

## Curriculum Vitae 2009

### Janet F. Spears, PhD.

Professor and Departmental Undergraduate Teaching Coordinator  
2126 Williams Hall, Box 7620  
North Carolina State University  
Raleigh, NC 27606  
Phone: 919-515-4070  
E-mail: jan\_spears@ncsu.edu

### Education

1988	Doctor of Philosophy in Agronomy	University of Kentucky, Lexington, Kentucky
1984	Masters of Science in Crop Science	Oregon State University, Corvallis, Oregon
1981	Bachelor of Science in Agronomy	University of Florida, Gainesville, Florida

### Professional Experience

2004 to Present	Undergraduate Teaching Coordinator, North Carolina State University
2003 to Present	Professor, North Carolina State University
1993 to 2003	Associate Professor, North Carolina State University
1988 to 1993	Assistant Professor, North Carolina State University

### Teaching

#### *Courses taught*

Courses created and taught: CS 103 Introduction to Crop Science (1 hour), CS 224 Seeds, Biotechnology & Societies (3 hours), CS 424/524 Seed Physiology (3 hours), and CS 010 Introduction to Field Crops Technology (1 hour). All classes are offered face-to-face and in addition CS 224 and CS 424/524 are offered through Distance Education.

Other courses taught: CS 011 Field Crop Production (4 hours), CS 067 Wheat Production (1 hour) and CS 490 Senior Seminar

#### *Advising*

Advising responsibilities include students enrolled in the Plant & Soil Sciences baccalaureate program and the Agricultural Institute Field Crop Technology Associate of Applied Sciences degree program. The total number of advisees is typically 50+ students per semester.

#### *Curriculum Development*

I revised the North Carolina State University Agronomy degree including renaming the degree to Plant & Soil Sciences, revising the requirements for three concentrations (Agronomic Business, Agronomic

Science and Crop Production), created a new Crop Biotechnology concentration and facilitated the establishment of a new Agroecology concentration.

### *Teaching Facility Development*

In 2006 I established the W.T. “Bill” Fike Agronomy Teaching Field Laboratory on the Lake Wheeler Farm. The facility includes 3 acres of irrigated land which now includes two permanent structures and one portable storage facility. Field rotational systems, planting date, and row spacing demonstrations that include the major agronomic crops produced in North Carolina are renewed each season. The facility also contains space for undergraduate student research projects.

### **Research and Extension/Outreach**

Research and extension programs have focused on production practices that optimize seed quality, developing better seed quality evaluation techniques, understanding germination requirements for crop and weed species, and enhancing stand establishment of agronomic crops.

### *Selected Publications*

Clewis, S.B., D.L. Jordan, **J. F. Spears**, and J. W. Wilcut. 2007. Influence of Environmental Factors on Eveningprimrose (*Oenothera laciniata*) Germination, Emergence, Development, Vegetative Growth, and Control. *Weed Sci.* 55:264-272.

Burke, I. C., W. E. Thomas, J. D. Burton, **J. F. Spears**, and J. W. Wilcut. 2006. A Seedling Assay to Screen Aryloxyphenoxypropionic Acid and Cyclohexanedione Resistance in Johnsongrass (*Sorghum halepense*). *Weed Tech.* 209:950-955.

Thomas, W.E., I. C. Burke, **J. F. Spears**, and J. W. Wilcut. 2006. Influence of Environmental Factors on Slender Amaranth (*Amaranthus viridis*) Germination. *Weed Sci.* 54:316-320.

Egli, D.B., D. M. TeKrony, and J. F. Spears. 2005. Effect of High Temperature Stress During Different Stages of Seed Development in Soybean [*Glycine max* (L.) Merrill]. *Seed Tech.* 27:177-188.

Lancaster, S. H., D.L. Jordan, **J.F. Spears**, A.C. York, J.W. Wilcut, D.W. Monks, R.B. Batts, and R.L. Brandenburg. 2005. Sicklepod (*Senna obtusifolia*) control and seed production following 2,4-DB applied alone and with fungicides or insecticides. *Weed Technol.* 19:451-455.

Lanier, J.E., D. L. Jordan, **J.F. Spears**, R. Wells, and P.D. Johnson. 2005. Peanut Response to Inoculation and Nitrogen Fertilizer. *Agron. J.* 97:79-84.

Lanier, E. J., D.L. Jordan, **J. F. Spears**, R. Wells, P. D. Johnson, J. S. Barnes, C. A. Hurt, R. L. Brandenburg, and J. E. Bailey. 2004. Peanut Response to Planting Pattern, Row Spacing, and Irrigation. *Agron. J.* 96:1066-1072.

Lanier, E. J., D.L. Jordan, J. S. Barnes, J. Matthews, G. L. Grabow, W. J. Griffin, J. E. Bailey, P. D. Johnson, **J. F. Spears**, and R. Wells. 2004. Disease Management in Overhead Sprinkler and Subsurface Drip Irrigation Systems for Peanut. *Agron. J.* 1058-1065.

Lanier, E. J., S. H. Lancaster, D.L. Jordan, P. D. Johnson, **J. F. Spears**, R. Wells, C.A. Hurt, and R.L. Brandenburg. 2004. Sicklepod Control in Peanut Seeded in Single and Twin Row Planting Patterns. *Peanut Sci.* 31:36-40.

Burke, I. C., W. E. Thomas, **J. F. Spears**, and J. W. Wilcut. 2003. Influence of Environmental Factors on Broadleaf Signalgrass (*Brachiaria Platyphylla*) Germination. *Weed Sci.* 51:683-689.

Burke, I. C., W. E. Thomas, **J. F. Spears**, and J. W. Wilcut. 2003. Influence of Environmental Factors on Crowfootgrass (*Dactyloctenium Aegyptium*) Germination. *Weed Sci.* 51:342-347.

Hartley, M. D., **J. F. Spears**, W. D. Smith, L. R. Fisher, and J. R. Schultheis. 2002. Response of Flue-cured Tobacco Cultivars NC 71 and NC 72 to Seed Priming: I. Laboratory Evaluations of Light and Temperature on Germination Rate and Synchrony. *Tobacco Sci.* 45:6-10.

Hartley, M. D., W. D. Smith, **J. F. Spears**, L. R. Fisher, and J. R. Schultheis. 2002. Effect of Uniformity of Seedling Emergence on the Percentage of Usable Transplants Produced in the Float System. *Tobacco Sci.* 45:1-5.

Hartley, M. D., W. D. Smith, **J. F. Spears**, L. R. Fisher, and J. R. Schultheis. 2002. Response of Flue-cured Tobacco Cultivars NC 71 and NC 72 to Seed Priming: II. Influence on Transplant Production Under Variable Float System Environments. *Tobacco Sci.* 45:11-14.

## Honors and Awards

2008	Outstanding Teacher	North Carolina State University
2007	Outstanding Faculty Adviser	College of Agriculture and Life Sciences
2004	Teaching Award of Merit	NACTA
2002	Outstanding NCSU Faculty Member	Agronomy Club
1999	Educational Materials Award	American Society of Agronomy
1998	Educational Materials Award (less than 16 pages)	American Society of Agronomy
1998	Outstanding Faculty Alumni Award	Alpha Zeta
1998	Foil W. McLaughlin Crop Improvement Award	North Carolina Crop Improvement Assoc
1996	Charter Research Member	Society of Commercial Seed Technologists
1994	Outstanding Extension Service Award	North Carolina State University
1991	Honorary Seedsman of the Year	North Carolina Seedsmen's Association

## Professional Memberships

American Peanut Research and Education Society  
American Society of Agronomy  
Association of Official Seed Analysts  
Crop Science Society of America  
Epsilon Sigma Phi  
International Society of Seed Technologists  
North Carolina Association of Cooperative Extension Specialists  
Society of Commercial Seed Technologists

