David R. Shaw

Provost and Executive Vice President
Mississippi State University
Starkville, Mississippi, USA

Education:

B. S. 1981.	Cameron University, Major - Agriculture
M. S. 1983.	Oklahoma State University, Major - Agronomy
Ph. D. 1985.	Oklahoma State University, Major - Crop Science

Experience:

1985-1989	Assistant Professor of Weed Science Mississippi State University
1989-1992	Associate Professor of Weed Science Mississippi State University
1992-1999	Professor of Weed Science Mississippi State University
1999-2002	Director, Remote Sensing Technologies Center Mississippi State University
1999-Present	William L. Giles Distinguished Professor of Weed Science Mississippi State University
2002-2009	Director, Geosystems Research Institute Mississippi State University
2006-2009	Director, Northern Gulf Institute Mississippi State University
2010-2020	Vice President for Research and Economic Development Mississippi State University
2020-Present	Provost and Executive Vice President Mississippi State University

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Research Experience:

Dr. Shaw has spent his scientific career focused on minimizing crop losses due to weeds while at the same time minimizing herbicide usage. Initially, he focused on development of new herbicide programs that decreased reliance on older, more toxic chemicals, and integrating these technologies into overall management strategies that used non-chemical means of control, including tillage, cover crops, row spacing, and crop rotation.

From these early efforts, he then developed a strong research program in mitigating off-site pesticide movement in surface water, particularly focusing on vegetative filter strips at the border of fields. He worked closely with the USDA Natural Resources Conservation Service to develop this research, which led to official guidelines by NRCS on field border management. His work in this area has been cited extensively in establishing policies regarding vegetative filters.

Based on his interest in minimizing herbicide applications while maximizing weed control, Dr. Shaw became fascinated with the concept of site-specific herbicide applications using remote sensing technologies. This led to Dr. Shaw advising NASA on the development of the concept of a commercial space remote sensing program, Dr. Shaw worked closely with NASA and USDA, using his fundamental research in developing feature detection techniques. In addition, his interest in geospatial technologies and remote sensing in agriculture, led to a major NASA challenge grant that also created the Remote Sensing Technologies Center at MSU in 1998. Several of Dr. Shaw's publication in remote sensing and site-specific agriculture are among the most often cited works he has published.

Honors and Awards:

Outstanding Young Weed Scientist Award, Weed Science Society of America, 1996
Outstanding Advising Award, MSU Chapter, Alpha Zeta, 1994
First Mississippi Corp. Award for Outstanding MAFES Scientist, 1994
Research Award, Mississippi State University Alumni Association, 1997
Grantsmanship Award, Mississippi Agricultural & Forestry Experiment Station, 1997
Outstanding Teacher Award, Weed Science Society of America, 1999
William L. Giles Distinguished Professor, 1999
Outstanding Alumnus Award, Cameron University, 1999
Ralph E. Powe Research Award, Mississippi State University, 2000
Top 25 Researcher, Mississippi State University, 1999, 2000, 2001, 2002
Fellow, Weed Science Society of America, 2002
Research Award, Weed Science Society of America, 2003
Fellow, American Association for the Advancement of Science, 2008
Public Service Award, Weed Science Society of America, 2015

Publications:

Journal Articles: 188
Experiment Station Bulletins: 29
Extension Publications: 2
Abstracts from Presentations: 453

Membership in Scientific, Professional, and Honor Societies:

American Society for Photogrammetry and Remote Sensing
International Weed Science Society
Weed Science Society of America
Southern Weed Science Society
Mississippi Weed Science Society
American Society of Agronomy
American Geophysical Union
Council for Agricultural Science and Technology
Phi Kappa Phi
Gamma Sigma Delta
Sigma Xi
American Chemical Society
American Association for the Advancement of Science
Soil and Water Conservation Society
