpr2013.07.0036crc

2. M. D. Burow, M. R. Baring, N. Puppala, C. E. Simpson, J. L. Ayers, J. Cason, A. M. Schubert, A. Muitia and Y. López. Registration of ‘Schubert’ Peanut. *Journal of Plant Registrations* 2014 8:122-126 doi:10.3198/jpr2013.07.0042crc
3. K.D. Chamberlin, J.P. Damicone, M.R. Baring, M.D. Burow, C.B. Godsey, R. S. Bennett, H.A. Melouk, and C.E. Simpson. Registration of High-Oleic Peanut Germplasm Line ARSOK-S1 (Tx996784) with Enhanced Resistance to Sclerotinia Blight and Pod Rot. *Journal of Plant Registration* 2014 doi:10.3198/jpr2013.08.0044crg
4. R. Chopra, G. Burow, A. Farmer, J. Mudge, C.E. Simpson, T. A. Wilkins, M.R. Baring, N. Puppala, K.D. Chamberlin, and M.D. Burow. Next-Generation Transcriptome Sequencing, SNP discovery, and SNP Validation in Four Market Classes of Peanut, *Arachis hypogaea* L.
5. Simpson, C.E., J.L. Starr, M.R. Baring, M.D. Burow, J.M. Cason, and J.N. Wilson. 2013. Registration of ‘Webb’ Peanut. *Journal of Plant Registrations*. DOI:10.3198/jpr2013.01.0005crc
6. Wilson, J.N., M.R. Baring, M.D. Burow, W.L. Rooney, J.C. Chagoya, and C.E. Simpson. 2013. Generation Means Analysis of Fatty Acid Composition in Peanut. *Journal of Crop Improvement*. Vol. 27 pg.430-443. DOI:10.1080/15427528.2013.790330
7. Grichar, W.J., P.A. Dotray, and M.R. Baring. 2013. Peanut Cultivar Response to Flumioxazin Applied Preemergence and Imazapic Applied Postemergence. *International Journal of Agronomy*. DOI:10.1155/2013/371847
8. Wilson, J.N., M.R. Baring, M.D. Burow, W.L. Rooney, and C.E. Simpson. 2013. Diallel Analysis of Oil Production Components in Peanut (*Arachis hypogaea* L.). *International Journal of Agronomy*.
9. Baring, M.R., Wilson, J.N., Burow, M.D., Simpson, C.E., Ayers, J.L., and Cason, J. 2013. Variability of Total Oil Content Across the State of Texas. *Journal of Crop Improvement*. 27:1-12. doi:10.1080/15427528.2012.740772
10. Baring, M.R., Simpson, C.E., Burow, M.D., Cason, J.M., and Ayers, J.L. 2013. Registration of ‘Tamrun OL11’ Peanut. *Journal of Plant Registrations*. 7:154-158. doi:10.3198/jpr2012.06.0001crc

Awards and Honors

- 2014 Dow Agrosience Excellence in Research Award

Professional Experience

- Co-advised 1 Phd student, and 1 MS student.
- Authored/co-authored 24 peer-reviewed journal articles, and 38 scientific abstracts/presentations.
- Acquired \$1,755,707 of which \$587,383 went to my research program since 2007.