

C. Wayne Smith
Professor-Cotton Breeding
Associate Department Head

Education

1974 Ph.D., University of Tennessee/Knoxville, Department of Plant and Soil Science
1971 M.S., Auburn University, Department of Agronomy and Soils.
1969 B.S., Auburn University, Agricultural Science.

Employment History

2013 - present: Professor and AgriLife Research Faculty Fellow; Graduate Advisor and Assoc. Dept. Head
2001 - present: Professor, cotton breeding; Graduate Advisor and Associate Department Head
2005 – 2006: Professor, cotton breeding; Assoc. Dept. Head; and Interim Dept. Head
1986 - 2001: Professor, cotton breeding, Department of Soil and Crop Sciences/TAMUS
1974 - 1986: Assistant to Professor, cotton breeding, Univ. of Ark. AES.

Program Overview

Research duties include development of superior germplasm/cultivars which will enhance the productivity, improve the product quality, and/or decrease production costs associated with cotton production in Texas. Primary research sites in Texas are College Station, Weslaco, Corpus Christi, Thrall, and Chillicothe, as well as colleagues at Lubbock. Primary geographical areas of responsibilities are central and south Texas with secondary goals aimed at all cotton producing areas of Texas and the United States. Teaching/administrative duties include teaching at the undergraduate level (SCSC 311W) and graduate level (SCSC 610 and SCSC 641), direction of graduate students in plant breeding, administration of departmental academic affairs, and coordination of graduate program in Soil and Crop Sciences, including recruitment and general advising. Position directs the graduate program in SCSC with majors in AGRONOMY, SOIL SCIENCE, and PLANT BREEDING, and directs the Distance M.S. and Ph.D. Program in Plant Breeding with M.S. and Ph.D. degrees conferred by Soil and Crop Sciences and Horticultural Sciences. Non traditional teaching includes but is not limited to a monthly Plant Breeding Bulletin (newsletter), oversight of a weekly seminar series involving plant breeding faculty and graduate students in SCSC, HORT, and other departments, and the distance plant breeding graduate program.

Significant 5 Year Accomplishments:

Genetic material developed and released (career=128 GP lines and 4 cultivars)

TAM 04 WB-33s	2011	Smith, Hague, Hequet, Jones	L & str & yarn	JPR 5:388-392.
TAM RKRNR 9	2011	Starr, Smith, Ripple, Zhou, Faske	RKNR, RNR	JPR 5:3:393-396.
TAM RKRNR 12	2011	Starr, Smith, Ripple, Zhou, Faske	RKNR, RNR	JPR 5:3:393-396.
Tamcot 73	2011	Smith, Hague, Jones	Conv. Cv.	JPR 5:273-278.
TAM 94L-25M-24	2012	Brown*, Smith, Jones, Auld, Hequet	Lg, str, etc	JPR 6:195-199.
TAM 94L-25M-25	2012	Brown*, Smith, Jones, Auld, Hequet	Lg, str, etc	JPR 6:195-199.
TAM 94L-25M-30	2012	Brown*, Smith, Jones, Auld, Hequet	Lg, str, etc	JPR 6:195-199.
TAM 06WE-621	2014	Smith, Hague, Hequet	Str.	JPR 8:308-312

*Graduate Student

Initiation of the only research MS and PhD in plant breeding offered in the United States at distance. Program was initiated in spring 2013 and currently has 20 students enrolled across Horticulture and Soil and Crop Sciences.

Advancement/improvement of extra long staple upland and extra strength upland traits.

Publications

Ten Most Recent (111 total) (*=graduate student)

Beyer, B. *, C. Wayne Smith, Richard Percy, Steve Hague, and Eric Hequet. 2014. Test cross evaluation of upland cotton accessions for selected fiber properties. *Crop Sci.* 54:60-67.
Jernigan, K. *, C. Wayne Smith, E. Hequet, Benjamin Beyer, and Richard Percy. 2014. Combining ability and variability for fiber maturity among diverse world cotton germplasm. *Crop Sci.* 54:906-913

- Jernigan, Kendra*, C. Wayne Smith, Eric Hequet, Benjamin Beyer, and Richard Percy. 2014. Combining ability and variability for fiber color among diverse cotton genotypes. *Crop Sci.* 54:1041-1047
- Ng, E.-H.*, C. W. Smith, E. Hequet, S. Hague, and J. Dever. 2014. Diallel Analysis of Fiber Quality Traits with an Emphasis on Elongation in Upland Cotton. *Crop Sci.* 54: 2: 514-519
- Ng, E.-H.*, C.W. Smith, E. Hequet, S. Hague, and J. Dever. 2014. Generation Means Analysis for Fiber Elongation in Upland Cotton. *Crop Sci.* 54:1347-1353.
- Jones, W.* , K. Joy, and C. Wayne Smith. 2014. Within boll yield components of extra long staple upland cotton. *Crop Sci.* 54:1057-1061
- Smith, C.W., E. Hequet, S. Hague, and D. Jones. 2014. Registration of TAM 06WE-621 upland cotton with improved fiber strength and yarn performance. *JPR* 8:308-312.
- Knutson, A., S. Isaacs, C. Campos, M. Campos, and C. Wayne Smith. 2014. Resistance to cotton fleahopper feeding in primitive and converted race stocks of cotton, *Gossypium hirsutum*. *Cotton Science* 18:385-392.
- Brown, N.I.*, C.W. Smith, S. Hague, D. Auld, E. Hequet, K. Joy and D. Jones. 2015. Within-boll yield characteristics and their correlation with fiber quality parameters following mutagenesis of upland cotton, *Gossypium hirsutum*, TAM 94L-25. *Crop Science* (accepted January 2015).
- McLoud, L.A., S. Hague, A. Knutson, M. Brewer, and C. Wayne Smith. 2015. Cotton square structure offers new insights into host plant resistance to cotton fleahopper (*pseudatomoscelis seriatus* Reuter) in upland cotton. (submitted May 2015).

Honors and Awards

- 2011: Fellow, Crop Science Society of America
 2012: Fellow, American Society of America
 2012: National Council of Commercial Plant Breeders Genetics and Plant Breeding Award
 2013: B.B. Singh Outstanding Crop Scientist Award in Soil and Crop Sciences
 2014: Research Faculty Fellow, Texas A&M AgriLife Research
 2015: Dean's Outstanding Award for Administration

Professional Experience

- Advised 24 MS and 15 PhD students with 1 MS and 3 PhD current
- Authored/co-authored 111 peer-reviewed publications, 1 book, 7 book chapters, edited 4 books, > 200 presentations
- Acquired \$13,661,923 in grants with \$4,812,800 dedicated to Smith's program
- Teach Crop Production (UG and W), Plant Breeding (G), and Host Plant Resistance (G, team taught)
- Editor for Journal of Plant Registrations
- Editor in Chief for Crop Science Society of America
- Secretary (through President rotation) for National Association of Plant Breeders