

## **Roch E. Gaussoin**

Emeritus Professor, Department of Agronomy and Horticulture, University of Nebraska  
Adjunct Faculty, Crop & Soil Sciences Department, North Carolina State University  
162 Morning Star Drive  
Advance, NC 27006  
[rgaussoin1@unl.edu](mailto:rgaussoin1@unl.edu)

### **Education:**

Ph.D. 1988, Michigan State University, Crop & Soil Sciences-Turfgrass Weed Ecology & Management  
M.S. 1983, New Mexico State University, Crop Science-Plant Breeding  
B.S. 1980, New Mexico State University, Agronomy.

### **Academic Employment History:**

#### University of Nebraska-Lincoln

Professor	7/2017 – 10/24
Professor and Head	7/2012 – 7/2017
Professor and Interim Head	7/2011 - 7/2012
Professor, Extension Specialist	7/2001 - 7/2011
Assoc. Professor, Extension Specialist	7/1996 - 7/2001
Assist. Professor, Extension Specialist	6/1991 - 7/1996

#### Kansas State University

Assist. Professor, Research & Teaching	7/1988 - 6/1991
--	-----------------

#### Michigan State University

Academic Specialist	7/1987 - 7/1988
---------------------	-----------------

#### New Mexico State University

Research Technologist-Plant Breeding	5/1980 - 3/1984
--------------------------------------	-----------------

### **Honors and Awards:**

- 2024 Distinguished Service Award, Nebraska Chapter-Golf Course Superintendents Association of America
- 2024 Lifetime Achievement Award, Rocky Mountain Regional Turfgrass Association
- 2024 Outstanding Paper in Applied Turfgrass Science for “A Review of Precision Management for Golf Course Turfgrass” published in Crop, Forage & Turfgrass Management authored by Michael Carlson, Roch Gaussoin and Laila Puntel
- 2023 United States Golf Association Green Section Award LINK: [2023 USGA Green Section Award Recipient Roch Gaussoin](#)
- 2020 Fellow, American Association for the Advancement of Science
- 2019-2025 Agronomic Science Foundation Board of Trustees
- 2016 Appointed to National Agricultural Research, Extension, Education, and Economics Advisory Board (NAREEEAB) by US Secretary of Agriculture
- 2016 Chair, Alliance of Crop, Soil, and Environmental Science Societies (ACSESS)
- 2015 President, Crop Science Society of America
- 2013 Distinguished Alumni Award, College of Agricultural, Consumer and Environmental Sciences, New Mexico State University
- 2013 Crop Science Extension Education Award, Crop Science Society of America
- 2013 Telly Award. Backyard Farmer, Turf 101
- 2013 Regional Emmy Nomination. Backyard Farmer, Turf 101

- 2013 Golf Course Superintendents Association of America, Col. John Morley Distinguished Service Award
- 2013 Nebraska Turfgrass Association, Distinguished Service Award
- 2008-2013 Cyril Bish Distinguished Professor of Horticulture, University of Nebraska-Lincoln (resigned due to position change to administration)
- 2008 Fred V. Grau Turfgrass Science Award, Crop Science Society of America
- 2006 Fellow, Crop Science Society of America
- 2006 Certificate of Merit for Extension Publications 16 pages or longer, American Society of Agronomy for *The 2006 Nebraska Guide for Weed Management*, M. Bernards, R. Gaussoin, B.. Kappler, R. Klein, S. Knezevic, D. Lyon, A. Martin, F. Roeth, P. Shea, L. Schulze, R. Wilson
- 2005 Fellow, American Society of Agronomy
- 2003 Presidential Award of Merit, Nebraska Turfgrass Association
- 2000 Educator of the Year, Nebraska Professional Lawn Care Association (NPLCA)
- 1999 Discover Magazine Award for Technological Innovation, “Top Ten for 2000” for the “Ristometer” see: Rist, A. M., M.F.Kocher, W.W. Stroup, R.E. Gaussoin, R.D. Grisso, R.C. Shearman. 1999. *Crop Science* 39:741-745).
- 1999 Sigma Xi -Outstanding Young Scientist, University of Nebraska-Lincoln.
- 1997 Exceptional Service Award, Nebraska Golf Course Superintendents Association (NGCSA)
- 1997 American Society of Agronomy Certificate of Excellence, Educational Materials Award. *Integrated Turfgrass Management Guide for the Northern Great Plains*. F.B. Baxendale and R.E. Gaussoin (ed.). Coop. Ext. Pub. No. EC931557. Univ. of Nebraska, Lincoln, NE.
- 1995 American Society for Horticultural Science, Extension Educational Aids Award for Excellence. *Integrated Management Guide for Nebraska Turfgrass*. F.P. Baxendale and R.E. Gaussoin (ed.). Coop. Ext. Pub. No. EC931588. Univ. of Nebraska, Lincoln, NE.
- 1995 American Society of Agronomy Certificate of Excellence, Educational Materials Award. *Integrated Management Guide for Nebraska Turfgrass*. F.B. Baxendale and R.E. Gaussoin (ed.). Coop. Ext. Pub. No. EC931588. Univ. of Nebraska, Lincoln, NE.
- 1993 American Society of Agricultural Engineers Blue Ribbon Award, Education Aids Competition, *Integrated Management Guide for Nebraska Turfgrasses*. Coop. Ext. Pub. No. EC93-1588. Univ. of Nebraska, Lincoln, NE.
- 1990 Academic Advisor of the Year, Kansas State University, College of Agriculture. 1989-1990 Academic Year.
- 1986 Outstanding graduate student paper presentation. American Society of Agronomy. Annual Meeting. Division C-5.
- 1981 Outstanding graduate student paper presentation. Western Society of Crop Science. Annual Meeting.

**Professional/Academic Publication Summary:**

Book chapters:	2	Refereed papers:	103
Extension Publications:	100+	Nontechnical papers:	75+
Invited Presentations:	400+	Cultivar Releases	5
Patents:	5 (1 pending)	Grants/GIA	\$7.4 million+

## Professional Service History:

- Executive Board Member, Crop Science Society of America
  - Numerous additional committee service within this organization
- Division Chair (Turfgrass Science), Crop Science Society of America
- Board Member, American Society of Agronomy
  - Numerous additional committee service within this organization
- Technical Editor, Crop, Forage and Turfgrass Management
- Acquisitions Editor, Applied Turfgrass Science
- Board Member, Nebraska Crop Improvement Association
- Associate Editor, Crop Science
- Associate Editor, International Turfgrass Society Research Journal
- Contributing Editor, TurfNews, Newsletter of Turfgrass Producers International
- Green Section Research Committee, United States Golf Association
- Research Committee, Golf Course Superintendents Association of America
- Education Committee, Golf Course Superintendents Association of America
- Faculty Member, Golf Course Superintendents Association of America
- Ex-officio Board Member, Nebraska Golf Course Superintendents Association
- Ex-officio Board Member, Nebraska Turfgrass Association
  - Numerous additional committee service within this organization

## Refereed Publications (*graduate students Gaussoin advised in italics*):

1. **Gaussoin, R.E.** and B.E. Branham. 1987. Annual bluegrass and creeping bentgrass germination response to flurprimidol. *HortScience* 23:178-179.
2. **Gaussoin, R.E.**, A.A. Baltensperger and B.N. Coffey. 1988. Response of 32 bermudagrass clones to reduced light intensity. *HortScience* 23:178-179.
3. **Gaussoin, R.E.** and B.E. Branham. 1989. Influence of cultural factors on species dominance in a mixed stand of creeping bentgrass and annual bluegrass. *Crop Sci.* 29:480-484.
4. **Gaussoin, R.E.**, J.A. Murphy and B.E. Branham. 1990. A flush-mounted, vertically installed tensiometer for turfgrass research. *HortScience* 25(8):928-929.
5. Lamont, W.J., D.L. Hensley, S.C. Wiest and **R.E. Gaussoin**. 1993. Relay intercropping muskmelons with Scotch pine Christmas trees using plastic mulch and drip irrigation. *HortScience* 28:177-178.
6. **Gaussoin, R.**, J. Nus and L. Leuthold. 1995. A modified Stimpmeter for small plot turfgrass research. *HortScience* 30(3):547-548.
7. Riordan, T.P., J. Johnson-Cicalese, F.B. Baxendale, **R.E. Gaussoin**, G.L. Horst and R.C. Shearman. 1995. Registration of '315' buffalograss. *Crop Sci.* 35(4):1206.
8. Masters, R.A., S.J. Nissen, **R.E. Gaussoin**, *D.D. Beran* and R.N. Stougaard. 1996. Imidazolinone herbicides improve restoration of Great Plains Grasslands. *Weed Tech.* 10:392-403.
9. *Unruh, J.B.*, **R.E. Gaussoin** and S.C. Wiest. 1996. Basal growth temperatures and growth rate constants of warm-season turfgrass species. *Crop Sci.* 36:997-999.
10. Fry, J.D., **R.E. Gaussoin**, *D.D. Beran* and R.A. Masters. 1997. Buffalograss establishment with preemergence herbicides. *HortSci.* 32(4):683-686.
11. Horst, G.L., D.H. Steinegger and **R.E. Gaussoin**. 1997. Comparative evapotranspiration rates of landscape and turfgrass groundcovers. *Int. Turfgrass Soc. Res. J.* 8:1274-1279.

12. Gaussoin, R.E., B.E. Branham and J.A. Flore. 1997. Carbon dioxide exchange rate and chlorophyll content of turfgrasses treated with flurprimidol or mefluidide. *J. of Plant Growth Regulation* 16(2):73-78.
13. Giese, M.S., **R.E. Gaussoin**, R.C. Shearman and T.P. Riordan. 1997. Sod production characteristics of turf-type buffalograss. *Int. Turfgrass Soc. Res. J.* 8:455-465.
14. Johnson, P.G., T.P. Riordan, **R.E. Gaussoin**, D. Schwarze and K. Kerner. 1997. Vegetative establishment of buffalograss with plugs: method and management. *Int. Turfgrass Soc. Res. J.* 8:467-476.
15. Riordan, R.P., P.G. Johnson, **R.E. Gaussoin** and J.F. Svoboda. 1997. Seedling germination and establishment of buffalograss caryopses vs. burs. *Int. Turfgrass Soc. Res. J.* 8:749-756.
16. Rist, A.M., **R.E. Gaussoin** and R.C. Shearman. 1997. Season and genotype influence golf ball roll distance on creeping bentgrass. *HortScience* 32(5):878-879.
17. Frank, K., **R.E. Gaussoin**, T. P. Riordan and E. D. Miltner. 1998. Date of planting effects on seeded turf-type buffalograss. *Crop Sci.* 38:1210-1213.
18. Beran, D.D., **R.E. Gaussoin** and R. A. Masters. 1999. Native wildflower establishment with imidazolinone herbicides. *Hort Science.* 34:283-286.
19. Masters, R. A., Beran, D. D., **R.E. Gaussoin**, and F. Rivas-Pantoja. 1999. Developing integrated weed management strategies to restore Great Plains grasslands. p. 204-207. *Proc. Second Eastern Native Grass Symposium.* November 17-19, 1999. Baltimore, MD.
20. Rist A.M., M.F. Kocher, W.W. Stroup, **R.E. Gaussoin**, R.D. Grisso and R.C. Shearman. 1999. Golf ball deceleration measuring system to evaluate surface uniformity of golf course greens. *Crop Sci.* 39:741-745.
21. Beran, D.D., R.A. Masters and **R.E. Gaussoin**. 2000. Establishment of big bluestem and Illinois bundleflower mixtures with imazapic and imazethapyr. *Agron. J.* 3: 592-596.
22. Streich, A.M. and **R.E. Gaussoin**. 2000. Quantifying the impacts of genotype selection and turfgrass management on the speed and smoothness of putting greens. *Diversity.* 16:1,2(35-36).
23. Masters, R. A., D. D. Beran, and **R.E. Gaussoin**. 2001. Restoring tallgrass prairie species on leafy spurge infested rangelands. *J. Range Manage.* 54:362-369.
24. Frank, K. W., **R.E. Gaussoin**, T.P. Riordan, W.W. Stroup, and M.H. Bloom. 2001. Nitrogen allocation of turfgrasses: I. Recovery of 15N-labeled ammonium nitrate applied to buffalograss [*Buchloe dactyloides* (Nutt.) Engelm]. *Int. Turf. Soc. Res. J.* 9:268-276.
25. Frank, K. W., **R.E. Gaussoin**, T.P. Riordan, W.W. Stroup, and M.H. Bloom. 2001. Nitrogen allocation of turfgrasses: II. Recovery of 15N-labeled ammonium nitrate applied to Kentucky bluegrass (*Poa pratensis* L.) and tall fescue (*Festuca arundinacea* Schreb.) *Int. Turf. Soc. Res. J.* 9:277-286.
26. Fry, J. S. Rodie, **R. Gaussoin**, S. Wiest, W. Upham, and A. Zuk. 2001. Using flowering ornamentals to guide application of preemergence herbicides in the Midwestern U.S. *Int. Turf. Soc. Res. J.* 9:1009-1012.
27. **Gaussoin, R.E.**, D. Minner, S. Keeley, and M. Vaitkus. 2001. Annual seeding of *Cynodon dactylon* [L.] Pers. for improved performance of heavily trafficked athletic fields in temperate climates. *Int. Turf. Soc. Res. J.* 9: 865-869.
28. Heckman, N. L., G.L. Horst, and **R.E. Gaussoin**, 2001. Influence of trinexapacethyl on specific leaf weight and chlorophyll content of *Poa pratensis* . *Int. Turf. Soc. Res. J.* 9: 287-290.
29. Heckman, N. L., G.L. Horst, **R.E. Gaussoin**, and L.J. Young. 2001. Heat tolerance of Kentucky bluegrass as affected by trinexapac-ethyl. *HortSci.* 36:365-367.
30. Heckman, N. L. **R.E. Gaussoin**, and G.L. Horst. 2001. Multiple trinexapac-ethyl applications reduce Kentucky bluegrass sod storage temperatures. *HortTech.* 11:595-598
31. Heckman, N.L., G.L. Horst, **R.E. Gaussoin**, and K.W. Frank. 2001. Storage and handling characteristics of trinexapac-ethyl treated Kentucky bluegrass sod. *HortSci.* 35:1127-1129.

32. Shearman, R. C., T.R. Turner, K.N. Morris, **R.E. Gaussoin**, M.R. Vaitkus, L.A. Wit. 2001. Sod strength and lateral spread of *Poa pratensis* cultivars and experimental lines. *Int. Turf. Soc. Res. J.* 9:928-933.
33. Watkins, J.E., **R.E. Gaussoin**, K.W. Frank, and L.A. Wit. 2001. *Rhizoctonia* brown patch severity and perennial ryegrass quality as influenced by nitrogen rate, nitrogen carrier, and cultivar. *Int. Turf. Res. Soc. J.* 9:723-728.
34. Watkins, J. E., R.C. Shearman, **R.E. Gaussoin**, W. K. Cecil, M. Vaitkus, L.A. Wit. 2001. An integrated approach to dollar spot management on a bentgrass fairway. *Int. Turf. Soc. Res. J.* 9:729-735.
35. Kerek, M., R. A. Drijber, W.L. Powers, R. C. Shearman, **R.E. Gaussoin**, A. M. Streich. 2002. Accumulation of microbial biomass within particulate organic matter of aging golf greens. *Agron. J.* 94:455-461
36. Frank, K.W., **R.E. Gaussoin**, J.D. Fry, M.D. Frost and J. H. Baird. 2002. Nitrogen, phosphorous, and potassium effects on seeded buffalograss establishment. *HortScience* 37: 371-373.
37. Heckman, N.L., G.L. Horst, **R.E. Gaussoin**, and B.T. Tavener. 2002. Trinexapacethyl influence on cell membrane thermostability of Kentucky bluegrass leaf tissue. *Scientia Horticulturae* 92:185-188.
38. Heckman, N.L., T.E. Elthon, G.L. Horst, and **R.E. Gaussoin**. 2002. Influence of trinexapac-ethyl on respiration of isolated wheat mitochondria. *Crop Sci.* 42:423-427.
39. Heckman, N.L., G.L. Horst, **R.E. Gaussoin**. 2002. Planting depth effect on emergence and morphology of buffalograss seedlings. *HortScience.* 37:506-507.
40. Kerek, M., R. A Drijber and **R.E. Gaussoin**. 2003. Labile soil organic matter as a potential nitrogen source in golf greens. *Soil Biol. and Biochem.* 35:1643-1649.
41. Karcher, D.E., R. M. Goss, M.D. Richardson, **R.E. Gaussoin** and M.E. Secks. 2003. Does blocking affect experimental efficiency on sand-based putting greens? *Crop Sci.* 43:2295-2297.
42. Goss R.M., **R.E. Gaussoin**, A.R. Martin 2004. Phytotoxicity of clippings from creeping bentgrass treated with glyphosate. *Weed Technology*,18: 575-579.
43. Frank K.W., **R.E. Gaussoin**, T.P. Riordan, R.C. Shearman, J.D. Fry, E.D. Miltner, P.G. Johnson. 2004. Nitrogen rate and mowing height effects on turf-type buffalograss. *Crop Science* 44:1615-1621
44. Heckman N., G.E. Meyer, G.L. Horst, R. Gaussoin. 2004. Direct calorimetric analysis of turfgrass sod for storage life assessment. *Scientia Horticulturae.* 102:1-10.
45. Budak, H., R.C. Shearman, I. Parmasksiz, **R.E. Gaussoin**, T.P. Riordan and I.Dweikat. 2004. Molecular characterization of buffalograss germplasm using sequence-related amplified polymorphism markers. *Theor. Appl. Genet.* 108:328-334
46. Budek H., R.C. Shearman, **R.E. Gaussoin**, L. Dweikat. 2004. Application of sequence-related amplified polymorphism markers for characterization of turfgrass species. *HortScience* 39: 955-958.
47. Gaussoin, R.E., B.E. Branham and J.A. Flore.2005. The Influence of environmental variables on CO<sub>2</sub> exchange rates of three cool season turfgrasses. *Int. Turfgrass Soc. Res. J.* 10:850 -856.
48. Heckman, N., **R.E. Gaussoin**, G. L. Horst, and C. G. Elowsky. 2005. Growth regulator effects on cellular characteristics of two turfgrass species. *Int.Turfgrass Soc. Res. J.* 10:857-861.
49. Streich, A. M., R. E. Gaussoin, W. W. Stroup, and R. C. Shearman 2005. Survey of management and environmental influences on golf ball roll distance. *Int. Turfgrass Soc. Res. J.I.* 10: p. 446-454
50. Severmutlu, S., T.P. Riordan, R.C. Shearman, **R.E. Gaussoin**, and L.E. Moser. 2005. Overseeding Buffalograss Turf with Fine-Leaved Fescues. *Crop Sci.* 45:704-711.
51. Goss R.M., **R.E. Gaussoin** and A.R. Martin. 2005. Survival of Common Turfgrass Weed Populations Following Glyphosate Application. *Int. Turfgrass Soc. Res. J.* 10:1189 -1192.
52. Shearman, R.C., L.A. Wit, S. Severmutlu, H, Budak, and **R.E. Gaussoin**. 2005. Colorant Effects on Dormant Buffalograss Turf Performance. *HortTech.* 15:244-246.
53. Shearman, R.C., H. Budak, S. Severmutlu, and **R.E. Gaussoin**. 2005. Burr Seeding Rate Effects on Turf-type Buffalograss Establishment. *HortTech.* 15:246-249.

54. Giese, M. S., R. J. Keese, N.E. Christians, and **R.E. Gaussoin**, R. E. 2005. Mesotrione: a potential selective post-emergence herbicide for turf grass. *Int. Turfgrass Soc. Res. J.*, 10, 100-101.
55. Goss, R. M., J. H. McCalla, R.E. Gaussoin, and M.D. Richardson. 2006. Herbicide tolerance of buffalograss. Online. *Applied Turfgrass Science* doi:10.1094/ATS-2006-0621-01-RS.
56. Lewis, J.D., R.E. Gaussoin, R.C. Shearman, and L.J.Giesler. 2007. Golf course putting green rootzone and establishment effects on pythium foliar blight on creeping bentgrass. Online. *Applied Turfgrass Science* doi: 10.1094/ATS-207-0806-01-RS.
57. Hooks, T., J. F. Pedersen, D. B. Marx, and **R.E. Gaussoin** 2007. Changing the support of a spatial covariate: A simulation study. *Crop Sci.* 47: 622-626.
58. Carstens, J., T. Heng-Moss, F. Baxendale, **R. Gaussoin**, K. Frank, and L. Young. 2007. Influence of buffalograss management practices on the chinch bug, *Blissus occiduus* Barber, and its beneficial arthropods. *J. Econ. Entomol.* 100: 136-147.
59. McClellan, T.A., R.C. Shearman, **R.E. Gaussoin**, M. Mamo, C. S. Wortmann, G.L. Horst, and D.B. Marx. 2007. Nutrient and Chemical Characterization of Aging Golf Course Putting Greens: Establishment and Rootzone Mixture Treatment Effects. *Crop Sci.* 47:193-199.
60. Morton, D., D. Weisenberger, Z. Reicher, B. Branham, B. Sharp, **R. Gaussoin**, et al. 2007. Evaluating bispyribac-sodium and sulfosulfuron for control of roughstalk bluegrass. *HortScience.* 42(7):p. 1710-1714.
61. McClellan, T. A., **R.E. Gaussoin**, R. C. Shearman, C. S. Wortmann, M. Mamo, G. L. Horst and D.B. Marx. 2009. Nutrient and chemical properties of aging golf course putting greens as impacted by soil depth and mat development. *HortScience.* 44(2):p. 452-458.
62. Abeyo B.G., R. C. Shearman, **R.E. Gaussoin**, L. A. Wit and D. D. Serba. 2009. Blue Fescue Overseeding Improves Performance of Fairway Height Buffalograsses. *HortScience* 44: 1444-1446.
63. Goss, R. M., **R.E. Gaussoin**, and A. R. Martin. 2009. Glyphosate rate-response of common turfgrass weeds. *Int. Turfgrass Soc. Res. J.* 11(Part 2):p. 1191-1197.
64. Lewis, J. D., **R.E. Gaussoin**, R. C. Shearman, M. Mamo, and C. S. Wortmann. 2010. Soil physical properties of aging golf course putting greens. *Crop Sci.* 50(5):p. 2084-2091.
65. Peterson, K. W., R. C. Shearman, **R.E. Gaussoin**, G. L. Horst, and W. H. Schacht. 2010. Growing degree-day influence on sprigged establishment of two buffalograss cultivars. *HortScience.* 45(2):p. 293-298.
66. **Gaussoin, R.**, C. Schmid, K. Frank, T. Butler, H. Liu, W. Jarvis, and C. Baldwin. 2009. Foliar uptake of nutrients applied in solution to Creeping Bentgrass (*Agrostis palustris*Huds.), Annual Bluegrass (*Poa annua* var. *reptans* (Hauskn.) Timm) and Ultra-Dwarf Bermudagrass (*Cynodon dactylon* x *C. transvaalensis* Burt-Davy). *Proc. Intl. Plant Nutrition Coll.* XVI.
67. Severmutlu, S., N. Mutlu, E. Gurbuz, O. Gulsen, M. Hocagil, O. Karaguzel, T. Heng-Moss, R. Shearman and **R. Gaussoin**. 2011. Drought resistance of warm season turfgrasses in Mediterranean region of Turkey. *HortTechnology.* 21(6):p. 726-736.
68. Severmutlu, S., N. Mutlu, R. C. Shearman, E. Gurbuz, O. Gulsen, M. Hocagil, O. Karaguzel, O. T. Heng-Moss, T. P. Riordan, **R.E. Gaussoin**. 2011. Establishment and turf qualities of warm-season turfgrasses in the mediterranean region. *HortTechnology.* 21(1):p. 67-81.
69. Proctor, C. A., **R.E. Gaussoin**, and Z. J. Reicher. 2011. Vegetative reproduction potential of common purslane (*Portulaca oleracea*). *Weed Tech.* 25(4):694-697.
70. Stamm, M. D., F. P. Baxendale, T. M. Heng-Moss, B. D. Siegfried, E. E. Blankenship, and **R.E. Gaussoin**. 2011. Dose-response relationships of clothianidin, imidacloprid, and thiamethoxam to *Blissus occiduus* (Hemiptera:Blissidae). *J. Econ. Entomol.* 104(1):p. 205-210.
71. Stamm, M. D., T. Heng-Moss, F. Baxendale, B. Siegfried, **R. Gaussoin**, D. Snow, D. and D. Cassada. 2012. Effect of distribution and concentration of topically applied neonicotinoid insecticides in buffalograss,

- Buchloe dactyloides*, leaf tissues on the differential mortality of *Blissus occiduus* under field conditions. Pest Manage. Sci. (wileyonlinelibrary.com) DOI 10.1002/ps.3387
72. Bernardis, M. L., R. J. Crespo, G. R. Kruger, **R. Gaussoin**, and P. J. Tranel. 2012. A Waterhemp (*Amaranthus tuberculatus*) Population Resistant to 2,4-D. Weed Science: 60: pp. 379-384.
  73. Sewell, S., D. McCallister, **R. Gaussoin** and C. Wortmann. 2012. Lawn Management Practices and Perceptions of Residents in 14 Sandpit Lakes of Nebraska. J of Extension. 04/26/10 07:20:57
  74. Han I., D. Li, W. Fang, Y. Wang and **R. Gaussoin**. 2012. Analysis of Soil Chemical Properties of Sand-Based Turfgrass Rootzones using Fourier Transform–Infrared Spectroscopy. Comm. in Soil Sci. and Plant Anal. 43:21; 2709-2721
  75. K.W. Peterson, C.J. Wegner, K.L. Amundsen, **R.E. Gaussoin**, W.H. Schacht, G.L. Horst, R.C. Shearman. 2013. Mowing Height and Genotype Influence on Carbohydrate Content of Buffalograss. Crop Sci. 53:1153-1160.
  76. Maugnan, M., D. Bollero, D.K. Lee, R. Darmody, R. Darmody, S. Bonos, L. Cortese, J. Murphy, **R. Gaussoin**, M. Sousek, D. Williams, L. Williams, F. Miguez and T. Voight. 2012. *Miscanthus X giganteus* productivity: the effects of management in different environments. GCB Bioenergy, doi: 10.1111/j.1757-1707.2011.01144.x
  77. Goss, R. M., and **R.E. Gaussoin**. 2013. Biostimulants and mycorrhizas do not increase *Poa pratensis* establishment on a sand-based root zone. Int. Turfgrass Soc. Res. J. 12:p. 169-177.
  78. Stamm M. D. T. M. Heng-Moss F. P. Baxendale J. C. Reese B. D. Siegfried T. E. Hunt, **R.E. Gaussoin** and E. E. Blankenship. 2013. Effects of Thiamethoxam Seed Treatments on Soybean Aphid (Hemiptera: Aphididae) Feeding Behavior. Journal of Economic Entomology. 106, Issue 6:2384–2390. <https://doi.org/10.1603/EC13268>
  79. Wang, Y., W. Fang, D. Li, and **R. Gaussoin**. 2013. Soil chemical properties of golf greens affected by age, initial construction and establishment. Int. Turfgrass Soc. Res. J. 12:p. 539-544.
  80. Reicher, Z., M. Sousek, and **R. Gaussoin**. 2014. Fall or late winter applications of preemergence herbicides rarely provide season-long control of crabgrass (*Digitaria* spp) in Nebraska. Online. Applied Turfgrass Science doi: 10.2134/ATS-2014-0024-BR.
  81. Berndt, W. L., **R.E. Gaussoin**, and J. M. Vargas. 2014. Cellulase accelerates short-term decay of thatchmat. *Agron. J.* 106(3):p. 781-788.
  82. Sousek, M., **R.E. Gaussoin**, A. J. Patton, D. V. Weisenberger, and Z. J. Reicher. 2014. Weed control and turf safety of single and sequential applications of herbicides over spring seedings. Online. Applied Turfgrass Science doi: doi:10.2134/ATS-2013-0046-RS.
  83. Watkins, E., D. S. Gardner, J. C. Stier, D. J. Soldat, R. A. St. John, N. E. Christians, **R.E. Gaussoin** et al. 2014. Cultivar performance of low-input turfgrass species for the North Central United States. Appl. Turfgrass Sci. 11(1):p. 1-7. doi: 10.2134/ATS-2013-0101-RS
  84. Schmid, C.A., **R.E. Gaussoin** and S. A. Gaussoin. 2014. Organic Matter Concentration of Creeping Bentgrass Putting Greens in the Continental U.S. and Resident Management Impact. Applied Turfgrass Science doi:10.2134/ATS-2014-0031-BR
  85. Ferguson, J.C., **R.E. Gaussoin**, J.A. Eastin, R.S. Henry and G.R. Kruger. 2014. Comparison of Herbicide Efficacy and Adjuvants Using a Conventional Sprayer and an Ultra-Low Volume Sprayer. In " Pesticide Formulation and Delivery Systems: 33rd Volume, "Sustainability: Contributions from Formulation Technology". ASTM International (astm.org).
  86. Schmid, C.A., **R.E. Gaussoin**, R.C. Shearman, M. Mamo and C.S. Wortmann. 2015. Cultivation Effects on Organic Matter Concentration and Infiltration Rates of Two Creeping Bentgrass (*Agrostis stolonifera* L.) Putting Greens. Applied Turfgrass Science doi:10.2134/ATS-2014-0032-RS
  87. Ferguson, J. C., **R.E. Gaussoin**, J. A. Eastin, M. D. Sousek, and G. R. Kruger. 2016. Comparison of an ultra-low volume (ULV) sprayer against a conventional sprayer, for foliar fertiliser and fungicide

- applications in turfgrass. *J of Plant Prot. Res*, 56(1), 54-59.
88. Ferguson, J. C., **R.E. Gaussoin**, J. A. Eastin, M. D. Sousek, and G. R. Kruger. 2016. Efficacy of pre and postemergence herbicides on weed suppression in established turfgrass with a conventional and an ultra-low volume sprayer. *Crop Prot.* 89:p. 72-77.
  89. Pedersen, M., C. Wegner., P. Phansak, G. Sarath, **R. Gaussoin**, and V. Schlegel. 2017. Monitoring wheat mitochondrial compositional and respiratory changes using Fourier transform mid-infrared spectroscopy in response to agrochemical treatments. *Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy*, 173, 727-732.
  90. Li, L., M. Sousek, **R. Gaussoin** and Z. Reicher. 2017. Herbicide Tolerance of Established Buffalograss. *Applied Turfgrass Science. Crop Forage Turfgrass Manage.*3: doi:10.2134/cftm2016.10.0065
  91. Amundsen, K., L. Li, R. C. Shearman, and **R.E. Gaussoin**. 2017. Addressing misperceptions regarding buffalograss tolerance to sandy soils, traffic, and shade. *Int. Turfgrass Soc. Res. J.* 13:p. 1-6
  92. Lee, D.K., E. Aberle, E.K. Anderson, W. Anderson, B.S. Baldwin, D. Baltensperger, M. Barrett, J. Blumenthal, S. Bonos, J. Bouton, D.I. Bransby, C. Brummer, P. S. Burks, C. Chen, C. Daly, J. Egenolf, R. L. Farris, J. H. Fike, **R. Gaussoin**, J. R. Gill, K. Gravois, M. D. Halbleib, A. Hale, W. Hanna, K. Harmony, E. A. Heaton, R. W. Heiniger, L. Hoffman, O. Hong, G. Kakani, R. Kallenbach, B. Macoon, J. C. Medley, A. Missaou, R. Mitchell, K. J. Moore, J. I. Morrison, G. N. Odvody, J. D. Richwine, R. Ogosh, J. R. Parrish, L. Quinn, E. Richard, W. L. Rooney, B. Rushing, R. Schnells, M. Sousek, S. A. Staggenborg, T. Tew, G. Uehara, D. R. Viands, T. Voight, D. Williams, L. Williams, L. Wilson, A. Wycislo, Y. Yang and V. Owens. 2018. Biomass production of herbaceous energy crops in the United States: field trial results and yield potential maps from the multiyear regional feedstock partnership. *Glob. Chang. Biol.*: 1–19. doi:10.1111/gcbb.12493.
  93. Pedersen, M.A., C.J. Wegner, **R.E. Gaussoin**, R. Zbasnik, G. Sarath and V.L. Schlegel. 2018. Phenolic Content and Profile Alterations during Seedling Growth in Supina Bluegrass and Bermudagrass *Crop Sci.* 58:2010–2019. doi: 10.2135/cropsci2018.02.0093.
  94. Li, L., M. Sousek, **R. Gaussoin**, and Z. Reicher. 2018. Buffalograss exhibits adequate turf tolerance to postemergence herbicides applied during or shortly after greenup. *Crop, Forage and Turfgrass Management.* 4(1):p. [1-3] DOI: 10.2134/cftm2017.09.0064.
  95. Patton, A.J., R.C. Braun, G.P. Schortgen, D.V. Weisenberger, B.E. Branham, B. Sharp, M.D. Sousek, **R.E. Gaussoin** and Z.J. Reicher. 2019. Long-Term Efficacy of Annual Bluegrass Control Strategies on Golf Course Putting Greens. *Crop, Forage & Turfgrass Management.* 5(1) 1-3. doi:10.2134/cftm2018.09.0068
  96. Li, L., E. Chestnut, M. Carlson, W. Kreuser and **R. Gaussoin**. 2020. Field evaluation of preemergence activity of plant growth regulators on annual bluegrass. *Crop, Forage and Turf. Mngnt.* <https://doi.org/10.1002/cft2.20073>
  97. Soldat, D. J., J. Brosnan, A. Chandra, **R. Gaussoin**, A. Kowalewski, B. Leinauer, B., F. Rossi, J. Stier and J.B. Unruh, J. B. 2020. Estimating economic minimums of mowing, fertilizing, and irrigating turfgrass. *Agric. & Environ. Letters*, e220032. <https://doi.org/10.1002/ael2.20032>
  98. Brosnan, J. A. Chandra, **R. Gaussoin**, A. Kowalewski, B. Leinauer, F. Rossi, D. Soldat, J. Stier and J.B. Unruh. 2020. A justification for continued management of turfgrass during economic contraction. *Agricultural & Environmental Letters*, e20033. <https://doi.org/10.1002/ael2.20033>
  99. Stahnke GK, Rieke PE, Cookingham PO, Shearman RC, **Gaussoin RE**, Kopec DM. 2021. James B Beard: The father of contemporary turfgrass science. *Int Turfgrass Soc Res J.* 2021;1–11. <https://doi.org/10.1002/its2.34>
  100. Li, L., M. Sousek, Z. Reicher, and **R. Gaussoin**. 2021. Strategies for increased yellow nutsedge (*Cyperus esculentus*) control in turfgrass with halosulfuron, sulfentrazone, and physical removal.

Weed Technology, 1-7. doi:10.1017/wet.2021.43

101. Carlson, M. G., **Gaussoin, R. E.**, & Puntel, L. A. 2022. A review of precision management for golf course turfgrass. *Crop, Forage & Turfgrass Management*, 8(2), e20183. <https://doi.org/10.1002/cft2.20183>
102. Kim P, Mahboob S, Nguyen HT, Eastman S, Meyer O, *Sousek M*, **Gaussoin RE**, Brungardt JL, Jackson-Ziems TA, Roston R, Alfano JR., Clemente TE, & Gaou M. 2023. Characterization of soybean events with enhanced expression of the microtubule-associated protein 65-1 (MAP65-1). *Molecular Plant-Microbe Interactions*. Oct 27(ja).
103. Berndt, W. L., and **Gaussoin, R. E.** 2023. Predicting Munsell Color for Turfgrass Leaves. *Crop Science*. <https://doi.org/10.1002/csc2.20843>

#### **Cultivar/Variety Registrations:**

1. Baltensperger, A.A., C.E. Watson, M. Smith, S.D. McLean and **R.E. Gaussoin**. 1982. Registration of Fresa strawberry clover (Reg. No. 38). *Crop Sci.* 22:1260.
2. Riordan, T.P., J. Johnson-Cicalese, F.B. Baxendale, **R.E. Gaussoin**, G.L. Horst and R.C. Shearman. 1995. Registration of '315' buffalograss. *Crop Sci.* 35(4):1206.
3. Johnson-Cicalese, J.M., P.G. Johnson, T.P. Riordan, F.P. Baxendale, R.E. Gaussoin, J.E. Watkins, and R. V. Klucas. 2000. Registration of '120' buffalograss. *Crop Sci.* 40(2): 571-572.
4. Johnson, P.G., T.P. Riordan, J.M. Johnson-Cicalese, F.P. Baxendale, **R.E. Gaussoin**, R.C. Shearman, and R. V. Klucas. 2000. Registration of '61' buffalograss. *Crop Sci.* 40(2): 569-570.
5. Riordan, T.P., P.G. Johnson, J.M. Johnson-Cicalese, **R.E. Gaussoin**, F.P. Baxendale, R.C. Shearman and R. V. Klucas. 2000. Registration of '118' buffalograss. *Crop Sci.* 40(2): 570-571.

#### **Patents:**

Buffalograss cultivars '315', '120', '61' and '118'; Microtubule-associated protein 65-1 (MAP65-1) *Patent Pending*.

#### **Book Chapters:**

1. **Gaussoin, R. E.**, Berndt, W. L., *Dockrell, C. A.*, Drijber, R. 2013. Characterization, Development, and Management of Organic Matter in Turfgrass Systems. *In* John C. Stier, Brian P. Horgan, and Stacy A. Bonos (Ed.), *Turfgrass: Biology, Use, and Management* (vol. 56). Agronomy Monograph.
2. Fidanza, M., Bigelow C, Kostka S, Ervin E, **Gaussoin R.**, Rossi F, Cisar J, Dinelli D, Pope J, and Steffel J. 2023. Considerations with biostimulants in turfgrass. Chapter 15 in: Fidanza, M. (ed.), *Achieving sustainable turfgrass management*, Burleigh Dodds Science Publishing, Cambridge, UK, 2023 (ISBN: 978 1 80146 019 4; [www.bdspublishing.com](http://www.bdspublishing.com))