

Bernhard R. Leinauer – Curriculum Vitae
New Mexico State University
Extension Plant Sciences Department
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Education

Ph.D., 1997 Hohenheim University, Stuttgart, Germany, Department of Crop Production and Grassland Science.

Thesis: Irrigation Effects on Water Use, Drought Stress Tolerance, and Recuperative Ability of Several Turfgrasses

M.S., 1990 Hohenheim University, Stuttgart, Germany, Department of Crop Production and Grassland Science.

Thesis: Drought Effects on Recuperative Ability of Turfgrasses

Work Experience

Assistant Professor, Associate Professor, Professor and Extension Turfgrass Specialist, Extension Plant Sciences Department & Department of Plant and Environmental Sciences, New Mexico State University, Las Cruces, New Mexico (March 2000 - present), 75% Extension, 25% Research

Extension:

Duties include information dissemination to citizens of New Mexico and elsewhere regarding general turfgrass management, turfgrass species selection, turfgrass irrigation, fertilization, interpretation of soil and water tests as they relate to turf and soil quality.

Research:

- 1) Developing water management strategies for turf areas with the aim of reducing the amount of (potable) water used for irrigation:
 - a. Irrigation with recycled and/or high saline water and subsequent effects on plant and soil quality
 - b. Implementing sensor technologies for monitoring water and salinity in soils and associated stress in plants
 - c. Screening for low water use, cold and salt tolerant grass species and cultivars
 - d. Efficient use of irrigation water on turf (e.g. alternative irrigation systems, irrigation scheduling, and modification of turfgrass root zones)
- 2) Collaboration with researchers from Stanford University, University of California – Berkley, Colorado School of Mines, and New Mexico State University in ReNUWIt (Engineering Research Center for Re-inventing America's urban water infrastructure), a project funded by the National Science Foundation
- 3) Collaboration with University of Padua, Italy which includes a student exchange program and research and extension projects in both turfgrass maintenance and forage production

Research Associate, Department of Crop and Soil Sciences, Michigan State University, East Lansing (May 1997 – February 2000)

Awards

- 2013: The University Research Council Award for Exceptional Achievements in Creative Scholarly Activity – New Mexico State University
- 2012: Mobley Family Endowed Distinguished Research Award – College of Agricultural, Consumer and Environmental Sciences
- 2007: Outstanding Integrated Program Water Resources Team Award, Rio Grande Basin Initiative, USDA-CSREES.
- 2005: Distinguished Service Award. New Mexico State University – College of Agriculture and Home Economics
- 2005: Team Award. New Mexico State University – College of Agriculture and Home Economics

- 2004: Membership in Gamma Sigma Delta, The Honor Society of Agriculture.
2001: Appreciation for outstanding contribution to the Southwest Turfgrass Association. Southwest Turfgrass Association
1995, 1996: Graduate scholarship awarded by the Baden-Württemberg Ministry of Science and Research

Graduate Research Program

Advisor:

Guillermo Alvarez, M.Sc.; graduated January 2016

Research Project: Soil Surfactants for Turfgrass Water Conservation

Matteo Serena, Ph.D.; graduated January 2014

Research Project: A comparison of foliar versus granular fertilization on performance of saline irrigated bermudagrass and seashore paspalum under drip and sprinkler irrigation.

Marco Schiavon, Ph.D.; graduated February 2013.

Research Project: Stress response of turfgrasses under saline drip irrigation.

Third place in graduate student research competition (category 'Applied Research') at 2010 National Agronomy Meeting, Long Beach, CA

Elena Sevostianova, Ph.D.; graduated April 2012. New Mexico State University Alumni Association's Outstanding Graduate Student Award.

Research Project: Long Term Sustainability of Turf Areas Irrigated with Saline Groundwater.

First place in graduate student research competition (category 'Applied Research') at 2008 National Agronomy Meeting, Houston, TX

Yoshiaki Ikemura, Ph.D.; graduated July 2007.

Research Project: Digital Image Analysis and Spectral Reflectance of Drought and Salinity Stressed Turfgrasses. First place in graduate student research competition (category 'Applied Research') at 2005 National Agronomy Meeting, Salt Lake City, UT

Casey Johnson, M.Sc.; graduated September 2007.

Research Project: Using Saline Groundwater to Establish and Maintain Turfgrasses in a Southwestern Climate. First place in graduate student research competition (category 'Applied Research') at 2004 National Agronomy Meeting, Seattle, WA

Committee Member:

Cochran, James, M.Sc.; Colorado School of Mines. Graduated December 2015

Research Project: Tailored water for turfgrass irrigation.

Mock, Tyler, Ph.D.; University of California, Riverside.

Research Project: Optimal management of kikuyugrass (*Pennisetum clandestinum* Hochst. ex Chiov.) and improvement through androgenesis and genome sequencing.

Nichols, Ryan Scott, Ph.D.; University of California, Riverside. Graduated December 2013.

Research Project: Water use efficiency and carbon fixation influenced by turfgrass species and irrigation practices.

Roux, Vincent, M.Sc.; Colorado School of Mines. Graduated May 2013.

Research Project: Tailored water for turfgrass irrigation.

Miehls, Alea, M.Sc.; University of California, Riverside. Graduated December 2013.

Research Project: Irrigation Requirements for Salinity Management on Perennial Ryegrass (*Lolium perenne* L.)

Zili, You, M.Sc.; Department of Economics, Applied Statistics, and International Business, NMSU. Graduated December 2012.

Research Project: Analysis of Variance for Balanced Split-plot Design with the Sub-plot Factor Partitioned into Nested Factors: A Case Study Comparing Type I and Type III Sums of Squares.

Miller, Jason, M.Sc.; University of Arkansas. Graduated December 2006.

Research Project: Sensor-based Irrigation and Wetting Agent Application Effects on a Sand-based Putting Green.

Editorial Service

Associate Editor, Applied Turfgrass Science

Reviewed Journal Articles for Acta Horticulturae, Agronomy Journal, Crop Science, European Journal for Horticultural Science, European Turfgrass Journal, HortScience, HortTechnology, International Turfgrass Science Society Research Journal, Irrigation Science, Journal of Agronomy and Crop Science, Journal of Land Degradation and Development, Vadose Zone

Reviewed Task Force Report for New Mexico State Agricultural Experiment Station, and Extension guides for the Extension Services at New Mexico State University, Utah State University, and Oregon State University

Reviewed grant and Hatch proposals for the Agricultural Experiment Stations of New Mexico State University, University of Guam, University of Rhode Island, Texas A&M University, International Arid Lands Consortium, United States Department of Agriculture's Small Business Innovation Program

Administrative Service / Committees

International

Scientific Committee, 29th International Horticultural Congress, Brisbane, Australia, 17-22 August 2014

Editorial Board of the 4th European Turfgrass Society Conference. Osnabrueck, Germany. (2013, 2014)

Editorial Board of the 2nd European Turfgrass Society Conference. Angers, France. (2009, 2010)

Editorial Board of the 1st European Turfgrass Society Conference. Pisa, Italy. (2007, 2008)

Scientific Committee for the 1st International Conference on Turfgrass Management & Science for Sports Fields. Athens, Greece. (2002, 2003)

Editorial Board of the 1st International Conference on Turfgrass Management & Science for Sports Fields. Athens, Greece. (2003, 2004)

National

CSSA (Crop Science Society of America) C5 Graduate Student Committee (2006 – 2009)

NTEP (National Turfgrass Evaluation Program) Policy Committee (2004 – 2009)

GCSAA (Golf Course Superintendents Association of America) Water Use Task Force (2004 – 2006),
Water Advisory Panel (2006 – 2009)

CSSA (Crop Science Society of America) C5 Extension Education Committee (2003 – 2006)

State

Director for Research and Education – Southwest Turfgrass Association (2007 – present)

Executive Director - Southwest Turfgrass Association (2002 – 2006)

Director for Research and Education – Southwest Turfgrass Association (2000 – 2002)

Member - City of Gallup Golf Course Advisory Committee (2001, 2002)

University

NMSU Athletic Field Task Force (Member, appointed by President Carruthers) (2013, 2014)

Water sub-cluster (2005 – present)

STUARDS (Science, Technology, Urban Agriculture, Research and Demonstration Site) committee
(2001 – present)

Advisory Council on Administrative Policy (2004 - 2006)

Athletics Council (2005 – 2006)

Alcohol Use Committee (2003 – 2006)

New Mexico State University Energy Task Force (2004, 2005)

Alternate Member, Advisory Council on Administrative Policy (2001 – 2004)

College / Department

Filled in for Department Head as needed

College of Agricultural, Consumer and Environmental Sciences Promotion and Tenure Committee (2011 – 2014; and 2015 – present)

Department of Extension Animal and Range Sciences' Promotion and Tenure Committee (2010 – 2016)

Department of Extension Plant Sciences' Promotion and Tenure Committee (2009 – present)

Committee Chair: Jan 1, 2011 – 2016

Department of Extension Plant Sciences' Awards Committee, Committee Chair: Nov 1, 2011 – 2015

Leyendecker Plant Science Research Center & Fabian Garcia Research Science Center Mission

Committee (2005 – 2007)

Research Extension Advisory Committee for the Fabian Garcia / Leyendecker Research Science Centers

(2002 – 2007)

Ad hoc committee Landscape Garden (2002 – present)

Expert member – Water Task Force (2001 – present)

Search committee for the position of Extension Weed Specialist for the New Mexico Cooperative

Extension Service (2007)

CAHE Visioning Committee (2005 – 2006)

Search committee for the position of Extension Viticulturist for the New Mexico Cooperative Extension

Service (2005)

Search committee for the Soil Physics faculty position for the Department of Agronomy and Horticulture

(2004 - 2005)

CES Electronic Reporting Committee (2003 - 2004)

Search committee for the Turfgrass faculty position for the Department of Agronomy and Horticulture

(2004)

Search committee for the position of Vegetable Specialist for the New Mexico Cooperative Extension

Service (2003)

CSREES review planning committee 'Urban Horticulture' (2003)

CSREES review planning committee 'Research – Extension Bridge' (2003)

Search committee for the position of Assistant Dean and Associate Director for the New Mexico

Cooperative Extension Service (2002)

Search committee for the Superintendent of the Fabian Garcia Research Center and the Leyendecker Plant

Science Research Center (2002)

Secretary, New Mexico Extension Specialists Association (2001)

Golf Course Planning Committee (2001)

All College Conference Planning Committee (2000 – 2003)

Skeen Hall Advisory Committee (2000 – 2001)

Grant Funding

Turfgrass irrigation and its impact on heat island mitigation and energy consumption. Sponsoring

Organization: Lawn Institute. 2017 – 2019. \$22,500.00

Engineering Research Center for re-inventing America's urban water infrastructure (ReNUWIt). Dick

Luthy (PI, Stanford University) and several contributing authors from Stanford University, University of California, Berkley, Colorado School of Mines, and New Mexico State University. 2011 – 2016.

National Science Foundation, \$387,338 annually to NMSU and \$56,711 annually to Co-Principal.

Toro Soil Moisture Sensor for Turfgrass Water Conservation. July 1, 2012 – Jun 30, 2014. The Toro Co.

\$74,232.80.

Plant Growth Regulator and Soil Surfactants' Effects on Drought and Salinity Stressed Bermudagrass and

Seashore Paspalum. February 1, 2012 - January 31, 2014. United States Golf Association Foundation.

\$24,000.00.

Field Evaluation of Wetting Agent ACA 3114. Feb 1, 2013 – Feb 28, 2014. Aquatrols Corp. \$15,000.

A feasibility study to understand the effects of using the KISSS subsurface irrigation system as compared to a conventional overhead irrigation system with potable and saline water on turfgrass. Jan 1, 2010 – Dec 31, 2012. Water Technologies America, Inc. \$63,658.

Experimental Wetting Agent (HM 0317A) effect on bermudagrass' color, quality, and stress tolerance. Jul 1, 2010 – Dec 31, 2011. Helena Co. \$30,000

Rootzone Qualities at Ladera Golf Course. July 19 – November 30, 2011. William S. Perkins, ASLA Landscape. \$7,000.00.

Evaluation of Moisture and Salinity Sensors to Monitor Soil Conditions for Agricultural Production. Jul 1, 2007 – Jun 31, 2011. USDA Special Projects Grant. \$134,500.

Utilization of water from the East Mesa Water Recycling Facility (EMWRF) for golf course irrigation. January – December 2009. City of Las Cruces. \$30,000.

Utilization of saline and other impaired waters for turfgrass irrigation. July 2008 – June 2011. USDA Special Projects Grant. \$96,000.

Comparing spring and summer establishment of bermudagrass sod under two irrigation systems using saline water. March 2008 – February 2010. The Lawn Institute; Southwest Turfgrass Association. \$20,000.

Assessing the usefulness of water and soil conditioning products to improve turfgrass quality and reduce irrigation water use in the Southwest. Jan 2007 – Dec 2008. Aqua-Phyd Corp. and Fre Flo Corp. \$75,225.

Effect of physical water conditioners on turfgrass quality and irrigation water use. Jan 2006 – Dec 2008. Co-funded through Golf Course Superintendents Association of America, United States Golf Association, Southwest Turfgrass Association, and Rio Grande Golf Course Superintendents Association. \$33,000.

Wireless Irrigation Systems. 2006. Governor Richardson's Water Innovation Fund II. \$37,812.

Longer term assessment of the effects of greens construction systems and irrigation systems on greens performance, turf quality and water conservation. Jul 2006 – Jun 2009. United States Golf Association. \$90,000.

Using Subsurface Wastewater Disposal Systems to Irrigate an Athletic Field in New Mexico. 2005. College of Agriculture and Home Economics. \$45,000.

Utilization of saline and other impaired waters for turfgrass irrigation. Aug 2005 – Jun 2008. New Mexico Water Resources Research Institute. \$90,000.

Longer term assessment of subirrigation systems for water conservation in turfgrass systems. Jul 2004 – Jun 2007. USDA Special Projects Grant. \$153,000.

Minimum Irrigation Requirements for Home Lawns in the Southwest. Jul 2003 – Jul 2005. USDA Special Projects Grant. \$25,760

GCSAA/USGA Wetting Agent Evaluation Jan 2003 – Dec 2004. \$20,000.

Effects of Salinity Level and Irrigation Type on Establishment Rate and Quality of Several Warm and Cool Season Grasses. 2003. NMSU's Office for Facilities and Services. \$12,000

Effects of Salinity Level and Irrigation Type on Establishment Rate and Quality of Several Warm and Cool Season Grasses. Jul 2003 – Jun 2005. USDA Special Projects Grant. \$48,000.

Effect of Irrigation Type, Root Zone Material, and Root Zone Depth on Irrigation Efficiency and Water Use on Putting Greens in the Southwest. Jan 2002 – Dec 2007. United States Golf Association. \$150,000.

Effect of Type of Irrigation and Root Zone Material on Water Use and Turfgrass Performance on Putting Greens in the Southwest. Jan 2002 – Dec 2004. The Toro Co. \$48,000.

Effect of Type of Irrigation and Root Zone Material on Water Use and Turfgrass Performance on Putting Greens in the Southwest. Jan 2002 - Dec 2004. Fytogreen Networks. \$48,000

Effect of Type of Irrigation and Root Zone Material on Water Use and Turfgrass Performance on Putting Greens in the Southwest Jan 2002 - Dec 2004. Evaporative Control System Ltd. \$48,000.

Real Time Soil Moisture Measurement at the Rouge Phytoremediation Demonstration Facility. Co-PI with Dr. Clayton Rugh, Michigan State University and Dr. Rossana Sallenave, New Mexico State University. Sep 2001 – Jul 2002. The Ford Motor Co. and Michigan State University Phytoremediation Laboratory. \$35,000.

Effect of Irrigation Type, Root Zone Material, and Root Zone Depth on Irrigation Efficiency and Water Use on Putting Greens in the Southwest. Jul 2002 – Jun 2004. USDA Special Projects Grant, \$75,000.
Evaluation of an Experimental Soil Conditioner For the Use As a Wetting Agent On Turfgrass and For the Improvement Of Soil Physical Properties In Turfgrass Root zones. 1999. CBC America Corp., \$16,000.
Effect of Rootzone Material and Depth on Moisture Retention Problems in USGA Putting Greens. 1999 - 2002. O.J. Noer Foundation. \$30,000.
Effect of Rootzone Material and Depth on Moisture Retention Problems in USGA Putting Greens 1998 – 2003. Golf Course Superintendents Association of America. \$50,000.
Literature reviews on ‘Irrigation of Golf Courses’ and ‘Alternative Spikes’. 1997. German Golf Association. \$20,000

Unrestricted gifts

Between March 1, 2000 and December 31, 2016 a total of over \$1,200,000.00 could be secured to support New Mexico State University’s Turfgrass Extension and Research program.

Instruction

Statistical Analysis of Field Data (Agro 500 – M03, special topics), Fall semester 2009.

Instructor, DEULA-Lehranstalt Rheinland - Nord, Kempen, Germany (November 01 – present). Have taught German greenkeepers annually (Total: 16 hours of teaching per year) as part of their training towards the Headgreenkeeper degree. Topics included turfgrass selection and maintenance, irrigation, and stress physiology.

Instructor, Michigan State University, Department of Crop and Soil Science (Fall semester 1997).

Course title: Introduction to turfgrass management (Laboratory section of Crop and Soil Sciences 232)

Instructor, University of Göttingen, Germany (Winter semester 1996/1997). Course title: Turfgrass management. Total: 20 hours of teaching.

Instructor, DEULA-Lehranstalt Rheinland - Nord, Kempen, Germany (November 91 - February 97).

Taught courses in a golf course superintendent continuing education program five times a year (Total: 30 hours of teaching per year). Topics included turfgrass identification, turf maintenance, irrigation, and stress physiology.

Instructor, DEULA-Lehranstalt Bayern, Freising (February 1995 - February 1997). Taught course in a golf course superintendent education program (3 hours and 2 full field days on a golf course each year). Topics included turfgrass and weed identification, and IPM for turf.

Patents

Makk, J. and B. Leinauer. 2009. US 7,614,827 B1. Subsurface Drip Installer.

Publications

Peer Reviewed Articles

- 1) Wang, J., H.C. Monger, X. Wang, M. Serena, **B. Leinauer**. 2016. Carbon Sequestration in Response to Grassland– Shrubland–Turfgrass Conversions and a Test for Carbonate Biomineralization in Desert Soils, New Mexico, USA. *Soil Science Society of America Journal*, 80, 1591-1603.
- 2) Alvarez, G., E. Sevostianova, M. Serena, R. Sallenave, and **B. Leinauer**. 2016. Polymer Coated Sand Effects on Deficit Irrigated Bermudagrass Turf. *Agronomy Journal* 108(6), 2245-2255.
doi:10.2134/agronj2016.06.0329
- 3) Pornaro, C., M. K. Schneider, **B. Leinauer**, and S. Macolino. 2016. Above and belowground patterns in a subalpine grassland-shrub mosaic. *Plant Biosystem*.
<http://dx.doi.org/10.1080/11263504.2016.1187679>

- 4) Pornaro, C., S. Macolino, and **B. Leinauer**. 2016. Seeding time affects establishment of warm-season turfgrasses. *Acta Horticulturae*. 1122(4), 27-34.
- 5) Sevostianova, S., S. Deb, M. Serena, D. VanLeeuwen, and **B. Leinauer**. 2015. Accuracy of two electromagnetic soil water content sensors in saline soils. *Soil Science Society of America Journal* 79: 6: 1752-1759. doi: 10.2136/sssaj2015.07.0271
- 6) Schiavon, M., M. Serena, **B. Leinauer**, R. Sallenave, and J.H. Baird. 2015. Seeding Date and Irrigation System Effects on Establishment of Warm-Season Turfgrasses. *Agronomy Journal*, 107(3), 880-886.
- 7) Schiavon, M., S. Macolino, **B. Leinauer**, and U. Ziliotto. 2015. Seasonal changes in carbohydrate and protein content of seeded bermudagrasses and their effect on spring green-up. *Journal of Agronomy and Crop Science*. doi:10.1111/jac.12135
- 8) Rimi, F., S. Macolino, **B. Leinauer**, L. Lauriault, U. Ziliotto. 2014. Fall dormancy and harvest stage effects on alfalfa persistence and characteristic of taproot and crown. *Agronomy Journal*, 106, 1258-1266.
- 9) Alvarez, G., **B. Leinauer**, E. Sevostianova, M. Serena, and C. Pornaro. 2014. Effects of experimental polymer seed coating on germination and establishment of perennial ryegrass and seashore paspalum under saline irrigation. *European Journal of Turfgrass Science*, June 2014(45/2), 27-28.
- 10) Sevostianova, E., P. Lenz, and **B. Leinauer**. 2014. Nitrate leaching from establishing bermudagrass irrigated with treated effluent. *European Journal of Turfgrass Science*, June 2014 (45/2), 69-70.
- 11) Serena, M., **B. Leinauer**, M. Schiavon, B. Maier, and R. Sallenave. 2014. Establishment and Rooting Response of Bermudagrass Propagated with Saline Water and Subsurface Irrigation. *Crop Science*, 54(2), 827-836. doi:10.2135/cropsci2013.07.0512
- 12) Schiavon, M., **B. Leinauer**, M. Serena, B. Maier, and R. Sallenave. 2014. Plant Growth Regulator and Soil Surfactants' Effects on Saline and Deficit Irrigated Warm-season Grasses: I. Turf Quality, Color Retention, and Soil Moisture Distribution. *Crop Sci*. doi: 10.2135/cropsci2013.10.0707
- 13) Schiavon, M., **B. Leinauer**, M. Serena, B. Maier, and R. Sallenave. 2014. Plant Growth Regulator and Soil Surfactants' Effects on Saline and Deficit Irrigated Warm-season Grasses: II. Pigment Content and Superoxide Dismutase Activity. *Crop Sci*. doi: 10.2135/cropsci2013.10.0708
- 14) **Leinauer, B.**, D.M. VanLeeuwen, M. Serena, M. Schiavon, and E. Sevostianova. 2014. Digital Image Analysis and Spectral Reflectance to Determine Turfgrass Quality. *Agron. J.* 106:1787–1794 doi:10.2134/agronj14.0088
- 15) Sevostianova, E. and **B. Leinauer**. 2014. Subsurface-Applied Tailored Water: Combining Nutrient Benefits with Efficient Turfgrass Irrigation. *Crop Sci.* 54:1926-1938. doi:10.2135/cropsci2014.01.0014
- 16) Serena, M., **B. Leinauer**, M. Schiavon, B. Maier, and R. Sallenave. 2014. Establishment and Rooting Response of Bermudagrass Propagated with Saline Water and Subsurface Irrigation. *Crop Sci.* 54: 827-836.
- 17) VanLeeuwen, D., Y. Zili., and **B. Leinauer**. 2013. Analyzing Partially Nested Designs with Irregular Nesting: A Cautionary Case Study. *Agron. J.* 105:1298-1306
- 18) Ganjegunte, G., **B. Leinauer**, M. Schiavon, and M. Serena. 2013. Using Electro-Magnetic Induction to Determine Soil Salinity and Sodicity in Turf Root Zones. *Agron. J.* 105:836–844
- 19) Rimi, F., S. Macolino, M.D. Richardson, D.E. Karcher, and **B. Leinauer**. 2013. Influence of Three Nitrogen Fertilization Schedules on Bermudagrass and Seashore Paspalum: II. Carbohydrates and Crude Protein in Stolons. *Crop Sci.* 53: 1168-1178.
- 20) Rimi, F., S. Macolino, M.D. Richardson, D.E. Karcher, and **B. Leinauer**. 2013. Influence of Three Nitrogen Fertilization Schedules on Bermudagrass and Seashore Paspalum: I. Spring Green-up and Fall Color Retention. *Crop Sci.* 53:1161–1167.
- 21) **Leinauer, B.** and D. Devitt. 2013. Irrigation science and technology. p. 1075 – 1133. *In* B. Horgan, J. Stier, S. Bonos (eds.) *Agronomy Monograph* 56. ASA, CSSA, and SSSA, Madison WI.
- 22) Schiavon, M., **B. Leinauer**, M. Serena, R. Sallenave, and B. Maier. 2013. Establishing tall fescue and Kentucky bluegrass using subsurface irrigation and saline water. *Agron. J.* 105:183-190.
- 23) Serena, M., **B. Leinauer**, R. Sallenave, M. Schiavon, and B. Maier. 2012. Turfgrass Establishment from Polymer-coated Seed Under Saline Irrigation. *HortScience* 47(12):1789-1794.

- 24) Fiorio, S., S. Macolino, and **B. Leinauer**. 2012. Establishment and Performance of Bluegrass Species and Tall Fescue under Reduced-input Maintenance in a Temperate Mediterranean Environment. *HortTechnology* 22(6):810-816.
- 25) **Leinauer, B.**, E. Sevostianova, C. Johnson. 2012. Utilization of saline and other impaired waters for turfgrass irrigation. New Mexico Water Resources Research Institute WRI Technical Completion Report No. 358. pp. 56.
- 26) **Leinauer, B.**, T. Barrick, M. Serena, M. Schiavon, and C. Robertson. 2012. Usefulness of Non-Chemical Water Conditioners for Managing Turfgrasses and their Rootzones. *Applied Turfgrass Science*. doi:10.1094/ATS-2012-0924-01-RS
- 27) Rimi, F., S. Macolino, and **B. Leinauer**. 2012. Winter-applied Glyphosate Effects on Spring Green-up of Zoysiagrasses and ‘Yukon’ Bermudagrass in a Transition Zone. *HortTechnology* 22:131-136.
- 28) Rimi, F., S. Macolino, **B. Leinauer**, L. Lauriault, and U. Ziliotto. 2012. Fall Dormancy and Harvest Stage Effects on Alfalfa Nutritive Value in a Subtropical Climate. *Agronomy Journal* 104: 415-422. doi:10.2134/agronj2011.0222
- 29) Schiavon, M., **B. Leinauer**, M. Serena, R. Sallenave, and B. Maier. 2012. Bermudagrass and Seashore Paspalum Establishment from Seed Using Differing Irrigation Methods and Water Qualities. *Agron. J.* 104: 706 – 714.
- 30) Serena, M., **B. Leinauer**, R. Sallenave, M. Schiavon, and B. Maier. 2012. Media Selection and Seed Coating Influence Germination of Turfgrasses under Salinity. *HortScience* 47:116-120.
- 31) Macolino, S., **B. Leinauer**, and U. Ziliotto. 2012. Comparison of Turf Performance and Root Systems of Bermudagrass Cultivars and ‘Companion’ Zoysiagrass. *Acta Hort.* 938: 185-190.
- 32) Schiavon, M., **B. Leinauer**, M. Serena, and S. Macolino. 2012. Warm Season Turfgrass Quality, Spring Green Up, and Fall Color Retention Under Drip Irrigation in an Arid Climate. *Acta Hort.* 938: 175-184.
- 33) **Leinauer, B.**, M. Serena, M. Schiavon, and E. Sevostianova. 2012. Water Demands and Water Conservation Strategies in Turfgrass Management. *Acta Hort* 938: 113-120.
- 34) Sevostianova, E., **B. Leinauer**, R. Sallenave, D. Karcher, and B. Maier. 2011. Soil Salinity and Quality of Sprinkler and Drip Irrigated Warm-Season Turfgrasses. *Agron. J.* 103:1773-1784.
- 35) Sevostianova, E., **B. Leinauer**, R. Sallenave, D. Karcher, and B. Maier. 2011. Soil Salinity and Quality of Sprinkler and Drip Irrigated Cool-Season Turfgrasses. *Agron. J.* 103:1503-1513
- 36) Schiavon, M., **B. Leinauer**, E. Sevostianova, M. Serena, and B. Maier. 2011. Warm-season turfgrass quality, spring green-up, and fall color retention under drip irrigation. Online. *Applied Turfgrass Science* doi:10.1094/ATS-2011-0422-01-RS.
- 37) Rimi, F., S. Macolino, **B. Leinauer**, U. Ziliotto. 2011. Green-up of seeded bermudagrass cultivars as influenced by spring scalping. *HortTechnology* 21: 230-235.
- 38) Cockerham, S. and **B. Leinauer** (eds.). 2011. *Turfgrass Water Conservation*. Cooperative Extension – University of California, Division of Agriculture and Natural Resources.
- 39) **Leinauer, B.**, and R. Green. 2011. Water Management Technologies. *In* S. Cockerham and B. Leinauer (eds.) *Turfgrass Water Conservation*. Cooperative Extension – University of California Division of Agriculture and Natural Resources. 101 – 112.
- 40) **Leinauer, B.**, M. Serena, M. Schiavon, and D. Singh. 2010. Seed coating and seeding rate effects on turfgrass germination and establishment. *HortTechnology* 20:179-185.
- 41) **Leinauer, B.**, E. Sevostianova, M. Serena, M. Schiavon, and S. Macolino. 2010. Conservation of irrigation water for urban lawn areas. *Acta Hort.* 881: 487-492.
- 42) **Leinauer, B.**, E. Sevostianova, M. Serena, and M. Schiavon. 2010. Irrigating turfgrasses with impaired water – possibilities and challenges. *Proceedings 2nd European Turfgrass Society Conference*:252-256.
- 43) Macolino, S., M. Serena, **B. Leinauer**, and U. Ziliotto. 2010. Preliminary findings on the correlation between water-soluble carbohydrate content in stolons and first year green-up of seeded bermudagrass cultivars. *HortTechnology* 20:758-763.
- 44) Macolino, S., U. Ziliotto, and **B. Leinauer**. 2010. Temporal shifts in plant composition of turfgrass mixtures are not affected by plant growth regulators. *Acta Hort.* 881: 347 -350

- 45) Rimi, F., S. Macolino, **B. Leinauer**, L. M. Lauriault and U. Ziliotto. 2010. Alfalfa yield and morphology of three fall-dormancy categories harvested at two phenological stages in a sub-tropical climate. *Agronomy Journal* 102:1578-1585.
- 46) Schiavon, M., **B. Leinauer**, E. Sevostianova, and F. Rimi. 2010. Cool-season turfgrass performance under drip irrigation in an arid climate. **Proceedings 2nd European Turfgrass Society Conference**:188-190
- 47) Serena, M., **B. Leinauer**, S. Macolino, and M. Gill. 2010. Germination of coated and uncoated turfgrass seed under saline conditions. **Proceedings 2nd European Turfgrass Society Conference**:199-201.
- 48) Sevostianova, E., **B. Leinauer**, and M. Serena. 2010. Performance of non-irrigated warm season turfgrasses in an arid climate. **Proceedings 2nd European Turfgrass Society Conference**:202-204.
- 49) Sevostianova, E., **B. Leinauer**, and I. Sevostianov. 2010. Quantitative characterization of the microstructure of a porous material in the context of tortuosity. *Int. J. Eng. Sci.*, doi:10.1016/j.ijengsci.2010.06.017
- 50) Ritsema, C., L. W. Dekker, K. Oostindie, D. Moore, and **B. Leinauer**. 2008. A Practical Field Method for Determining Soil Water Repellency and Critical Soil Water Content. In: *Soil Science: Step-by-step Field Analyses*. S. D. Logsdon et al. (Editors). Soil Science Society of America.
- 51) **Leinauer, B.**, V. Gibeault, L. Lauriault, R. Autio, S. Cockerham, R. Kirksey, and S. Ries. 2008. Establishment and Subsequent Spring Survival of Low Maintenance Turfgrasses in Transition Zone Climates. *Proceedings of the 1st ETS (European Turfgrass Society) Conference - 19th-20th May, 2008*: 113 – 114.
- 52) Ikemura, Y., M. Shukla, M. Tahboub, and **B. Leinauer**. 2008. Some Physical and Chemical Properties of Soil in Organic and Conventional Farms for a Semi-Arid Ecosystem of New Mexico. *Journal of Sustainable Agriculture*, Vol. 31(4): 149 – 170.
- 53) **Leinauer, B.**, Y. Ikemura, and J. Makk. 2007. Technologies for monitoring water stress in turf. *HortScience*. 42(4):814-815.
- 54) Johnson, C. J., **B. Leinauer**, A. L. Ulery, D. E. Karcher, and R. M. Goss. 2007. Moderate salinity does not affect germination of several cool- and warm-season turfgrasses. Online. *Applied Turfgrass Science* doi: 10.1094/ATS-2007-0912-01-RS.
- 55) **Leinauer, B.**, Karcher, D., Barrick, T., Ikemura, Y., Hubble, H., and Makk, J. 2007. Water repellency varies with depth and season in sandy rootzones treated with ten wetting agents. Online. *Applied Turfgrass Science* doi:10.1094/ATS-2007-0221-01-RS.
- 56) Fortuna, A., P.E. Rieke, L.W. Jacobs, **B. Leinauer**, D.E. Karcher. 2005. Kentucky Bluegrass Response to Use of Aquatic as a Soil Amendment. *HortScience* 40. 237 – 241.
- 57) Frank, K. W., B. E. Leach, J. R. Crum, P. E. Rieke, **B. Leinauer**, T. A. Nikolai, et al. 2005. The effects of a variable depth rootzone on soil moisture in a sloped USGA putting green. *Int. Turfgrass Soc. Res. J.* 10(Part 2): 1060-1066
- 58) **Leinauer, B.**, R. Sallenave, and H. Schulz. 2004. A Comparison of Construction Types and Their Associated Irrigation Systems: Effect on Turfgrass Quality, Drought Avoidance, and Irrigation Water Use. *Acta Horticulturae* 661. 123 - 129.
- 59) **Leinauer, B.**, P.E. Rieke, D. VanLeeuwen, R. Sallenave, J. Makk, and E. Johnson. 2001. Effects of Soil Surfactants on Water Retention in Turfgrass Rootzones. *International Turfgrass Society Research Journal*, Volume 9. 542-547.
- 60) Frank, K., B.E. Leach, J.R. Crum, P.E. Rieke, **B. Leinauer**, T.A. Nikolai, and R.N. Cahoun. 2001. The effects of a variable depth root zone on moisture retention in a sloped USGA putting green. *Australian Turfgrass Management*. Vol. 69, No. 7. p. 65-69.
- 61) **Leinauer, B.** and J. Sorochan. 2000. Eignung der Lägerrispe (*Poa supina* Schrad.) für Strapazierrasen [Suitability of supina bluegrass for heavily used turf]. *Rasen Turf Gazon* 3/2000, 36-40.
- 62) **Leinauer, B.**, T. Nikolai, D. Karcher, O. Schabenberger, P. Rieke, and J. Rogers. 1999: Alternativspikes, und eine neue Möglichkeit subjektive Boniturnoten zu verrechnen [Alternative spikes and a new possibility to analyze subjective ratings]. *Rasen Turf Gazon* 1/1999: 17-21.
- 63) **Leinauer, B.**, and H. Schulz. 1998. Sprinklerberegnung und Unterflurbewässerung von Rasenflächen. *Literaturübersicht und Einfluß der Bewässerungsart auf die Durchwurzelung* [Sprinkler irrigation and

subground irrigation on turf areas. Literature overview and influence of irrigation type on rooting]. *Rasen Turf Gazon* 3/1998: 73-80.

- 64) **Leinauer, B.**, and H. Schulz. 1998. Sprinklerberegnung und Unterflurbewässerung von Rasenflächen. Einfluß der Bewässerungsart auf Wasserverbrauch, Trockenstreß- und Regenerationsverhalten einiger Rasengrasarten [Sprinkler irrigation and subground irrigation on turf areas. Influence of irrigation method on water consumption, drought performance and recovery of several turfgrass species]. *Rasen Turf Gazon* 4/1998: 93-103.
- 65) **Leinauer, B.**, H. Schulz, D. Bär and A. Huber. 1997. *Poa supina* (Schrad.): A new Species for Turf. *International Turfgrass Society Research Journal*, Volume 8, Part 1: 345-351.
- 66) **Leinauer, B.**, H. Schulz, D. Bär and A. Huber. 1997: Eignung der Lägerrisse (*Poa supina* Schrad.) für Strapazierrasen [Suitability of supina bluegrass (*Poa supina* Schrad.) for trafficked turf]. *Rasen Turf Gazon* 4/1997: 102-106.
- 67) Hardt, G., **B. Leinauer**, H. Schulz. 1993. Nitrogen Leaching Losses Of Different N-Sources And N-Levels From Golfgreens. *International Turfgrass Society Research Journal*, Volume 7: 950-957.
- 68) **Leinauer, B.**, H. Jacob, and H. Schulz. 1991. Einfluß der Dauer von Trockenperioden auf die Regeneration einiger Rasengrasarten [Influence of the duration of dry down periods on the regeneration of some grass species]. *Rasen Turf Gazon* 22:30-37.

Non Reviewed Journals, Trade Journals, Proceedings, Extension Bulletins, Research Reports, and Abstracts

- 1) B. Leinauer. 2016. Communicating your science: from your research project to presentation and publication. Ulan Ude: Proceedings from the IV Russian conference of young scientists (with international participation) "Biodiversity: global and regional processes"
- 2) Serena, M., Leinauer, B., Sevostianova, E. (2016). Water Conservation Potential of Subsurface Drip-Irrigation on Warm-Season Grasses. 2016 ASA-CSSA-SSSA International Annual Meetings Abstracts.
- 3) Leinauer, B., Schiavon, M., Serena, M., Sevostianova, E., Goss, R. M. 2016. In ASA-CSSA-SSSA (Ed.), Plant Growth Regulator and Soil Surfactants' Effects on Drought and Salinity Stressed Bermudagrass and Seashore Paspalum. 2016 SA-CSSA-SSSA International Annual Meetings Abstracts.
- 4) Leinauer, B., D. VanLeeuwen, M. Serena, E. Sevostianova, G. Alvarez, R.M. Goss. 2015. Visual turfgrass quality revisited. 2015 ASA-CSSA-SSSA International Annual Meetings Abstracts.
- 5) Deb, S., M. Serena, O.J. Idowu, M. McMillan, A. Duttle, and B. Leinauer. 2015. Surfactants effects on water retention and flow in subsurface drip irrigated unsaturated soils. 2015 ASA-CSSA-SSSA International Annual Meetings Abstracts.
- 6) Sevostianova, E., J. Skerker, S. Deb, G. Alvarez, M. Serena, and B. Leinauer. 2015. Nitrogen losses from warm-season turfgrasses during establishment. 2015 ASA-CSSA-SSSA International Annual Meetings Abstracts.
- 7) Serena, M. and B. Leinauer. 2015. Does irrigating dormant bermudagrass pay off? 2015 ASA-CSSA-SSSA International Annual Meetings Abstracts. scisoc.confex.com/crops/2015am/webprogram/Paper92961.html
- 8) Leinauer, B. 2014. In Helen M. Stone (Ed.), *Subsurface drip irrigation (SDI) for Turf* (6th ed., vol. 20, pp. 8). Orange, CA: Southwest Trees & Turf.
- 9) Serena, M., B. Leinauer. 2014. Ideal irrigation management for establishing cool-season grasses. 2014 ASA-CSSA-SSSA International Annual Meetings Abstracts. <https://scisoc.confex.com/crops/2014am/webprogram/Handout/Paper86170/Establishment%20using%20different%20irrigation%20amounts.pdf>
- 10) Sevostianova, E., B. Leinauer, P. Lentz, S. Stanek. 2014. Nitrate leaching from irrigation with tailored water during turfgrass establishment. 2014 ASA-CSSA-SSSA International Annual Meetings Abstracts. <https://scisoc.confex.com/crops/2014am/webprogram/Paper89701.html>

- 11) Leinauer, B., M. Serena, E. Sevostianova, M. Schiavon. 2014. Subsurface drip irrigation for turfgrass areas. 2014 ASA-CSSA-SSSA International Annual Meetings Abstracts. <https://scisoc.confex.com/crops/2014am/webprogram/Paper88911.html>
- 12) Leinauer, B., M. Serena, M. Schiavon. 2014. Using saline water and subsurface irrigation to establish bermudagrass and seashore paspalum: Saline water and subsurface drip irrigation do not hinder establishment of two seeded grasses and one sodded warm-season grass. *Golf Course Management* Vol. 82, June 2014, pp. 78-83.
- 13) Leinauer, B., M. Schiavon, M. Serena. 2014. Plant growth regulator and soil surfactant effects on drought and salinity stressed bermudagrass and seashore paspalum. *USGA Turfgrass Environ. Res* July/August 2014, pp. 29-31.
- 14) Sevostianova, E. and B. Leinauer. 2014. Salt and Nitrate Leaching from Cool and Warm-season Turfgrasses Irrigated with Tailored Water. Extended Abstract. International Salinity Forum 2014, June 16 – 18, 2014. University of California, Riverside.
- 15) Serena, M., B. Leinauer, and G. Alvarez. 2014. Turfgrass Establishment from Polymer Coated Seed under Saline Irrigation. Extended Abstract. International Salinity Forum 2014, June 16 – 18, 2014. University of California, Riverside.
- 16) Leinauer, B. M. Serena, and M. Schiavon. 2014. Using saline water and subsurface irrigation to establish bermudagrass and seashore paspalum. *Golf Course Management* June 2014. 78-83.
- 17) Leinauer, B. and E. Sevostianova. 2013. Soil salinity and quality of cool-season turfgrasses under sprinkler- and subsurface drip irrigation. *Golf Course Management* September 2013. 76-86.
- 18) Leinauer, B. and E. Sevostianova 2013. Soil salinity and quality of sprinkler- and drip-irrigated warm-season grasses. *Golf Course Management* June 2013. 80-88.
- 19) Kent, C. and B. Leinauer. 2013. How to Perform a Catch Can Irrigation Audit on a Home Lawn Sprinkler System. Guide H-510. Cooperative Extension Service, New Mexico State University, College of Agricultural, Consumer and Environmental Sciences. http://aces.nmsu.edu/pubs/_h/H510.pdf
- 20) Serena, M., B. Leinauer, J. Zimmerman, 2013. Comparing Turfgrass Irrigation Scheduling Based On Soil Moisture Sensors and ET-Controllers. 2013 ASA-CSSA-SSSA International Annual Meetings Abstracts. <https://scisoc.confex.com/scisoc/2013am/webprogram/Paper79445.html>
- 21) Sevostianova, E., and B. Leinauer. 2013. *Irrigation With Tailored Water: Nitrogen Leachate*. ASA-CSSA-SSSA International Annual Meetings Abstracts. <https://scisoc.confex.com/scisoc/2013am/webprogram/Paper80832.html>
- 22) Alvarez, G., B. Leinauer, E. Sevostianova, S.J. Kostka. 2013. Repeated Applications of a Hydrophilic Sand Affect Turfgrass Quality and Reduce Irrigation Water Requirement. ASA-CSSA-SSSA International Annual Meetings Abstracts. <https://scisoc.confex.com/scisoc/2013am/webprogram/Paper80826.html>
- 23) Schiavon, M., B. Leinauer, J. H. Baird, M. Serena, 2013. Warm-Season Turfgrass Establishment From Seed When Seeded Dormant and Irrigated Though Subsurface Drip Irrigation. ASA-CSSA-SSSA International Annual Meetings Abstracts. <https://scisoc.confex.com/scisoc/2013am/webprogram/Paper81777.html>
- 24) Leinauer, B., M. Serena, E. Sevostianova, G. Alvarez, F. Rimi. 2013. Growing Turfgrass When Water is Scarce. Las Cruces, NM: New Mexico State University Research Council.
- 25) Leinauer, B. 2013. Grassroots Research. *Research Media*. August 2013:33-35.
- 26) Leinauer, B., E. Sevostianova, G. Alvarez. 2013. Experimental Soil Surfactants Improve Turf Quality and Reduce Irrigation Requirement. *BioHydrology* 2013.
- 27) Leinauer, B., G. Ganjgunte, E. Sevostianova, M. Serena, M. Schiavon 2013. Saline Water for Turfgrass Irrigation. College Station, TX: Texas Water Resources Institute.
- 28) Leinauer, B., E. Sevostianova, M. Schiavon, and M. Serena. 2012. Irrigating turf areas with saline and potable water from a subsurface drip system. *Irrigation Association*, Vol. 2012, pp. 2.
- 29) Leinauer, B. and D. Smeal. 2012. How to Water Your Lawn. Guide H-504. Cooperative Extension Service, New Mexico State University, College of Agricultural, Consumer and Environmental Sciences. http://aces.nmsu.edu/pubs/_h/H504/welcome.html

- 30) Leinauer, B. and D. Smeal. 2012. Turfgrass Irrigation. Circular 660. Cooperative Extension Service, New Mexico State University, College of Agricultural, Consumer and Environmental Sciences. http://aces.nmsu.edu/pubs/_circulars/CR660.pdf
- 31) Sevostianova, E., J. Munakata-Marr, B. Leinauer, J. Drewes, and T. Cath. 2012. Nitrate Leaching From Turfgrasses Irrigated with Tailored Effluent Water Using Subsurface Drip System. *In* 2012 annual meetings abstracts. ASA, CSSA, SSSA, Madison, WI.
- 32) Schiavon, M., B. Leinauer, and M. Serena. 2012. Pigment content and quality of drought stressed warm-season turf species treated with plant growth regulators. *In* 2012 annual meetings abstracts. ASA, CSSA, SSSA, Madison, WI.
- 33) Schiavon, M., B. Leinauer, and M. Serena. 2012. Superoxide dismutase activity in leaves and stolons of two warm-season turfgrass species in an arid environment. *In* 2012 annual meetings abstracts. ASA, CSSA, SSSA, Madison, WI.
- 34) Serena, M., B. Leinauer, and M. Schiavon. 2012. Nitrogen Fertilization Effects on Protein Content of Warm Season Grasses Under Saline Drip Irrigation. *In* 2012 annual meetings abstracts. ASA, CSSA, SSSA, Madison, WI.
- 35) Leinauer, B., T. Barrick, M. Serena, M. Schiavon, and B. Maier. 2012. Physical water conditioners for managing turfgrasses. *Golf Course Management*. November 2012:90-97.
- 36) Schiavon, M., B. Leinauer, and M. Serena. 2011. Plant Growth Regulators and Soil Surfactants Improve Warm-Season Turfgrass Quality Under Saline Conditions. *In* Annual meetings abstracts [CD Rom]. ASA, CSSA, SSSA, Madison, WI.
- 37) Serena, M., B. Leinauer, and M. Schiavon. 2011. A comparison of water use and soil moisture uniformity in sprinkler and subsurface drip irrigated warm season turfgrasses. *In* Annual meetings abstracts [CD Rom]. ASA, CSSA, SSSA, Madison, WI.
- 38) Sevostianova, E., B. Leinauer, B. Maier. 2011. Soil salinity and turf performance under saline irrigation. *HortScience* 46: 391.
- 39) Serena, M., B. Leinauer, M. Schiavon, E. Sevostianova, B. Maier. 2011. A comparison of underground biomass and stolon production of paspalum vaginatum (Swarz.) established from seed under potable and saline subsurface drip irrigation. *HortScience* 46: 390.
- 40) M. Schiavon, B. Leinauer, M. Serena, B. Maier. 2011. Establishment of festuca arundinacea (Schreb) using subsurface capillary irrigation and saline water. *HortScience* 46: 141.
- 41) Schiavon, M., B. Leinauer, and M. Serena. 2010. Subsurface capillary irrigation to establish *Festuca arundinacea* (Schreb.) in an arid environment. *In* Annual meetings abstracts [CD Rom]. ASA, CSSA, SSSA, Madison, WI.
- 42) Serena, M., B. Leinauer, and M. Schiavon. 2010. Nitrogen source and rate affect color retention on warm season grasses under saline and drip irrigation. *In* Annual meetings abstracts [CD Rom]. ASA, CSSA, SSSA, Madison, WI.
- 43) Serena, M., B. Leinauer, and M. Schiavon. 2010. Scalping effect on spring green-up of bermudagrass and seashore paspalum. *In* Annual meetings abstracts [CD Rom]. ASA, CSSA, SSSA, Madison, WI.
- 44) Sevostianova, E., B. Leinauer, and B. Maier: 2010. Warm Season Turfgrass and Rootzone Quality Under Saline Sprinkler and Drip Irrigation. *In* Annual meetings abstracts [CD Rom]. ASA, CSSA, SSSA, Madison, WI.
- 45) Leinauer, B., M. Serena, and M. Schiavon. Comparing Spring and Summer Establishment of Bermudagrass Seed and Sod Under Two Irrigation Systems Using Saline Water. *TPI Turf News*: May/June 2010. 14 – 15.
- 46) Sevostianova, E., B. Leinauer, M.K. Shukla, and B. Maier. 2009. Evaluation of a turtuosity parameter of a sandy soil from the bulk electrical conductivity measurements. 2009 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
- 47) Schiavon M., B. Leinauer, and M. Serena. 2009. Growing Degree Days to Predict Warm Season Turfgrass Establishment Under Saline and Subsurface Drip Irrigation. 2009 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
- 48) Serena, M., B. Leinauer, and M. Schiavon. 2009. Dormant Seeding and Sodding for Faster Turfgrass Establishment under Saline and Subsurface Drip Irrigation. 2009 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].

- 49) Leinauer, B., M. Serena, and M. Schiavon. 2009. Comparing Spring and Summer Establishment of Bermudagrass Seed and Sod Under Two Irrigation Systems Using Saline Water. *TPI Turf News*: May/June 2009. 36 – 39.
- 50) Leinauer, B. and E. Sevostianova. 2008. Turf Quality of Minimally Irrigated Warm and Cool Season Grasses. 2008 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
- 51) Sevostianova, E., and B. Leinauer. 2008. Salinity effect on soil moisture measurement: comparison of different sensors for two soil types. 2008 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
- 52) Serena, M., B. Leinauer, and S. Macolino. 2008. Planting Date and Water Quality Effects on the Establishment of 2 Warm -Season Grasses under Sub-surface Drip and Sprinkler Irrigation. 2008 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
- 53) Leinauer, B., E. Sevostianova, M. Serena, M. Schiavon, and S. Macolino. 2009. Irrigation Water Conservation for Urban Lawn Areas. 2nd International Conference on Landscape and Urban Horticulture Conference Abstracts.
- 54) Macolino, S., B. Leinauer, and U. Ziliotto. 2009. Temporal shifts in plant composition of turfgrass mixtures in response to plant growth regulators. 2nd International Conference on Landscape and Urban Horticulture Conference Abstracts.
- 55) Leinauer, B., T. Barrick, and C. Robertson. 2008. Assessing the usefulness of physical water conditioning products to improve turfgrass quality and reduce irrigation water use. *In J. Nus* (ed.) 2008 *Turfgrass Environmental Research Summary – United States Golf Association*. p. 62
- 56) Leinauer, B., and J. Makk. 2007. Longer term assessment of the effects of greens construction and irrigation systems on greens performance, turf quality, and water conservation. *In J. Nus* (ed.) *Turfgrass Environmental Research Summary – United States Golf Association*. p. 2
- 57) Leinauer, B., T. Barrick, and C. Robertson. 2007. Assessing the usefulness of physical water conditioning products to improve turfgrass quality and reduce irrigation water use. *In J. Nus* (ed.) *Turfgrass Environmental Research Summary – United States Golf Association*. p. 58
- 58) Leinauer, B., and J. Makk. 2007. Establishment of Golf Greens under Different Construction Types, Irrigation Systems, and Rootzones. [Online]*USGA Turfgrass Environ. Res. Online*. 6(7):p. [1-7].
- 59) Leinauer, B., D. Karcher, T. Barrick, Y. Ikemura, H. Hubble, and J. Makk. 2007. Water repellency in sandy rootzones treated with wetting agents. [Online]*USGA Turfgrass Environ. Res. Online*. 6(6):p. [1-9].
- 60) Leinauer, B., and T. Barrick. 2007. Water conditioners effect on turfgrass establishment and rootzone salinity. *The Super News*, June 2007. p. 6, 7, 9.
- 61) Ikemura, Y. and B. Leinauer, 2007. Remote Sensing of Stressed Turfgrass. 2007 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
- 62) Sevostianova, E.; B. Leinauer, B., and M. Barrick. 2007. Long Term Performance of Cool and Warm Season Grasses Under Saline Irrigation. 2007 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
- 63) Leinauer, B. 2006. Precision irrigation: Prolonged water shortages require innovative measures. *TurfNews*. 30(2):p. 66, 68
- 64) Makk, J., B. Leinauer, and M. Shukla. 2006. Evaluation and calibration of a new wireless sensor. 2006 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
- 65) Leinauer, B., and M. Barrick. 2006. Evaluating the performance of water conditioning devices on turf quality irrigated with saline water. 2006 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
- 66) Leinauer, B. and C. Johnson. 2006. Saline Groundwater Effects on Cool Season Turfgrass Quality. *Proceedings Turf-Seed/Pure Seed Testing, Inc. Field Day 24* (2006): p. 91 – 94.
- 67) M. T. Barrick, B. Leinauer, and A. Petermeier. 2005. Efficacy of Magnetic and Catalytic Water Conditioning Devices on Establishment and Quality of Perennial Ryegrass under Saline and Potable Water. 2005 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
- 68) Frank, K. W., P. E. Rieke, B. E. Leach, J. R. Crum, B. R. Leinauer, T. A. Nikolai. 2005. Rootzone depth affects putting green performance: Research at Michigan State University demonstrates how

- varying putting green rootzone depth affects moisture retention. *USGA Green Sec. Rec.* 43(6):p. 21-25.
- 69) Leinauer, B., and J. Makk. 2005. Water distribution in two golf green systems. 2005 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
 - 70) Leinauer, B., R. Goss, J. Makk, and T. Barrick. 2005. Using soil moisture to predict water repellency in turfgrass root zones. 2005 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
 - 71) C. Johnson, B. Leinauer, R. Kochevar, and D. Karcher. 2005. Turfgrass Germination Using Saline Geothermal Irrigation. 2005 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
 - 72) Y. Ikemura, B. Leinauer, B. 2005. Spectroradiometry Analysis of Drought and Salinity Stressed Turfgrass. 2005 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
 - 73) Barrick, T., B. Leinauer, and H. Hubble. 2005. Efficacy of surfactants to aid water penetration into hydrophobic organic layers in turfgrass root zones. *Geophysical Research Abstracts*. 7:p. [1-2].
 - 74) Leinauer, B., J. Makk, D. Karcher, and T. Barrick. 2005. Water Repellency in Sprinkler- and Subirrigated Turfgrass Root Zones. *Geophysical Research Abstracts*. 7:p. [1-2].
 - 75) Leinauer, B., V. Gibeault, L. Lauriault, R. Autio, S. Cockerham, R. Kirksey, and S. Ries. 2005. Assessing Establishment Rates and Winter Survival of Low Maintenance Turfgrasses in Two Climate Zones. *Intl. Turfgrass Society Res. J. Annexe*. 46, 47.
 - 76) Leinauer, B. 2005. Wetting agent study IV: New Mexico. *Golf Course Management*. Vol. 73, No. 4, April 2005, p. 62-64.
 - 77) Frank, K. W., B. E. Leach, J. R. Crum, P. E. Rieke, B. R. Leinauer, T. A. Nikolai, et al. 2005. Effect of rootzone material and depth on moisture retention in undulating USGA putting greens. [Online]*USGA Turfgrass Environ. Res. Online*. 4(11):p. 1-9.
 - 78) Leinauer, B. 2005. Effect of Greens Type, Irrigation Type, and Root Zone Material on Irrigation Efficiency, Turfgrass Quality, and Water Use on Putting Greens in the Southwest. In: Nus, J.L. (ed.) 2004 USGA (United States Golf Association) Turfgrass and Environmental Research Summary. USGA Green Section, Far Hills, N.J. p. 4.
 - 79) Leinauer, B. 2005. Establishing low maintenance turfgrasses – be patient. *The Super News*, June 2005. p. 7, 9.
 - 80) Johnson, C.; and B. Leinauer. Turfgrass Establishment with Saline Irrigation. *The Super News*, April 2005. p. 7,9.
 - 81) Y. Ikemura, Leinauer, B. 2004. Spectroscopy analysis of salinity stressed tall fescue. 2004 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
 - 82) Y. Ikemura, Leinauer, B. 2004. A modified hydroponic system for turfgrass research. 2004 ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
 - 83) Leinauer, B. 2004. Establishing Southwest Turfgrass. *Southwest Trees and Turf*. July/August 2004.
 - 84) Leinauer, B. 2004. Subsurface Irrigation for Turf Areas – a Water Saving Alternative to Sprinklers? In R. Bottoms (ed.) *New Mexico State University 2004 Academic Field Day*, Leyendecker and Fabian Garcia Plant Science Research Centers Research Reports.
 - 85) Leinauer, B., R. Kirksey, and L. Lauriault. 2004. Turfgrass Trials. 2003 Annual Progress Report, New Mexico State University Agricultural Science Center at Tucumcari. 38-41.
 - 86) Rugh, C., J.C. Thomas, D.K. Russell, B. Leinauer, and L. Carreira. 2004. Ecological Influences on PAH-Phytoremediation. 2004 Meeting Abstracts. 2004 West Coast Conference on Soils, Sediments and Water, San Diego, CA.
 - 87) Leinauer, B. 2004. Effect of Greens Type, Irrigation Type, and Root Zone Material on Irrigation Efficiency, Turfgrass Quality, and Water Use on Putting Greens in the Southwest. In: Nus, J.L. (ed.) 2003 USGA (United States Golf Association) Turfgrass and Environmental Research Summary. USGA Green Section, Far Hills, N.J. p. 4.
 - 88) Leinauer, B., R. Flynn, L. Lauriault, and R. Kirksey. 2003. Selecting Turfgrasses for New Mexico – A Climatic Dilemma. *Divining Rod*, Vol. XXVI, No. 1. p. 3.
 - 89) Makk, J.; Leinauer, B., C. Johnson. 2003. Evaluation of three different irrigation methods for establishing turfgrass from seed. ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].

- 90) Leinauer, B. 2003. Effect of Subirrigation and Soil Amendments on Water Conservation, Irrigation Efficiency and Turfgrass Quality. In: Efficient Irrigation for Water Conservation. New Mexico State University, College of Agriculture and Home Economics, Water Task Force, Report 1. 31-34.
- 91) Leinauer, B., J. Makk, and C. Johnson. 2003. A demonstration and research area to study efficiency in turfgrass irrigation. p. 22-24. In R. Bottoms (ed.) New Mexico State University 2003 Academic Field Day, Leyendecker and Fabian Garcia Plant Science Research Centers Research Reports.
- 92) Leinauer, B., H. Hubble, C. Johnson, and J. Makk. 2003. Turfgrass Species and Cultivar Trials. p. 24-25. In R. Bottoms (ed.) New Mexico State University 2003 Academic Field Day, Leyendecker and Fabian Garcia Plant Science Research Centers Research Reports.
- 93) Leinauer, B. 2003. Effect of Irrigation Type, Root Zone Material, and Root Zone Depth on Irrigation Efficiency and Water Use on Putting Greens in the Southwest. In: Nus, J.L. (ed.) 2002 USGA (United States Golf Association) Turfgrass and Environmental Research Summary. USGA Green Section, Far Hills, N.J. p. 6.
- 94) Leinauer, B. 2003. Effect of Irrigation Type, Root Zone Material, and Root Zone Depth on Irrigation Efficiency and Water Use on Putting Greens in the Southwest. In: Nus, J.L. (ed.) 2002 USGA (United States Golf Association) Turfgrass and Environmental Research Executive Summary. USGA Green Section, Far Hills, N.J. p. 15.
- 95) Leinauer, B. 2002. Wetting Agents and their impact on water retention of turfgrass root zones. Australian Turfgrass Management. Vol. 4, No.1. p. 28-30, 32.
- 96) Leinauer, B., J. Bilskie, M. Parossien, T.L. Jones. 2002. Accurate Technologies for Monitoring Soil Moisture in Turf. ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
- 97) Leinauer, B., K.L. Kopp, and G.K. Stahnke. 2002. A Survey of Turfgrass Extension in the West. ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
- 98) Leach, B.E., K.W. Frank, J.R. Crum, T.A. Nikolai, R.N. Calhoun; B.R. Leinauer. 2002. Understanding water relations in a USGA putting green. ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
- 99) Leinauer, B. 2002. Effect of Irrigation Type, Root Zone Material and Depth on Water Use on Putting Greens in the Southwest. Golf Course Management September 2002. 117.
- 100) Leinauer, B. 2002. Turfgrass Trials. In: Proceedings of the Artesia Field Day 2002. Agricultural Science Center, Artesia, New Mexico, August 20, 2002. p. 11.
- 101) Leinauer, B., R. Kirksey, and L. Lauriault. 2002. Turfgrass Trials. 2001 Annual Progress Report, New Mexico State University Agricultural Science Center at Tucumcari. 94-95.
- 102) Leinauer, B. and A. Baltensperger. 2002. Turfgrasses for New Mexico. Extension guide.
- 103) Leinauer, B. and J. White. 2002. Turfgrass establishment. Extension guide.
- 104) Leinauer, B. 2002. All wet. Grounds Maintenance April 2002. Golf 1-3.
- 105) Leinauer, B. 2002. Will Banning Some Turfgrasses Conserve Water? Plant Sciences News: January 15, 2003. p. 5, 6.
- 106) Leinauer, B. 2002. Turf Conference. Plant Sciences News: September 15, 2002. p. 7.
- 107) Leinauer, B. 2002. Turfgrass Irrigation and Water Conservation. Plant Sciences News: July 15, 2002. p. 9, 10.
- 108) Leinauer, B. 2002. Artificial Turf. Plant Sciences News: June 15, 2002. p. 7, 8.
- 109) Leinauer, B. 2002. Turfgrass Trials. Plant Sciences News: April 15, 2002. p. 10.
- 110) Leinauer, B. 2002. Controlling Thatch. Plant Sciences News: March 15, 2002. p. 8.
- 111) Leinauer, B. 2002. Thatch. Plant Sciences News: February 15, 2002. p. 7, 8.
- 112) Leinauer, B. 2001. Bermudagrass. Plant Sciences News: December 15, 2001. p. 8.
- 113) Leinauer, B., D.M. VanLeeuwen, and T. Jones. 2001. Effect of Wetting Agents on Drainage in Turfgrass Rootzones. ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
- 114) Leinauer, B., P. Rieke, and J. Crum. 2001. Retaining Moisture in USGA Putting Greens. Golf Course Management July 2001. 65-69.
- 115) Leinauer, B. 2001. Effects of wetting agents on soil physical properties in turfgrass root zones. Golf Course Management July 2001. 76.
- 116) Frank, K.W., B.E. Leach, Nikolai, T.A., J.R. Crum, P.E. Rieke, B. R. Leinauer, R. Calhoun, and T.A. Nikolai, 2001. Turfgrass soils and fertility research report 2000: I. Effects of Rootzone Material

- and Depth on Moisture Retention Problems in Undulating USGA Putting Greens (the Sloping Green). 71st Annual Michigan Turfgrass Conference Proceedings. Vol. 30, 2001. 15-25.
- 117) Leinauer, B. 2001. Lawn and Turf. New Mexico Extension Master Gardener Manual.
 - 118) Leach, B.E., K.W. Frank, J.R. Crum, B.R. Leinauer, T.A. Nikolai, P.E. Rieke, R.N. Calhoun. 2001. Water Relations in a Variable Rootzone USGA Putting Green. ASA-CSSA-SSSA Annual Meeting Abstracts [CD-ROM computer file].
 - 119) Leinauer, B. and J. White. 2001. Turfgrass establishment: Turfgrass maintenance during grow-in. Plant Sciences News: October 15, 2001. p. 7,8.
 - 120) Leinauer, B. and J. White. 2001. Turfgrass establishment: Turfgrass selection and seeding. Plant Sciences News September 15, 2001. p. 11-14.
 - 121) Leinauer, B. and J. White. 2001. Turfgrass establishment: Site preparation. Plant Sciences News July 15, 2001. p 7-9.
 - 122) Leinauer, B. 2001. Zoysiagrass. Plant Sciences News June 15, 2001. p. 11.
 - 123) Leinauer, B. 2001. Mowing, part 2. Plant Sciences News April 15, 2001. p. 7.
 - 124) Frank, K.W., B.E. Leach, J.R. Crum, P.E. Rieke, B. R. Leinauer, R. Calhoun, and T.A. Nikolai, 2001. The Effects of a Variable Depth Rootzone Mix on Moisture Retention in a Sloped USGA Putting Green. Australian Turfgrass Management Volume 3.3 (June-July 2001).
 - 125) Leinauer, B., C. Smith. 2001. Yard Waste Management. Extension Guide H-122.
 - 126) Leinauer, B. 2001. Warm and cool season turfgrasses. Plant Sciences News: March 15, 2001. p 9 - 10.
 - 127) Leinauer, B. 2001. Seashore paspalum. Plant Sciences News: January 15, 2001. p 6.
 - 128) Leinauer, B., P.E. Rieke, R. Calhoun, T. Nikolai, D. Karcher, and J. Crum. 2000. Effect of Rootzone Material and Depth on Moisture Retention Problems in Undulating USGA Putting Greens. 70th Annual Michigan Turfgrass Conference Proceedings, Vol. 29. 143-148.
 - 129) Leinauer, B., D. VanLeeuwen, R. M. Sallenave, P. E. Rieke, J. Makk, and E. Johnson. 2000. Effects of Wetting Agents on Soil Physical Properties of Turfgrass Rootzones. Annual Meetings Abstract, ASA, CSSA, SSSA. 151.
 - 130) Frank, K.W., T.A. Nikolai, B. R. Leinauer, J.R. Crum, and P.E. Rieke, 2000. The Effects of Variable Depth Rootzone Mix on Soil Moisture Retention in a Sloped USGA Putting Green. Annual Meetings Abstract, ASA, CSSA, SSSA. 163.
 - 131) Leinauer, B., 2000. Turfgrass Research at New Mexico State University: Present and Future. Proceedings of the Southwest Turfgrass Association Annual Conference, 31-34.
 - 132) Leinauer, B. 2000. Mowing. Plant Sciences News: December 15, 2000. p 11.
 - 133) Leinauer, B. 2000. Late fall fertilization for cool season turfgrass areas. Plant Sciences News: November 15, 2000. p 11.
 - 134) Leinauer, B. 2000. The color of green. Plant Sciences News: August 15, 2000. p 9-10.
 - 135) Leinauer, B. 2000. Alternative Irrigation Methods. Plant Sciences News: May 15, 2000. p 7-9.
 - 136) Leinauer, B. 2000. The purpose of turf. Plant Sciences News: April 15, 2000. p 5-6.
 - 137) Leinauer, B. 2000. Out on the Green. Plant Sciences News: March 15, 2000. p 6.
 - 138) Leinauer, B., T. Nikolai and D. Karcher. 1999: Alternativspikes, eine Alternative? [Alternative spikes – an alternative?] Greenkeepers Journal 1/99: 21-22.
 - 139) Leinauer, B., P.E. Rieke, T.A. Nikolai, D.E. Karcher, J.R. Crum, R.M. Sallenave, and R.N. Calhoun. 1999. The Sloping Green: Effect of Rootzone Material and Depth on Moisture Retention in USGA Putting Greens. 69th Annual Michigan Turfgrass Conference Proceedings, Vol. 28. 148-152.
 - 140) Leinauer, B.R., P.E. Rieke, J.R. Crum, T.A. Nikolai, and R.N. Calhoun. 1999. Soil Moisture Retention in Sloped USGA Putting Greens. Annual Meetings Abstract, ASA, CSSA, SSSA. 135.
 - 141) Leinauer, B. and P.E. Rieke. 1998. Influence of Organic Amendments on Particle Density of Sandy Rootzone Mixes. 1998 Annual Meeting Abstracts. 136.
 - 142) Leinauer, B., P.E. Rieke, and R.N. Calhoun. 1998. Soil Moisture Measurement in Sandy Rootzone Mixes by TDR. 1998 Annual Meeting Abstracts. 136.
 - 143) Leinauer, B. 1998: Water Savings Through Subirrigation. Golf Course Management October 1998, 65-69.

- 144) Leinauer, B. 1998: Alternative Bewässerung für Grüns und Abschläge. *Greenkeepers Journal* 2/98. 20, 21.
- 145) Leinauer, B. 1998: Subground Irrigation on Green and Tees. 68th Annual Michigan Turfgrass Conference Proceedings, Vol. 27. 125-127.
- 146) Leinauer, B. 1998: *Poa supina* on Both Sides of the Pond: The European Perspective. 68th Annual Michigan Turfgrass Conference Proceedings, Vol. 27. 84-186.
- 147) Leinauer, B. und H. Schulz. 1997: Bewässerung von Golfanlagen, schonender Umgang mit Wasser. 56 p. German Golf Association (ed.)
- 148) Leinauer, B. 1997: Wasserverbrauchsfaktoren und deren Beeinflussung auf Golfgrasen. Proceedings of the 3rd Golf Course Congress with Exhibition, Munich, 7-8/3/1997. 39-42.
- 149) Leinauer, B. and H. Schulz. 1996: Influence of Irrigation Systems on Drought Tolerance of Three Turf Species. *Agronomy Abstracts*. 146.
- 150) Leinauer, B. 1994. Rasengräser und ihre Pflege auf Golfplätzen. *SDGLV News* 1994. pp. 12,13, 19.

Television and Radio Appearances

- Lafont-Anselmo, M., B. Leinauer, and R., Goss. Field Trip – Following agricultural products from the farm to the table. KRWG TV.
- Leinauer, B. and C. Smith. 2002. Turfgrasses for Northern New Mexico. Television series: “Southwest Yard and Garden”. New Mexico State University Cooperative Extension Service.
- Leinauer, B. and J. White. 2001. Bermudagrasses. Television series: “Southwest Yard and Garden”. New Mexico State University Cooperative Extension Service.
- Leinauer, B. and J. White. 2001. Turfgrass Selection and Turfgrass Maintenance in the Southwest. *Sunscape Radio Show KTEP FM, El Paso, TX*. Aired 8/4/01.
- Leinauer, B. and J. White. 2001. Dethatching and overseeding of home lawns. Television series: “Southwest Yard and Garden”. New Mexico State University Cooperative Extension Service.
- Leinauer, B. and J. White. 2000. Fall lawn care. Television series: “Southwest Yard and Garden”. New Mexico State University Cooperative Extension Service.
- Leinauer, B. and J. White. 2000. Fertilization of home lawns. Television series: “Southwest Yard and Garden”. New Mexico State University Cooperative Extension Service.

Presentations

Webinars

- 1) Soil Moisture Meters – Changing the Way Golf Uses Water. Organized and posted by the United States Golf Association.
- 2) Subsurface Irrigation. Google+ Hangout. TurfChat Episode 18: 126 views and an estimated 1533 hours watched since posted on YouTube on Feb 19, 2013.
https://www.youtube.com/watch?feature=player_embedded&v=C0wql6rzeVs
- 3) Physical water conditioners for managing turfgrasses. Google+ Hangout. TurfChat Episode 14:
https://www.youtube.com/watch?feature=player_embedded&v=wCbqVATST60

International Meetings

- 1) B. Leinauer. 2016. Turfgrass Selection to Maximize Water Use Efficiency. International Irrigation Show 2016, Irrigation Association of America, Las Vegas, NV, December 7, 2016. **Invited Speaker.**
- 2) B. Leinauer. 2016. Parameter zur Bestimmung von Beregnungswasserqualität – Bedeutung und Interpretation für die Praxis. OWL Greenkeeper-Seminar 2016, Greenkeeperverband Ostwestfalen & Compo GmbH, Bad Salzuflen, November 28, 2016. **Invited Speaker.**
- 3) B. Leinauer. 2016. Rasenbewässerung. Umwelt-Geräte-Technik Turfgrass Workshop, Umwelt-Geräte-Technik, Müncheberg, Germany. November 24, 2016. **Invited Speaker.**

- 4) B. Leinauer. 2016. Turfgrass Maintenance and Irrigation Water Conservation. German Headgreenkeeper Continuing Education Seminar, Agricultural Technology Training School (DEULA), Kempen, Germany. November 22, 2016. **Invited Speaker.**
- 5) B. Leinauer. 2016. Warmzonengräser – Vorstellung und Verwendung der wichtigsten Arten. 123th Turfgrass Seminar, German Turf Council, Geisenheim, Germany. September 27, 2016. **Invited Keynote speaker.**
- 6) B. Leinauer. 2016. Communicating your science: from your research project to presentation and publication. IV. Russian conference of young scientists (with international participation) "Biodiversity: global and regional processes", FEDERAL AGENCY OF SCIENTIFIC ORGANIZATIONS OF RUSSIA, Ulan Ude, Russia. June 23, 2016. **Invited Speaker.**
- 7) M. Serena, B. Leinauer, M. Schiavon. 2016. SURFACTANTS AND TRINEXAPAC-ETHYL IMPROVE ROOTING AND QUALITY OF DEFICIT- IRRIGATED WARM-SEASON TURFGRASSES. 5th European Turfgrass Conference, European Turfgrass Society | Universidade do Algarve, Albufeira, Portugal. June 6, 2016.
- 8) E. Sevostianova, B. Leinauer, J. Skerker, M. Serena, P. Rollo. 2016. Sustainable Landscape Irrigation with Reclaimed Water: Nitrogen losses from warm-season turfgrasses during establishment. Annual Meeting Re-Inventing the Nation's Urban Water Infrastructure, National Science Foundation, Stanford University. January 11, 2016.
- 9) B. Leinauer. 2015. Turfgrass Maintenance and Irrigation Water Conservation. German Headgreenkeeper Continuing Education Seminar, Agricultural Technology Training School (DEULA), Kempen, Germany. November 20, 2015. **Invited Speaker.**
- 10) B. Leinauer. 2015. Water Conservation and Management. International Golf Forum, Shenzhen, China. October 26 - 29, 2015. **Invited Keynote speaker.**
- 11) B. Leinauer. 2015. Recycled Water for Turfgrass Irrigation. Seminar for Faculty and Students at the Technological Institute of Crete, Heraklion, Greece. June 22 – 25, 2015. **Invited Speaker.**
- 12) B. Leinauer. 2015. Teaching a series of lectures to students of the Golf Institute at the Shanghai Jiao Tong University, Xiamen, China. March 17 – 18, 2014. **Invited Speaker.**
- 13) B. Leinauer. 2015. Irrigation Technologies and Water Management. China Golf Show 2015, March 13 – 16, 2015, Beijing, China. **Invited Speaker.**
- 14) B. Leinauer. 2015. Communicating your science: from your research project to presentation and publication. University of Padova - Ph.D. School, University of Padova, Padova, Italy. January 21, 2015. **Invited Speaker.**
- 15) B. Leinauer. 2015. Plant selection and water management for a changing environment. University of Padova - Ph.D. School, University of Padova, Padova, Italy. January 21, 2015. **Invited Speaker.**
- 16) B. Leinauer. 2014. Turfgrass Water Conservation – Should We Grow Grass in the Desert? IRLA2014 International Symposium: The effects of Irrigation and Drainage on Rural and Urban Landscapes, European Union and National Funds of Greece and Italy, Patras, Greece. November 27, 2014. **Invited Speaker.**
- 17) B. Leinauer. 2014. Turfgrass Maintenance and Irrigation Water Conservation. German Headgreenkeeper Continuing Education Seminar, Agricultural Technology Training School (DEULA), Kempen, Germany. November 13, 2014. **Invited Speaker.**
- 18) B. Leinauer, E. Sevostianova. 2014. Irrigation with Tailored Water: Benefits and Risks. 24th Session of Committee on Agriculture, Food and Agriculture Organization of the United Nations, Rome, Italy. October 3, 2014. **Invited Speaker.**
- 19) B. Leinauer. 2014. Turfgrass Water Conservation. FESCUE-GREEN Reference Group Meeting, Copenhagen, Denmark. July 4, 2014. **Invited Speaker.**
- 20) Sevostianova, E., B. Leinauer. Salt and Nitrate Leaching from Cool and Warm-season Turfgrasses Irrigated with Tailored Water. Third International Salinity Forum, University of California, Riverside, Riverside, CA. June 17, 2014.
- 21) Serena, M. Leinauer, B., Alvarez, G. Turfgrass Establishment from Polymer Coated Seed under Saline Irrigation. Third International Salinity Forum, University of California, Riverside, Riverside, CA. June 17, 2014.

- 22) Leinauer, B. 2014. Rasenbewässerung - Trends, Technologien, wassersparende Massnahmen. Guest Lecture, University of Applied Sciences, Osnabrueck, Germany, Osnabrueck, Germany. March 10, 2014. **Invited Speaker.**
- 23) B. Leinauer, E. Sevostianova , G. Alvarez. 2013. Soil Surfactants improve turf quality and reduce irrigation requirement. Biohydrology Conference 2013, Landau/Pfalz, Germany. May 21 – 24, 2013.
- 24) B. Leinauer. Turfgrass Water Conservation. Seminar Series ‘Growing Turf When Water is Scarce’, Department of Crop Science, Lab. of Floriculture and Landscape Architecture, Agricultural University of Athens, Greece. October 4, 2013. **Invited Speaker.**
- 25) Turfgrass Irrigation and Water Conservation. Annual Spring Meeting, Greenkeeper Association of Germany, Fulda, Germany, February 13, 2012. **Invited Speaker**
- 26) Irrigation Management. DEULA Rheinland Head Greenkeeper Continuing Education, Kempen, Germany, November 14, 2011. **Invited Speaker.**
- 27) Turfgrass Irrigation and Water Conservation. Austrian Golf Course Superintendents Meeting, Bad Leonfelden, Austria, October 18 to 20, 2011. **Invited Speaker**
- 28) Irrigation Scheduling. International Golf Industry Show and Conference. Golf Course Superintendents Association of America, Orlando, Florida, USA, February 8, 2011). **Invited Speaker**
- 29) Measuring Turf Stress – Tools for the Golf Course Superintendent. Regional Golf Course Superintendents Meeting. Riedberg, Germany, Nov 22, 2010. **Invited Speaker**
- 30) Irrigation Management. DEULA Rheinland Head Greenkeeper Continuing Education Seminar, Kempen, Germany, Nov 15 – 16, 2010. **Invited Speaker**
- 31) Measuring Turf Stress – Tools for the Turf Manager. COMPO Sports Turf Seminar ‘Everything About Sorts Turf’. Imtech Arena, Hamburg, Germany, Nov 10, 2010. **Invited Speaker**
- 32) Measuring Turf Stress – Tools for the Turf Manager. COMPO Sports Turf Seminar ‘Everything About Sorts Turf’. BayArena, Leverkusen, Germany, Nov 9, 2010. **Invited Speaker**
- 33) B. Leinauer and D. Karcher. Relationships between soil moisture, water repellency, localized dry spot, and soil surfactants on a sand based turfgrass rootzone. 9th International Symposium on Adjuvants for Agrochemicals (ISAA). Munich, Germany. August 16 – 19, 2010.
- 34) Water Demands and Water Conservation Strategies in Turfgrass Management. 28th International Horticultural Congress. Lisbon, Portugal. August 22 – 27, 2010. **Invited Speaker**
- 35) M. Schiavon, B. Leinauer, E. Sevostianova, M. Serena, and S. Macolino. Warm Season Turfgrass Quality, Spring Green Up, and Fall Color Retention Under Drip Irrigation in an Arid Climate. 28th International Horticultural Congress. Lisbon, Portugal. August 22 – 27, 2010.
- 36) M. Schiavon, B. Leinauer, E. Sevostianova, and F. Rimi. Cool-season Turfgrass Performance Under Drip Irrigation in an Arid Climate. 2nd European Turfgrass Society Conference. Angers, France. April 12 – 15, 2010.
- 37) M. Serena, B. Leinauer, S. Macolino, and M. Gill. Germination of Coated and Uncoated Turfgrass Seed Under Saline Conditions. 2nd European Turfgrass Society Conference. Angers, France. April 12 – 15, 2010.
- 38) E. Sevostianova, B. Leinauer, and M. Serena. Performance of Non-Irrigated Warm Season Turfgrasses in an Arid Climate. 2nd European Turfgrass Society Conference. Angers, France. April 12 – 15, 2010.
- 39) Irrigation Technologies and Water Management. Golf Course Superintendents Association of America 2010 Education Conference. San Diego, CA, February 7 – 12, 2010. **Invited Speaker**
- 40) Soil Sensor Technologies for Turf. Golf Courses & Services Conference and Show, Oldenburg, Germany, November 25 – 26, 2009. **Invited Speaker**
- 41) Irrigation Management. DEULA Rheinland Head Greenkeeper Continuing Education Seminar, Kempen, Germany, Nov 9 – 10, 2009. **Invited Speaker**
- 42) E. Sevostianova, B. Leinauer, M. Shukla, and B. Maier. Evaluation of a tortuosity parameter of a sandy soil from the bulk electrical conductivity measurements. 2009. 16th school “Ecology and soil science”, Puschino, Russia., Oct 5-8, 2009.
- 43) Irrigating Turfgrasses with Impaired Water - Possibilities and Challenges. European Turfgrass Society – Field Days, Valencia, Spain. April 21 – 22, 2009. **Invited Speaker**

- 44) Physical Water Conditioner Effects on Turfgrass. 2009 Golf Industry Show. New Orleans, LA. February 2 – 7, 2009. **Invited Speaker**
- 45) Irrigation Technologies and Water Management. 2009 Golf Industry Show. New Orleans, LA. February 2 – 7, 2009. **Invited Speaker**
- 46) Technologies to Identify Turfgrass Stress. Golf Courses & Services Conference and Show, Oldenburg, Germany, November 26 – 27, 2008. **Invited Speaker**
- 47) Localized Dry Spots: Development and Treatment Options; 2) Physical Water Conditioning. Annual German Greenskeeper Conference, Bad Honnef, Germany, October 24 – 28, 2007. – **Invited Speaker**
- 48) Turfgrass Maintenance; 2) Turfgrass Irrigation Management; and 3) Localized Dry Spots and Wetting Agents; 4) Turfgrass Irrigation with Impaired Waters. Continuing Education for German Greenskeepers; DEULA School Kempen, Germany, November 12 – 13, 2007. – **Invited Speaker**
- 49) Spring Transition of Overseeded Bermudagrass and 2) Bermudagrass Establishment from Seed. Annual Italian Greenskeeper Conference, Bologna, Italy, September 9 – 11, 2007. – **Invited Speaker**
- 50) Turfgrass Research at New Mexico State University. Guest Lecture at University of Padova, Italy, November 22 – 24, 2006. **Invited Speaker**
- 51) Turfgrass Maintenance; 2) Turfgrass Irrigation Management; and 3) Localized Dry Spots and Wetting Agents. Continuing Education for Greenskeepers; DEULA School Kempen, Germany, November 20 – 21, 2006. – **Invited Speaker**
- 52) Comparing Water Repellency in Turfgrass Root Zones Using Different Drying Methods. International Conference BIOHYDROLOGY 2006, Prague, Czech Republic. September 18 – 22, 2006.
- 53) Turfgrass Irrigation Management for the 21st Century. 27th International Horticultural Congress Global Horticulture: Diversity & Harmony, Seoul, South Korea. August 13 – 19, 2006. **Invited Speaker.**
- 54) Assessing Establishment Rates and Winter Survival of Low Maintenance Turfgrasses in Two Climate Zones. International Turfgrass Society Meeting, July 10 – 15, 2005. Llandudno, Great Britain.
- 55) Water Repellency in Sprinkler- and Subirrigated Turfgrass Root Zones. Meeting of the General Assembly of the European Geosciences Union, Vienna, Austria, April 24 – 29, 2005.
- 56) New Technologies for Effective Irrigation. Fairway Congress and Trade Show, Munich, Germany, March 2 -4, 2005. **Invited speaker.**
- 57) Turfgrasses for Extreme Environments. 98th Turfgrass seminar series, Vught, Netherlands. October 04/05, 2004. **Invited Speaker.**
- 58) Applied Turfgrass Research for Climate Extremes. University of Padova, Padova, Italy. 2004. **Invited speaker.**
- 59) USGA Guidelines for the Construction of Greens and Tees; 2) Establishment of Turfgrass Areas; 3) Localized Dry Spots and Wetting Agents. Annual Meeting of Austrian Greenkeepers Association, Loipersdorf, Austria. 2003. **Invited speaker.**
- 60) Subground vs. sprinkler irrigation: A comparison of drought avoidance, quality, and irrigation water use in turfgrasses. 2003. 1st International Conference on Turfgrass Management & Science for Sports Fields. Athens, Greece.
- 61) The Future of Putting Green Construction. 2003. International Golf Show and Conference, Barcelona, Spain. **Invited speaker.**
- 62) USGA Specifications for the Construction of Golf Greens. 2002. International Meeting for Turf Managers, Luzern, Switzerland. **Invited speaker.**
- 63) Effects of Soil Surfactants on Water Retention in Turfgrass Root Zones. 2001. International Turfgrass Society Meeting, Toronto, Canada
- 64) Microirrigation for golf courses. 2000. Meeting of Golf Course Investors, Builders, and Managers, Murcia, Spain. **Invited keynote speaker.**
- 65) Amendments for Sandy Root zones. 2000. Sod Producer Field Day, Vienna, Austria. **Invited Speaker.**
- 66) Biostimulants and Soil Amendments. GVD-Jahrestagung (Annual Meeting of German Greenkeepers Association), Nuernberg, Germany, October 29-November 1, 1999. **Invited Speaker.**

- 67) Alternative Spikes. GVD-Jahrestagung (Annual Meeting of German Greenkeepers Association), Karlsruhe, Germany, October 21-25, 1998. **Invited Speaker.**
- 68) *Poa supina* (Schrad.): A new Species for Turf. International Turfgrass Research Conference, Sydney (Australia), July 18-24, 1997.

National Meetings

- 1) B. Leinauer. 2016. Non-chemical Water Conditioners and Surfactants for Turfgrass Management. Penn State Golf Turf Conference 2016, Penn State and the Pennsylvania Turfgrass Council, State College, PA, November 17, 2016. **Invited Speaker.**
- 2) B. Leinauer. 2016. Turfgrass Water Conservation. Penn State Golf Turf Conference 2016, Penn State and the Pennsylvania Turfgrass Council, State College, PA. November 16, 2016. **Invited Speaker.**
- 3) B. Leinauer, M. Schiavon, M. Serena, E. Sevostianova. 2016. Plant Growth Regulator and Soil Surfactants' Effects on Drought and Salinity Stressed Bermudagrass and Seashore Paspalum. ASA, CSSA and SSSA Annual Meetings, American Society of Agronomy | Crop Science Society of America | Soil Science Society of America, Phoenix, AZ. November 8, 2016.
- 4) B. Leinauer. 2016. Effective Water Conservation through Better Stewardship: Subsurface Drip Irrigation for Turfgrass Areas. Landscape Expo, Long Beach, CA. October 19, 2016. **Invited Speaker.**
- 5) Serena, M. and B. Leinauer. 2015. Does irrigating dormant bermudagrass pay off? ASA, CSSA and SSSA International Annual Meetings, Minneapolis, MN, November 18, 2015.
- 6) Sevostianova, E., Skerker, J., Deb, S., Alvarez, G., Serena, M., Leinauer, B. 2015. Nitrogen losses from warm-season turfgrasses during establishment. ASA, CSSA and SSSA International Annual Meetings, Minneapolis, MN, November 18, 2015.
- 7) Deb, S., Serena, M., Idowu, O.J., McMillan, M., Duttler, A., Leinauer, B., 2015. Surfactants effects on water retention and flow in subsurface drip irrigated unsaturated soils. ASA, CSSA and SSSA International Annual Meetings, Minneapolis, MN, November 18, 2015.
- 8) Leinauer, B., VanLeeuwen, D., Serena, M., Sevostianova, E., Alvarez, G., Goss, R.M. 2015. Visual Turfgrass Quality Revisited. ASA, CSSA and SSSA International Annual Meetings, Minneapolis, MN, November 17, 2015.
- 9) Leinauer, B., Cochran, J., Munakata-Marr, J., Sevostianova, E. 2015. Sustainable Landscape Irrigation with Reclaimed Water. ERC Project Review Meeting, National Science Foundation. Stanford University, Palo Alto, CA. April 18, 2015.
- 10) Sevostianova, E., Munakata-Marr, J., Leinauer, B., Cath, T., Lentz, P., Cochran, J., Serena, M., Stanek, S. 2014. Nitrate Leaching from Irrigation with Tailored Water during Turfgrass Establishment. Advisory Board Meeting Re-Inventing the Nation's Urban Water Infrastructure (ReNUWI), National Science Foundation & University of Stanford, El Paso, TX. November 18, 2014.
- 11) Serena, M. B. Leinauer, B. 2014. Ideal irrigation management for establishing cool-season grasses. ASA, CSSA and SSSA Annual Meetings, Crop Science Society of America, Long Beach, CA. November 5, 2014.
- 12) Leinauer, B. M. Serena, E. Sevostianova, M. Schiavon. 2014. Subsurface drip irrigation for turfgrass areas. ASA, CSSA and SSSA Annual Meetings, Soil Science Society of Agronomy, Long Beach, CA. November 5, 2014.
- 13) Sevostianova, E., B. Leinauer, P. Lentz, S. Stanek. 2014. Nitrate leaching from irrigation with tailored water during turfgrass establishment. ASA, CSSA and SSSA Annual Meetings, Crop Science Society of Agronomy, Long Beach, CA. November 3, 2014.
- 14) Leinauer, B., Munakata-Marr, J., Sevostianova, E., Cochran, J., Roux, V., Alvarez, G. 2014. Tailored Water for Distributed Non-Potable and Potable Reuse (E1.3) - Sustainable Landscape Irrigation with Reclaimed Water. Annual Meeting Re-Inventing the Nation's Urban Water Infrastructure (ReNUWI), National Science Foundation & University of Stanford, Palo Alto, CA. May 20, 2014.
- 15) Leinauer, B. 2013. Subsurface Drip Irrigation for Sports Turf. 24th Annual Sports Turf Managers Association Conference and Exhibition, Sports Turf Managers Association, Daytona Beach, FL, January 16, 2013.
- 16) Serena, M., Leinauer, B., Zimmerman, J. 2013. Comparing Turfgrass Irrigation Scheduling Based On Soil Moisture Sensors and ET-Controllers., ASA, CSSA and SSSA Annual Meetings, Tampa Bay, FL, November 3-6, 2013.

- 17) Alvarez, G., Leinauer, B., Sevostianova, E., Serena, M. 2013. Effects of Polymer-coated Sand on Turfgrass Quality Under Drought Stress. ASA, CSSA and SSSA Annual Meetings, Tampa Bay, FL, November 3-6, 2013.
- 18) Sevostianova, E., Munakata-Marr, J., Leinauer, B., Drewes, J., Cath, T., Roux, V., Cochran, J. 2013. Irrigation with Tailored Water: Nitrogen Leachate. ASA, CSSA and SSSA Annual Meetings, Tampa Bay, FL, November 3-6, 2013.
- 19) Leinauer, B., Munakata-Marr, J., Sevostianova, E., Roux, V., Cochran, J., Alvarez, G. 2013. Tailored Water for Distributed Non-Potable and Potable Reuse (E1.3) - Sustainable Landscape Irrigation with Reclaimed Water. Annual Meeting 'Re-Inventing the Nation's Urban Water Infrastructure (ReNUWI)', National Science Foundation & University of Stanford, Palo Alto, CA. May 19 – 22, 2013.
- 20) Leinauer, B. 2013. Saline Water for Turfgrass Irrigation. Rio Grande Basin Project Meeting, Texas Water Resources Institute & Texas A&M Institute of Renewable Natural Resources, San Antonio, TX, April 16, 2013.
- 21) Sevostianova, E., J. Munakata-Marr, B. Leinauer, J. Drewes, and T. Cath. Nitrate Leaching From Turfgrasses Irrigated with Tailored Effluent Water Using Subsurface Drip System. 2012 ASA, CSSA and SSSA Annual Meetings, Cincinnati, OH, October 21 – 24, 2012.
- 22) Serena, M., B. Leinauer, and M. Schiavon. Nitrogen Fertilization Effects On Protein Content of Warm Season Grasses Under Saline Drip Irrigation. 2012 ASA, CSSA and SSSA Annual Meetings, Cincinnati, OH, October 21 – 24, 2012.
- 23) Schiavon, M., B. Leinauer, and M. Serena. Pigment Content and Quality of Drought Stressed Warm-Season Turf Species Treated with Plant Growth Regulators. 2012 ASA, CSSA and SSSA Annual Meetings, Cincinnati, OH, October 21 – 24, 2012.
- 24) Schiavon, M. B. Leinauer, and M. Serena. Superoxide Dismutase Activity In Leaves and Stolons of Two Warm-Season Turfgrass Species In An Arid Environment. 2012 ASA, CSSA and SSSA Annual Meetings, Cincinnati, OH, October 21 – 24, 2012.
- 25) Schiavon, M., B. Leinauer, and M. Serena. Plant Growth Regulators and Soil Surfactants Improve Warm-Season Turfgrass Quality Under Saline Conditions. 2011 ASA, CSSA and SSSA Annual Meetings, San Antonio, TX, October 16 – 20, 2011.
- 26) Serena, M., B. Leinauer, M. Schiavon, and D. Kieffer. Comparison of soil moisture uniformity in sprinkler and subsurface drip irrigated warm season turfgrasses. 2011 ASA, CSSA and SSSA Annual Meetings, San Antonio, TX, October 16 – 20, 2011.
- 27) Serena, M., B. Leinauer, M. Schiavon, E. Sevostianova, and B. Maier. A Comparison of Underground Biomass and Stolon Production of *Paspalum Vaginatum* (Swartz) established from Seed under Potable and Saline Subsurface Drip Irrigation. 108th Annual Conference of the American Society for Horticultural Sciences, Waikoloa, HI, September 25 – 28, 2011.
- 28) Schiavon, M., B. Leinauer, M. Serena, and B. Maier. Establishment of *Festuca arundinacea* (Shreb) Using Subsurface Capillary Irrigation and Saline Water. 108th Annual Conference of the American Society for Horticultural Sciences, Waikoloa, HI, September 25 – 28, 2011.
- 29) Sevostianova, E., B. Leinauer, and B. Maier. Soil Salinity and Turf Performance under Saline Irrigation. 108th Annual Conference of the American Society for Horticultural Sciences, Waikoloa, HI, September 25 – 28, 2011.
- 30) Leinauer, B., M. Serena, M. Schiavon, and E. Sevostianova. Efficient Irrigation Technologies: Helping to Meet Public Policy Goals in Landscape Water Conservation. , 2011 Land Grant and Sea Grant National Water Conference, Washington, DC, January 31 – February 1, 2011.
- 31) M. Schiavon, B. Leinauer, and M. Serena. Subsurface capillary irrigation to establish *Festuca arundinacea* (Schreb.) in an arid environment. 2010 ASA-CSSA-SSSA Annual Meeting, Long Beach, CA, Oct 31 – Nov 4, 2010.
- 32) M. Serena, B. Leinauer, and M. Schiavon. Nitrogen source and rate affect color retention on warm season grasses under saline and drip irrigation. 2010 ASA-CSSA-SSSA Annual Meeting, Long Beach, CA, Oct 31 – Nov 4, 2010.

- 33) M. Serena, B. Leinauer, and M. Schiavon. Scalping effect on spring green-up of bermudagrass and seashore paspalum. 2010 ASA-CSSA-SSSA Annual Meeting, Long Beach, CA, Oct 31 – Nov 4, 2010.
- 34) E. Sevostianova, B. Leinauer, and B. Maier. Warm Season Turfgrass and Rootzone Quality Under Saline Sprinkler and Drip Irrigation. 2010 ASA-CSSA-SSSA Annual Meeting, Long Beach, CA, Oct 31 – Nov 4, 2010.
- 35) B. Leinauer, M. Serena, E. Sevostianova, and M. Schiavon. Utilization of Saline Waters for Turfgrass Irrigation – 2009 Accomplishments. Efficient Irrigation for Water Conservation in the Rio Grande Basin. 2010 Annual Conference. Alpine, TX. May 17 – 20, 2010.
- 36) B. Leinauer. Water Conservation in Turfgrass Irrigation. 2010 Land Grant & Sea Grant National Water Conference. Hilton Head, SC, Feb 21 – 25, 2010.
- 37) M. Schiavon, B. Leinauer, and M. Serena. Growing Degree Days to Predict Warm Season Turfgrass Establishment from Seed under Saline and Subsurface Drip Irrigation. 2009 ASA-CSSA-SSSA Annual Meeting, Pittsburgh, PA, Nov 1 – 5, 2009.
- 38) M. Serena, B. Leinauer, and M. Schiavon. Dormant Seeding and Sodding for Faster Turfgrass Establishment Under Saline and Subsurface Drip Irrigation. 2009 ASA-CSSA-SSSA Annual Meeting, Pittsburgh, PA, Nov 1 – 5, 2009.
- 39) E. Sevostianova, B. Leinauer, M. Shukla, and B. Maier. Using tortuosity and bulk electrical conductivity measurements to estimate salinity in a sandy soil. 2009 ASA-CSSA-SSSA Annual Meeting, Pittsburgh, PA, Nov 1 – 5, 2009.
- 40) EPA Water-Efficient New Home Specification – The Southwest Perspective: ET_o, Alternative Water Sources, Education. EPA Water Sense Stakeholder Listening Session, Washington D.C. August 14, 2008. – **Invited Speaker**
- 41) Water Management Technologies. Victor A. Gibeault Symposium on Turfgrass Water Conservation in Riverside, CA, September 5 – 7, 2007. – **Invited Speaker**
- 42) Saving Water for Park and Rec with Irrigation Efficiency. Lands Conference and Expo, Louisville, KY. October 14 – 16, 2005. **Invited Speaker.**
- 43) Turfgrass Establishment with Saline Irrigation. Southern California Salinity Coalition, Board of Directors Meeting, Riverside, CA. October 6, 2005. **Invited Speaker.**
- 44) Renovation of Aggie Memorial Stadium. Pennington/Seeds West 7th International Field Day, Maricopa, AZ. 2004 – **Invited Speaker**
- 45) B. Leinauer and J. Makk. Effect of Irrigation Type, Root Zone Material and Root Zone Depth on Irrigation Efficiency and Water Use on Putting Greens in the Southwest. USGA (United States Golf Association) Golf Course Construction Workshop, Columbus, OH. October 14 – 16, 2003. **Invited Speaker.**
- 46) Sub-Irrigation for Sports Fields. 2003 Sports Turf Managers Association 14th Annual Conference and Exhibition, San Antonio, TX. **Invited speaker.**
- 47) Instrumentation, Monitoring System Design, Data Acquisition, and Data Processing in TDR Soil Moisture Measurement. 2000. Workshop “Interaction of Plants and Pollutants on Soil Moisture Dynamics” Department of Crop and Soil Sciences, Michigan State University, East Lansing, MI, and Phytoremediation Demonstration Facility at Ford Motor Co., Detroit, MI. **Invited speaker.**

Regional Meetings

- 1) B. Leinauer, Sevostianova, E. Alvarez, G. 2016. Irrigation Audit. Extension Workshop, El Paso, TX. December 15, 2016.
- 2) Leinauer, B. 2016. Turfgrass Management and Research. Pesticide Applicator Workshop, New Mexico State University Extension Service, Albuquerque, NM. November 30, 2016.
- 3) Leinauer, B. 2016. Turfgrass Selection and Maintenance. El Paso County Master Gardener Training Seminar, El Paso County Master Gardener, El Paso, NM. November 3, 2016.
- 4) Leinauer, B., Serena, M., Sportelli, M. 2016. How to install a subsurface drip installation. Extension Workshop, New Mexico State University Extension Service, Albuquerque, NM. November 1, 2016.

- 5) Leinauer, B. 2016. 2016 Extension and Research Update. Southwest Turfgrass Association Conference & Trade Show, Southwest Turfgrass Association & NMSU Extension Service, Las Cruces, NM. October 26, 2016.
- 6) Leinauer, B. 2016. Chemicals for Water Conservation. Turfgrass Field Day, Southwest Turfgrass Association & NMSU Extension Service, Las Cruces, NM. October 26, 2016.
- 7) Leinauer, B. 2016. Turfgrass Selection and Maintenance. Dona Ana County Master Gardener Training Seminar, Dona Ana County Extension Service, Las Cruces, NM. October 13, 2016.
- 8) Leinauer, B. 2016. Irrigation Audit. Extension Workshop, New Mexico State University Extension Service, Albuquerque, NM. September 9, 2016.
- 9) Leinauer, B., Serena, M., Sevostianova, E., Sportelli, M. 2016. Turfgrass Research at New Mexico State University. WERA11: Western Regional Turfgrass Research Grant Proposal Meeting, Multistate Research Coordinating Committee and Information Exchange Group, Honolulu, HI. July 25, 2016.
- 10) Leinauer, B., Serena, M., Sevostianova, E. 2016. How to install a subsurface drip installation. Extension Workshop, New Mexico State University Extension Service, Santa Fe, NM. April 26, 2016.
- 11) Leinauer, B. 2016. Adjuvants and Surfactants – How Can They Help The Superintendent? GCSAA Rio Grande Chapter Education and Golf Meeting, Rio Grande Chapter Golf Course Superintendents Meeting, Las Cruces, NM. March 22, 2016.
- 12) Leinauer, B. 2016. Turfgrass Selection and Maintenance. Taos County Master Gardener Training Seminar, Taos County Master Gardener, Taos, NM. March 2, 2016.
- 13) Leinauer, B. 2016. Turfgrass Selection, Maintenance and Irrigation. Water Bernalillo County Master Gardener Training Seminar, Bernalillo County Master Gardener, Albuquerque, NM. March 1, 2016.
- 14) Leinauer, B. 2016. Turfgrass Selection and Maintenance. Valencia County Master Gardener Training Seminar, Valencia County Master Gardener, Belen, NM. February 29, 2016.
- 15) Leinauer, B. 2016. Turfgrass Management and Research. Pesticide Applicator Workshop, New Mexico State University Extension Service, Farmington, NM. February 3, 2016.
- 16) Leinauer, B. 2016. Trees and Turf. An Urban Tree Care Conference, Think Trees New Mexico, Albuquerque, NM. February 2, 2016.
- 17) Leinauer, B. 2015. 2015 Extension and Research Update. Southwest Turfgrass Association Conference & Trade Show, Southwest Turfgrass Association & NMSU Extension Service, Ruidoso, November 4, 2015.
- 18) Leinauer, B. 2014. Subsurface drip irrigation for turfgrass areas. Water Efficient Landscaper, Las Cruces Utilities, Las Cruces, NM, October 23, 2014.
- 19) Leinauer, B. 2014. 2014 Extension and Research Update. Southwest Turfgrass Association Conference & Trade Show, Southwest Turfgrass Association & NMSU Extension Service, Albuquerque, NM, October 28, 2014.
- 20) Leinauer, B. 2013. Outta Sight Irrigation for Turfgrass – Research Perspective. Landscape Industry Show, California Landscape Association, Los Angeles, CA, February 13, 2013.
- 21) Leinauer, B., Alvarez, G., Serena, M. 2013. Seed Coating to Improve Turfgrass Establishment in Hydrophilic and Hydrophobic Saline Rootzones. Aquatrols Research Update, Aquatrols Corp., Paulsboro, NJ, July 7, 2013.
- 22) Leinauer, B. 2013. Turfgrasses for the Transition Zone. Meeting of the Rio Grande Golf Course Superintendents Association, Socorro, NM, July 22, 2013.
- 23) Leinauer, B., Serena, M. 2013. Bermudagrass and Seashore Paspalum Establishment and Management Using Subsurface Drip Irrigation vs. Overhead Sprinkler Irrigation. UC Riverside Turfgrass Field Day, UC Riverside, Riverside, CA, September 12, 2013.
- 24) Leinauer, B. 2013. Turfgrass and Water. El Paso and Sun Country Landscape Conference, Sun Country Landscape Association, El Paso, TX, October 31, 2013.
- 25) Leinauer, B. 2013. Extension and Turf Research at New Mexico State University. 2013 Southwest Turfgrass Association Annual Conference, Ruidoso, NM, November 12 – 14, 2013.
- 26) Subsurface Drip Irrigation for Turf Areas. 2012 Southwest Turfgrass Association Annual Conference, Ruidoso, NM, November 13 – 15, 2012.

- 27) Extension and Turf Research at New Mexico State University. 2012 Southwest Turfgrass Association Annual Conference, Ruidoso, NM, November 13 – 15, 2012.
- 28) Irrigating turf areas with saline and potable water from a subsurface drip system. 2012 Irrigation Show & Education Conference, Irrigation Association, Orlando, FL, November 2 – 5, 2012.
- 29) Sodium and Salinity: Soil and Plant Health. Fall Education Golf Course Superintendents Association - San Diego Chapter, San Diego, CA, October 18, 2012. **Invited speaker.**
- 30) Leinauer, B., M. Serena, M. Schiavon, and E. Sevostianova. Efficient Irrigation Technologies: Helping to Meet Public Policy Goals in Landscape Water Conservation. 57th Annual New Mexico Water Conference, New Mexico Water Resources Research Institute, Las Cruces, NM, September 28, 2012.
- 31) Leinauer, B., and M. Serena. Tall Fescue Establishment and Management Using Drip vs. Overhead Irrigation. UC Riverside Turfgrass Field Day, UC Riverside, Riverside, CA, September 13, 2012. **Invited speaker.**
- 32) Serena, M., B. Leinauer, M. Schiavon. Warm Season Turfgrass Establishment Using Saline Water and Subsurface Drip Irrigation. 47th Annual Water Resources Conference, Albuquerque, NM, November 7, 2011.
- 33) Schiavon, M., B. Leinauer, M. Serena. Establishment of cool-season turfgrasses using subsurface capillary irrigation and saline water. 47th Annual Water Resources Conference, Albuquerque, NM, November 7, 2011.
- 34) Extension and Turf Research at New Mexico State University. 2011 Southwest Turfgrass Association Annual Conference, Las Cruces, NM, November 1 – 3, 2011.
- 35) Saline Irrigation Water: Which Grasses Work Best? 2011 Southwest Turfgrass Association Annual Conference, Las Cruces, NM, November 1 – 3, 2011.
- 36) New Technologies for Managing Irrigation. 54th Annual Tennessee Turfgrass Assoc. Conference and Trade Show, Franklin, TN, January 5 – 7, 2011. **Invited speaker.**
- 37) Turf Research at New Mexico State University. 2010 Southwest Turfgrass Association Annual Conference, Ruidoso, NM, October 19 – 21, 2010.
- 38) B. Leinauer and R. Goss. Turfgrass Research at New Mexico State University. Western Regional Turfgrass Research (WERA-11) Meeting. Riverside, CA. June 2 – 4, 2010.
- 39) New Mexico State University Extension Update. Western Regional Turfgrass Research (WERA-11) Meeting. Riverside, CA. June 2 – 4, 2010.
- 40) Non-Chemical Water Conditioning and its Effects on Turfgrass. Spring Meeting Inland Empire Golf Course Superintendents Association. Walla Walla, WA, March 8 – 9, 2010. **Invited Speaker**
- 41) Turfgrass Water Conservation. Spring Meeting Inland Empire Golf Course Superintendents Association. Walla Walla, WA, March 8 – 9, 2010. **Invited Speaker**
- 42) Moisture and Salinity Sensors For Golf Course Management. 2009 Northern California's Golf Course Superintendents Institute: Tools For Tomorrow: Getting in Touch With GPS/GIS and Sensor Technology. Livermore, CA, Oct 19, 20, 2009. **Invited Speaker**
- 43) Subsurface Irrigation. 2009 California GCSA Annual Conference. San Luis Obispo, CA, Oct 31 – Nov 2, 2009. **Invited Speaker**
- 44) Extension and Turf Research at New Mexico State University. 2009 Southwest Turfgrass Association Annual Conference, Ruidoso, NM, October 12 – 14, 2009.
- 45) Efficient Irrigation for Turf. Minnesota Golf Course Superintendents Association's March Mini-Seminar, Minneapolis, MN. March 11, 2008. – **Invited Speaker**
- 46) Subsurface Irrigation for Turf; 2) Efficient Irrigation of Turfgrass Areas. 2007 Peaks and Prairies Golf Course Superintendents Association Meeting, Billings, MT. October 2 – 4, 2007. – **Invited Speaker**
- 47) Technologies for Monitoring Water Stress in Turf. Annual Conference of the American Society of Horticultural Science in Scottsdale, AZ, July 15 – 17, 2007. – **Invited Speaker**
- 48) Water Conservation and Turfgrass Irrigation. Meeting on Current NMSU's Research Projects with Staff from Senator Pete Domenici's office. New Mexico State University, Las Cruces, NM, May 31, 2007. – **Invited Speaker**

- 49) Products to Assist in Turfgrass Irrigation: Tools or Snake Oils? Annual Spring Turfgrass Management Seminar, Maricopa, AZ, April 11, 2007. **Invited Speaker**
- 50) Water Conservation and Turfgrass Irrigation. Meeting on Current Water Research Projects at the College of Agriculture and Home Economics. New Mexico State University, Las Cruces, NM, February 20, 2007. – **Invited Speaker**
- 51) Irrigating Salt Tolerant Grasses with RO Concentrate. 2006 Desalination Conference: Concentrate on Concentrate, Paso, TX. March 15 – 17, 2006. **Invited Speaker**
- 52) Subsurface Irrigation. Annual Rocky Mountain Regional Turfgrass Association Conference. December 6-8, 2005. Denver, CO. **Invited Speaker.**
- 53) Wetting Agents. Annual Rocky Mountain Regional Turfgrass Association Conference. December 6-8, 2005. Denver, CO. **Invited Speaker.**
- 54) Turfgrass Establishment with Saline Irrigation. Southern California Salinity Coalition, Board of Directors Meeting. Chino, CA. **Invited Speaker.**
- 55) Subsurface Irrigation for Sports Turf. 43rd Annual Nebraska Turfgrass Conference and Trade Show. Nebraska Turfgrass Association. Omaha, NE. 2005. **Invited Speaker.**
- 56) Subsurface Irrigation for the Golf Course. 43rd Annual Nebraska Turfgrass Conference and Trade Show. Nebraska Turfgrass Association. Omaha, NE. 2005. **Invited Speaker.**
- 57) Wetting Agents. 16th Annual Arkansas Conference and Trade Show. Arkansas Turfgrass Association. Hot Springs, AR. 2004. **Invited Speaker.**
- 58) Irrigation Scheduling. 16th Annual Arkansas Conference and Trade Show. Arkansas Turfgrass Association. Hot Springs, AR. 2004. **Invited Speaker.**
- 59) Subsurface Drip Irrigation for Large Turf Areas. Drought in the Desert: Doomsday or Opportunity? Desert Green Conference, Las Vegas, NV. 2003. **Invited Speaker.**
- 60) Extension and Research Update. 2003. Southwest Turfgrass Association Annual Conference, Ruidoso, NM. **Invited speaker.**
- 61) Subirrigation for Turfgrass Areas. 2003. Urban Irrigation and Water Conservation Conference, Albuquerque, NM. **Invited speaker.**
- 62) Sub-Irrigation for Turf. 2003. Sports Field Construction and Renovation Seminar, SFC Associates, Albuquerque, NM. **Invited speaker.**
- 63) Greens Water Management and the Future of Putting Greens Construction. 37th Annual Tennessee Turfgrass Association Conference and Trade Show 2003. **Invited speaker.**
- 64) Subsurface Irrigation of Turf Areas. Maui Turfgrass Conference: A Short Course on Turfgrass Management, University of Hawaii, College of Tropical Agriculture and Human Resources, Cooperative Extension Service, 2002. **Invited speaker.**
- 65) Sub-Irrigation for Sports Turf. Seminar Sports Field Renovation and Maintenance, Honolulu, Hawaii, 2002. **Invited speaker.**
- 66) Reducing Irrigation Water for Turf by Using Alternative Irrigation Systems. 2002. Workshop: Water Conservation: A Sensible Business Solution for your Facility. Albuquerque, NM. **Invited speaker.**
- 67) TDR Probe Design and Signal Interpretation. 2000. Workshop “TDR Soil Moisture Measurement in Sandy Root zones”, Rutgers University, New Brunswick, NJ.

Membership in Professional Societies

American Society of Agronomy (ASA)
 Crop Science Society of America (CSSA)
 German Turf Council (Deutsche Rasengesellschaft)
 Golf Course Superintendents Association of America (GCSAA)
 Greenkeeper Association of Germany (Greenkeeperverband Deutschland e.V.)
 International Turfgrass Society (ITS)
 New Mexico Extension Specialists Association
 Rio Grande Golf Course Superintendents Association
 Southwest Turfgrass Association
 Sports Turf Managers Association (STMA)
 United States Golf Association (USGA)