Curriculum Vitae of ROBERT A. LANE

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Professional Experience

Sam Houston State University Department of Agricultural Sciences September, 2006 to Present

Professor of Soil and Crop Sciences. Currently on a .75 teaching/.25 research appointment. Teach classes in Soil Fertility and Fertilizers, Sheep and Goat Production and Management, Fruit and Vegetable Production, Forage Crops and Pasture Management, Food and Fiber Crops, Advanced Crop Protection, among others. Conduct agronomic research and other grant-related work. Advise graduate and undergraduate students and develop curricula for the Horticulture and Crop Science discipline. Serve on a number of departmental and university committees. Develop, organize and/or teach international classes offered by the department in Australia, China, Costa Rica, France, Italy, Argentina, and Chile.

A.C.E. Services and BPL Enterprises, Inc.

Agronomic Consultant. Provide professional consulting services related to soil damage, soil fertility management and fertilizers, soil remediation, pesticide drift and herbicide phytotoxicity, turf and crop injury, forage crop management and damage, agronomic and ruminant animal research.

Sam Houston State University Department of Agricultural and Industrial Sciences

Professor and Chair. Held administrative responsibility for the Department of Agricultural and Industrial Sciences, consisting of 21.5 FTE faculty equivalents, 6 staff members, 6 graduate teaching assistants and numerous student employees. The Department has programs in Agricultural Sciences and Industrial Technology. Planned and administered departmental operations and maintenance, university farm, endowment, research and scholarship funds, along with numerous other research and local accounts. Coordinated review and development of departmental curricula and programs in Agricultural Sciences and Industrial Technology. Developed strategic plans for the program. Conducted planning and oversight of construction projects. Assigned committee and instructional responsibilities and negotiated allocation of faculty time in teaching, scholarly activities and service. Evaluated faculty performance and annual merit raises, tenure and promotion. Taught classes in Soil Science, Soil Fertility, Crop Science, Turfgrass Science, Integrated Pest Management, and others. Conducted research and

1997 to Present

September, 1995 to August, 2006

provided consulting services on various agronomic and environmental topics. Actively engaged in 4-H and FFA youth programs and other outreach activities. Served on a number of university committees, including the Academic Affairs Council. Advised undergraduate and graduate students. Served as chair or member of a number of community committees and boards dealing with agricultural issues, community needs, and a variety of other issues.

Associate Professor	May, 1988 to August, 1995
Assistant Professor	September, 1987 to April, 1988
Acting Chair	January, 1988 to June, 1988
Lecturer	September, 1982 to August 1987

Taught undergraduate and graduate classes in Soil Science, Plant Science, Crop Science, Food and Fiber Crops, Techniques and Interpretation of Research, Forestry, Turfgrass Science, Undergraduate Seminar, Forage Crops and Pasture Management, Soil Fertility Management and Fertilizers, Integrated Pest Management, and others. Advised undergraduate and graduate students. Supervised graduate student research and completion of masters theses. Served on numerous departmental, college and university committees. Served as advisor to SHSU Chapter of Delta Tau Alpha – National Agricultural Honor Society and the Crop Science Club.

University of Louisiana-Lafayette (formerly University of Southwestern Louisiana) Department of Plant and Soil Sciences

Assistant Professor

August, 1980 to August, 1982

Taught undergraduate courses in Soil Science, Sugar, Fiber, and Oil Crops, Turfgrass Science, and Soil Conservation. Advised undergraduate students. Advisor of Agronomy Club. Conducted research on turf management and participated in the National Sunflower Variety Trial. Served as advisor to the university Grounds Maintenance Department.

Education

Ph.D. – Agronomy May 1988	Texas A&M University
M.S. – Agronomy May 1980	Texas A&M University
B.S. – Agricultural Education May 1977	Sam Houston State University Magna Cum Laude

Organizations

Agricultural Consortium of Texas American Association of State Colleges of Agriculture and Renewable Resources American Forage and Grassland Council American Registry for Certified Professionals in Agronomy, Crops, and Soils American Society of Agronomy Council for Agricultural Science and Technology Crop Science Society of America North American Association of Colleges and Teachers of Agriculture Soil Science Society of America Southern Pasture and Forage Crop Improvement Council Texas Chapter-American Society of Agronomy Texas Forage and Grassland Council

Honors/Awards

Texas Education Agency Outstanding Career and Technology Alumni Award - 1998 Delta Tau Alpha Outstanding Teacher-Advisor Award - 1992 Sam Houston State University Excellence in Research Award - 1991 Sam Houston State University Excellence in Teaching Award Finalist – 1991, 2012, & 2013 Sam Houston State University Alumni Service Award - 2007 Texas FFA Honorary Lone Star FFA Degree - 2012 NACTA Teacher Fellow Award - 2013 Distinguished Educator Award – Non-Land Grant Agricultural and Renewable Resources Universities – 2013 Sam Houston State University Excellence in Teaching Award Recipient- 2014 USDA National Award for Excellence in College and University Teaching in the Food and Agricultural Sciences - 2017

Offices and Appointments

American Association of State Colleges of Agriculture and Renewable Resources (AASCARR) Board of Directors – 1998 to 2007 Chair, Legislative Committee – 1999-2002 President-elect – 2002-2003 President – 2003-2004 Past-President/Nominating Committee Chair – 2004-2005

- Agricultural Consortium of Texas (ACT) Vice President – 1998 President - 1999
- American Forage and Grassland Council Research and Education Committee – 1995-96 Organization Committee for National Meeting - 1996-97
- National Association of Colleges and Teachers of Agriculture Texas State Director - 1990-1994

Texas Forage and Grassland Council Organization Committee for State Meeting - 1992-93 Organization Committee for State Meeting - 2000 Member of Board of Directors - 2003 to 2006

American Society of Agronomy Membership Committee - 1994-2000 Resident Education Work Area - 1982-1988 Resident Education Awards Committee – 2011-2016

- Texas Chapter-American Society of Agronomy Secretary - 1985-87 V. President - 1987-88 President - 1988-89
- Walker County Fair Association Executive Board Member – 2004-present Vice President – 2006-2012 President – 2012 to 2014 Immediate Past President – 2014 to 2016
- Sam Houston State University Alumni Association Advisory Board Member – 1999-2005
- Walker County Agrilife Extension Service Livestock and Pasture Committee Treasurer – 2004 to present Advisory Board Member – 1995 to present

Walker County Special Utility District Board Member – 2006 to present Vice President – 2009-2010 President – 2011 to 2013

Publications

Lane, Robert A. 1986. Use of a laboratory field project in an introductory crop science course. Journal of Agronomic Education, 15:40-43.

Lane, Robert A. and Henry Iyamu. 1987. Effects of postemergence herbicides on seedling development of selected legumes. <u>Texas Journal of Agriculture and Natural Resources</u>. 1:27-29.

Lane, Robert A. 1989. Bermudagrass recovery and sward yields following sod suppression for clover establishment. Paper presented at the American Forage and Grassland Council- Annual Meeting, May 24, 1989, University of Guelph, Ontario, Canada. Published in refereed <u>Proceedings</u>, pp. 124-131.

Lane, Robert A. and James E. Casey. 1989. Faculty assignments at non-land grant universities. <u>NACTA Journal</u>, Vol. XXXIII No. 4, pp. 14-16.

Lane, Robert A., William L. Nobles and F. Doug Blackard. 1989. Effects of supplementation with lasalocid and synchronization with melengesteral acetate on heifers to improve reproductive efficiency. <u>Texas Journal of Agriculture and Natural Resources</u>. Vol. 3, pp. 19-23.

Pitman, W. D., C. G. Chambliss and **R. A Lane**. 1989. Phalaris germplasm screening on a subtropical spodosol. Paper presented at the XVI International Grassland Congress, Nice, France, October 4-11, 1989. Paper published in <u>Proceedings</u>, pp. 269-270.

Lane, Robert A., K. H. Lin and K. E. Lege. 1990. Effect of defoliation interval on the yield and seed characteristics of subterranean clover. Presented at the American Forage and Grassland Conference, Virginia Tech, Blacksburg, Va., June 8, 1990. Paper published in refereed <u>Proceedings</u>, pp. 261-267.

Lane, Robert A., Gerald W. Evers and B. E. Conrad. 1990. Chemical suppression of bermudagrass to aid in clover establishment. Published in <u>Proceedings</u> of the Southern Association of Agricultural Scientists annual meeting, Little Rock, Arkansas.

Lane, Robert A. 1995. "Fireant Damage to Small Grains," Texas Forage and Grassland Council <u>Advances</u>, Vol. 5, 6-7.

Lane, Robert A. 1998. "Fort Bliss Fire Effects Study: Soil Properties," research report submitted to the U.S. Army, Department of the Environment, 230 pp.

Lane, Robert A., 1998. W.R Ocumpaugh, D.H. Bade, K.A. Cassida, S.W. Coleman, W.J. Grichar, M.A. Hussey, W.E. Pinchak, W.D. Pittman, J.N. Rahmaes, J.C. Read, R.L. Reed, D.C. Sestak, and G.R. Smith. 1998. "Limits of Adaptation of a Burr Medic Selection Naturalized in South Texas", published in the <u>Proceedings</u> of the American Forage and Grassland Council Annual Meetings.

Lane, Robert A. 1998. "Research and Writing Process", in <u>TR5: To Research, To Read, To Reason, To Write, To Report; An Introduction to Research Writing</u>, ed. Diane Dowdy, Barbara Jones, and Katie Pannell, Simon and Schuster, Needham Heights, MA. pp.529-530.

Lane, Robert A. 1998. "Fireant Damage to Small Grains", in <u>TR5: To Research, To Read, To Reason, To Write, To Report: An Introduction to Research Writing</u>, ed. Diane Dowdy, Barbara Jones, and Katie Pannell, Simon and Schuster, Needham Heights, MA. pp.531-534.

Lane, Robert A. "Final Report on Ft. Hood Hydrology Project - Soil Hydraulic Conductivity," results of a 2-year Texas Research Institute for Environmental Studies research project, presented to the U.S. Army Corps of Engineers, Engineering Research Center, November 8, 2001.

Lane, Robert A. "The Scoop on Agriculture" weekly column for <u>The Huntsville Item</u>, November, 1997-2002.

Kelley, S. F., D.R. Ullrich and **R.A. Lane.** Abstract. Sino-American 1-2-1 Dual Degree Program. North American Colleges and Teachers of Agriculture. June, 2005.

Lane, Robert A. Technical Report on Use of Humic Acids and Other Non-Traditional Nutrient Enhancement Products for Increasing Crop Yields and Improving Nutritional Quality of Forage Crops, NBN Turf and Plant Products.

Lane, Robert A. and Manage Bandulasiri. Moisture content of bermudagrass hay baled with the New Holland Bale-SliceTM and CropCutterTM technology, abstract published on CD (2009 abstracts) and available from The American Forage and Grassland Council at http://www.afgc.org/.

Amaradasi, Bimal S., **Robert A. Lane**, and Manage Bandulasiri. Vertical migration of *Haemonchus contortus* infective larvae on *Cynodon dactylon* and *Paspalum notatum*, Veterinary Parasitology 170 (2010), pp. 78-87.

Lane, Robert A. and Russell Yancy, Herbicide control of dallisgrass in bermudagrass turf, abstract #63473 published on CD in <u>Proceedings</u> (2011 abstracts), Southern Association of Agricultural Scientists Annual Conference, February 6-8, 2011.

K. J. Stutts, M. J. Thomas, M. M. Beverly, **R. A. Lane**, and S. F. Kelley. 2011. Selected condensed tannin-containing plant extracts and their effects on *Haemonchus contortus* larvae. J. Anim. Sci. Vol. 89, E-Suppl. 1/J. Dairy Sci. Vol. 94, E-Suppl. 1, p. 397.

Lane, Robert A. "Pasture Renovation Effects on Jiggs Bermudagrass Production," refereed paper published on CD of 2013 Proceedings and Abstracts, American Forage and Grassland Council Annual Meeting, Covington, KY, January 6-9, 2013.

Leipnik, Mark, **Robert A. Lane**, Yun Su and Xinyue Ye. Agriculture and Food Production In China and the U.S. *in* <u>A Comparative Geography of China and the U.S.</u>, Edited by Rudi Hartman, Jing'ai Wang, Tao Ye, 01/2014: chapter 4: pages 117-158; Springer, ISBN: 978-94-017-8792-5.

Lane, Robert A. and Mark Anderson. "*Pasture Herbicide Effects on Crimson Clover*," (2014 Abstracts) American Society of Agronomy Convention, Long Beach, CA, November 3, 2014.

Lane, Robert A. and Mark Anderson. "*Pasture Herbicide Effects on Crimson and White Clover*," (2016 Abstracts), American Forage and Grassland Conference, Baton Rouge, LA, January 12, 2016.

Yildiz, F., **Lane, R.,** Ullrich, D. 2016. "*Renewable Energy Education Initiative for K-12 Teachers with Sustainable Energy Education Network*," (2016 Abstracts), 5th IAJC/ISAM Joint Conference, November 6-8, 2016. Orlando, FL.

Lane, Robert A, S. Nair, D. Matar, and B. McCoy. "Effectiveness of Existing Soil Rhizobia on Crimson Clover Performance," (2017 Abstracts and Interpretive Summary) American Forage and Grassland Conference, January 24, 2017, Roanoke, VA.

Rice, B., M. Sartin, M. Sartin, **R. Lane,** and S. Nair. "*Comparison of Quality Attributes of Bermudagrass Varieties*". 7th Annual Agricultural Consortium of Texas Research Symposium, Sam Houston State University, Huntsville, Texas, April 13, 2017. Abstract in *Proceedings of the 7th Annual Agricultural Consortium of Texas Research Symposium, p 21.*

Lane, R.A., S. Krysher, and R. Baxter. '*Planting the Seeds of a "Pedia" Project,* 2017 NACTA Journal Vol. 61, Supplement 1, p 61.

Papers/Presentations

Lane, Robert A. 1983. "Student Response to Undergraduate Crop Science Laboratory Field *Projects*," Agriculture Consortium of Texas. Plant Science Conference, San Marcos, Texas, Feb. 4, 1983.

Lane, Robert A. 1984. "The Effect of Various Postemergence Herbicides on Clover Establishment in a Bermudagrass Sod," Texas A & M University, February, 1984.

Lane, Robert A. 1984. "The Effect of Preemergence and Postemergence Applications of Fusilade on the Seedling Development of Corn and Sorghum," Texas A & M University, April, 1984.

Lane, Robert A. 1985. "*The Effect of Sewage Sludge Application to Bermudagrass of Forage Quality, Production, and Metal Accumulation,*" Southern Association of Agricultural Scientists, Biloxi, Mississippi, Feb. 5, 1985. Abstract published in <u>Proceedings</u>.

Lane, Robert A. and James E. Casey. 1988. "A Comment on Teaching Agriculture at Non-Land Grant Versus Land Grant Universities," National Association of Colleges and Teachers of Agriculture Annual Meeting, Corvallis, Oregon, June 29, 1988.

W. D. Pitman, **Robert A. Lane**, and C. G. Chambliss. 1988. "*Phalaris Persistence in Florida and Texas*," American Society of Agronomy Annual Meeting, Anaheim, California, November 29, 1988. Abstract published in <u>Proceedings</u>.

K. H. Lin, **R. A. Lane** and K. E. Lege. 1990. "*Effect of Clipping Frequency on Seed Production Characteristics of Subterranean Clover*," Paper presented at Southern Association of Agricultural Scientists annual meeting, Little Rock, Arkansas, Feb. 4, 1990. Abstract published in <u>Proceedings</u>.

Lane, Robert A., Gerald W. Evers and B. E. Conrad. 1990. "*Chemical Suppression of Bermudagrass to Aid in Clover Establishment*," Paper presented at Southern Association of Agricultural Scientists annual meeting, Little Rock, Arkansas, Feb. 4, 1990. Abstract published in <u>Proceedings</u>.

Lane, Robert. A., K. H. Lin, and K. E. Lege. "*Effect of Clipping Frequency on Yield and Seed Production Characteristics of Subterranean Clover*," Paper presented at the Texas Chapter-American Society of Agronomy, Feb. 15 & 16, 1990, College Station, Texas.

Lane, Robert A. and Buddy J. Hinson. 1990. "Variations in Forage Quality of Three Warm Season Perennial Grasses," Presented at the Annual Meeting of the American Society of Agronomy, San Antonio, Texas, Oct. 25, 1990. Abstract published in Proceedings. Also

presented as an invited paper at the Annual Meeting of the Texas Chapter- American Society of Agronomy, Uvalde, Texas, Feb. 14, 1991.

Lane, Robert A. and Muzaffer Isik. 1991. "*Effect of Soil Moisture, Seed placement, and Inoculation Method on Rhizobium Survival*," Presented at the Annual Meeting of the Southern Association of Agricultural Scientists. Ft. Worth, Texas, Feb. 5, 1991. Abstract published in <u>Proceedings</u>.

Lane, Robert A. 1995. "*Rate of Foliage Decomposition and Nitrogen Release From Three Tropical Legumes*," Presented at the Association of Southern Agricultural Scientists meetings, New Orleans, LA, January 31, 1995. Abstract published in <u>Proceedings</u>.

Lane, Robert A. "*The Value of Ryegrass as a Cool Season Forage for Grazing Beef Cattle,*" East Texas Brangus Breeders Assoc., Huntsville, Texas, December, 1995.

Lane, Robert A. "Dairy Products: Perspectives of Vegetarians and Animal Rights Activists," Houston Livestock Show and Rodeo Dairy Scramble Banquet, Houston, Texas March 2, 1996.

Lane, Robert A. "Proper Herbicide Selection for Weed Control in Warm Season Perennial Grass Pastures," Texas Agricultural Extension Service Spring Agriculture Tour, SHSU Gibbs Ranch, April 16, 1996.

Lane, Robert A. "Strip-seeding Small Grains for Winter Pasture in Established Sod of Warm Season Perennial Grasses," Texas Agricultural Extension Service Field Day, Huntsville Texas, April 16, 1996.

Lane, Robert A. "*Update on Bait Products for Fireant Control in Pastures*," Texas Agricultural Extension Service Field Day, Huntsville, Texas, April 16, 1996.

Lane, Robert A. "*The Importance of Proper Soil Sampling*," Texas Agricultural Extension Service Spring Agriculture Tour, SHSU Gibbs Ranch, April 16, 1996.

Lane, Robert A. "Interpretation of Soil Analysis Results for Economical and Efficient Use of *Fertilizers*," Texas Agricultural Extension Service Winter Pasture Field Day, Huntsville, Texas, September 24, 1996.

Lane, Robert A. "Factors Affecting Forage Quality of Warm Season Perennial Grasses and Management Practices that Influence Them," East Texas Brangus Breeders Conference, Huntsville, Texas, June 28, 1997.

Lane, Robert A. "Use of Fireant Baits in Residential Areas," Texas Pest Control Operators, Huntsville, Texas, November 12, 1996.

Lane, Robert A. "*Will stockpiled forages meet the needs of your cattle?*" Bedias Creek Soil and Water Conservation District Forage Field Day, Bedias, Texas, April 29, 1998.

Lane, Robert A. [W.R Ocumpaugh, D.H. Bade, K.A. Cassida, S.W. Coleman, W.J. Grichar, M.A. Hussey, W.E. Pinchak, W.D. Pittman, J.N. Rahmaes, J.C. Read, R.L. Reed, D.C. Sestak, and G.R. Smith] *"Limits of Adaptation of a Burr Medic Selection Naturalized in South Texas,"* paper presented at the American Forage and Grassland Council Annual Meetings, published in its entirety in the <u>Proceedings</u>, June 5, 1998.

Lane, Robert A. "*The Structure of the Agricultural Education System in the United States*," The Alliance of Universities for Democracy Annual Conference, The Nitra Agricultural University, Nitra, Czech Republic, November 11, 1998.

Lane, Robert A. "Judging Hay Quality and the Establishment of a New Forage Judging Contest in Texas," Area IX Mid-Winter Ag Teachers Conference, Huntsville, Texas, January 30, 1999.

Lane, Robert A. *"Forage Recovery Following Drought,"* East Texas Brangus Breeders Association, Huntsville, Texas, January 30, 1999.

Lane, Robert A. "The Pros and Cons of Using Biosolids as a Source of Nutrients on *Pastureland*," Texas Agricultural Extension Service Field Day, Huntsville, Texas, March 18, 1999.

Lane, Robert A. "Interpreting Soil and Plant Analyses Results," Bedias Soil and Water Conservation District Conference, Iola, Texas, April 21, 1999.

Lane, Robert A. *"Reduce Expenses by Using Forages Properly,"* Texas and Southwestern Cattle Raisers Association Field School, Huntsville, Texas, May 22,1999.

Lane, Robert A. "What to Look For in Evaluating Hay Quality Visually," Texas Agricultural Extension Service Hay Evaluation Program, Huntsville, Texas, October 14, 1999.

Lane, Robert A. *"Legume Selection and Inocluation for Winter Pastures,"* Texas Agricultural Extension Service Winter Pasture Program, Huntsville, Texas, October 28, 1999.

Lane, Robert A. "Selection and Management of the Warm Season Perennial Grasses for Forage Purposes," Bedias Soil and Water Conservation District Forage Field Day, Iola, TX, April 12, 2000.

Lane, Robert A. "*Managing Summer Forages for Optimum Quality*," East Texas Brangus Breeders Spring Meeting, Huntsville, TX, May 27, 2000.

Lane, Robert A. "Visual Evaluation of Hay Quality," Texas Agricultural Extension Service Hay Evaluation Program, Huntsville, Texas, October 14, 1999.

Lane, Robert A. "*The Pros and Cons of Different Planting Procedures When Establishing Ryegrass Pastures*," educational program for local producers at the SHSU Gibbs Ranch, October 28, 1999.

Lane Robert A. "Understanding the True Value of Youth Programs in Agriculture," Keynote Speech, Houston Livestock Show and Rodeo Banquet (audience of approx. 900), February 26, 2000, Houston, Texas.

Lane, Robert A. "Use of Biosolids for Providing Pasture Nutrient Needs," Texas Agricultural Extension Service Field Day, Huntsville, TX, April 18, 2000.

Lane, Robert A. "Hay Judging Procedures and Guidelines," Texas Agriscience Teachers Conference, Corpus Christi, Texas, July 24, 2002.

Lane, Robert A. "*Methods of Teaching Soil Science Principles*," Texas Education Agency Horticulture Workshop, Sam Houston State University, Huntsville, Texas, June 19, 2002.

Lane, Robert A. *"Soil Preparation for Planting Forage Crops,"* East Texas Brangus Breeders Winter Meeting, Huntsville, Texas, January 19, 2002.

Lane, Robert A. "*Turfgrass Management for Secondary Agriscience Programs*," Texas Education Agency Horticulture Workshop, Sam Houston State University, Huntsville, Texas, June 24, 2002.

Lane, Robert A. "A Brief Overview of Soil Physical, Chemical, and Biological Properties," Texas Cooperative Extension Service Master Gardener Program, March 27, 2003.

Lane, Robert A. *"Site Selection and Preparation of Soils for Growing Roses,"* Lakes Area Rose Society, Jasper, TX, January 9, 2003.

Lane, Robert A. "Proper Selection and Culture of Turfgrasses for the Huntsville Area," Elkins Lake Homeowners Association, Huntsville, TX, March 10, 2003.

Lane, Robert A. "*The Use of Bottle Biology in Teaching Soil Science Principles*," Texas Education Agency Horticulture Workshop, Sam Houston State University, Huntsville, Texas, June 19, 2002.

Lane, Robert A. "*Grassland Agriculture in the Southeastern United States*," presentation given to students and faculty at Gansu Agricultural University, Lanzhou, China, September 13, 2004.

Lane, Robert A. "*New Genetics and Technology in Forage Crops*," Professional Agri-Science Teachers Conference, San Angelo, TX, August 4, 2004.

Lane, Robert A. "*Principles of Soils and Soil Improvement for Master Gardeners*," Texas Cooperative Extension Service, Huntsville, TX, February 19, 2004 and January 27, 2005.

Lane, Robert A. "The Benefits and Disadvantages of Using Biosolids for Forage Fertilization – Five Years of Experience," Texas Cooperative Extension Service Field Day, SHSU Gibbs Ranch, April 23, 2004.

Lane, Robert A. "Weed Identification and Control Techniques in Pastures," Pennington Seed Company Sales Force, Huntsville, TX, February 1, 2005.

Lane, Robert A. "Establishing White Clover in Warm Season Perennial Grass Pastures," Iola Forage Field Day, Iola, TX, April 27, 2005.

Lane, Robert A. *"Winter Forage Production and Hay Storage,"* Madison County Cooperative Extension Service Program, Madisonville, TX, September 20, 2005.

Lane, Robert A. "*Getting started in gardening: preparing the soil*," Leon County Master Gardeners Program, Centerville, TX, October 13, 2005.

Lane, Robert A. "Soil properties important to the successful gardener," 4-hour training session provided to the Walker County Master Gardeners class, Huntsville, TX, February 2, 2006.

Lane, Robert A. *"Drought management strategies for the cattle rancher,"* East Texas Brangus Breeders Association, Huntsville, TX, February 25, 2006.

Lane, Robert A. "Raising Meat Goats in East Texas: the Trials and Tribulations" SAM School for Successful Agricultural Management," Huntsville, TX, April 19, 2006.

Lane, Robert A. *"Know Your Weeds and Grasses,"* SAM School for Successful Agricultural Management," Huntsville, TX, April 20, 2006.

Lane, Robert A. "Components of a Successful Grazing Management System," Iola Forage Field Day, Iola, TX, April 26, 2006.

Lane, Robert A. "An overview of soil chemical and physical properties," Leon County Master Gardeners class, Centerville, TX, September 1, 2006.

Lane, Robert A. "Strategies for making it through the winter with short hay supplies," Trinity County Farm Bureau Convention, Groveton, TX, October 3, 2006.

Lane, Robert A. *"The economics of forage quality,"* San Jacinto County Cooperative Extension Office, Coldspring, TX, October 5, 2006.

Lane, Robert A. "Cutting costs on soil fertility and liming without damaging long-term pasture productivity," Central TX Cow-Calf clinic, Milano, TX, January 5, 2007.

Lane, Robert A. *"Making Legumes Work For Us,"* 6th Annual Texas Organic Farmers and Gardeners Association Conference on Organic Production Systems, January 26, 2007, Dallas, TX.

Lane, Robert A. "An Introduction To Soils and Soil Improvement," Walker County Master Gardeners Class, February 1, 2007, Huntsville, TX.

Lane, Robert A. "Incorporating Legumes into Forage Systems in South Texas," Schulenberg Coop Annual Meeting, March 8, 2007, Schulenberg, TX.

Lane, Robert A. "*Reducing Costs of Hay and Forage Production to Enhance Profitability,*" Leon County Cooperative Extension Program, May 10, 2007, Donie, TX.

Lane, Robert A. *"Winter Pastures for Southeast Texas,"* Tri-County Cow-Calf Producers Meeting, October 26, 2007, Corrigan, TX.

Lane, Robert A. and Bimal S. Amaradasi. *Vertical migration of Haemonchus contortus infective larvae on Cynodon dactylon and Paspalum notatum*, presented at the International Annual Meetings of ASA-CSSA-SSA, November 7, 2007, New Orleans, LA.

Lane, Robert A. "Soil Properties and Methods of Improvement," Walker County Master Gardener's class, January 31, 2008, Huntsville, TX.

Lane, Robert A. "*Mathematics in Agriculture,*" Math and Science Summer Academy at Sam Houston State University, June 9, 2008. Huntsville, TX.

Lane, Robert A. and Darcy Hubbard, *Student Perceptions of International Study Programs*, presented at North American Colleges and Teachers of Agriculture Annual Conference, June 13, 2008, Logan, UT.

Lane, Robert A. "*Better Soils for Better Gardening*," Leon County Master Gardener's, September 26, 2008, Centerville, TX.

Lane, Robert A. "*Preparing for the spring garden*," Walker County Master Gardener's Workshop Series, January 15, 2009, Huntsville, TX.

Henderson, Susan, **Robert A. Lane**, and Craig Henderson, "*Evaluation of five warm season annual legumes for grazing meat goats,*" presented at the Southern Association of Agricultural Scientists Annual Meeting – Agronomy Section, March 1, 2009, Atlanta, GA.

Lane, Robert A. "Soil management for East Texas pastures," Texas Agrilife Extension Service program, May 15, 2009, Huntsville, TX.

Lane, Robert A. *"Forage crop selection and management for wildlife enhancement,"* The SAM School Wildlife Management Workshop, June 13, 2009, Huntsville, TX.

Lane, Robert A. and Manage Bandulasiri, "Moisture content of bermudagrass hay baled with the New Holland Bale-Slice[™] and CropCutter[™] technology," American Forage and Grassland Conference, June 21, 2009, Grand Rapids, MI.

Lane, Robert A. *"Food for thought – the state of contemporary agriculture,"* Huntsville Rotary International, July 1, 2009, Huntsville, TX.

Lane, Robert A. *"Internal parasite control in sheep and goats,"* Walker County 4-H Club, November 11, 2009, Huntsville, TX.

Lane, Robert A. "Basics of Soil Improvement," training program for the Walker County Master Gardeners 2010 class, February 4, 2010.

Lane, Robert A. *"Tailoring Your Forage Program to Meet Livestock Needs,"* Houston Livestock Show and Rodeo All Breeds Educational Program, March 5, 2010.

Lane, Robert A. *"Forage Crops Basics,"* Walker County Texas Agrilife Extension Service, for new ranchers and landowners, May 14, 2010.

Lane, Robert A. "Soil Properties Important to the Home Gardener," training program for the Leon County Master Gardeners 2010 class, August 27, 2010.

Lane Robert A. *"Interpreting Hay Quality Results from the Forage Testing Lab,"* Leon County Hay Show and Forage Program, October 18, 2010.

Lane, Robert A. "Physical and Chemical Characteristics of Good and Poor Hay," Walker County Hay Show, October 21, 2010.

Lane, Robert A. "Soil Properties Important to the Home Gardener," training program for the San Jacinto Master Gardeners 2010 class, December 15, 2010.

Lane, Robert A. and Russell Yancy, *"Herbicide control of dallisgrass in bermudagrass turf,"* poster presentation at the Southern Association of Agricultural Scientists Annual Conference, Corpus Christi, TX, February 6-8, 2011.

K. J. Stutts, M. J. Thomas, M. M. Beverly, **R. A. Lane,** and S. F. Kelley. "Selected condensed tannin containing plant extracts and their effects on Haemonchus contortus larvae," poster presentation at the American Society of Animal Science Conference, New Orleans, LA, June 12, 2011.

Lane, Robert A. "Soil and cropland damage assessment due to pipeline construction and repair," presentation to Exxon-Mobil Pipeline employees, Houston, TX, December 8, 2011.

Lane, Robert A. "Interesting Facts about Corn and Wheat," training program for HLRS AgVenture volunteers at Montgomery High School, January 21, 2012.

Lane, Robert A. "The Benefits of Including Cool Season Legumes In Your Forage Program," Walker County Agrilife Extension Forage Program Field Day, Huntsville, Texas, February 22, 2012.

Lane, Robert A. "Proper Selection and Establishment of Legumes in Texas Pastures," Texas Red Angus Association Annual Meeting, Huntsville, TX, June 9, 2012.

Lane, Robert A. "Pasture Renovation Effects on Jiggs Bermudagrass Production," presented

at the American Forage and Grassland Conference, Covington, KY, January 7, 2013.

Lane, Robert A., "*Managing Forage Related Expenses*," presented at the Southeast Texas Beef Cattle Symposium, Liberty, TX, October 29, 2013.

Lane, Robert A., Foy Mills and Mark Anderson "*Effectiveness and Economic Feasibility of Two Liquid Alkalizers in a Bermudagrass Hay Pasture*," presented at the American Society of Agronomy Convention, Tampa, FL, November 5, 2013. Abstract published in *Proceedings*.

Pannkuk, Tim and **Robert A. Lane**. "*Effect of Nitrogen Rate on Turfgrass Quality among Five Cultivars of St. Augustinegrass*," presented at the American Society for Horticultural Science Conference, Orlando, FL, July 28, 2014. Abstract published in *Proceedings*.

Lane, Robert A. "*The Secrets of Producing High Quality Hay*," presented at the Walker County Hay Show, Huntsville, TX, October 16, 2014.

Lane, Robert A. and Mark Anderson. "*Pasture Herbicide Effects on Crimson Clover*," presented at the American Society of Agronomy Convention, Long Beach, CA, November 3, 2014. Abstract published in *Proceedings*.

Pasket, M., Watson, M., Kane, S., Ullrich, D., Yildiz, F., Lane, R. (2015). "Agricultural Sustainable Energy Education Network (ASEEN) – Teacher Professional Development Summer Workshop," Poster/Workshop. 2015 VATAT Professional Development Conference. July 27-31, 2015. Waco, TX.

Handlin, C., T. Pannkuk, **R. Lane,** and S. Frey. "*Evaluation of an Aquaponics System*." August 4, 2015. American Society of Horticultural Sciences. Undergraduate Research Oral Competition. New Orleans, LA.

Lane, Robert A. "Principles of Integrated Pest Management in Fruits and Vegetables," September 12, 2015, SAFE Program, Caldwell, Texas.

Lane, Robert A. "Selecting Hay Crops and Winter Forages for East Texas," Joint Jasper, Newton, and Sabine County Agrilife Extension Program, September 22, 2015, Jasper, Texas.

Lane, Robert A. and Mark Anderson. "*Pasture Herbicide Effects on Crimson and White Clover*," presented at the American Forage and Grassland Conference, Baton Rouge, LA, January 12, 2016. Abstract published in *Proceedings*.

Lane, Robert A. and Mark Anderson. "*Pasture Herbicide Effects on Crimson and White Clover*," presented at the American Forage and Grassland Conference, January 12, 2016, Baton Rouge, LA.

Lane, Robert A. "A History of the Dairy Industry in Texas," SHSU Honors College Seminar, February 29, 2016, Huntsville, TX.

Lane, Robert A., Sheyenne Krysher, and Rachel Baxter. "Come and Grow a Project Pedia": How to Add Variety and Fun in Your Course Assessments," 5th Annual SHSU Online Teaching & Learning Conference. March 4, 2016. Huntsville, TX.

Lane, Robert A. "How do you interpret the forage evaluation reports from forage testing labs: what do the numbers mean?" Texas Agrilfe Extension Program, October 17, 2016, Huntsville, TX.

Yildiz, F., Lane, R., Ullrich, D. "*Renewable Energy Education Initiative for K-12 Teachers with Sustainable Energy Education Network*," 5th IAJC/ISAM Joint Conference, November 6-8, 2016. Orlando, FL.

Lane, Robert A, S. Nair, D. Matar, and B. McCoy. "Effectiveness of Existing Soil Rhizobia on Crimson Clover Performance," American Forage and Grassland Conference, January 24, 2017, Roanoke, VA.

Rice, B., M. Sartin, M. Sartin, **R. Lane,** and S. Nair. "*Comparison of Quality Attributes of Bermudagrass Varieties*". 7th Annual Agricultural Consortium of Texas Research Symposium, April 13, 2017, Sam Houston State University, Huntsville, TX.

Lane, R.A., S. Krysher, and R. Baxter. '*Planting the Seeds of a "Pedia" Project,* 'NACTA Conference, June 30, 2017, West Lafayette, IN.

Lane, Robert A. "*Hay Evaluation Using the New Numerical Scoring System*," VATAT Conference, July 26, 2017, Arlington, TX.

Lane, Robert A. "The Major Turf Insects of Texas and Integrated Control Techniques Needed to Manage Them," Southwestern Golf Course Superintendents Association, Huntsville, TX, March 6, 2017.

Lane, Robert A. "*Grazing Management of Native Grasses,*" Native Plants Society of Texas Annual Conference, Huntsville, TX, November 4, 2017.

Competitive Grants

1983-85	<i>"An Appraisal of Sod Suppression Techniques on Clover Establishment and Grass Recovery,"</i> funded by the Houston Livestock Show and Rodeo, (\$7500.00), ICI Americas, (\$3000.00), and Monsanto Company (\$1000.00 payment-in-kind).
1986-87	<i>"Response of Bermudagrass to Increasing Levels of Sewage Sludge,"</i> funded by the Houston Livestock Show and Rodeo, \$3000.00.
	"Quality Deterioration of Warm Season Perennial Forage Grasses," funded by the Houston Livestock Show and Rodeo, \$2632.00.
1987-88	"The Effect of Defoliation on Seed Production Characteristics of Subterranean Clover," funded by the Houston Livestock Show and Rodeo, \$1000.00.

"Effects of Supplementation with Lasalocid and Synchronization with Melengesteral Acetate on Heifers to Improve Reproductive Efficiency," funded by the Faculty Research Council, S.H.S.U., \$500.00.

"Vitamin C Requirements and/or Deficiencies of the American Alligator," funded by the Faculty Research Council, S.H.S.U., \$3000.00.

1988-89 *"The Effect of Defoliation on Seed Production Characteristics of Subterranean Clover,"* funded by the S.H.S.U. Faculty Research Council, \$3000.00

"The Effect of Defoliation on Seed Production Characteristics of Subterranean Clover," funded by the Houston Livestock Show and Rodeo, \$3300.00

1989-90 *"Protein and Energy Supplementation for Beef Replacement Heifers on a Forage Based Diet,"* funded by the S.H.S.U. Faculty Research Council, \$6765.00.

"Protein and Energy Supplementation for Beef Replacement Heifers on a Forage Based Diet," funded by the Houston Livestock Show and Rodeo, \$3098.00.

"Use of Vacuum Sealing in Seed Storage," funded by the Houston Livestock Show and Rodeo, \$1081.00.

1990-91 *"Heifer Supplementation Study: Phase II,"* funded by the Houston Livestock Show and Rodeo, \$3200.00.

"Calving Problems and Rebreeding of First Calf Heifers as Affected by Nutritional Level During Pregnancy," funded by the S.H.S.U. Faculty Research Council, \$4,837.00.

"Feasibility Study for the Production of Camptotheca acuminata in Texas," funded by the Houston Livestock Show and Rodeo, \$2,500. Additional funds provided by private firms and individuals for student assistance, \$5,000.

"Evaluation of Logic® *and Amdro* ® *for Control of the Red Imported Fire Ant in East Texas Pastures,"* funded by the Houston Livestock Show and Rodeo, Ciba Geigy, American Cyanamid, and Whitmire Laboratories, \$4,000.

"Equipment Grant for Fire Ant Research," funded by Walker County Ranchers, \$2,200, matched by Sam Houston State University Matching Grants Program.

1994-95 *"Characterization of Soils from Burned and Unburned Arid Rangeland in Southern New Mexico,"* Ft. Bliss Military Reserve, supported by the Texas Regional Institute for Environmental Studies, \$25,000.

"Improving Forage Quality by Strip-Seeding Legumes Into Warm Season Perennial Grass Pastures," funded by the Houston Livestock Show and Rodeo, \$1,900.

"Effect of the Red Imported Fireant on Bahiagrass Hay Yield," collaborative project with the Texas Agricultural Extension Service, \$1,600.

"Evaluation of the Bait Products to Control the Red Imported Fireant in Pastures," Whitmire Laboratories, Inc., \$500.

1996-97 *"Feasibility of Producing Purebred Angus Bulls on a Forage-Based Diet,"* project conducted in cooperation with Dr. Stanley Kelley and funded by Robert Bruner, \$2,000.

"Alumni Demographics and Perceptions of the Agricultural Sciences Department at Sam Houston State University," Houston Livestock Show and Rodeo, co-written with Doug Ullrich, \$4,785.

- 2001-2002 "Integrated Proposal for Continuation of Land Management System Related Activities at Fort Hood, Texas," U.S. Army Corps of Engineers-Engineering Research Center, cowritten with Mark Leipnik, \$225,000.
- 2001-2003 *"Agricultural Science and Technology Education Field Personnel,"* Texas Education Agency, Austin, Texas, co-written with Roger D. Hanagriff, Dwayne Pavelock, and Douglas R. Ullrich, \$100,000.
- 1996-2006 *"Financial Support for the Graduate Assistantship program in Agricultural Sciences at Sam Houston State University,"* Houston Livestock Show and Rodeo, \$37,800 per year.
- 1998-2006 "Scholarship Support of Sam Houston State University Agriculture Students," San Antonio Livestock Exposition, \$30,000 per year.
- 2004-2005 "Yield and Quality Evaluation of Cool Season Forage Species," Pennington Seed Co., \$910.

"Use of Humic Acids and Other Non-Traditional Nutrient Enhancement Products for Increasing Crop Yields and Improving Nutritional Quality of Forage Crops," NBN Turf and Plant Products, \$1160.00

- 2005-2006 *"Building New Career Tracks for Underrepresented Students,"* co-written with Maya Durnovo of Houston Community College, USDA-CSREES grant, \$349,748.
- 2006-2007 *"Engaging Hispanics into the Math/Science Pipeline,"* co-written with Maya Durnovo, Houston Community, USDA-CSREES grant, \$240,000.
- 2007-2008 *"Infusing Mobile Technology into SHSU Agricultural Sciences Classrooms and Laboratories."* co-written with Michael Lau, Doug Kingman, and Dwayne Pavelock, Hewlett-Packard Technology for Teaching Grant, \$68,000; equipment: \$49,000, Cash: \$19,000.
- 2008-2009 *"SAM School The Gateway to Successful Agricultural Management,"* co-written with Doug Ullrich and Dwayne Pavelock, Houston Livestock Show and Rodeo Farm and

Ranch Management Grants. \$15,000.

2009-2010	"Bio-Forge Effects on Dry Matter Yields and Qualitative Parameters of a Forage-Type
	Bermudagrass," Stoller USA. \$5,180.

- 2012-2013 *"Residual Effects of Various Pasture Herbicides on Legume Establishment,"* Dow Agrosciences, \$2,500.
- 2012-2015 *"Agriculture Sustainable Energy Education Network (ASEEN),"* co-PI with Doug Ullrich and Faruk Yildiz, USDA Capacity Building Grants for Non-Land Grant Colleges of Agriculture. \$693,021.
- 2016-2017 *"Genetic analysis of Cynodon dactylon forage cultivars using sequence-related amplified polymorphism,"* co-PI with Christian Hitzelberger, COSET Undergraduate Research Award, \$1,178.

"Genetic Analysis of Forage Bermudagrass Cultivars," co-PI with Christian Hitzelberger, Ag Development Undergraduate Research Project, \$1,461.

Other Research

"Evaluation of Phalaris spp. For Adaptation to East Texas"

"Evaluation of Techniques for Suppressing the Red Imported Fire Ant"

"Emergency Inoculation of Arrowleaf Clover Pastures"

"Evaluation of Cool Season Annual Legumes as a Living Mulch in Commercial Blueberry Production"

"Nitrogen Partitioning in Sorghum Parents and Their Hybrids"

"Assessing Boron Needs of the Cool Season Annual Clovers"

"Nitrogen and Phosphorus Utilization by Corn"

"Use of Foliar Nitrogen Fertilizers on Tomato"

"Interrelationships Between Soil and Tissue Levels of P and N in Corn"

"The Effect of Sod Desiccation and Sod Destruction on Berseem Clover Yields"

"Fire and Damage to Seed of Surface Sown and Drilled Crops"

"Cool Season Legume Evaluation Studies"

"Evaluation of Cool Season Perennial Grasses from New Zealand and Northern Europe for East Texas"

"Culture of 'Puna' Chickory as a Forage Crop"

"Fall Fertilization of Annual Ryegrass to Enhance Production and Length of Grazing" "Biodegradability of woody Legume Foliage"

"Nutrient and Sediment Movement From a Swine Production Facility"

"Evaluation of Lablab and Other Tropical Legumes for Pasture Improvement in East Texas"

"Evaluation of Selected African Cowpeas for Biomass Yield, Drought Tolerance and other Agronomic Characteristics"

"Determining the Optimum Mixture of Soil Plus Waste Gypsum Board and Shredded Yard Waste as a Plant Growing Medium"

"Nutrient and Sediment Movement From a Swine Production Facility"

"Strip-seeding Small Grains in Pastures for Improving Livestock Performance"

"Evaluation of burr medic and black medic selections for possible release as new forage cultivars"

"Phenoxy herbicide drift as affected by environmental factors"

"Surface water quality of the university farm prior to and following land application of biosolids" "Evaluation of ball clover introductions in East Texas"

"Effect of long-term biosolids application on soil quality"

"Evaluation of Cheyenne and Cheyenne II bermudagrasses as seeded bermudagrass cultivars"

"Evaluation of three endophyte infected tall fescue cultivars for adaptability to East Texas"

"Evaluation of cattle preference and quality deterioration of round bales stored uncovered from sliced and unsliced Hay"

"Evaluation of summer legumes for meat goat production"

"Evaluation of Jatropha adaptability to the southeast Texas climate"

"A study of Chinese tallow for suitability as an oilseed crop"

"Clover seedling emergence following summer broadleaf herbicide applications"

"Evaluation of new ball clover germplasm for suitability in East Texas"

"Comparison of Raven and Jiggs bermudagrass for establishment rate and first cutting dry matter production and quality,"

"Comparison of liquid and solid fertilizers for pasture fertilization"

Evaluation of three new herbicides for purple and yellow nutsedge control in high quality bermudagrass turf"

"Evaluation of sorghum-sudangrass hybrids for bio-energy utility"

"Effect of new herbicides on crimson clover germination and production"

"Evaluation of St. Augustinegrass cultivars for disease, insect and environmental tolerances"

Master's Theses Supervised

Iyamu, Henry. 1984. Effects of post-emergence herbicides on seeding development of selected legumes.

Gonzalez, Ruben E. 1984. A chemical and biological insecticide study in the control of corn earworm in sweet corn.

Yakub, Muhammed Jusuf. 1984. The effects of row width, plant population and maturity group on the growth, development and yield of sorghum.

Kasim, Firdaus. 1984. Effect of row width, plant population, and leaf orientation on the growth, development, and yield of two corn phenotypes.

Alam, Md. Ferdous. 1987. The influence of applied sewage sludge and lime on bermudagrass yield and uptake of selected heavy metals.

Lin, Robert H. 1989. The effects of defoliation on yield and seed production characteristics of subterranean clover.

Hinson, Buddy J. 1989. Quality deterioration of warm season perennial forage grasses.

Jones, Randel L. 1989. The effect of soil and foliar applied fertilizers on yield of tomato.

Lewis, M. Edmond. 1990. Relationship between soil and tissue concentrations of nitrogen and phosphorus in corn.

Isik, Muzzafer. 1990. Effect of soil moisture, seed placement, and inoculation method on *Rhizobium* survival.

Nuxmalo, Edgar M. 1990. Nitrogen use efficiency in sorghum inbreds and their hybrids.

Civitillo, Micheal S. 1992. Postemergence herbicide combinations in bermudagrass (*Cynodon* spp.).

Torun, Muhtesem. 1992. Nitrogen use efficiency in corn as affected by time and method of application.

Ngono, Gregoire. 1994. Rate of foliage decomposition and N release of four woody leguminous species suitable for alley cropping in the sub-humid tropics.

Mayhood, Roxanne M. 1994. The effect of nitrogen fertilization rates and timing on legume/ryegrass mixtures.

Amaradasa, Bimal S. 2007. Vertical migration of *Haemonchus contortus* infective larvae on *Cynodon dactylon* and *Paspalum notatum* pastures in response to climatic conditions.

Thomas, Michael. 2010. Selected Condensed Tannin Containing Plant Extracts and their Effects on Barber Pole Worm Larvae.

Yancey, Russell. 2010. Evaluation of chemical control methods of dallisgrass in bermudagrass turf.

Henderson, Susan. 2011. Evaluation of five warm season annual legumes for grazing meat goats.

VanDelist, Brian D. 2011. Comparison of vertical migration heights of *Haemonchus contortus* on introduced warm season perennial grasses.

Menendez III, Hector. 2012. Forage Quality Analysis of Annual Ryegrass via Near Infrared Reflectance Spectroscopy