**BIOGRAPHICAL SKETCH**

**Dr. Dwayne G. Westfall**
**Professor Emeritus**
**Department of Soil and crop Sciences**
**Colorado State University**

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**EDUCATION:**

B.S. University of Idaho, 1961.
Ph.D. Washington State University, 1968.

**HONORS:**

Elected "Fellow" - American Society of Agronomy, 1986.
Recipient - "Agronomic Achievement Award - Soils" by American Society of Agronomy, 1987.
Elected "Fellow" - Soil Science Society of America, 1988.
Adjunct-Professor of the Faculty of the Institute of Agronomy and Veterinary Medicine, Hassan II, Rabat, Morocco, 1986-1995.
Recipient - "Distinguished Service Award" by the Great Plains Conservation Tillage Task Force, 1990.
Recipient - "Werner L. Nelson Award" by National Fertilizer Solution Association, 1990.
Recipient - "Honorary Member Award" by Agricultural Retailers Association, 1992.
Recipient - "Soil Science Applied Research Award" by the Soil Science Society of America, 1993.
Recipient - "Faculty Award of Merit" by Gamma Sigma Delta Honor Society, CSU Chapter, 1994.
Recipient - "Researcher of The Year" by the Fluid Fertilizer Foundation, 1995.
Recipient – "Robert E. Wagner Award" by The Potash and Phosphate Institute, 2005.
Recipient – "Great Plains Soil Fertility Leadership Award", 2006.
Recipient – "Leadership Award" Western Nutrient Management Conference, 2009
Recipient – "Distinguished Career Award", College of Agricultural Sciences, CSU, 2010.
Recipient – "Outstanding Faculty Member Award", CSU Agronomy Club, 2010

**EXPERIENCE:**

July 1, 2011 to Present. Professor Emeritus, Department of Soil and Crop Sciences, Colorado State University
1981 to June 30, 2011, Professor, Department of Soil and Crop Sciences, Colorado State University. Appointment 70% research and 30% teaching. Primary research in areas of soil/crop management of no-till dryland/irrigated agroecosystems. Other research areas; environmental soil science, soil testing, soil fertility, precision agriculture/site specific management, N management to protect groundwater quality, and fertilizer management. Teach/taught junior-senior level Soil Fertility Management, Soil Fertility Management Laboratory, International Soils, Crops, and Farming Systems, and Environmental Soil Science, Graduate level course "Techniques of Presentation of Scientific Information". Involved in international development.

Jan to July 2004 Visiting Professor, Department of Crop and Soil Sciences, University of Georgia, Athens, GA.

1988 to 1994 Project Leader, University Strengthening Program, Autonomous University of Guadalajara, Guadalajara, Mexico.

Jan to Aug 88 Visiting Scientist, CSIRO Tropical Crops and Pasture, Brisbane, Australia. Conducted N cycling research on tropical legumes using $^{15}N$.

1980 to 1981 Associate Professor and Soil Fertility Extension Specialist, Department of Agronomy, Colorado State University. Conduct extension education program related to soil fertility, crop production, and conduct soil fertility research program on dryland and irrigated crops.

1978-1980 Irrigation Agronomist, Colorado State University: On-Farm Water Management Development Project, Lahore, Pakistan. Provided guidance and leadership in research and training programs related to on-farm water management. Supervised and coordinated water management and soils research programs at several research institutes and Universities throughout country.

1973 -78 Senior Plant Nutritionist, Great Western Sugar Company, Agricultural Research Center, Longmont, Colorado. Responsible for company's research and educational activities in area of soil fertility and N plant nutrition of sugar beets in Colorado, Kansas, Nebraska, Wyoming, Montana, and Ohio.

1967-73 Assistant and Associate Professor, Soil Chemistry, Texas A&M University, Agricultural Research and Extension Center, Beaumont, Texas. Research responsibility for soil fertility and chemistry programs in rice and pasture production and pollution from irrigation water return flow.

1963-67 Graduate Research Assistant ("National Defense and Education Fellow"), Department of Soil Science, Washington State University, Pullman, WA.

1961-1963 2nd Lieutenant/1st Lieutenant, U. S. Army Chemical Corp, U. S. Army Biological Laboratory, Fort Detrick, MD.

1963-1967 1st Lieutenant/Captain, Commanding Officer. U. S. Army Chemical Corp CBR Reserve Unit, Pullman, WA.

**INTERNATIONAL EXPERIENCE SUMMARY**

Irrigation Agronomist on the Consortium for International Development, CSU/USAID On-Farm Water Management Project stationed in Lahore Pakistan. 1978-80

Adjunct Professor at Institute of Agriculture and Veterinary Science, Hassan II, Rabat, Morocco (University of Minnesota/USAID University Development Project) Advised graduate students. 1986-1995

Visiting Scientist, CSIRO Tropical Crops and Pasture, Brisbane, Australia. Conducted N cycling research on tropical legumes using $^{15}N$. 1988

Participating scientist in MIAC/USAID project at the Arid Culture Center, Satat, Morocco (Advise graduate students. 1992-1995

Project Leader, University Strengthening Program, Autonomous University of Guadalajara, Guadalajara, Mexico. 1989-1994

US Project Leader, FAS/USDA Pakistan Agricultural Linkage Program (Soil Fertility Monitoring in Cropping Systems). 2001-2004

US/CSU representative to Agricultural Knowledge Initiative (AKI) project planning meeting and proposal development in New Delhi, India. September 2006.

CSU representative to meeting on "Water and Agricultural Sustainability Strategies" held at the Punjab Agricultural University, Ludhiana, India, October 2008.

Co-Project Leader "Indo-US Workshop on Precision Agricultural Techniques and Technologies" 2010-2011.

Co-Project Leader "International Research and Education Collaboration with India and China in Information and Communication Technologies in Agriculture and Precision Agriculture" 2010 -2013.

**PROFESSIONAL SOCIETY ELECTED OFFICES:**

President, Western Society of Soil Science, 1989-90
Vice President, Western Society of Soil Science, 1988-89
Secretary-Treasurer, Western Society of Soil Science, 1986-88
Board of Directors, American Society of Agronomy, 1986-89
Board of Directors, Soil Science Society of America, 1986-89

**PROFESSIONAL SOCIETY ACTIVITIES:**

Member, Soil Science Professional Service Awards Committee, 2007-2007.
Interim Technical Editor, *Agronomy Journal*, 2005-2006.
Technical Editor, *Agronomy Journal*, 1999- 2004
Editor, *Journal of Production Agriculture*, 1992-1999.
Associate Editor, *Agronomy Journal*, 1991-1992.
Associate Editor, Division S-8, *Soil Science Society to America Journal*, 1983-87.
Member, Soil Society of America, Organization, Policy and Bylaws Committee, 1993-96.
Member, Soil Science Society of America "Fellow" selection committee, 1990-1992.
Chairman, Agronomic Research Award Committee, American Society of Agronomy, 1983.
Member, Agronomic Research Award Committee, American Society of Agronomy, 1981-83.
Board of Directors, Rocky Mountain Plant Food Association, 1980-83.
State of Colorado Department of Agriculture, Advisory Board for Evaluation of Fertilizers, Soil Amendments and Plant Amendments. Member, 1980-81; Chairman, 1982-present.
Farmland Industries/Agriliance LLC., Fertilizer Advisory Board, 1981- 2004.
Western Society of Soil Science, 1970-present.
Soil Science Society of America, 1966-present.
American Society of Agronomy, 1966-present.
International Society of Soil Science, 1980-present.
Gamma Sigma Delta, 1981-present.
Sigma Xi, 1967-present.

**RESEARCH AREAS:**

Management of dryland and irrigated sustainable cropping systems. Drought management and

intensification of no-till dryland agroecosystems. Soil fertility management under dryland no-till and irrigated cropping systems. Soil environmental quality and groundwater pollution, soil testing and fertilizer recommendations. Nitrogen and phosphorus use and cycling in dryland/irrigated agroecosystems Beneficial use of industrial by-products as plant nutrient sources**.** Soil fertility relationships of precision agriculture/site specific management through delineation of production level management zone.

**TECHNICAL PUBLICATIONS:**

Books/Manuals = 1
Book Chapters = 16
Scientific Refereed Papers = over 100
Abstracts and Proceedings = over 250
Technical Bulletins = 70
Extension Bulletins = 23
Non-Technical (popular) papers = 20

**CONSULTING:** ***Consulting conducted under Company***
**Westfall & Associates, Inc.**
**Dwayne G. Westfall Ph.D., President**
**1312 Ticonderoga Drive**
**Fort Collins, CO 80525**
**(**970) 207-9917 - Phone
(970) 207-8997 – Fax
(970) 222-0682 - Cell

Served as "expert" witness in court litigations and hearings involving:

* Proper use of fertilizer on crops.
* Land management, soil degradation and environmentally sound cultural practices.
* Value of plant nutrients to cropping systems.
* Land/soil management influences in bankruptcy cases.
* Impact of transfers of municipal effluent water on water quality and crop production.
* Value of nutrients in fertilizer manufacturing and end product usage and tax liability.
* Loss of production from petrochemical spills
* Patent infringement in fertilizer manufacturing

Consultant to the Institute of Agronomy and Veterinary Science, Rabat, Morocco, for development of soil test correlations and fertilizer use procedures in Morocco.

Development of environmentally safe land application procedures for industrial by-products that contain economic levels of plant nutrients and low levels of heavy metals.

Nutrient, organic matter and salt level balances/monitoring and management for land application of industrial waste streams containing nutrients and organic materials originating from industrial effluent stream.

Installation of groundwater monitoring wells, long term groundwater quality monitoring,

Development of State/County permits for application of industrial byproducts for beneficial use and soil quality and environmental monitoring.

Development of nutrient management plan for manure application to agricultural land and long term environmental monitoring.