Dr. Xuejun Dong

Contact Information

Associate Professor of Crop Physiology
Texas A&M AgriLife Research and Extension Center at Uvalde
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Research Interests

My program is centered in the soil-plant-water relations for improved crop production under water limitation. My research emphasizes the identification of plant physiological traits and mechanisms of soil-plant interactions in relation to improved crop water use efficiency in cropping system through the development and application of sensors and computer models for crop phenotyping and management.

Education

Institute of Botany, Chinese Academy of Sciences, Beijing, China

Ph.D., Botany (Plant Ecophysiology), 1997

- Dissertation: *Ecophysiology of the Sandy Shrubs in the Mu Us Sandland: Structure and Function* (in English with journal articles published in [J. Arid Environ.], [Trees])
- Adviser: Professor Xinshi Zhang (Hsin-shih Chang), Former Member of Chinese Academy of Sciences
- Department: Lab of Quantitative Vegetation Ecology (now State Key Laboratory of Vegetation and Environmental Change)

M.S., Botany (Plant Ecophysiology), 1991

- Thesis: *The Qualitative and Quantitative Interpretations of Water Relations of the Plants in the Soil-Plant-Atmospheric Systems in the Mu Us Sandland of China* (in Chinese)
- Adviser: Professor Xinshi Zhang
- Department: Lab of Quantitative Vegetation Ecology

Lanzhou University, Lanzhou, Gansu Province, China

B.S., Plant Physiology (with honor), 1987

- Thesis: *The Change in the Superoxide Dismutase Activity and Lipid Peroxidation in Radish Cotyledons During Senescence as Induced by Exotic Hormones* (in Chinese)
- Adviser: Professor Chenglie Zhang
- Department of Biology

Professional Experience

Associate Professor of Crop Physiology 2019 – present
Texas A&M AgriLife Research and Extension Center - Uvalde, TX USA, and Department of Soil and Crop Sciences, College Station, TX USA

Assistant Professor of Crop Physiology 2013 – 2019
Texas A&M AgriLife Research and Extension Center - Uvalde, TX USA, and Department of Soil and Crop Sciences, College Station, TX USA

Range Scientist/ Adjunct Professor 2010 – 2013

Central Grasslands Research Extension Center (CGREC), North Dakota State University (NDSU), Streeter, ND USA

Assistant Range Scientist/ Adjunct Professor 2006 – 2010
NDSU-CGREC, Streeter, ND USA

Assistant Range Scientist 2002 – 2006
NDSU-CGREC, Streeter, ND USA

Research Specialist 2000 – 2002
NDSU-CGREC, Streeter, ND USA

Research Associate 1999 – 2000
Department of Botany, Duke University, Durham, NC USA

Research Associate Professor 1997 – 1999
Institute of Botany, Chinese Academy of Sciences, Beijing, China

Research Assistant Scientist 1991 – 1997
Institute of Botany, Chinese Academy of Sciences, Beijing, China

Invited Book Chapters/papers (3)

[1] M. Liebig, X. Dong, J. McLain and C. Dell. 2012. Greenhouse gas flux from managed grasslands in the U.S. In: M. A. Liebig, A. J. Franzluebbers and R. F. Follett (eds): **Managing Agricultural Greenhouse Gases: Coordinated Agricultural Research Through GRACEnet to Address Our Changing Climate.** *Elsevier*. San Diego, CA. Pp 183–202.

[2] X.-D. Chen, X.-J. Dong and Z.-X. Chen. 1999. Shrub diversity and its restoration ecology in Ordos Plateau Sandland. In: K.-P. Ma (ed.): **Ecosystems Diversity in Key Areas of China**, In Chinese, published by Zhejiang Science and Technology Press, Hangzhou, China. Pp 109–153.

[3] X. Dong, B. Patton and P. Nyren. 2013. Responses of plant root and soil microbial respiration to seasonal rain events in a mixed-grass prairie under different grazing intensities. Invited paper presented to **International Symposium on Adaptation of Terrestrial Ecosystems to Climate Change and Future Earth**, Pp 148–158. Edited by G.-S. Zhou, Hubei Hotel-Beijing, China. Jun. 29 - Jul. 1, 2013.

Refereed Journal Articles (62)

[1] X. Dong, B. Peng, S. Sieckenius, R. Raman, M. M. Conley, D. I. Leskovar. 2021. Leaf water potential of field crops estimated using NDVI in ground-based remote sensing–opportunities to increase prediction precision. **PeerJ** 9:e12005 http://doi.org/10.7717/peerj.12005.

[2] X. Dong, G. Feng, and I. Zemach. 2021. Using normalized difference vegetation index to estimate sesame drydown and seed yield. **J. Crop Improve.** 35: 508–521. doi: 10.1080/15427528.2020.1846101 Supplementary material is available from http://doi.org/10.5281/zenodo.4137182.

[3] X. Liu, X. Dong, X. Ma, E. B. Blancaflor and J. R. Butnor. 2019. Ground penetrating radar with a high frequency antenna improves root biomass detection in sandy soil-grown winter wheat. **Ground Penetrating Radar**, 2(2): 31-48. doi.org/10.26376/GPR2019006

[4] B. Peng, X. Liu, X. Dong, Q. Xue, C. B. Neely, T. Marek, A. M. H. Ibrahim, G. Zhang, D. I. Leskovar and J. C. Rudd. 2019. Root morphological traits

of winter wheat under contrasting environments. **J. Agro. Crop Sci.** 205: 571–585. https://doi.org/10.1111/jac.12360

[5] K. Qin, X. Dong, J. Jifon and D. I. Leskovar. 2019. Rhizosphere microbial biomass is affected by soil type, organic and water inputs in a bell pepper system. **Appl. Soil Ecol.**, 138: 80–87. https://doi.org/10.1016/j.apsoil.2019.02.024

[6] X. Dong, B. Peng, X. Liu, K. Qin, Q. Xue and D. I. Leskovar. 2019. An automated calculation of plant root distribution parameters based on root length density data. **Appl. Ecol. Environ. Res.**, 17: 3545–3552. DOI: http://dx.doi.org/10.15666/aeer/1702_35453552 Supplementary material is available from https://zenodo.org/record/1484655#.XBe_dWl7lhE.

[7] X. Liu, S. Feakins, X. Dong, Q. Xue, J. Han, T. Marek, D.I. Leskovar, C.B. Neely and A.M.H. Ibrahim. 2019. Evaluating leaf wax and bulk leaf carbon isotope surrogates for water use efficiency and grain yield in winter wheat. **Crop Sci.** 59: 718–732. doi: 10.2135/cropsci2018.07.0452.

[8] Y. J. Zhang, M. Y. Hou, H. Y. Xue, L. T. Liu, H. C. Sun, C. D. Li and X. J. Dong. 2018. Photochemical reflectance index and solar-induced fluorescence for assessing cotton photosynthesis under water-deficit stress. **Biol. Plant.** 62: 817–825. DOI: 10.1007/s10535-018-0821-4

[9] X. Liu, X. Dong, Q. Xue, D.I. Leskovar, J. Jifon, J.R. Butnor and T. Marek. 2018. Ground penetrating radar (GPR) detects fine roots of agricultural crops in the field. **Plant Soil** 423: 517–531. https://doi.org/10.1007/s11104-017-3531-3

[10] X. Liu, S. Feakins, X. Dong, Q. Xue, T. Marek, D.I. Leskovar, C.B. Neely and A.M.H. Ibrahim. 2017. Experimental study of leaf wax *n*-alkane response in winter wheat cultivars to drought conditions. **Org. Geochem.** 113: 210–223. http://dx.doi.org/10.1016/j.orggeochem.2017.07.020

[11] X. Liu, X. Dong and D. I. Leskovar. 2016. Ground penetrating radar for for underground sensing in agriculture: A review. **Int. Agrophys.** Vol 30(4): 533–543. doi: 10.1515/intag-2016-0010

[12] D. Leskovar, Y. Othman, and X. Dong. 2016. Strip tillage improves soil biological activity, fruit yield and sugar content of triploid watermelon. **Soil Tillage Res.** 163: 266–273.

[13] X. Dong, W. Xu, Y. Zhang, and D. Leskovar. 2016. Effect of irrigation timing on root zone soil temperature, root growth and grain yield and chemical composition in corn. **Agronomy** 6, 34. doi: 10.3390/agronomy6020034

[14] Z.-S. Zhang, Y. Zhao, X.-J. Dong, Y.-F. Shi, Y.-L. Chen, Y.-G. Hu. 2016. Evolution of soil respiration depends on biological soil crusts across a 50-year chronosequence of desert revegetation. **Soil Sci. Plant Nutrition** 62(2): 140–149.

[15] X. Dong. 2016. How to put plant root uptake into a soil water flow model. **F1000Research**, 5:43 (doi: 10.12688/f1000research.7686.1) Supplementary material is available from https://zenodo.org/record/42702#.XBfBvWl7lhE.

[16] Z.-S. Zhang, X.-J. Dong, B.-X. Xu, Y.-L. Chen, Y. Zhao, Y.-H. Gao, Y.-G. Hu and L. Huang. 2015. Soil respiration sensitivities to water and temperature in a revegetated desert. **JGR - Biogeosciences** 120(4): 773–787. DOI: 10.1002/2014JG002805

[17] X. Dong and B. D. Patton. 2015. Predicting soil water retention curves based on particle-size distribution using a Minitab macro. **Afr. J. Soil Sci.** 3(1): 079–085.

[18] X. Dong, J. Patton, L. Gu, J.-Z. Wang and B. Patton. 2014. Leaf photosynthesis and plant competitive success in a mixed-grass prairie: With reference to exotic grasses invasion. **J. Ecosys. Ecograph.** 4: 152. doi: 10.4172/2157-7625.1000152.

[19] Z.-S. Zhang, Y.-L. Chen, B.-X. Xu, L. Huang, H.-J. Tan and X.-J. Dong. 2014. Topographic differentiations of biological soil crusts and hydraulic properties in fixed sand dunes, Tengger Desert. **J. Arid Land** 7(2): 205–215. doi: 10.1007/s40333-014-0048-y

[20] X. Dong D. Leskovar, K. Crosby and T. Marek. 2014. Quantifying crop water use in arid and semi-arid regions: Opportunities based on soil-plant water relations. **J. Arid Land Studies.** 24-1: 141–144.

[21] Y. Sun, L. Gu, R. E. Dickinson, S. G. Pallardy, J. Baker, Y. Cao, F. M. DaMatta, X. Dong, D. Ellsworth, D. Van Goethem, A. M. Jensen, B. E. Law, R. Loos, S. C. V. Martins, R. J. Norby, D. Weston, K. Winter. 2014. Asymmetrical effects of mesophyll conductance on fundamental photosynthetic parameters and their relationships estimated from leaf gas exchange measurements. **Plant Cell Environ.** 37(4): 978–994.

[22] W.-H. Wang, J. Chen, T.-W. Liu, J. Chen, A.-D. Han, M. Simon, X.-J. Dong, J. He, H.-L. Zheng. 2014. Regulation of the calcium-sensing receptor in both stomatal movement and photosynthetic electron transport is crucial for water use efficiency and drought tolerance in Arabidopsis. **J. Exp. Bot.** 65: 223–234.

[23] X. Dong, J. Patton, G. Wang, P. Nyren and P. Peterson. 2014. Effect of drought on biomass allocation in two invasive and two native grass species dominating the mixed-grass prairie. **Grass Forage Sci.** 69: 160–166.

[24] F.-H. Wu, J. Chen, T.-W. Liu, Z.-J. Li, J. Chen, L. Chen, S.-H. Guan, T.-Y. Li, X.-J. Dong, J. Patton and H.-L. Zheng. 2013. Differential responses of *Abies fabri* and *Rhododendron calophytum* at two sites with contrasting pollution deposition and available calcium in southwestern China. **Plant Ecol.** 214: 557–569.

[25] M. A. Liebig, S. L. Kronberg, J. R. Hendrickson, X. Dong, and J. R. Gross. 2013. CO_2 efflux from long-term grazing management systems in a semiarid region. **Agricult. Ecosyst. Environ.** 164: 137–144.

[26] X. Dong, F.-C. Cheng, D.-J. Wang, G.-J. Wang, B. D. Patton and P. E. Nyren. 2013. Mixed-grass prairie rhizome biomass is influenced by cattle grazing intensity. **Grass Forage Sci.** 68: 199–204. Supplementary material is available from https://zenodo.org/record/2543916#.XEdXt2l7lhE.

[27] J. Chen, W.-H. Wang, F.-H. Wu, C.-Y. You, T.-W. Liu, X.-J. Dong, J.-X. He and H.-L. Zheng. 2013. Hydrogen sulfide alleviates aluminum toxicity in barley seedlings. **Plant Soil** 362: 301–318.

[28] Z.-S. Zhang, X.-J. Dong, Y.-B. Liu, X.-R. Li, R.-L. Jia, Y.-G. Hu, M.-Z. He, and L. Huang. 2012. Soil oxidases recovered faster than hydrolases in a 50-year chronosequence of desert revegetation. **Plant Soil** 358: 275–287.

[29] W.-H. Wang, X.-Q. Yi, F.-H. Wu, A.-D. Han, X.-J. Dong, J.-X. He, Z.-M. Pei and H.-L. Zheng. 2012. Calcium-sensing receptor regulates stomatal closure through hydrogen peroxide and nitric oxide in response to extracellular calcium in Arabidopsis. **J. Exp. Bot.** 63(1): 177–190.

[30] S.-S. Huang, J. Chen, X.-J. Dong, J. Patton, Z.-M. Pei and H.-L. Zheng. 2012. Calcium and calcium receptor CAS promote Arabidopsis thaliana de-etiolation. **Physiol. Plant.** 144(1): 73–82.

[31] J. Chen, F.-H. Wu, T.-W. Liu, L. Chen, Q. Xiao, X.-J. Dong, Z.-M. Pei and H.-L. Zheng. 2012. Emissions of nitric oxide from 79 plant species in response to simulated nitrogen deposition. **Environ. Pollut.** 160: 192–200.

[32] X. Pan, D. Shen, X. Dong, B. Patton. 2011. Natural disaster occurrence and average global temperature. **Disaster Adv.** 4(4): 61–63.

[33] X. Dong, B. Patton, P. Nyren, R. Limb, L. Cihacek, D. Kirby and E. Deckard, 2011. Leaf-water relations of a native and an introduced grass species in the mixed-grass prairie under cattle grazing. **Appl. Ecol. Environ. Res.** 9: 311–331. Supplementary material is available from https://zenodo.org/record/999711#.WkwSKXlG2Ul.

[34] J. Chen, F.-H. Wu, W.-H. Wang, C.-J. Zheng, G.-H. Lin, X.-J. Dong, J.-X. He, Z.-M. Pei and H.-L. Zheng. 2011. Hydrogen sulphide enhances photosynthesis through promoting chloroplast biogenesis, photosynthetic enzyme expression, and thiol redox modification in *Spinacia oleracea* seedlings. **J. Exp. Bot.** 62(13): 4481–4493.

[35] T.-W. Liu, F.-H. Wu, W.-H. Wang, J. Chen, Z.-J. Li, X.-J. Dong, J. Patton, Z.-M. Pei and H.-L. Zheng. 2011. Effects of calcium on seed germination, seedling growth and photosynthesis of six forest tree species under simulated acid rain. **Tree Physiol.** 31: 402–413.

[36] X. Dong, B. Patton, A. Nyren, P. Nyren and L. Prunty. 2010. Quantifying root water extraction by rangeland plants through soil water modeling. **Plant Soil** 335: 181–198.

[37] J. Chen, F.-H. Wu, Q. Xiao, Z.-H. Yang, S.-K. Huang, J. Wang, Y.-G. Wu, X.-J. Dong, Z.-M. Pei and H.-L. Zheng. 2010. Diurnal variation of nitric oxide emission flux from a mangrove wetland in Zhangjiang River Estuary, China. **Est. Coast. Shelf Sci.** 90: 212–220.

[38] X.-B. Pan, S.-P. Wang, P. E. Nyren, B. D. Patton, X.-J. Dong and A. Nyren. 2010. Studies on land use of North Dakota state and its instruction to China. **Guangxi Zhiwu / Guihaia** 30(2): 196–201.

[39] J. Chen, Q. Xiao, F.-H. Wu, X.-J. Dong, J.-X. He, Z.-M. Pei and H.-L. Zheng. 2010. Nitric oxide enhances salt secretion and Na^+ sequestration in a mangrove plant, *Avicennia marina*, through increasing the expression of H^+-ATPase and Na^+/H^+ antiporter under high salinity. **Tree Physiol.** 30: 1570–1585.

[40] Z.-S. Zhang, X.-R. Li, X.-J. Dong, X.-H. Jia, M.-Z. He and H.-J. Tan. 2009. Rainfall interception by sand-stabilizing shrubs related to crown structure. **Sci. Cold Arid Regions** 1: 0107–0119.

[41] X.-B. Pan, J.-H. Wang, S.-P. Wang, P. E. Nyren, B. D. Patton, X.-J. Dong and A. Nyren. 2008. Studies on optimum grazing rates in grasslands based on a multi-objectives weighting analysis. **Acta Pratacult. Sin.** 17: 149–158.

[42] X. Dong, P. Nyren, B. Patton, A. Nyren, J. Richardson and T. Maresca, 2008. Wavelets for agriculture and biology: A tutorial with applications and outlook. **BioScience** 58: 445–453. Supplementary material is available from http://www.ag.ndsu.edu/CentralGrasslandsREC/wavelets-for-agriculture-and-biology.

[43] B. Patton, X. Dong, P. Nyren and A. Nyren, 2007. Effect of grazing intensity, precipitation and temperature on forage production. **Rangeland Ecol. Manage.** 60: 656–665.

[44] Z.-Y. Huang, X.-J. Dong, G.-M. Jiang, W.-P. Yuan. 2002. Primary studies on the daily dynamic changes of photosynthesis and transpiration of *Salix psammophila*. **Acta Bot. Boreal.-Occident. Sin.** 22: 817–823.

[45] X. Dong and X. Zhang. 2001. Some observations of functional adaptations of the sandy shrubs to the arid environment in the Mu Us Sandland: leaf water relations and anatomic features. **J. Arid Environ.** 48: 41–48.

[46] X. Dong and X. Zhang. 2000. Special stomatal distribution in *Sabina vulgaris* in relation to its survival in a desert environment, **Trees: Struct. Funct.** 14: 369–375.

[47] K. Guo, X. Dong and Z.-M. Liu. 2000. Characteristics of soil moisture content on sand dunes in Mu Us Sandy Grassland: Why *Artemisia*

ordosica declines on old fixed sand dunes. **Acta Phytoecol. Sin.** 24(3): 275–279.

[48] X.-J. Dong, Z.-X. Chen, J.-Z. Chen and Y.-X. Zhao. 1999. Changes of main water relations parameters in *Pinus tabulaeformis* trees in relation to different soil substrate features in the Mu Us Sandland. **Acta Phytoecol. Sin.** 23: 385–392.

[49] X.-J. Dong, Z.-X. Chen, B. Alateng, Z.-M. Liu and D. Sideng. 1999. A preliminary study on the water regimes of *Sabina vulgaris* in Maowusu Sandland, China. **Acta Phytoecol. Sin.**, 23: 311–319.

[50] Y. Tanaka, T. Masuda, X. Dong and H. Maenaka. 1999. Allometric relation and standingcrop of *Salix psammophila* in the Ordos Plateau, **J. Japn. Inst. Landscape Architect.** 62: 595–598.

[51] X.-J. Dong. 1998. Experimental measurement of the water relations parameters of nine shrubs and some ecological interpretations. **Acta Bot. Sin.** 40: 657–664.

[52] X.-R. Li, Z.-X. Chen, X.-D. Chen and X.-J. Dong. 1998. Study on the interconnections among several communities of desert shrubs in west Ordos Plateau. **Chin. Bul. Bot.** 15: 56–62.

[53] X. Dong, X. Zhang and B. Yang. 1997. A preliminary study on the water balance for some sandland shrubs based on transpiration measurements in field conditions, **Acta Phytoecol. Sin.** 21: 208–225.

[54] X.-R. Li, X.-J. Dong and H.-Y. Zhou. 1997. A preliminary study of the ecological adaptation strategies of the shrubs in different vegetation zones in the Ordos Plateau. **J. Desert Res.** 17(Supp. 3): 42–48.

[55] Q. Gao, N. Liang and X. Dong. 1997. A modelling analysis on dynamics of hilly sandy grassland landscapes using spatial simulation, **Ecol. Model.** 98: 163–172.

[56] Q.-S. Wang, X.-J. Dong, X.-X. Chen and B.-Z. Yang. 1997. Study on some features of *Artemisia ordosica* community at the different successional stages, **Acta Phytoecol. Sin.** 21: 531–538.

[57] Q. Gao, X.-J. Dong and N. Liang. 1996. A study on the optimal vegetation coverage for sandy grassland in northern China based on soil water budget. **Acta Ecol. Sin.** 16: 33–39.

[58] K. Guo, X.-J. Dong, Y.-X. Zhao and Z.-M. Liu. 1996. Variation in transpiration rate of plant cuttings, **Acta Bot. Sin.** 38: 661–665.

[59] B.-Z. Yang, X.-J. Dong, Q. Gao, Z.-M. Liu and B. Alateng. 1994. A study on the transpiration and water-deficit regime of the *Artemisia ordosica* community, **Acta Phytoecol. Sin.** 18: 161–170.

[60] X.-J. Dong, B.-Z. Yang, K. Guo, Z.-M. Liu, B. Alateng, S. Han and Y.-X. Zhao. 1994. An investigation on the water physio-ecological characteristics of some psammophytes. **Acta Phytoecol. Sin.**, 18: 86–94.

[61] X.-J. Dong, Z.-C. Huang and H.-L. Zheng. 1993. The estimations of leaf areas for some sandy shrubs, **Arid Zone Res.** 10: 33–36.

[62] H.-L. Zheng, Z.-C. Huang and X.-J. Dong. 1992. Physiological Ecology Studies on *Artemisia ordosica* and *Cynanchum komarovii* in the Maowusu Sandland. **Acta Phytoecol. Sin.** 16: 197–208.

Conference Papers (2)

[1] S.C. Murray, L. Knox, B. Hartley, M.A. Mendez, G. Richardson, A. Thomasson, Y. Shi, N. Rajan, H. Neely, M. Bagavathiannan, X. Dong, W. Rooney. 2016. High clearance phenotyping systems for season-long measurement of corn, sorghum and other row crops to complement unmanned aerial vehicle systems. Proc. SPIE 9866, Autonomous Air and Ground Sensing Systems for Agricultural Optimization and Phenotyping, 986607 (17 May 2016); doi: 10.1117/12.2228323

[2] X. Dong and D. A. Mott. 2021. Leaf osmotic potential and morphological traits of 43 cotton varieties growing in a rainfall gradient from southwest to central Texas. In Boyd, S., Huffman, M., Krogman,L., and Sarkissian, A., editors, Proceedings of the 2021 Beltwide Cotton Conferences, pages 193–197, Virtual. National Cotton Council of America.

Other Publications and Reports (21)

[1] X. Dong. 2021. Using bibliography databases with LaTeX. **Issues in Science & Technology Librarianship.** Submitted March 1, 2021.

[2] X. Dong and D. Mott. 2021. Technical report on cotton soil water monitoring leaf drought tolerance measurement in southwest and central Texas. **Progress report submitted to Cotton Inc.** (20 pages).

[3] X. Dong. 2018. Study notes on dynamic systems (Version 1.0) 24 pages. Available at https://zenodo.org/record/1419315#.W8pI7flRdhE

[4] X. Dong, B. Speer, X. Liu and D. Leskovar. 2016. Sesame growth and yield responses to irrigation regimes in southwest Texas. **Progress report submitted to Sesaco Co.** (19 pages).

[5] X. Dong, J. Patton and L. Gu. 2012. Photosynthetic capacity of 26 dominant plant species of the mixed-grass prairie. **NDSU Central Grasslands Research Extension Center 2012 Annual Report**. Pages 61-69.

[6] X. Dong and B. Patton. 2012. Plant fine root decomposition in relation to biomass quality in a mixed-grass prairie under cattle grazing. **NDSU Central Grasslands Research Extension Center 2012 Annual Report**. Pages 70-73.

[7] X. Dong and J. Patton. 2011. Biomass allocation in prairie grasses under drought stress. **NDSU Central Grasslands Research Extension Center 2011 Annual Report**. Pages 13–14.

[8] X. Dong. 2010. From plant water use to rangeland carbon sequestration: Progress of eco-physiology studies at CGREC in 2010. **NDSU Central Grasslands Research Extension Center 2010 Annual Report**. Pages 7–8.

[9] X. Dong, G. Patton, A. Nyren, B. Patton and P. Nyren. 2009. Managing biological journal citations: The use of a **BiBTEX** journal titles and abbreviations database in conjunction with **LATEX** type-setting system. **Issues in Science & Technology Librarianship.** The 2009 Summer Issue (Number 58). Science and Technology Section, Association of College & Research Libraries. DOI:10.5062/F4GH9FVM

[10] X. Dong. 2009. Quantifying plant water use on rangelands through soil water modeling . **NDSU Central Grasslands Research Extension Center 2009 Annual Report**. Page 12.

[11] X. Dong and H. Li. 2008. Calculating wavelet variance associated with discrete wavelet transform (DWT). Streeter, ND: Central Grasslands Research Extension Center. 6 pages

[12] X. Dong. 2008. Carbon sequestration on grazing rangelands: the role of plants. **NDSU Central Grasslands Research Extension Center 2008 Annual Report**. Page 8.

[13] X. Dong. 2007. Rangeland soil carbon sequestration: a contribution of plant roots. **NDSU Central Grasslands Research Extension Center 2007 Annual Report**. Pages 9–11.

[14] X. Dong, P. Nyren, B. Patton, G. Wang, B. Kreft, A. Nyren, R. Limb, D. Kirby, and L. Cihacek. 2005. Basic plant and soil process measurements for range ecosystem modeling and management–updates for 2005. **NDSU Central Grasslands Research Extension Center 2005 Annual Report**. Pages 12–16.

[15] X. Dong, P. Nyren, B. Patton, B. Kreft and A. Nyren. 2004. Basic plant and soil process measurements for range ecosystem modeling and management. **NDSU Central Grasslands Research Extension Center 2004 Annual Report**. Pages 22–23.

[16] X. Dong, P. Nyren, B. Patton, B. Kreft and A. Nyren. 2004. How does cattle grazing affect the growth of grass leaves? A preliminary report. **NDSU Central Grasslands Research Extension Center 2004 Annual Report**. Pages 11–13.

[17] X. Dong. 2003. Plant eco-physiology, range ecosystem modeling and management. **NDSU Central Grasslands Research Extension Center 2003 Annual Report**. Pages 13–15.

[18] X. Dong, P. Nyren, B. Patton, A. Nyren. 2002. Modeling to aid production agriculture: Introduction to a grassland ecosystem study in the Missouri Coteau of North Dakota. **NDSU Central Grasslands Research Extension Center 2002 Annual Report**. Pages 15–20.

[19] X. Dong, P. Nyren, B. Patton, A. Nyren, D. Hopkins, J. Richardson, W. Barker, M. Biondini, D. Kirby, J. Volk, E. Deckard. 2001. Quantifying plant water use in the native Coteau grasslands of North Dakota. **NDSU Central Grasslands Research Extension Center 2001 Annual Report**. Pages 17–23.

[20] X. Dong, P. Nyren, B. Patton, B. Kreft, A. Nyren, 2001, Uses of ecosystem modeling for range management. **NDSU Central Grasslands Research Extension Center 2001 Annual Report**. Pages 8–9.

[21] Y.-T. Pan and X.-J. Dong. 1989. On the methodology of Palaeoecology, **Encyclop. Knowledge (Bai-ke Zhi-shi)** 1989: No.9, 27–31.

Posters and Abstracts (33)

[1] *Hinson, P.O., Adams, C., Xue, Q., Thapa, S., Dong, X., Feng, G., Neely, C.B., and Guillen-Portal, F. Identifying in-Season Phenotypic Predictors of Elevated Grain Protein Concentration in Wheat Plains. The 2021 Annual Meeting of the Southern ASA. January 30-February 1, 2021 (Virtual)*

[2] *Hinson, P.O., Adams, C., Xue, Q., Thapa, S., Dong, X., Feng, G., Neely, C.B., and Guillen-Portal, F. Identifying wheat traits associated with consistently high grain protein concentration in the Southern Great Plains. ASA-CSSA-SSSA Virtual Annual Meeting, Nov. 8-11, 2020, Phoenix, AZ.*

[3] *Dong, X., Sieckenius, S., Peng, B., Djidonou, D., Leskovar, D.I. 2019. Using Ground Penetrating Radar to Detect Root Biomass of Grafted Tomato. ASA-CSSA-SSSA Annual Meeting, San Antonio, TX, Nov. 10-13, 2019.*

[4] *Dong, X., Feng, G., Sieckenius, S., Leskovar, D. 2019. Water Use By Mustard Cover Crops: Does It Affect the Growth of Corn As a Following Crop? ASA-CSSA-SSSA Annual Meeting, San Antonio, TX, Nov. 10-13, 2019.*

[5] *Dong, X. Sieckenius, S., Peng, B., Morgan, G. and Joshi, V. 2019. Cotton yield and fiber quality in relation to leaf and canopy traits under different irrigation regimes in southwest Texas. The Annual Beltwide National Cotton Conference, January 8-10, 2019. New Orleans, LA.*

[6] *Dong, X. and Morgan, G. 2018. Leaf Osmotic Potentials of Selected Cotton Varieties Under Different Irrigation Regimes in Southwest Texas. The Beltwide National Cotton Conference, January 3-5, 2018. San Antonio, TX.*

[7] *R. Raman, X. Dong, S. Murray, W. Rooney, S. Malla. 2017. Water-Use Efficiency of Selected Corn and Sorghum Genotypes in Southwest Texas, The 29th Annual Conference of Texas Plant Protection Association. Dec. 5-6, 2017. Bryan, TX.*

[8] *X. Liu, X. Dong, Q. Xue, D. I. Leskovar, J. Jifon, J. R. Butnor and T. Marek. 2017. Using Ground Penetrating Radar to Detect Fine Roots*

of Agricultural Crops in the Field, ASA-CSSA-SSSA Annual Meeting, Tampa, FL, Oct. 21-25, 2017.

[9] *R. Raman, X. Dong, S. Murray, W. Rooney, S. Malla. 2017. Characterization of drought tolerance traits in corn and sorghum: a phenotypical approach, ASA-CSSA-SSSA Annual Meeting, Tampa, FL, Oct. 21-25, 2017.*

[10] *D. Leskovar, Y. Othman and X. Dong. 2017. Strip Tillage Improves Soil Biological Activity, Fruit Yield and Sugar Content of Triploid Watermelon. Watermelon Research and Development Group (WRDG) Meeting. Feb. 3-4, 2017. Mobile, Alabama*

[11] *X. Liu, X. Dong, Q. Xue, A. Ibrahim, C.B. Neely, D. Leskovar and T. Marek. 2016. Path Analysis of Root/Shoot Traits and Grain Yield in Winter Wheat in Texas Wintergarden and High Plains, ASA-CSSA-SSSA Annual Meeting, Phoenix, AZ, Nov. 6-9, 2016.*

[12] *S.C. Murray, G. Richardson, L. Malambo, Y. Shi, B. Hartley, J. Demieville, J. Pekar, J. A. Thomasson, S. Popescu, D. Cope, J. Valasek, J. Olsenholler, M.P. Bishop, X. Dong, W.L. Rooney, G. Oliver, C. Ratcliff, D. Baltensperger, M. Maeda, J. Jung, M. Starek, M.J. Brewer, J.A. Landivar. 2016. Temporal estimates of maize plant growth in a breeding program using ground based and unmanned aerial vehicle systems,ASA-CSSA-SSSA Annual Meeting, Phoenix, AZ, Nov. 6-9, 2016.*

[13] *X. Liu, X. Dong, D. Hathcoat, C. Neely, A. Ibrahim, D. Leskovar. 2016. Testing winter wheat varieties under different irrigation regimes considering heat and disease stress in southwest Texas. Small Grains Workers Meeting, College Station, TX, August 3-4, 2016.*

[14] *Y. Zhang, X. Dong, B. Speer, D. Leskovar. Leaf gas exchange and water use of two cotton varieties under different irrigation regimes. The 27th Annual Conference of Texas Plant Protection Association. Dec. 8-9, 2015. Bryan, TX.*

[15] *Y. Zhang, M. Hou, H. Xue, L. Liu, H. Sun, X. Dong, C. Li. Using Photochemical Reflectance Index and Solar-Induced Fluorescence to Assess Cotton Photosynthesis Under Water-Deficit Stress. ASA-CSSA-SSSA Annual Meeting, Minneapolis, MN, Nov. 15-18, 2015*

[16] *X. Dong, P. Nyren, B. Patton, M. A. Liebig, A. Chatterjee, L. J. Cihacek. Plant Vs. Environmental Influences on Soil Respiration in a Mixed-Grass Prairie Under Cattle Grazing: A Path Analysis. ASA-CSSA-SSSA Annual Meeting, Minneapolis, MN, Nov. 15-18, 2015*

[17] *X. Dong, B. Speer, Y. Zhang, D. Hathcoat, A.M.H. Ibrahim, C.B. Neely, Q. Xue, T. Marek, J.C. Rudd, D. Leskovar. Cultivar-Irrigation Interactions in Shoot/Root Traits of 15 Wheat Varieties in Wintergarden Region. ASA-CSSA-SSSA Annual Meeting, Minneapolis, MN, Nov. 15-18, 2015*

[18] *X. Dong, W. Xu, B. Speer, Y. Zhang, J. Christman, D. Leskovar. Can Irrigation Timing Ameliorate High Night Temperature Stress on Corn? ASA-CSSA-SSSA Annual Meeting, Minneapolis, MN, Nov. 15-18, 2015*

[19] *C.L.S. Morgan, J.M. Bell, P.B. DeLaune, X. Dong, K.L. Lewis, J.L. Foster. Agronomic Management Strategies in Texas: Securing Soil and Improving the Efficiency of Water Use. ASA-CSSA-SSSA Annual Meeting, Minneapolis, MN, Nov. 15-18, 2015*

[20] *D. Leskovar, Y. Othman, X. Dong, K. Crosby, Q. Xue, T. Marek. Water Relations, Gas Exchange, and Yield of Pepper Cultivars Under Water Deficit Stress. 2015 American Society of Horticultural Science (ASHS) Annual Conference, New Orleans, LA, Aug. 4-7, 2015*

[21] *Dong, X. 2014. Wavelets for Big Data in Plant/Soil Research. The 26th Texas Plant Protection Conference, Brazos Center, Bryan TX, December 10 &11, 2014. Available at Zenodo.*

[22] *X. Dong, P. Nyren, B. Patton, G. Wang, X. Pan, S. Wang, A. Nyren, R. Limb, D. Kirby and L. Cihacek. 2011. Ecosystem CO_2 Exchange in a Mixed-Grass Prairie. Unsubmitted poster*

[23] *X. Dong, B. Patton, A. Nyren, P. Nyren and L. Prunty. 2011. Water uptake by rangeland plants: a modeling analysis. A poster based on Plant and Soil, 335 (1-2): 181–198.*

[24] *X. Dong, J. Patton and P. Nyren. 2010. Drought strategies of invasive Kentucky bluegrass vs. native western wheatgrass. **Forage Focus**, The May 2010 Issue, Page 22. Midwest Forage Association, St. Paul, MN, USA.*

[25] *X. Dong, B. Patton and P. Nyren. 2009. Managing Kentucky Bluegrass Invasion in Native Prairies. **Forage Focus**, The August 2009 Issue, Page 21. Midwest Forage Association, St. Paul, MN, USA.*

[26] *X. Dong, P. Nyren, B. Patton, B. Kreft, A. Nyren. 2008. Long-term cattle grazing affected specific leaf area and its components in two range plant species. Proceedings of the 2008 joint Meeting of the XXI International Grassland Congress and the VIII International Rangeland Congress. Volume 1, P178. Hohhot, China, June 29 to July 5th, 2008.*

[27] *X. Dong, P. Nyren, B. Patton, G. Wang, B. Kreft, A. Nyren, R. Limb, D. Kirby and L. Cihacek. 2008. Photosynthesis and soil respiration from a mixed-grass prairie: Effects of cattle grazing and drought. Proceedings of the 2008 joint Meeting of the XXI International Grassland Congress and the VIII International Rangeland Congress. Volume 1, P177. Hohhot, China, June 29 to July 5th, 2008.*

[28] *X. Dong, J.-Z. Wang, G.-J. Wang, D.-J. Wang, J.-H. Wang, X.-Y. Zhao, B. D. Patton, S.-P. Wang and P. E. Nyren. 2008. Plant root biomass and respiration on rangelands of south-central North Dakota: Impact from 18*

years of cattle grazing. The 2008 Joint Annual meetings of The American Forage and Grassland Council and The Society of Range Management to be held in Louisville, Kentucky. January 26-31, 2008.

[29] *X. Dong, P. Nyren, B. Patton, B. Kreft, A. Nyren. 2007. Specific leaf area, leaf thickness and density of two range plant species influenced by long-term cattle grazing. The 2007 Joint Congress of Botanical Society of America and American Society of Plant Biologists. With Section of Environmental Physiology (ASPB), Poster number 90. Chicago, Illinois. July 7-11, 2007.*

[30] *X. Dong, P. Nyren, B. Patton, A. Nyren, J. Richardson and T. Maresca. 2007. Wavelet analysis: a toolbox for agricultural sciences. The 2007 Joint Congress of Botanical Society of America and American Society of Plant Biologists. With Section of Ecophysiology (BSA), Poster Number 1906. Chicago, Illinois. July 7-11, 2007.*

[31] *X. Dong. 2006. Soil water budget and optimal grazing management in a mixed-grass prairie: Considering drought. Unpublished Poster.*

[32] *X. Dong, B. Patton, P. Nyren, B. Kreft and A. Nyren. 2005. Effects of long-term cattle grazing on leaf water relations of two cool-season grasses in the Missouri Coteau of North Dakota. Society of Range Management 58th Annual Meeting, Fort Worth, TX. Feb. 05-11, 2005.*

[33] *X. Dong, P. Nyren, B. Patton, A. Nyren, Ed Deckard. 2004. Plant water relations and gas exchange in a grassland with cattle grazing in the Missouri Coteau of North Dakota.Society for Range Management 57th Annual Meeting, Salt Lake City, Utah, January 25-30, 2004.*

Talks (46)

[1] *Dong, X., Feng, G., Zemach, I. 2021. Phenotyping of sesame drydown using NDVI – results from southwest Texas. Online International Sesame Symposium, Feb. 23-24, 2021. Hosted by Dr. Kimberly Cochran, Texas A&M AgriLife Extension & Plant Pathologist, Uvalde, Texas*

[2] *Dong, X. 2021. Can NDVI predict leaf water potential under field conditions? The 2021 Annual Meeting of the Southern Branch of the American Society of Agronomy, Jan. 30- Feb. 1, 2021.*

[3] *Dong, X. and Mott, D. 2021. Leaf osmotic potential and morphological traits of 43 cotton varieties growing in a rainfall gradient from Southwest to Central Texas. The Annual Belt-Wide Cotton Conference (Virtual Meeting, Jan. 5-7, 2021).*

[4] *Dong, X., Feng, G., Sieckenius S., and Leskovar, D. I. Water use, growth and yield of corn affected by previous mustard cover crops. ASA-CSSA-SSSA Virtual Annual Meeting, Nov. 8-11, 2020, Phoenix, AZ.*

[5] *Feng, G., Dong, X., Xue, Q., Adams, C., and Neely, C. Using the Osmometer Method to Quantify Drought Tolerance of Winter Wheat Under Field Conditions. ASA-CSSA-SSSA Annual Meeting, San Antonio, TX. November 10-13, 2019.*

[6] *Dong, X. Osmotic potential of bulk leaves - Can it be measured rapidly? Educational Seminars Series, Texas A&M AgriLife Research and Extension Center, Uvalde, TX. 10:30 a.m., October 7, 2019.*

[7] *Feng, G., Dong, X., Hinson, P., Xue, Q., Adams, C., and Neely, C. Can leaf osmotic potential indicate drought tolerance in winter wheat? Small Grains Workers Meeting, College Station, TX., August 28-29, 2019.*

[8] *Dong, X., Sieckenius, S., Peng, B., Xue, Q., Ibrahim, A.M.H. Predicting leaf rust infection rate in winter wheat using normalized difference vegetation index. ASA-Southern Regional Conference, Birmingham, AL., February 3-5, 2019.*

[9] *Peng, B., Dong, X. Effects of Environment × Variety on Root Traits of Winter Wheat. The 2018 Small Grains Workers Meeting, Scotts Miracle Gro Turfgrass Research Facility, 2891 F&B Road, College Station, TX, August 1-2, 2018.*

[10] *Dong, X. Soil-plant water relations and crop production in southwest Texas. Soils Critique - The 2018 annual meeting soil researchers, Texas A&M AgriLife Research and Extension Center at Uvalde, Uvalde, TX. July 25-26, 2018.*

[11] *Root Water Uptake: Integrating Measurements and Modeling Approaches. Graduate Lecture as part of "Root Biology Part II. Field Applications and Breeding", HFSB 101, Texas A&M University, College Station, TX. March 29, 2018. (Invited)*

[12] *R. Raman, X. Dong, S. Murray, W. Rooney, S. Malla. 2018. Identification of yield potential of different corn and sorghum genotypes in southwest Texas. Southern Branch of American Society of Agronomy Annual Meeting. February 4-6, 2018, Jacksonville, FL.*

[13] *Dong, X., Sieckenius, S., Djidonou, D., Leskovar, D.I. Soil Water Infiltration and Retention Under Saline and Sodic Conditions. The 2017 Annual Meeting of ASA-CSSA-SSSA, Tampa, FL. October 21-25, 2017.*

[14] *Soil-plant water relations and agricultural crop production in arid regions, a lecture presented at the Cochran Fellowship Program (Turkmenistan and Uzbekistan), Uvalde, TX. June 21-22, 2017.*

[15] *Root Water Uptake: Integrating Measurements and Modeling Approaches. Graduate Lecture as part of "Root Biology Part II. Field Applications and Breeding", WCBA 290, Texas A&M University, College Station, TX. March 22, 2016. (Invited)*

[16] *Ecophysiology of Cropping Systems: An Experience in Southwest Texas, Heep Center, Texas A&M University, College Station, TX. October 21, 2015.*

[17] *Dong, X. Root distribution and its representation for quantifying plant water uptake: An applied perspective. The 2015 Annual Meeting of ASHS New Orleans, Louisiana. August 4-7, 2015. (Invited)*

[18] *Dong, X., Jones, A., Speer, B., Cothren, J.T., and D. Leskovar. 2015. Leaf stomatal conductance, transpiration and leaf area growth patterns of four cotton varieties under different irrigation regimes in southern Texas. The Beltwide National Cotton Conference, January 5-7, 2015. San Antonio, TX.*

[19] *Dong, X., Forbes, D., Speer, B., Shallock, J., Rowland and D., Morgan. Effects of tillage and reduced irrigation on cotton yield in southern Texas. The 2014 Annual Meeting of ASA-CSSA-SSSA, Long Beach, CA. November 2-5, 2014.*

[20] *Dong, X., Leskovar, D., Pierson, B., Pierson L.S., Sharma, S.P., A. Gibby and G. Pape. Ag1000 soil amendment increased root growth and intrinsic leaf water use efficiency in corn. The 2014 Annual Meeting of ASA-CSSA-SSSA, Long Beach, CA. November 2-5, 2014.*

[21] *Yield responses of 15 winter wheat varieties to irrigation in Uvalde. A talk given at the 2014 Small Grains Workers Meeting, College Station, TX, August 12, 2014.*

[22] *Role of Breeding to Enhance Plant Roots/Rhizosphere Communities. A talk given to the Grand Networks for Grand Challenges Min-Symposia, Organized by Texas A&M University, College of Agriculture and Life Sciences, College Station, TX. May 15, 2014.*

[23] *Physiological Traits and Wheat Performance in the Wintergarden Region. A talk given at the Combined Wheat and Vegetable Field Day, Texas A&M AgriLife Research & Extension Center, Uvalde, TX, April 23, 2014.*

[24] *Can leaf-level photosynthesis help explain the success of cool-season invasive grasses? A talk given at the Cool-Season Grasses of the Northern Great Plains Workshop, Holiday Inn, Fargo, ND, March 18-19, 2014 (presented by Bob Patton).*

[25] *From soil water to soil respiration: An experience in the mixed-grass prairie. A talk given at Texas A&M AgriLife Research & Extension Center, Amarillo, TX, December 18, 2013.*

[26] *Photosynthetic capacity of 26 range plant species and its ecological implication. A talk given at the Forage Production Seminar & Research Review, NDSU-Central Grasslands Research Extension Center, Streeter, North Dakota. Mar. 19, 2013.*

[27] *Effect of grazing on grassland soil respiration and photosynthesis. A talk to be given to the public on the 31th Annual field tour of NDSU-Central Grasslands Research Extension Center, Streeter, North Dakota. Jun. 27, 2012.*

[28] *Soil respiration and its efficiency for rangeland forage production. Oral presentation planned for the NCCC31 2012 Annual Meeting, Bloomington, MN. Jun. 19-21, 2012.*

[29] *Soil respiration partitioning in a Missouri Coteau rangeland. A talk given at the Grass & Beef Research Review of NDSU-Central Grasslands Research Extension Center, Streeter, North Dakota. Jan. 25 2012.*

[30] *Alfalfa-tall fescue mixtures at CGREC- a part of a multi-regional project in north-central USA. A talk given to the public on the 30th Annual field tour of NDSU-Central Grasslands Research Extension Center, Streeter, North Dakota. Jun. 29, 2011.*

[31] *Water cycle, transpiration and root water uptake in plants. A talk given to the 6th Grade class at Medina Public School, ND, USA. Apr. 13, 2011.*

[32] *Effect of drought on biomass partitions between two introduced grasses and two native grasses in south-central North Dakota. Oral presentation at NCCC31 2011 Annual Meeting, West Lafayette, IN. Mar. 30-31, 2011.*

[33] *Effect of grazing intensity on soil health and how it relates to beef production and carbon sequestration (with Bob Patton and Guojie Wang). A talk given to the public on the 29th Annual field tour of NDSU-Central Grasslands Research Extension Center, Streeter, North Dakota. Jun 23, 2010.*

[34] *Soil water dynamics and root water uptake compensation on a mixed-grass prairie: A simulation analysis with implications to forage research and management. Oral presentation at NCCC31 2010 Annual Meeting, Blacksburg, VA. Mar. 31-Apr. 1, 2010.*

[35] *Nutrient cycling in a Kentucky bluegrass dominated rangeland: Root water uptake, rhizome growth and root decomposition. An invited talk given to the "Kentucky Bluegrass Ecology Workshop: Identifying what we think we know, what we don't know, and future direction", hosted by the "Range Forum" and the N. D. Chapter of Society for Range Management. Mar.16, 2010. Mandan, ND.*

[36] *Decomposition of below-ground plant litter: the effects of season and grazing intensity. Oral presentation at NCCC31 2009 Annual Meeting, Grand Rapids, MI. Jun. 24, 2009.*

[37] *Wavelet transform in Biological Sciences: Principle, Examples and Outlook. Lecture given to Department of Economics and Management, Northwestern Nationality University, Lanzhou, China (28 June, 2008), Department of Forestry, Inner Mongolia Agricultural University, Huhhot, Inner Mongolia, China (4 July, 2008) and College of Resources and Environment, The Graduate University of Chinese Academy of Sciences, Beijing, China (10 July, 2008) .*

[38] *Effects of grazing on rangeland root biomass: a resampling-aided analysis. Oral presentation at NCCC31 2008 Annual Meeting, Ardmore, OK. Mar. 12-14, 2008.*

[39] *Plant roots and soil carbon sequestration on rangelands of South-central North Dakota. A talk given at the Grass & Beef Research Review of*

NDSU-Central Grasslands Research Extension Center, Streeter, North Dakota. Jan. 2008.

[40] *Statistical resampling of data to increase the sensitivity of statistical tests. Second part of a special talk given to the "Range Forum", hosted by the N. D. Chapter of Society for Range Management. Nov.19, 2007. Mandan, ND.*

[41] *The effects of grazing on root biomass and respiration of perennial plants. First part of a special talk given to the "Range Forum", hosted by the N. D. Chapter of Society for Range Management. Nov.19, 2007. Mandan, ND.*

[42] *Soil respiration with plant influence: a multidisciplinary research. Oral presentation at NCCC31 2007 Annual Meeting, Columbus, Ohio. Mar. 14-15, 2007.*

[43] *Carbon sequestration and exchange: a research overview. A talk given to the public on the occasion of the 25th Anniversary of the NDSU-Central Grasslands Research Extension Center, Streeter, North Dakota. Jun 28, 2006.*

[44] *Ecosystem CO_2 exchange in a mixed-grass prairie: effects of grazing and drought. Oral presentation at NCCC31 2006 Annual Meeting, Eureka Springs, Arkansas. Mar. 13-14, 2006.*

[45] *Photosynthesis-light curves of 3 seeded species in a Conservation Reserve Program study field. Oral presentation at the Society of Range Management 58th Annual Meeting, Fort Worth, TX. Feb. 05-11, 2005.*

[46] *Modeling to assist production agriculture. Oral presentation at the NDSU Central Grasslands Research Extension Center 2002 Grass & Forage Research Review, Jan 20, 2002.*

TRANSLATION (1)

[1] X.-J. Dong and S.-Y. Wang. 1999. How to Assess Sustainability? A Chinese translation of an article by Robert Prescott Allen, given at the **IUCN 50th Anniversary Symposium Conference** (3c), pp193–214.

MEDIA CONTRIBUTIONS (8)

[1] P. Schattenberg and X. Dong. Can 'reading' leaves lead to more drought-tolerant crops? Study examines the impact of leaf wax on plant survival in harsh climates. AgriLife TODAY, August 17, 2017.

[2] P. Schattenberg, X. Dong and D. Leskovar. Study shows ground-penetrating radar can detect fine roots in crops. AgriLife TODAY, December 14, 2017.

[3] P. Schattenberg, D. Leskovar and X. Dong. Study investigates impact of strip tillage on a high-value crop. AgriLife TODAY, February 13, 2017.

[4] L. Thompson. Texas A&M University, Soil and Crop Sciences Newsletter: AGGIE Agenda, October 2013. Welcome the Department.

[5] K. Eagle. Dong studies water, crops at research center. Uvalde Leaders News. December 1, 2013.

[6] P. Schattenberg. Chinese researchers visiting Uvalde center contributing to Texas cotton improvement. August 3, 2015.

[7] Group from China studying grassland management. Bismarck Tribune. October 29, 2011.

[8] D. Maack. Chinese researcher compares home land to Dakota prairies. Sun Country, The Jamestown Sun (North Dakota). September 16, 2000.

Professional Affiliations

- *Ecophysiological Aspects of Forage Management (NCCC-31)*. Served as North Dakota State University representative (2004 - 2013); secretary for the 2010 and 2011 annual meetings and chairperson for the 2012 annual meeting.
- *American Institute of Biological Sciences* (2008 - 2012).
- *Society for Range Management* (2002 - 2012).
- *Crop Science Society of America*, *American Society of Agronomy*, *Soil Science Society of America*(2013 - present). ACS - Book and Multimedia Publishing Committee (2017-2022).

Review Service for International Journals (37)

African Journal of Agricultural Research; Agriculture; Agriculture, Ecosystems and Environment; Agronomy Journal; Agrosystems, Geosciences & Environment; Analytica Chimica Acta; Arid Land Research and Management; Biosystems Engineering; Botany; Caspian Journal of Environmental Sciences; Catena; Crop Science; Ecological Research; Environmental Management; Environmental Pollution; European Journal of Soil Science; Forests; Geoderma; Grass and Forage Science; HortScience; Irrigation Science; Journal of Agricultural Extension and Rural Development; Journal of Animal Science; Journal of Arid Land; Journal of Arid Land Studies; Journal of Geophysics and Engineering; Mathematical Geosciences; The Open Ecology Journal; PeerJ; Photosynthetica; PLOS ONE; Rangeland Ecology and Management; Scientific Reports; Soil Science Society of America Journal; Soil & Tillage Research; South African Journal of Plant and Soil; Transactions of the ASABE

Editorial Appointments

- *Irrigation Science*, Associate Editor (2016 - present).
- *Photosynthetica*, On Editorial Board (2008 - 2009); Associate Editor (2010 - 2013); On Editorial Board (2014 - 2015); Associate Editor (2015 - present).
- *Arid Land Research and Management*, Associate Editor (2009 - present).

Computer Skills

- Programming: Fortran, True BASIC, Minitab, MATLAB, R
- Alternative document preparation tools: LaTeX, BibTeX

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