Calvin R. Shumway

College of Agriculture Arkansas State University P.O. Box 1080 State University, AR 72467 Phone# (870) 972-3557 FAX # (870) 972-3885 EMAIL cshumway@astate.edu

Education

Ph.D. August,1990. Texas A&M University. Major: Agronomy/Crop Science

M.S. December, 1981. Southern Illinois University-Carbondale. Major: Plant Pathology/Physiology

B.S. December, 1979. Northern Illinois University. Major: Biological Science, Minor: Chemistry.

Experience

August 1991- August 1996. Assistant Professor August 1996 - Present Associate Professor, Plant Sciences. College of Agriculture, Arkansas State University. Responsible for instruction of courses in basic plant science, crop production, and statistics.

July 1, 1998 - January 2000, July 2003 - Present. Associate Dean, January 2000 - June 2003, Interim Dean College of Agriculture, Arkansas State University.

July 1990-July 1991 Postdoctoral Research Associate, USDA-ARS. Responsible for research related to temperature regulation of protein accumulation in soybeans.

January 1986-July 1990 Research Associate, Texas A&M University. Primary research responsibilities involved production systems of maize and resulting physiological responses as they relate to carbon exchange, partitioning, and kernel growth characteristics.

April 1984-September 1985. Associate Agronomist, Rohm and Haas Seeds, Inc. Responsible for research related to chemical hybridizing agents in wheat in the mid-south region.

June 1981-April 1984. Research Specialist/Associate, University of Missouri-Columbia, Delta Center. Research responsibilities included genetic and production studies related to control of cyst nematode in soybean. Duties included general laboratory, greenhouse, and field work.

January 1980-May 1981 Graduate Teaching Assistant, Southern Illinois University. Responsible for instruction of laboratory courses in general biology, general plant pathology, and a graduate level cytology course. Research responsibilities included cytochemical evaluation of penetration sites of *Botrytis allii* on *Allium cepa*.

Publications

Shumway, C. R., J. T. Cothren, S. O. Serna-Saldivar, and L. W. Rooney. 1992. Planting date and moisture level effects on grain yield, physical grain quality, and alkaline-processing characteristics of food-grade maize. Crop Science 32: 1265-1269.

Savoy, B. R., J. T. Cothren, and C. R. Shumway. 1992. Early-season production systems utilizing indeterminate soybean. Agronomy Journal: 84:394-398.

B. R. Savoy, J. T. Cothren, and C.R. Shumway. 1992. Soybean biomass accumulation and leaf area index in early-season production environments. Agronomy Journal 84: 956-959.

Mjelde, J. W., J. T. Cothren, M. E. Rister, F. M. Hons, C. G. Coffman, C. R. Shumway, and R. G. Lemon. 1991. Integrating data from various field experiments: The case of corn in Texas. Journal of Production Agriculture 4:139-147.

Anand, S. C., J. A. Wrather, and C. R. Shumway. 1985. Soybean genotypes with resistance to races of soybean cyst nematode. Crop Science 25:1073-1075.

Anand, S. C., and C. R. Shumway. 1985. Response of secondary selection on soybean cyst nematode reproduction on resistant soybean lines. Crop Protection 4:231-234.

Anand, S. C., and C. R. Shumway. 1984. Relative resistance of derived cultivars of soybeans to the cyst nematode, <u>Heterodera glycines</u> Ichnole. Crop Protection 3:363-367.

Shumway, C., V. M. Russo, and A. J. Pappelis. 1983. Germination and postgermination development of <u>Colletotrichum dematium</u> f. <u>circinans</u> on <u>Allium cepa</u>. Mycopathologia 82:125-127.

Non-peer Reviewed Publications

Shumway, C. R. 1995. Evaluation of Pix in Northeastern Arkansas. Proceedings of the 1994 Cotton Research Meeting and 1994 Summaries of Cotton Research in Progress. Special Report 166, UA/AES, February 1995.

Shumway, C. R. 1995. Evaluation of cotton defoliants under several production

systems. Proceedings of the 1994 Cotton Research Meeting and 1994 Summaries of Cotton Research in Progress. Special Report 166, UA/AES, February 1995.

Annis, D., and C. R. Shumway. 1995. Effect of CGA-163935 on growth and yield of rice. Arkansas Rice Research Studies. Research Series 446, UA/AES, July 1995.

Crawford,S.H., C.B. Guy, R. Hayes, D.B. Reynolds, C.E. Snipes, P.R. Vidrine, C. R. Shumway. 1995. Roundup efficacy in preharvest application to cotton. p. 1090-1091. *In* 1995 Proceeding Beltwide Cotton Conferences, San Antonio, TX. January 4-7, 1995. National Cotton Council of America, Memphis, TN.

Shumway, C. R. 1996. Effect of Pix[™] and PGR IV[™] on cotton development and yield potential. Proceedings of the 1996 Cotton Research Meeting and 1996 Summaries of Cotton Research in Progress. Special Report 178, UA/AES, December 1996.

Shumway, C. R. 1997. Pix recommendations for Arkansas. Proceedings of the 1997 Cotton Research Meeting and 1997 Summaries of Cotton Research in Progress. Special Report 183, UA/AES, December 1997.

Shumway, C. R. 1997. Effect of Pix rate on cotton development and yield potential. Proceedings of the 1997 Cotton Research Meeting and 1997 Summaries of Cotton Research in Progress. Special Report 183, UA/AES, December 1997.

Shumway, C. R. 1997. Evaluation of corn nitrogen requirements following cotton, soybeans, and rice. Arkansas Soil Fertility Studies 1999. AAES Research Series 471, UA/AES, April 2000.

Presentations

Regulation of protein and oil content in soybean (Glycine max L). International CropScience Congress. 14-22 July 1992. Iowa State University, Ames, Iowa.

Soybean seed quality and composition in early-planted production environments. American Society of Agronomy. 1-6 November 1992. Minneapolis, MN.

Evaluation of varietal of soybeans to Frontier (SAN 582H) herbicide. Arkansas Agricultural Pesticides Association. 1-2 December. 1992. Fayetteville, AR.

Effect of CGA-163935 on growth and yield of rice. Arkansas Agricultural Pesticides Association. 1-2 December 1992. Fayetteville, AR.

Evaluation of kernel characteristics and yield potential of food-grade corn in Arkansas. American Society of Agronomy. 30 January to 3 February 1993. Tulsa, OK.

Soybean water-use efficiency in early-planted, early-maturing production systems.

Southern Soybean Conference. 15-17 February 1993.

Effect of CGA-163935 and nitrogen fertility on growth, yield, and lodging of rice. American Society of Agronomy. 5-9 February 1994. Nashville, TN.

Effect of MON 35085 herbicide on rice at early emergence. American Society of Agronomy. 5-9 February 1994. Nashville, TN.

Growth and yield potential of rice as affected by application timing of CGA-163935. American Society of Agronomy. 5-9 February 1994. Nashville, TN.

Evaluation of cotton defoliants and application timing. Arkansas Agricultural Pesticide Association. 6-7 December 1994. Fayetteville, AR.

Evaluation of Pix and PGR-IV on cotton yield and plant growth characteristics. Arkansas Agricultural Pesticide Association. 6-7 December 1994. Fayetteville, AR.

Roundup efficacy in preharvest applications to cotton. Beltwide Cotton Production Research Conference, 4-7 January 1995. San Antonio, TX.

Effect of rate and timing of nitrogen on plant and yield characteristics of soft red winter wheat. American Society of Agronomy. 30 January to 1 February 1995. New Orleans, LA.

Evaluation of yield characteristics of wheat under conventional and intensive management systems. American Society of Agronomy. 30 January to 1 February 1995. New Orleans, LA.

Temperature regulation of seed composition in soybean. Annual Meeting of the American Oil Chemists Society. May 1995.

Evaluation of plant growth regulators in cotton production systems. American Society of Agronomy, Southern Branch Meeting. February 1 - 5, 1997. Birmingham, AL.

Efficacy of RH 2485 on European corn borer control. House, J., C. S. Sorenson, L. Walton. American Society of Agronomy, Southern Branch Meeting. February 1 - 5, 1997. Birmingham, AL.

Effect of plant density and hybrid under several corn production systems. D. Ladd. American Society of Agronomy, Southern Branch Meeting. February 1 - 5, 1997. Birmingham, AL.

An evaluation of weed management systems in Roundup-ready soybeans. S. Parks. American Society of Agronomy, Southern Branch Meeting. February 1 - 5, 1997. Birmingham, AL. Effect of *Bacillus* cereus on growth and yield of cotton (*Gossypium hirsutum*). American Society of Agronomy, Southern Branch Meeting. January 30-31, 2000. Lexington, KY.

Invited Papers

Pix update and recommendations. Cotton Research Meeting. February 13, 1997. University of Arkansas, Monticello.

Corn herbicides. Arkansas Plant Food Educational Society/ Arkansas Crop Protection Association Technical Conference. January 26-30, 1998. Little Rock, AR.

Corn production. Arkansas Agricultural Consultants Association. February 10- 11, 1998. Little Rock, AR.

Intensive management practices for high yield corn production. Arkansas Plant Food Educational Society/Arkansas Crop Protection Association Technical Conference. January 25-28, 1999. Little Rock, AR.

Corn production systems. Arkansas Agricultural Consultants Association. February 9 - 10, 1999. Little Rock, AR.

Genetically modified organisms: Will they survive? Presented to the faculty of Suranaree University of Technology. April 7, 2000. Korat, Thailand.