

Drew J. Lyon

Washington State University
Crop and Soil Sciences
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- Education:**
- Ph.D. Agronomy/Weed Science - 1988
University of Nebraska, Lincoln, NE
Dissertation: A search for metribuzin tolerance in fieldbeans (*Phaseolus vulgaris*).
 - M.S. Agronomy/Weed Science - 1985
University of Nebraska, Lincoln, NE
Thesis: Response of fieldbeans (*Phaseolus vulgaris*) to reduced rates of 2,4-D and dicamba.
 - B.S. Agronomy/Crop Protection - 1980
University of Illinois, Urbana-Champaign, IL

Present Position: Endowed Chair & Professor, Crop & Soil Sciences, WSU

Extension (70%) and research (30%) responsibilities involve weed control in dryland small grain production systems of eastern Washington. This includes weed control in crops grown in rotation with small grains as well as in summer fallow. Integrated weed management is the primary focus of my work. My research is primarily applied in nature and conducted mostly in the field. The research will be quickly transferred to Washington growers through my Extension program.

Previous Professional Experience:

Professor of Agronomy & Horticulture, University of Nebraska
50% Research/50% Extension; July 2002 through July 2012

Associate Professor of Agronomy & Horticulture, University of Nebraska
50% Research/50% Extension; July 1996 through June 2002

Assistant Professor of Agronomy, University of Nebraska
50% Research/50% Extension; May 1990 through June 1996

Technical Service Representative, American Cyanamid Company
February 1989 through March 1990

Assistant County Extension Advisor, University of Illinois
January 1981 through July 1983

Membership in Professional Organizations:

American Society of Agronomy
Crop Science Society of America
Soil Science Society of America
Weed Science Society of America
Western Society of Weed Science

Honors and Awards Received:

Team Interdisciplinary Award, College of Agricultural, Human, and Natural Resource Sciences, 2017

Distinguished Achievement Award, Nebraska Crop Improvement Association, 2012

Distinguished Specialist Award, University of Nebraska Extension Division, 2011

Agronomic Extension Education Award, American Society of Agronomy, 2011

Fellow, Crop Science Society of America, 2010

Crop Science Extension Education Award, Crop Science Society of America, 2010

Membership in the Nebraska Hall of Agricultural Achievement, 2010

Outstanding Weed Scientist - Public Sector, Western Society of Weed Science, 2010

Fenster Distinguished Professor of Dryland Agriculture, 2008

Fellow, American Society of Agronomy, 2005

Nebraska Wheat Growers Association 2001 Man of the Year Award

2001 Gamma Sigma Delta Research Award of Merit

Junior Faculty Recognition for Excellence in Research Award, 1994, University of Nebraska Agricultural Research Division.

Excellence in Team Programming Award, 1992, University of Nebraska Cooperative Extension.

Current Professional Service:

CAST Board of Representative, Liaison for the American Society of Agronomy
Editorial Board, Crops & Soils Magazine, American Society of Agronomy

Herbicide Resistant Plants Committee, Western Society of Weed Science
Affiliate Faculty, Department of Crop and Soil Science, Oregon State University

Leadership Training:

Inaugural class for LEAD21 completed in 2006.

List of Publications:

Books

Hickman, J., J. Jacobsen, and D. Lyon. 1994. Best Management Practices for Wheat: A guide to profitable and environmentally sound production. pp. 115. National Association of Wheat Growers Foundation, Washington, D.C.

Refereed Journal Articles

79. Kumar, V., J.F. Spring, P*. Jha, D.J. Lyon, and I.C. Burke. 2017. Glyphosate-resistant Russian-thistle (*Salsola tragus*) identified in Montana and Washington. *Weed Technol.* 31:238-251.
78. Nielsen, D.C., D.J. Lyon, and J.J. Miceli-Garcia*. 2017. Replacing fallow with forage triticale in a dryland wheat-corn-fallow rotation may increase profitability. *Field Crops Res.* 203:227-237.
77. Calderon, F.J., D. Nielsen, V. Acosta-Martinez, M. Vigil, and D. Lyon. 2016. Cover crop and irrigation effects on soil microbial communities and enzymes in semiarid agroecosystems of the Central Great Plains of North America. *Pedosphere*: 26:192-205.
76. Hurisso, T.T., U. Norton, J.B. Norton, J. Odhiambo, S. J. Del Grosso, G.W. Hergert, and D.J. Lyon. 2016. Dryland soil greenhouse gases and yield-scaled emissions in no-till and organic winter wheat-fallow systems. *Soil Sci. Soc. Am. J.* 80:178-192.
75. Nielsen, D.C., D.J. Lyon, R.K. Higgins, G.W. Hergert, J.D. Holman, and M.F. Vigil. 2016. Cover crop effect on subsequent wheat yield in the Central Great Plains. *Agron. J.* 108:243-256.
74. Lyon, D.J., D.R. Huggins, and J.F. Spring*. 2016. Windrow burning eliminates Italian ryegrass (*Lolium perenne* ssp. *multiflorum*) seed viability. *Weed Technol.* 30:279-283.
73. Nielsen, D.C., D.J. Lyon, G.W. Hergert, R.K. Higgins, and J.D. Holman. 2015. Cover crop biomass production and water use in the Central Great Plains. *Agron. J.* 107:2047-2058.
72. Lyon, D.J., and F.L. Young. 2015. Integration of weed management and tillage practices in spring barley production. *Weed Technol.* 29:367-373.

71. Nielsen, D.C., D.J. Lyon, G.W. Hergert, R.K. Higgins, F.J. Calderon, and M.F. Vigil. 2015. Cover crop mixtures do not use water differently than single-species plantings. *Agron. J.* 107:1025-1038.
70. Lyon, D.J., and G.W. Hergert. 2014. Nitrogen fertility in semiarid dryland wheat production is challenging for beginning organic farmers. *Renew. Agric. Food Syst.* 29:42-47.
69. Saseendran, S.A., D.C. Nielsen, L.R. Ahuja, L. Ma, and D.J. Lyon. 2013. Simulated yield and profitability of five potential crops for intensifying the dryland wheat-fallow production system. *Agric. Water Manage.* 116:175-192.
68. Nielsen, D.C., J.J. Miceli-Garcia*, and D.J. Lyon. 2012. Canopy cover and leaf area index relationships for wheat, triticale, and corn. *Agron. J.* 104:1569-1573.
67. Peterson, G.A., D.J. Lyon, and C.R. Fenster. 2012. Valuing long-term field experiments: Quantifying the scientific contribution of a long-term tillage experiment. *Soil Sci. Soc. Am. J.* 76:757-765.
66. Hansen, N.C., B.L. Allen, R.L. Baumhardt, and D.J. Lyon. 2012. Research achievements and adoption of no-till, dryland cropping in the semi-arid U.S. Great Plains. *Field Crops Res.* 132:196-203.
65. Abunyewa, A.A., R.B. Ferguson, C.S. Wortmann, D.J. Lyon, S.C. Mason, S. Irmak, and R.N. Klein. 2011. Grain sorghum water use with skip-row configuration in the Central Great Plains of the USA. *Afr. J. Agric. Res.* 6:5328-5338.
64. Lyon, D.J., and J.A. Smith. 2011. No-till dryland sugarbeet production in semi-arid western Nebraska. *J. Sugar Beet Res.* 48:121-136.
63. Kniss, A.R., D.J. Lyon, J.D. Vassios, and S.J. Nissen. 2011. MCPA synergizes imazamox control of feral rye (*Secale cereale*). *Weed Technol.* 25:303-309.
62. Setiyono, T.D., H. Yang, D.T. Walters, A. Dobermann, R.B. Ferguson, D.F. Roberts, D.J. Lyon, D.E. Clay, and K.G. Cassman. 2011. Maize-N: A decision tool for nitrogen management in maize. *Agron. J.* 103:1276-1283.
61. Kniss, A.R., and D.J. Lyon. 2011. Winter wheat response to preplant applications of aminocyclopyrachlor. *Weed Technol.* 25:51-57.
60. Lyon, D.J., and A.R. Kniss. 2010. Proso millet tolerance to saflufenacil. *Weed Technol.* 24:349-355.
59. Pavlista, A.D., Lyon, D.J., Baltensperger, D.D., and Hergert, G.W. 2010. Yield components as affected by planting dryland maize in a double-skip row pattern. *J. Crop Improve.* 24:1-11.

58. Wortmann, C.S., A.J. Liska, R.B. Ferguson, D.J. Lyon, R.N. Klein, and I. Dweikat. 2010. Dryland performance of sweet sorghum and grain crops for biofuel in Nebraska. *Agron. J.* 102:319-326.
57. Abunyewa, A.A., R.B. Ferguson, C.S. Wortmann, D.J. Lyon, S.C. Mason, and R.N. Klein. 2010. Skip-row and plant population effects on sorghum grain yield. *Agron. J.* 102:296-302.
56. Urrea, C.A., C.D. Yonts, D.J. Lyon, and A.E. Koehler. 2009. Selection for drought tolerance in dry bean derived from the Mesoamerican gene pool in western Nebraska. *Crop Sci.* 49:2005-2010.
55. Blanco-Canqui, H., L.R. Stone, A.J. Schlegel, D.J. Lyon, M.F. Vigil, M.M. Mikha, P.W. Stahlman, and C.W. Rice. 2009. No-till induced increase in organic carbon reduces maximum bulk density of soils. *Soil Sci. Soc. Am. J.* 73:1871-1879.
54. Blanco-Canqui, H., M.M. Mikha, J.G. Benjamin, L.R. Stone, A.J. Schlegel, D.J. Lyon, M.F. Vigil, and P.W. Stahlman. 2009. Regional study of no-till impacts on near-surface aggregate properties that influence soil erodibility. *Soil Sci. Soc. Am. J.* 73:1361-1368.
53. Saseendran, S. A., D. C. Nielsen, D. J. Lyon, L. Ma, D. G. Felter*, D. D. Baltensperger, G. Hoogenboom, and L.R. Ahuja. 2009. Modeling responses of dryland spring triticale, proso millet and foxtail millet to initial soil water in the High Plains. *Field Crops Res.* 113:48-63.
52. Lyon, D.J., A.D. Pavlista, G.W. Hergert, R.N. Klein, C.A. Shapiro, S. Knezevic, S.C. Mason, L.A. Nelson, D.D. Baltensperger, R.W. Elmore, M.F. Vigil, A.J. Schlegel, B.L. Olson, and R.M. Aiken. 2009. Skip-row planting patterns stabilize corn grain yields in the central Great Plains. [Online]. *Crop Manage.* doi:10.1094/CM-2009-0224-02-RS. Available at <http://www.plantmanagementnetwork.org/cm/>. (Verified 25 Feb., 2009).
51. Kniss, A.R., D.J. Lyon, and S.D. Miller. 2008. Jointed goatgrass management with imazamox-resistant cultivars in a winter wheat-fallow rotation. *Crop Sci.* 48:2414-2420.
50. Lyon, D. J., D. C. Nielsen, D. G. Felter*, and P. A. Burgener. 2007. Choice of summer fallow replacement crops impacts subsequent winter wheat. *Agron. J.* 99:578-584.
49. Lyon, D. J., A. Kniss, and S. D. Miller. 2007. Carfentrazone improves broadleaf weed control in proso and foxtail millets. *Weed Technol.* 21:84-87.
48. *Felter, D. G., D. J. Lyon, and D. C. Nielsen. 2006. Evaluating crops for a flexible summer fallow cropping system. *Agron. J.* 98:1510-1517.
47. White, A. D., D. J. Lyon, C. Mallory-Smith, C. R. Medlin, and J. P. Yenish. 2006. Feral rye (*Secale cereale*) in agricultural production systems. *Weed Technol.* 20:815-823.

46. Baenziger, P. S., B. Beecher, R. A. Graybosch, D. D. Baltensperger, L. A. Nelson, J. M. Krall, Yue Jin, J. E. Watkins, D. J. Lyon, A. R. Martin, Ming-Shun Chen, and Guiha Bai. 2006. Registration of 'Infinity CL' wheat. *Crop Sci.* 46:975-977.
45. *Maman, N., S. C. Mason, and D. J. Lyon. 2006. Nitrogen rate influence on pearl millet yield, nitrogen uptake, and nitrogen use efficiency in Nebraska. *Commun. Soil Sci. Plant Anal.* 37:1-15.
44. Lyon, D. J., and R. G. Wilson. 2005. Chemical weed control in dryland and irrigated chickpea. *Weed Technol.* 19:959-965.
43. Kappler, B. F., S. Z. Knezevic, R. F. Klein, D. J. Lyon, A. R. Martin, F. W. Roeth, and G. A. Wicks. 2005. Comparison of glyphosate herbicides in Nebraska [Online]. *Crop Management* doi:10.1094/CM-2005-0719-01-RS. Available at <http://www.plantmanagementnetwork.org/sub/cm/research/2005/nebraska/> (posted 19 Jul. 2005; verified 20 Jul. 2005).
42. Lyon, D. J., and G. A. Peterson. 2005. Continuous dryland cropping in the Great Plains: What are the limits? *Agron. J.* 97:347-348.
41. Thomas, J. A., G. L. Hein, and D. J. Lyon. 2004. Spread of wheat curl mite and wheat streak mosaic virus is influenced by volunteer wheat control methods [Online]. *Plant Health Progress* doi:10.1094/PHP-2004-1206-01-RS. Available at <http://www.plantmanagementnetwork.org/sub/php/research/2004/wheat/> (posted 6 Dec. 2004; verified 20 Jul. 2005).
40. Clay, D. E., S. A. Clay, D. J. Lyon, and J. M. Blumenthal. 2005. ¹³C discrimination in corn grain can be used to separate and quantify yield losses due to water and nitrogen stresses. *Weed Sci.* 53:23-29.
39. Geier, P. W., P. W. Stahlman, A. D. White, S. D. Miller, C. M. Alford, and D. J. Lyon. 2004. Imazamox for winter annual grass control in imidazolinone-tolerant winter wheat. *Weed Technol.* 18:924-930.
38. *Maman, N., S. C. Mason, D. J. Lyon, and P. Dhungana. 2004. Yield components of pearl millet and grain sorghum across environments in the central Great Plains. *Crop Sci.* 44:2138-2145.
37. Lyon, D. J., D. D. Baltensperger, J. M. Blumenthal, P. A. Burgener, and R. M. Harveson. 2004. Eliminating summer fallow reduces winter wheat yields, but not necessarily system profitability. *Crop Sci.* 44:855-860.
36. *Maman, N., D. J. Lyon, S. C. Mason, T. D. Galusha, and R. Higgins. 2003. Pearl millet and grain sorghum yield response to water supply in Nebraska. *Agron. J.* 95:1618-1624.

35. Lyon, D. J., S. D. Miller, and S. Seifert-Higgins. 2003. MON 37500 soil residues affect rotational crops in the High Plains. *Weed Technol.* 17:792-798.
34. Lyon, D. J., G. L. Hammer, G. B. McLean, and J. M. Blumenthal. 2003. Simulation supplements field studies to determine no-till dryland corn population recommendations for semiarid western Nebraska. *Agron. J.* 95:884-891.
33. Wicks, G. A., D. H. Popken, G. W. Mahnken, G. E. Hanson, and D. J. Lyon. 2003. Survey of winter wheat (*Triticum aestivum*) stubble fields sprayed with herbicides in 1998: weed control. *Weed Technol.* 17:475-484.
32. Wicks, G. A., D. H. Popken, G. W. Mahnken, G. E. Hanson, and D. J. Lyon. 2003. Survey of winter wheat (*Triticum aestivum*) stubble fields sprayed with herbicides in 1998: cultural practices. *Weed Technol.* 17:467-474.
31. Blumenthal, J. M., D. J. Lyon, and W. W. Stroup. 2003. Optimal plant population and nitrogen fertility for dryland corn in western Nebraska. *Agron. J.* 95:878-883.
30. Lyon, D. J., A. J. Bussan, J. O. Evans, C. A. Mallory-Smith, and T. F. Peeper. 2002. Pest management implications of glyphosate-resistant wheat (*Triticum aestivum*) in the western United States. *Weed Technol.* 16:680-690.
29. *Kappler, B. F., D. J. Lyon, P. W. Stahlman, S. D. Miller, and K. M. Eskridge. 2002. Wheat plant density influences jointed goatgrass (*Aegilops cylindrica*) competitiveness. *Weed Technol.* 16:102-108.
28. Agdag, M, L Nelson, D. Baltensperger, D. Lyon, S. Kachman. 2001. Row spacing affects grain yield and other agronomic characters of proso millet. *Commun. Soil Sci. Plant Anal.* 32:2021-2032.
27. Lyon, D. J., D. D. Baltensperger, and M. Siles. 2001. Wheat grain and forage yields are affected by planting and harvest dates in the Central Great Plains. *Crop Sci.* 41:488-492.
26. Jasieniuk, M., B. D. Maxwell, R. L. Anderson, J. O. Evans, D. J. Lyon, S. D. Miller, D. W. Morishita, A. G. Ogg, Jr., S. Seefeldt, P. W. Stahlman, F. E. Northam, P. Westra, Z. Kebede, and G. A. Wicks. 2001. Evaluation of models predicting winter wheat yield as a function of winter wheat and jointed goatgrass densities. *Weed Sci.* 49:48-60.
25. Pester, T. A., P. Westra, R. L. Anderson, D. J. Lyon, S. D. Miller, P. W. Stahlman, F. E. Northam, and G. A. Wicks. 2000. *Secale cereale* interference and economic thresholds in winter *Triticum aestivum*. *Weed Sci.* 48:720-727.
24. Drijber, R. A., J. W. Doran, A. M. Parkhurst, and D. J. Lyon. 2000. Changes in soil microbial community structure with tillage under long-term wheat-fallow management. *Soil Biology and Biochemistry* 32:1419-1430.

23. *Kettler, T. A., D. J. Lyon, J. W. Doran, W. L. Powers, and W. W. Stroup. 2000. Soil quality assessment after weed-control tillage in a no-till wheat-fallow cropping system. *Soil Sci. Soc. Am. J.* 64:339-346.
22. Jasieniuk, M., B. D. Maxwell, R. L. Anderson, J. O. Evans, D. J. Lyon, S. D. Miller, D. W. Morishita, A. G. Ogg, Jr., S. Seefeldt, P. W. Stahlman, F. E. Northam, P. Westra, Z. Kebede, and G. A. Wicks. 1999. Site-to-site and year-to-year variation in *Triticum aestivum*-*Aegilops cylindrica* interference relationships. *Weed Sci.* 47:529-537.
21. Meyer, S. J., D. J. Lyon, and D. D. Baltensperger. 1999. Effect of winter wheat seeding date on soil erosion in the west-central Great Plains. *Great Plains Res.* 9:75-86.
20. *Daugovish, O., D. J. Lyon, and D. D. Baltensperger. 1999. Cropping systems to control winter annual grasses in winter wheat (*Triticum aestivum*). *Weed Technol.* 13:120-126.
19. Bhatti, M. H., L. A. Nelson, D. D. Baltensperger, D. J. Lyon, S. D. Kachman, and G. E. Frickel. 1999. Influence of planting dates and populations on seed yield and plant characteristics of sunflower in the High Plains. *J. Prod. Agric.* 12:38-42.
18. Lyon, D. J., and D. R. Shelton. 1999. Fallow management and nitrogen fertilizer influence winter wheat kernel hardness. *Crop Sci.* 39:448-452.
17. Lyon, D.J., W.W. Stroup, and R.E. Brown. 1998. Crop production and soil water storage in long-term winter wheat-fallow tillage experiments. *Soil Tillage Res.* 49:19-27.
16. Lyon, D. J. 1998. Sunflower residue weight and ground cover loss during summer fallow. *J. Soil and Water Cons.* 53:71-73.
15. Peterson, G. A., A. D. Halvorson, J. L. Havlin, O. R. Jones, D. J. Lyon, and D. L. Tanaka. 1998. Reduced tillage and increasing cropping intensity in the Great Plains conserves soil C. *Soil Tillage Res.* 47:207-218.
14. Kessavalou, A., A.R. Mosier, J.W. Doran, R.A. Drijber, D.J. Lyon, and O. Heinemeyer. 1998. Fluxes of CO₂, N₂O, and CH₄ in grass sod and winter-wheat fallow tillage management. *J. Environ. Qual.* 27:1094-1104.
13. *Uludag, A., D. J. Lyon, S. J. Nissen, and S. D. Kachman. 1997. Proso millet (*Panicum miliaceum*) response to CGA-152005, metsulfuron, and triasulfuron. *Weed Technol.* 11:138-143.
12. Paul, E. A., R. F. Follett, S. W. Leavitt, A. Halvorson, G.A. Peterson, and D. J. Lyon. 1997. Radiocarbon dating for determination of soil organic matter pool sizes and dynamics. *Soil Sci. Soc. Am. J.* 61:1058-1067.

11. Follett, R. F., E. A. Paul, S. W. Leavitt, A. D. Halvorson, D. Lyon, and G. A. Peterson. 1997. Carbon isotope ratios of Great Plains soils and in wheat-fallow systems. *Soil Sci. Soc. Am. J.* 61:1068-1077.
10. Lyon, D. J., S. D. Miller, and G. A. Wicks. 1996. The future of herbicides in weed control systems of the Great Plains. *J. Prod. Agric.* 9:209-215.
9. Anderson, R. L., D. J. Lyon, and D. L. Tanaka. 1996. Weed management strategies for conservation-tillage sunflower (*Helianthus annuus*). *Weed Technol.* 10:55-59.
8. Lyon, D. J. and D. D. Baltensperger. 1995. Cropping systems control winter annual grass weeds in winter wheat. *J. Prod. Agric.* 8:535-539.
7. Lyon, D. J., *F. Boa, and T. J. Arkebauer. 1995. Water-yield relations of several spring-planted dryland crops following winter wheat. *J. Prod. Agric.* 8:281-286.
6. Lyon, D. J., J. A. Smith, and D. D. Jones. 1994. Sampling wheat at the elevator for jointed goatgrass (*Aegilops cylindrica*). *Weed Technol.* 8:64-68.
5. Lyon, D. J. and D. D. Baltensperger. 1993. Proso millet (*Panicum miliaceum*) tolerance to several postemergence herbicides. *Weed Technol.* 7:230-233.
4. Lyon, D. J. and I. G. Rush. 1993. Processing reduces seed germination and emergence of jointed goatgrass. *J. Prod. Agric.* 6:395-398.
3. Lyon, D. J. and R. L. Anderson. 1993. Crop response to fallow applications of atrazine and clomazone. *Weed Technol.* 7:949-953.
2. Lyon, D. J., D. D. Baltensperger, and I. G. Rush. 1992. Viability, germination and emergence of cattle-fed jointed goatgrass seed. *J. Prod. Agric.* 5:282-285.
1. Lyon, D. J., and R. G. Wilson. 1986. Sensitivity of fieldbeans (*Phaseolus vulgaris*) to reduced rates of 2,4-D and dicamba. *Weed Sci.* 34:953-956.

*Co-advised graduate student.

Refereed Book Chapters

7. Hansen, N.C., Allen, B.L., Anapalli, S., Blackshaw R.E., Lyon, D.J., and Machado, S. 2017. Dryland agriculture in North America. In: Farooq, M. and Siddique K.H.M. (eds). *Innovations in dryland agriculture*. Cham, Springer, pp. 415-441.
6. Tanaka, D.L., D.J. Lyon, P.R. Miller, S.D. Merrill, and B.G. McConkey. 2010. Soil and water conservation advances in the semiarid northern Great Plains. p. 81-102. *In* T.M. Zobeck and W.F. Schillinger (eds.) *Soil and water conservation advances in the United States*. SSSA Spec. Publ. 60. SSSA, Madison, WI.

5. Lyon, D. J., R. E. Blackshaw, and G. S. Gill. 2009. Cutting down on weeds to cut a cleaner crop. p. 251-272. *In* B. F. Carver (ed.) *Wheat: Science and trade*. Wiley-Blackwell, Ames, IA.
4. Lyon, D., J. Smith, and D. Fryrear. 2000. Wind erosion. p. 11-16. *In* R. Reeder (ed.) *Conservation tillage systems and management*. 2nd ed. MidWest Plan Service publ. 45. Ames, IA.
3. Lyon, D. J., C. A. Monz, R. E. Brown, and A. K. Metherell. 1997. Soil organic matter changes over two decades of winter wheat-fallow cropping in western Nebraska. p. 343-351. *In* E. A. Paul et al. (ed.) *Soil organic matter in temperate agroecosystems: Long-term experiments in North America*. CRC Press, Boca Raton, FL.
2. Lyon, D. J., S. D. Miller, and G. A. Wicks. 1994. Weed management in reduced-tillage cropping systems. p. 42-51. *In* W. C. Moldenhauer and A. L. Black (ed.) *Crop residue management to reduce erosion and improve soil quality: Northern Great Plains*. USDA-ARS. Conservation Research Report No. 38.
1. Elliott, E. T., I. C. Burke, C. A. Monz, S. D. Frey, K. H. Paustian, H. P. Collins, E. A. Paul, C. V. Cole, R. L. Blevins, W. W. Frye, D. J. Lyon, A. D. Halvorson, D. R. Huggins, R. F. Turco, and M. V. Hickman. 1994. Terrestrial carbon pools: Preliminary data from the Corn Belt and Great Plains Regions. p. 179-191. *In* J. W. Doran et al. (ed.) *Defining soil quality for a sustainable environment*. SSSA Spec. Publ. no. 35. SSSA, Madison, WI.

Refereed Proceedings

2. Lyon, D., S. Bruce, T. Vyn, and G. Peterson. 2004. Achievements and future challenges in conservation tillage. *In* T. Fischer et al. (ed.) *Proc. 4th Int. Crop Sci. Congr.*, Brisbane, Australia. 26 Sep. - 2 Oct. 2004. [Online] Available at [www.cropscience.org.au](http://www.cropsscience.org.au). The Reg. Inst., Gosford, Australia.
1. Baltensperger, D. D., G. Frickel, D. Lyon, J. Krall, and T. Nightingale. 2002. Safflower management and adaptation for the High Plains. p. 179-182. *In* J. Janick (ed.) *Proc. Nat. Symp. New Crops & New Uses*, 5th, Atlanta, GA. 10-13 Nov. 2001. ASHS Press, Alexandria, VA.

Extension Publications

85. Lyon, D.J., I.C. Burke, A.G. Hulting, and J.M. Campbell. 2017. Integrated management of mayweed chamomile in wheat and pulse production systems. (PNW695).
84. Lyon, D.J., and I.C. Burke. 2016. Integrated management of prickly lettuce in wheat production systems. (PNW688).
83. Raeder, A.J., D.J. Lyon, J.B. Harsh, and I.C. Burke. 2015. How soil pH affects the activity and persistence of herbicides. (FS189E).

82. Lyon, D.J., A.G. Hulting, D.W. Morishita, and F.L. Young. 2015. Integrated management of downy brome in winter wheat. (PNW668).
81. Lyon, D.J. 2015. Buckwheat control in wheat. (FS158E).
80. Lyon, D. J., A. G. Hulting, and D. W. Morishita. 2014. Integrated management of feral rye in winter wheat (PNW660).
79. Gaussoin, R. E., R. N. Klein, S. Z. Knezevic, G. R. Kruger, D. J. Lyon, Z. J. Reicher, L. D. Sandell, S. L. Young, R. G. Wilson, P. J. Shea, C. L. Ogg. 2012. 2012 Nebraska Guide for Weed Management (EC-130).
78. Klein, R. N., D. J. Lyon. 2011. Recommended seeding rates and hybrid selection for rainfed (dryland) corn in Nebraska. (G2068).
77. Bernards, M. L., R. E. Gaussoin, R. N. Klein, S. Z. Knezevic, G. R. Kruger, D. J. Lyon, Z. J. Reicher, L. D. Sandell, S. L. Young, R. G. Wilson, P. J. Shea, C. L. Ogg. 2011. 2011 Nebraska Guide for Weed Management (EC-130).
76. Lyon, D., and C. Medlin. 2010. Managing weeds in winter wheat. In F. B. Peairs (ed.) *Wheat Production and Pest Management for the Great Plains Region*. Colorado State Univ. Extension (XCM235).
75. Fenster, C. R., G. W. Hergert, D. J. Lyon, P. A. Burgener, G. L. Stone, and D. D. Baltensperger. 2010. Breaking the ground: a century of farming in the Panhandle of Nebraska 1910-2010 (RB344).
74. Wegulo, S. N., G. L. Hein, and D. J. Lyon. 2010. Distinguishing between head disorders of wheat (EC1872).
73. Bernards, M. L., R. E. Gaussoin, R. N. Klein, S. Z. Knezevic, D. J. Lyon, L. D. Sandell, R. G. Wilson, P. J. Shea, C. L. Ogg, R. J. Wright, L. J. Giesler, T. A. Jackson, and S. N. Wegulo. 2010. 2010 Nebraska Guide for Weed Management (EC-130).
72. Yonts, C.D, D.J. Lyon, J.A. Smith, R.M. Harveson, G.W. Hergert, G.L. Hein, and D. Santra. 2009. Producing irrigated winter wheat (EC731).
71. Wortmann, C.S., R. Ferguson, R. Klein, D. Lyon, and S. Melvin. 2009. Skip-row planting of grain sorghum for improved drought tolerance (G1976).
70. Lyon, D., M. F. Vigil, D. C. Nielsen, and R. M. Aiken. 2009. Crop rotations and residue management. p. 38-40. *In* R. Meyer et al. (ed.) *High Plains sunflower production handbook*. Kansas State University, Manhattan, KS.

69. Thompson, C. R., D. E. Peterson, D. J. Lyon, B. L. S. Olson, A. R. Kniss, and J. S. Falk. 2009. Weed control. p. 8-10. *In* R. Meyer et al. (ed.) High Plains sunflower production handbook. Kansas State University, Manhattan, KS.
68. D. J. Lyon and T. L. Holman. 2009. Converting CRP to Cropland in the Nebraska Panhandle. (G1943).
67. Bernards, M. L., R. E. Gaussoin, R. N. Klein, S. Z. Knezevic, D. J. Lyon, L. D. Sandell, and R. G. Wilson. 2009. 2009 Nebraska Guide for Weed Management. (EC-130-D).
66. Schmale, D., R. Anderson, D. Lyon, and R. Klein. 2008. Jointed goatgrass: best management practices central Great Plains. EB2033. Washington State Univ., Pullman.
65. Klein, R.N, D.J. Lyon, and R.G. Wilson. 2008. Downy brome control. (G422).
64. Lyon, D.J., P.A. Burgener, K.L. DeBoer, R.M. Harveson, G.L. Hein, G.W. Hergert, T.L. Holman, L.A. Nelson, J.J. Johnson, T. Nleya, J.M. Krall, D.C. Nielsen, and M.F. Vigil. 2008. Producing and marketing proso millet in the Great Plains (EC 137). University of Nebraska-Lincoln Extension, Lincoln, NE.
63. Bernards, M. L., R. E. Gaussoin, R. N. Klein, S. Z. Knezevic, D. J. Lyon, L. D. Sandell, and R. G. Wilson. 2008. 2008 Nebraska Guide for Weed Management. (EC-130-D).
62. Klein, R. N., and D. J. Lyon. 2007. Getting started in ecofarming: Growing the winter wheat crop. (G1009)
61. Lyon, D. J., R. N. Klein. 2007. Controlling jointed goatgrass. (G1252).
60. Lyon, D., P. Burgener, R. Harveson, G. Hein, and G. Hergert. 2007. Growing safflower in Nebraska. (G1702).
59. Bernards, M. L., R. E. Gaussoin, R. N. Klein, S. Z. Knezevic, D. J. Lyon, A. R. Martin, and R. G. Wilson. 2007. 2007 Nebraska Guide for Weed Management. (EC-130-D).
58. Lyon, D. J., and R. N. Klein. 2007. Rye control in winter wheat. (G1483).
57. Lyon, D. J., L. A. Nelson, and R. N. Klein. 2007. Planting and harvesting information for Nebraska crops. (G1757).
56. Lyon, D. J., A. R. Martin, and R. N. Klein. 2006. Cultural practices to improve weed control in winter wheat. (G1389).
55. Lyon, D. J., R. N. Klein, and R. G. Wilson. 2006. Blue mustard control. (G1272).

54. Bernards, M. L., R. E. Gaussoin, B. F. Kappler, R. N. Klein, S. Z. Knezevic, D. J. Lyon, A. R. Martin, F. W. Roeth, and R. G. Wilson. 2006. 2006 Nebraska Guide for Weed Management. (EC-130-D).
53. Krall, J. M. et al. 2006. Pea production in the High Plains. (EC-187).
52. Klein, R. N., and D. J. Lyon. 2006. Freeze injury to Nebraska wheat. (EC-132).
51. Klein, R. N., D. J. Lyon, D. D. Baltensperger, and L. A. Nelson. 2005. Using winter wheat yield data to improve variety selection. (EC-197).
50. Lyon, D., M. F. Vigil, D. C. Nielsen, and H. D. Sunderman. 2005. Crop rotations and residue management. p. 35-37. *In* R. Meyer et al. (ed.) High Plains sunflower production handbook. MF-2384. Kansas State University, Manhattan, KS.
49. Thompson, C., D. Peterson, D. Regehr, D. Lyon. 2005. Weed control. p. 7-9. *In* R. Meyer et al. (ed.) High Plains sunflower production handbook. MF-2384. Kansas State University, Manhattan, KS.
48. Holman, T. L., D. J. Lyon, D. D. Baltensperger, I. G. Rush, and R. Weed. 2005. Grazing winter wheat in Nebraska. (EC05-185).
47. Gaussoin, R. E., B. F. Kappler, R. N. Klein, S. Z. Knezevic, D. J. Lyon, A. R. Martin, F. W. Roeth, G. A. Wicks, and R. G. Wilson. 2005. 2005 Nebraska Guide for Weed Management. (EC-130-D).
46. Brick, M. A., et al. 2004. Dry bean production and pest management. 2nd Edition. (CSU Bulletin 562A).
45. Klein, R. N., and D. J. Lyon. 2004. Seeding rates for winter wheat in Nebraska. (G04-1543).
44. Lyon, D. J., and J. A. Smith. 2004. Wind erosion and its control. (G04-1537).
43. Baltensperger, D. D., D. J. Lyon, P. A. Burgener, G. L. Hein, R. M. Harveson, C. D. Yonts, J. F. Margheim, G. E. Frickel, and G. J. Foster. 2004. Brown mustard production. (EC04-183a).
42. Margheim, J. F., D. D. Baltensperger, R. G. Wilson, D. J. Lyon, G. L. Hein, R. M. Harveson, P. Burgener, J. M. Krall, J. T. Cecil, J. R. Rickertson, A. P. Merrigan, and M. H. Watson. 2004. Chickpea production in the High Plains. (EC04-183).
41. Gaussoin, R. E., B. F. Kappler, R. N. Klein, S. Z. Knezevic, D. J. Lyon, A. R. Martin, F. W. Roeth, G. A. Wicks, R. G. Wilson, S. D. Comfort, R. A. Masters, P. J. Shea, and L. D. Schulze. 2004 Guide for Weed Management In Nebraska. (EC-130-D).

40. Klein, R. N., D. J. Lyon. 2003. Recommended seeding rates and hybrid selection for rainfed (dryland) corn in Nebraska. (G03-1528-A)
39. Martin, A. R., Comfort, S. D., R. E. Gaussoin, B. F. Kappler, R. N. Klein, S. Z. Knezevic, D. J. Lyon, F. W. Roeth, L. D. Schulze, P. J. Shea, G. A. Wicks, R. G. Wilson. 2003 Guide for Weed Management In Nebraska. (EC-130-D).
38. Yonts, C. D., D. J. Lyon, D. D. Baltensperger, J. M. Blumenthal, R. M. Harveson, G. L. Hein, and J. A. Smith. 2002. Producing irrigated winter wheat. (G02-1455-A).
37. Lyon, D. J., R. N. Klein, and G. A. Wicks. 2002. Rye control in winter wheat. (G02-1483-A).
36. Wicks, G. A., D. J. Lyon, and R. N. Klein. 2002. Controlling jointed goatgrass. (G95-1252-A). Revised October 2002.
35. Klein, R. N., G. A. Wicks, D. J. Lyon. Downy brome control. (G78-422-A). Revised October 2002.
34. Martin, A. R., Comfort, S. D., R. E. Gaussoin, B. F. Kappler, R. N. Klein, S. Z. Knezevic, D. J. Lyon, F. W. Roeth, L. D. Schulze, P. J. Shea, G. A. Wicks, R. G. Wilson. 2002 Guide for Weed Management In Nebraska. (EC-130-D).
33. Anderson, R., E. Zakarison, D. Ball, G. Wicks, D. Lyon, W. Donald, S. Miller, F. Young, and T. White. 2002. Jointed goatgrass ecology. Extension Bulletin EB1932. Washington State University Cooperative Extension.
32. Lyon, D. J., and R. N. Klein. 2001. Estimating winter wheat grain yields. (G01-1429-A).
31. Martin, A. R., F. W. Roeth, R. G. Wilson, G. A. Wicks, R. N. Klein, D. J. Lyon, and S. Z. Knezevic. 2001 Guide for Weed Management In Nebraska. (EC01-130-D).
30. Martin, A. R., F. W. Roeth, R. G. Wilson, G. A. Wicks, R. N. Klein, D. J. Lyon, and S. Z. Knezevic. 2000 Guide for Weed Management In Nebraska. (EC00-130-D).
29. Wicks, G. A., A. R. Martin, and D. J. Lyon. 1999. Cultural practices to improve weed control in winter wheat. (G99-1389-A).
28. Lyon, D., H. D. Sunderman, M. F. Vigil, and D. C. Nielsen. 1999. Crop rotations and residue management. p. 28-30. *In* R. Meyer et al. (ed.) High Plains sunflower production handbook. Kansas State University, Manhattan, KS.
27. Thompson, C., D. Peterson, D. Regehr, and D. Lyon. 1999. Weed control. p. 6-7. *In* R. Meyer et al. (ed.) High Plains sunflower production handbook. Kansas State University, Manhattan, KS.

26. Martin, A. R., F. W. Roeth, R. G. Wilson, G. A. Wicks, R. N. Klein, D. J. Lyon, and S. Knezevic. Revised 1999. A 1999 Guide for -- Herbicide Use In Nebraska. (EC99-130-D).
25. Wicks, G. A., R. N. Klein, A. R. Martin, and D. J. Lyon. Revised 1999. Annual broadleaf weed control in winter wheat. (G95-1241-A).
24. Martin, A. R., F. W. Roeth, R. G. Wilson, G. A. Wicks, R. N. Klein, and D. J. Lyon. Revised 1998. A 1998 Guide for -- Herbicide Use In Nebraska. (EC98-130-D).
23. Lyon, D. J. and T. Holman. 1997. Converting CRP to cropland in the Nebraska Panhandle. (NF97-321).
22. Martin, A. R., F. W. Roeth, R. G. Wilson, G. A. Wicks, R. N. Klein, and D. J. Lyon. Revised 1997. A 1997 Guide for -- Herbicide Use In Nebraska. (EC97-130-D).
21. Martin, A. R., F. W. Roeth, R. G. Wilson, G. A. Wicks, R. N. Klein, D. L. Holshouser, and D. J. Lyon. Revised 1996. A 1996 Guide for -- Herbicide Use In Nebraska. (EC96-130-D).
20. Lyon, D. J., R. N. Klein, and G. A. Wicks. 1995. Controlling jointed goatgrass. (G95-1252-A).
19. Wicks, G. A., D. J. Lyon, and R. N. Klein. 1995. Blue mustard control (G95-1277-A).
18. Martin, A. R., F. W. Roeth, R. G. Wilson, G. A. Wicks, R. N. Klein, D. L. Holshouser, and D. J. Lyon. Revised 1995. A 1995 Guide for -- Herbicide Use In Nebraska. (EC95-130-D).
17. Baltensperger, D., D. Lyon, R. Anderson, T. Holman, C. Stymiest, J. Shanahan, L. Nelson, K. DeBoer, G. Hein, and J. Krall. Producing and marketing proso millet in the High Plains. (EC95-137-C).
16. Martin, A. R., F. W. Roeth, R. G. Wilson, G. A. Wicks, R. N. Klein, D. L. Holshouser, and D. J. Lyon. Revised 1994. A 1994 Guide for -- Herbicide Use In Nebraska. (EC94-130-D).
15. Klein, R. N., D. J. Lyon, and J. E. Watkins. 1994. Freeze injury to Nebraska wheat. (EC94-132-S).
14. Lyon, D. J. and R. N. Klein. 1994. Controlling volunteer rye in winter wheat. (G94-1225-A).
13. Martin, A. R., F. W. Roeth, R. G. Wilson, G. A. Wicks, R. N. Klein, and D. J. Lyon. Revised 1993. A 1993 Guide for -- Herbicide Use In Nebraska. (EC93-130-D).

12. Lyon, D. J., D. D. Baltensperger, L. A. Nelson. 1992. Planting and harvesting information for Nebraska crops. (G92-1068-A).
11. Lyon, D. J., R. G. Wilson, and A.R. Martin. Revised 1992. Right crop stage for herbicide use: corn, sorghum, small grains. (G77-382-A).
10. Klein, R. N., G. A. Wicks, and D. J. Lyon. Revised 1992. Downy brome control. (G78-422-A).
9. Martin, A. R., R. N. Stougaard, F. W. Roeth, R. S. Moomaw, R. G. Wilson, G. A. Wicks, R. N. Klein, and D. J. Lyon. Revised 1992. A 1992 Guide for -- Herbicide Use In Nebraska. (EC92-130).
8. Lyon, D. J. and R. A. Christiansen. 1992. Estimating winter wheat residue cover. (EC92-128-C).
7. Wicks, G. A., R. N. Klein, and D. J. Lyon. 1991. Getting started in ecofarming: growing the winter wheat crop. (G91-1009).
6. Schild, J., D. Baltensperger, D. Lyon, G. Hein, and E. Kerr. 1991. Sunflower production in Nebraska. (G91-1026).
5. Smith, J. A., D. J. Lyon, E. C. Dickey, and P. Rickey. Revised 1991. Emergency wind erosion control. (G75-282).
4. Martin, A. R., R. N. Stougaard, F. W. Roeth, R. S. Moomaw, R. G. Wilson, G. A. Wicks, R. N. Klein, and D. J. Lyon. Revised 1991. A 1991 Guide for -- Herbicide Use In Nebraska. (EC91-130).
3. Lyon, D. J., D. D. Baltensperger, R. Sall, and E. Kerr. 1991. Growing safflower in Nebraska. (NF91-36).
2. Baltensperger, D. D., D. J. Lyon, L. A. Nelson, and A. Corr. 1991. Amaranth grain production in Nebraska. (NF91-35).
1. Wilson, R. G., and D. J. Lyon. 1986. Banvel and 2,4-D damage to fieldbeans and soybeans. (G86-802).

Software Releases

10. Martin, A. R., F. W. Roeth, L. B. Bills, R. W. Klein, R. G. Wilson, S. Knezevic, D. J. Lyon, P. J. Shea, J. Lindquist, and B. F. Kappler. 2006. WeedSOFT 2006.
9. Martin, A. R., F. W. Roeth, L. B. Bills, R. W. Klein, G. A. Wicks, R. G. Wilson, S. Knezevic, D. J. Lyon, P. J. Shea, J. Lindquist, and B. F. Kappler. 2005. WeedSOFT 2005.

8. Martin, A. R., F. W. Roeth, L. B. Bills, R. W. Klein, G. A. Wicks, R. G. Wilson, S. Knezevic, D. J. Lyon, P. J. Shea, J. Lindquist, and B. F. Kappler. 2004. WeedSOFT 2004.
7. Martin, A. R., F. W. Roeth, L. B. Bills, R. W. Klein, G. A. Wicks, R. G. Wilson, S. Knezevic, D. J. Lyon, P. J. Shea, J. Lindquist, and B. F. Kappler. 2003. WeedSOFT 2003.
6. Martin, A. R., F. W. Roeth, L. B. Bills, R. W. Klein, G. A. Wicks, R. G. Wilson, S. Knezevic, D. J. Lyon, P. J. Shea, J. Lindquist, and B. F. Kappler. 2002. WeedSOFT 2002.
5. Mortensen, D. A., A. R. Martin, F. W. Roeth, L. B. Bills, R. W. Klein, M. Milner, G. A. Wicks, R. G. Wilson, S. Knezevic, D. J. Lyon, P. J. Shea, J. Lindquist, and G. Krishnan. 2001. WeedSOFT 2001.
4. Mortensen, D. A., A. R. Martin, F. W. Roeth, L. B. Bills, A. Dieleman, R. W. Klein, M. Milner, G. A. Wicks, R. G. Wilson, S. Knezevic, D. J. Lyon, P. J. Shea, J. T. Rawlinson, J. Lindquist, C. Neeser, and G. Krishnan. 2000. WeedSOFT 2000.
3. Mortensen, D. A., A. R. Martin, F. W. Roeth, T. E. Harvill, R. W. Klein, M. Milner, G. A. Wicks, R. G. Wilson, D. L. Holshouser, D. J. Lyon, P. J. Shea, and J. T. Rawlinson. 1999. WeedSoft, Version 4.0.
2. Mortensen, D. A., A. R. Martin, F. W. Roeth, T. E. Harvill, R. W. Klein, G. A. Wicks, R. G. Wilson, D. L. Holshouser, D. J. Lyon, P. J. Shea, and J.T. Rawlinson. 1998. WeedSoft, Version 3.0.
1. Mortensen, D. A., A. R. Martin, F. W. Roeth, T. E. Harvill, R. W. Klein, G. A. Wicks, R. G. Wilson, D. L. Holshouser, D. J. Lyon, P. J. Shea, and J. W. McNamara. 1997. WeedSoft, Version 2.0.

Current Web Sites

WSU Wheat and Small Grains Website at smallgrains.wsu.edu.

Current Podcast

WSU Wheat Beat Podcast with Drew Lyon

List of Recent (5-years) Grants and Gifts:

Beers, E., C. Foss, B. Hopkins, D. Lyon, C. Miles, M. Moyer, S. O'Neal, K. Patten, T. Waters, and D. Walsh. 2017. Washington State IPM Extension Implementation Program 2017-2020. \$872,712 (5.4%).

Lyon, D. 2017. Extension education for wheat and barley growers. Washington Grain Commission. \$29,274 (100%).

Burke, I.C., and D.J. Lyon. 2017. Weed management in wheat. Washington Grain Commission. \$61,000 (50%).

Burke, I. and D. Lyon. 2017. Weed management in chickpeas and lentils. \$15,500 (50%)

Lyon, D. 2017. Herbicide MOA: A decision support tool for pulse growers. \$5,500 (100%)

Lyon, D. 2017. Weed management. Various chemical companies. \$76,752 (100%).

Lyon, D. 2016. Extension education for wheat and barley growers. Washington Grain Commission. \$28,148 (100%).

Burke, I. and D. Lyon. 2016. Weed management in chickpeas and lentils. \$22,000 (50%)

Burke, I.C., and D.J. Lyon. 2016. Weed management in wheat. Washington Grain Commission. \$38,500 (50%).

Burke, I.C., A. Carter, M. Pumphrey, and D. Lyon. 2016. Herbicide resistance and susceptibility. Washington Grain Commission. \$50,000 (10%).

Lyon, D. 2016. Weed management. Various chemical companies. \$46,092 (100%).

Thompson, W., D. Huggins, and D. Lyon. 2015. Alternatives for managing wheat straw: assessing soil water storage, nutrient status and removal, and weed management. Washington Department of Ecology. \$64,633 (10%).

Lyon, D. 2015. Extension education for wheat and barley growers. Washington Grain Commission. \$50,000 (100%).

Burke, I.C., and D.J. Lyon. 2015. Weed management in wheat. Washington Grain Commission. \$50,000 (50%).

Burke, I.C., A. Carter, M. Pumphrey, and D. Lyon. 2015. Herbicide resistance and susceptibility. Washington Grain Commission. \$50,000 (10%).

Burke, I. and D. Lyon. 2015. Weed management in chickpeas and lentils. \$20,330 (50%).

Lyon, D. 2015. Weed management. Various chemical companies. \$55,000 (100%).

Beers, E., D. Lyon, M. Moyer, S. O'Neal, T. Waters, D. Walsh, K. Patten, and C. Foss. 2014. Washington State IPM Extension Implementation Program 2014-2017. \$465,000 (6.2%).

Burke, I. and D. Lyon. 2014. Weed management in chickpeas and lentils. \$20,455 (50%).

Lyon, D. 2014. Extension education for wheat and barley growers. Washington Grain Commission. \$50,000 (100%).

Burke, I.C., and D.J. Lyon. 2014. Weed management in wheat. Washington Grain Commission. \$47,250 (50%).

Burke, I.C., A. Carter, M. Pumphrey, and D. Lyon. 2014. Herbicide resistance and susceptibility. Washington Grain Commission. \$50,000 (10%).

Lyon, D. 2014. Weed management. Various chemical companies. \$72,400 (100%).

Lyon, D., and D. Huggins. 2013. Straw management and crop rotation alternatives to burning wheat stubble: Assessing crop rotation and weed management options. Washington Department of Ecology. \$54,211 (70%).

Lyon, D. 2013. Extension education for wheat and barley growers. Washington Grain Commission. \$50,000 (100%).

Burke, I.C., and D.J. Lyon. 2013. Weed management in wheat. Washington Grain Commission. \$47,250 (50%).

Lyon, D. 2013. Weed management. Various chemical companies. \$64,600 (100%).