

Hormoz BassiriRad

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Education:

- 1990 Ph.D. Plant Physiology, University of Arizona, Tucson
- 1984 M.S. Soil & Water Sciences, University of Arizona, Tucson
- 1982 B.S. Plant & Soil Sciences, University of Massachusetts, Amherst

Professional Experience:

- 2005- Present Professor Ecology & Evolution program, Department of Biological Sciences, University of Illinois at Chicago.
- 2006 – 2010 Faculty Coordinator, Ecology and Evolution program, Department of Biological Sciences, University of Illinois at Chicago
- 2006 - 2007 Bullard Fellow, Harvard Forest/Department of Organismic and Evolutionary Biology
- 2001- 2005 Associate Professor, Ecology & Evolution, Department of Biological Sciences, University of Illinois at Chicago.
- 1996-2001 Assistant Professor, Ecology & Evolution, Department of Biological Sciences, University of Illinois at Chicago.
- 1995-1996 Assistant Professor, Department of Biology, New Mexico State University.
- 1992-1995 Research Associate, Botany Department, Duke University.
- 1990-1992 Postdoctoral Fellow, Ecology Center/Range Science Department, Utah State University.

Honors and Awards:

- 2009-2010 Teaching Recognition Program awarded by the Council for Excellence in Teaching and Learning (CETL) of the University of Illinois at Chicago
- 2006-2007 Bullard Fellowship, Harvard University
- 2005-2006 Fulbright Distinguished Chair Program, Guelph, Canada
- 2004-2005 Faculty Scholar, Global Climate Change cluster, Institute of Environmental Science and Policy, UIC
- 2001-2002 Teaching Recognition Program awarded by the Council for Excellence in

Research Awards:

- 2009-2014 \$465,000, National Science Foundation, **BassiriRad, PI**
- 2003-2008 \$595,000, National Science Foundation, **BassiriRad, PI**
- 2002-2007 \$274,000, National Science Foundation, **BassiriRad, PI**
- 1998-2001 \$565,000, National Science Foundation, **BassiriRad, PI**

- 1995-1998 \$285,000, United States Department of Energy, **BassiriRad, PI**
- 2008-2009 \$65,000, National Science Foundation, SGER. **BassiriRad, PI**
- 2006-2008 \$70,000, Project "FUTURE": National Science Foundation, **BassiriRad, PI**
- 1996-2004 \$26,000, 2 separate grants UIC's Campus Research Board, **BassiriRad, PI**

Panels and Advisory Boards:

- 2011- Advisory Council to UI Provost, Urban Resilience & Global Environment
- 2005- Handling Editor, *Oecologia*
- 2012- Academic Editor, *PLOS One*
- 2007- National Science Foundation, DEB, Ecosystem Program
- 2006 -2006 National Science Foundation, DUE, Phase I, CCLI program
- 2007 - 2007 External Advisory Panel to review EES program at UTSA
- 2000- National Sci. Foundation, Ecological & Evolutionary Physiology program
- 1999- Steering Committee, Institute of Environmental Science and Policy, UIC.
- 2002- University of Illinois at Chicago, Campus Research Board

Regular Peer-Review Activities (select):

Proceedings of the National Academy of Science, Plant, Cell and Environment, Ecology, Plant and Soil, Ecological Applications, Ecosystems, New Phytologist, Annals of Botany

Publications:

Hao GH, Zwieniecki MA, Holbrook NM, Gutschick VP, **BassiriRad H** (2016) Hydraulic and allometric regulation of species specific responses of stomatal conductance to elevated CO₂. *Plant, Cell, Environment* (In revision)

BassiriRad H (2015) Consequences of atmospheric nitrogen deposition in terrestrial ecosystems: old questions, new perspectives. *Oecologia* 177:1–3. DOI 10.1007/s00442-014-3116-2

BassiriRad H, Lussenhop JF, Sehtiya HL, Borden KK (2015) Nitrogen deposition contributes to oak regeneration failure in the Midwestern temperate forests of the USA: implications for changes in species composition. *Oecologia* 177:53–63. DOI 10.1007/s00442-014-3119-z

Marty M and **BassiriRad H** (2014) Seed germination and rising atmospheric CO₂ level: a meta-analysis of parental and direct effects. *New Phytologist* 202: 401–414.

Gebauer T and **BassiriRad H** (2011). Effects of high atmospheric CO₂ concentration on root hydraulic conductivity of conifers depend on species identity and inorganic nitrogen source. *Environmental Pollution*. 159 (12): 3455-3461.

Gutschick VP and **BassiriRad H** (2010). Biological extreme events - theoretical and practical challenges. *Trans Am Geophys Union*. 91(9): 84-85.

- Trueman RJ, Taneva L, Gonzalez-Meler MA, Oechel WC, **BassiriRad H** (2009) Carbon Losses in soils previously exposed to elevated atmospheric CO₂ in a Chaparral ecosystem: potential implications for a sustained biospheric C sink. *Journal of Geochemical Exploration*. 102: 142-148
- BassiriRad H**, Gutschick V, Sehtiya HL (2008) Control of plant nitrogen uptake in native ecosystems by rhizospheric processes. In: *Quantifying and Understanding Plant Nitrogen Uptake for Systems Modeling*, pp- 71-93, edited by Liwang Ma, Lajpat Ahuja and Tom Bruulsema. CRC (Taylor and Francis Group, LLC,) Boca Raton; Florida.
- Newingham B, Callaway MR, **BassiriRad H** (2007) Allocating nitrogen away from an herbivore: A novel compensatory response to root herbivory. *Oecologia*. 153: 913-920
- BassiriRad** (2006) Root characteristics and control of plant nitrogen uptake. *Journal of Crop Improvement*. 15(2):25-52
- Lane D.R. and **BassiriRad H** (2005). Diminishing spatial heterogeneity in soil organic matter across a prairie restoration chronosequence. *Restoration Ecology*, 13(2) 403-412
- Lussenhop J and **BassiriRad H** (2005) Collembola density changes nitrogen acquisition by Ash seedling (*Fraxinus pennsylvanica*). *Soil Biology and Biochemistry*, 37:645-650
- BassiriRad H** (2005) From Molecular Biology to Biogeochemistry: Toward an Integrated View of Plant Nutrient Uptake. In *Nutrient uptake by plants: an ecological perspective* (BassiriRad H, Editor). Ecological Studies Series. Springer Verlag. Berlin pp, 331-339.
- Lane D.R. and **BassiriRad H** (2005). Nitrogen enrichment in ant mounds varies across a prairie restoration chronosequence.. *Pedobiologia*, 49: 359-366
- Saha S, **BassiriRad H** and Joseph G (2005) Phenology and water relations of tree sprouts and seedlings in a tropical deciduous forest of South India. *Trees*. 19: 322-325.
- Bielenberg DG and **BassiriRad H** (2005) Nutrient acquisition of terrestrial plants in a changing climate. In *Nutrient uptake by plants: an ecological perspective* (BassiriRad H, Editor). Ecological Studies Series. Springer Verlag. Berlin, pp, 311-323
- BassiriRad H. Editor** (2005) *Nutrient uptake by plants: an ecological perspective*. Ecological Studies Series. Springer Verlag. Berlin.
- BassiriRad H** et al. (2003). Widespread foliage $\delta^{15}\text{N}$ depletion under elevated CO₂: inferences for the nitrogen cycle. *Global Change Biology*. 9:1582-1590
- Gutschick VP and **BassiriRad H** (2003) Extreme events as shaping physiology, ecology and evolution of plants: toward a unified definition and evaluation of their consequences. *New Phytologist*, Tansley review. 160:21-42
- Lane DR and **BassiriRad H** (2002) Interspecific variation in the growth and physiology of tallgrass prairie species in response to nitrate loading. *Plant Functional Ecology*. 29:1227-1235

- Zerihun A and **BassiriRad H** (2001) Interspecies variation in nitrogen uptake kinetic responses of temperate forest species to elevated CO₂: Potential causes and consequences. *Global Change Biology*. 7:211-222
- BassiriRad H**, Gutschick V and Lussenhop J (2001) Root system adjustments: regulation of plant nutrient uptake and its control of growth responses to elevated CO₂. *Oecologia*. 126:305-320
- Constable JVH, **BassiriRad H**, Lussenhop J and Zerihun A (2001) Influence of elevated CO₂ and mycorrhizae on nitrogen acquisition: contrasting responses in *Pinus taeda* and *Liquidambar styraciflua*. *Tree Physiology* 21:83-91
- Zerihun A and **BassiriRad H** (2000) Photosynthesis of *Helianthus annuus* L. does not acclimate to elevated CO₂ regardless of N supply. *Plant Physiology and Biochemistry*. 38:897-903
- BassiriRad H** (2000) Kinetics of nutrient uptake by roots: responses to global change. *New Phytologist*. 147:150-169
- Zerihun A, Gutschick VP and **BassiriRad H** (2000) Compensatory roles of nitrogen uptake and photosynthetic N-use efficiency in determining plant growth response to elevated CO₂: Evaluation using a functional balance model. *Annals of Botany*. 86:723-730
- BassiriRad H**, Virginia RA and Reynolds JF, Tremmel DC and Brunelle MH (1999) Short-term patterns of resource capture by two desert shrubs following a simulated summer rain. *Plant Ecology*. 145: 27-36.
- BassiriRad H**, Prior SA, Norby RJ and Rogers RR (1999) A field method of determining NH₄⁺ and NO₃⁻ uptake kinetics in intact roots: Effects of CO₂ enrichment on trees and crop species. *Plant and Soils*. 217: 195-204.
- Zerihun A, DeMuro R, Goyal S and **BassiriRad H** (1999) Modification of a standard HPLC autosampler to perform on-line process monitoring. *Liquid Chromatography Gas Chromatography*. 17(9): 862-864.
- BassiriRad H** (1998) *Terrestrial Ecosystems and Global Change: Past, Present and Future*. *Bul Eco Soc Am* 79(2): 164-165.
- BassiriRad H**, Griffin KL, Reynolds JF and Strain BR (1997) Responses of loblolly and ponderosa pine to CO₂ enrichment: Effects on growth, root respiration, NH₄⁺ and NO₃⁻ absorption rate. *Plant and Soil*. 190: 1-9.
- BassiriRad H**, Reynolds JF, Virginia RA and Brunelle MH (1997) Growth and root NO₃⁻ and PO₄³⁻ uptake capacity of three desert species in response to atmospheric CO₂ enrichment. *Australian Journal of Plant Physiology*. 24: 353-358.
- BassiriRad H**, Thomas RB, Reynolds JF and Strain BR (1996) Differential responses of root uptake kinetics of NH₄⁺ and NO₃⁻ to enriched atmospheric CO₂ in field grown loblolly pine. *Plant, Cell and Environment* 19: 367-371.

- BassiriRad H**, Tissue DT, Reynolds JF and Chapin FS III (1996) Responses of *Eriophorum vaginatum* to CO₂ enrichment at different soil temperature: Effects on growth, root respiration and ³²PO₄ uptake kinetics. *New Phytologist* 133: 423-430.
- BassiriRad H**, Griffin KL, Strain BR and Reynolds JF (1996) Effects of CO₂ enrichment on root ¹⁵NH₄ uptake kinetics and growth in seedlings of loblolly and ponderosa pine. *Tree Physiology* 16: 957-962.
- BassiriRad H**, Caldwell MM and Mott KA (1993) Effect of root cooling on photosynthesis of *Artemisia tridentata* under different light levels. *Botanica Acta*. 106: 223-227.
- BassiriRad H**, Caldwell MM and Bilbrough C (1993) Effect of soil temperature and nitrogen status on root ¹⁵NO₃ uptake kinetics of field-grown *Agropyron desertorum*. *New Phytologist* 123: 485-489.
- BassiriRad H** and Caldwell MM (1992) Root growth and osmotic adjustment during and after a period of drought: Implications for NO₃ uptake in *Artemisia tridentata*. *Australian Journal of Plant Physiology*. 19: 493-500.
- BassiriRad H** and Caldwell MM (1992) Post-drought changes in root growth ¹⁵NO₃ uptake and shoot water relations of two tussock grass species. *Physiologia Plantarum* 86: 525-531.
- BassiriRad H** and Radin JW (1992) Temperature dependent water and ion transport properties of barley and sorghum roots. II. Effects of abscisic acid. *Plant Physiology* 99: 34-37.
- BassiriRad H**, Radin JW and Matsuda K (1991) Temperature dependent water and ion transport properties of barley and sorghum roots. I. Relationship to leaf growth. *Plant Physiology* 97: 426-432.
- T Gebauer, A Islam, **H BassiriRad**. Interacting effects of CO₂ & N form on root hydraulic conductivity in conifer seedlings (In Prep)
- McKie-Krisberg Z, **BassiriRad H**, Sehtiya L Redistribution of labile nitrogen between growing and non-growing regions. (In Prep)
- BassiriRad H**, Egerton-Warburton L, Sehtiya HL, Lussenhop J. Root uptake capacity of ammonium, nitrate and glycine in red and white oak seedlings colonized by different species of ectomycorrhizas (In Prep)

Professional Affiliations:

Ecological Society of America, American Institute of Biological Sciences, American Society of Plant Physiology, American Association for Advancement of Science.

Postdoctoral and Graduate Student Advising:

John Constable	Postdoc	Diana Lane	Ph.D. Student
Ayalsew Zerihun	Postdoc	Mark Rudy	M.S. Student

Salim Silim	Postdoc	Kerry Kline	M.S. Student
Harbans Sehtiya	Postdoc	Kara Borden	M. S. Student
Saman Seneweera	Postdoc	Michael Johnson	Ph.D. Student
Song Cheng	Postdoc	Zaid Krisberg	M. S. Student
Tobias Gebauer	Postdoc	Melissa Custic	Ph. D. Student
Anisul Islam	Postdoc		
Munawwar Khan	Postdoc		
Charles Marty	Postdoc		
Neetika Khurana	Postdoc		

University and Departmental Committee Service:

Urban Resilience & the Global Environment Advisory Council to the Vice Chancellor for Research, Member of the Steering Com. of the Institute of Env Science and Policy at UIC, Honors College Fellow, Member of the promotion and tenure committee, Dept. Bio. Sci. Head Search and Junior Faculty Search Committees, Chair of Greenhouse Committee, Dept. Bio. Sci. Chair, Task Force on Curriculum Development and Assessment, NTT Promotion Committee, Undergraduate Curriculum Committee.

Courses Taught:

Ecosystems, Plant Physiological Ecology, Ecology and Evolution, Field ecology, Topics in Ecology & Evolution (Global Change & Terrestrial Ecosystems: Past, Present, and Future), Freshman Seminar (Global Warming: Causes and Consequences), Plant Physiology and General Biology.

Graduate Committees:

Sara Foster, MS defense, Christina Martinez, Ph.D. thesis committee, Manoel Pacheco, Ph.D. thesis committee, Sonali Saha, Ph.D. thesis committee, Ken Schmidt, Ph.D defense, Erin O'Brien, Anthonio Golubski, Gabriela Nunez, Ph.D. thesis committee, Lina Taneva, Ph.D. thesis committee, Rebecca Truman, PhD thesis committee, Erin Hasse, MS Thesis committee, Kathy Paap thesis committee, MS, Amy Sullivan, PhD committee, Crystal Guzman, MS Thesis Committee, Charles Flower, PhD Committee, Basil, Ianonne, PhD Thesis Committee, Amanda Henderson, PhD Committee, Matthew McCurry, PhD Committee, Douglas Lynch, PhD committee, Monica Farfan, PhD Committee.

Undergraduate Advising (Select):

Meredith Brass, REU, NSF, Michael Hsu, REU/NSF, David Limsui, REU/NSF Menzi Tabora, REU/NSF, Grace Tan, Independent Studies, Jeff Mossenson Independent Studies, Partive Patel Independent Studies, Philip Stevens Independent Studies, Shoaib Memon Independent Studies, Ana Brozoska, Independent Studies, Nadia, Michael Johnson, NSF/REU, Josia Zayner NSF/REU, Darcy Welch, Shital Shah, Paul Orlando, REU, NSF. Josh Kanannkirl NSF/REU, Rupak Basu, NSF/REU, Prashansa Sharma, NSF/REU.

Invited Speaking (Select): Updated only to 2013

- Jan 13 **H BassiriRad.** Chronic atmospheric Nitrogen Deposition: Implications for Biogeochemistry & Plant Diversity in Temperate Forests. Center for Global Change, Duke University
- Jan 13 **H BassiriRad.** Biogeochemistry & Community Responses of Temperate Forests to Chronic Nitrogen Deposition. Cary Institute of Ecosystem Studies
- Nov 12 **H BassiriRad** Rising atmospheric CO₂ and kinetics of root nitrogen transporters. School of Plant Sciences, University of Arizona
- Oct 12 **H BassiriRad** Vapor phase and hydraulic conductivity responses to rising CO₂ levels are uncoupled: evidence from seedlings of six broad-leaf species. Department of Organismic and Evolutionary Biology, Harvard University
- Jan 11 **H BassiriRad** and V Gutschick, Ecology and evolution of plant communities in a changing landscape of extreme events. In Rare Events with Catastrophic Consequences in Complex Systems, International Conference of Humboldt Kolleg at the University Texas, Austin
- Aug 10 **H BassiriRad**, Moderator Special Org Session, Gaps In Predicting Vegetation Change – Physiological & Genetic Variation And, Extreme Events, ESA meeting, Pitt. PA
- June 10 **H BassiriRad**, Nitrogen Control of Terrestrial Plant Responses to Rising Atmospheric CO₂ Concentration. Department of Biological Sciences, NIU
- May 09 **H BassiriRad.** Soil resource acquisition in future climates. Plant Biology Symposia, Penn State University. State College, PA
- Dec 08 VP Gutschick & **H BassiriRad** Symposium on Climate Variability, Extreme Events, and Biospheric Responses and Feedbacks. Fall Meeting of American Geophysical Union, San Francisco, CA.
- Jan 08 **H BassiriRad**, Physiological responses that control plant response to climate change. Special Symposium on; *Biological Adaptation to a Changing Climate*. AAAS Annual Meeting, Boston
- Mar 08 **H BassiriRad**, Plant nitrogen uptake and assimilation in a changing climate. Department of Biological Sciences, University of Texas, San Antonio
- Nov 07 **H BassiriRad**, Nitrogen uptake: A key to understanding plant responses to global change. Department of Plant Sciences, University of Saskatchewan, Canada

- Nov 07 **H BassiriRad**, Root adjustments in nitrogen acquisition and potential consequences for plants and ecosystems in a changing climate. The Morton Arboretum, IL
- April 07 **H BassiriRad**, Plant nitrogen uptake and global change: is there a unifying mechanism that explains diversity of responses? Harvard Forest Seminar series
- Nov 06 **H BassiriRad**, Rising CO₂ and diverging plant responses in nitrogen acquisition. Harvard University Herbarium seminar series.
- Nov 06 **H BassiriRad**, From Microbial Activities to Root Uptake Kinetics: the Role of Rhizospheric Biology in Plant Nitrogen Uptake. Special Symposium on New Advances in Understanding and Quantification of Plant N Uptake, 2006, Ann. Meeting Am Soc Ag, Indianapolis, IN
- Sept 06 **H BassiriRad**, Global Change and Terrestrial Ecosystem: How Do We Do Impact Assessment? Environmental Research Seminar Series, Civil & Materials Engineering, University of Illinois at Chicago.
- June 06 **H BassiriRad**, Root hydraulics and elevated CO₂: patterns and mechanisms of response. Department of Organismic and Evolutionary Biology, Harvard University
- July 06 **H BassiriRad**, Molecular regulation of root nitrogen uptake kinetics responses to high CO₂. Botany Department, University of British Columbia.
- Sept 05 **H BassiriRad**, Belowground plant and animal interactions and their consequences for plant nitrogen nutrition. Department of Biology, IUPUI
- April 04 **H BassiriRad**, Internal nitrogen pools control plant nitrogen uptake responses to elevated CO₂, Environmental and Plant Dynamics Research Group, U.S. Water Conservation Laboratory, USDA, Agricultural Research Service, Phoenix, Arizona
- April 04 **H BassiriRad**, Below-ground control of plant and ecosystem responses to global change. Department of Soil and Water Sciences, University of AZ, Tucson AZ
- April 04 **H BassiriRad**, The potential "root" causes of the shift in plant diversity in a changing climate: a nitrocentric perspective. Land & Environmental Management Group, AgResearch Limited, New Zealand
- Nov 02 **H BassiriRad**, Mechanisms regulating plant N uptake and assimilation in a changing climate. Physiology and Molecular Plant Biology program, University of Illinois, Urbana-Champaign.
- Mar 01 **H BassiriRad**, Root system adjustments: can they predict plant and ecosystem responses to rising CO₂ concentration. Department of Botany. University of Wyoming. Laramie Wyoming

- Dec 00 **H BassiriRad**, Root nutrient uptake kinetics and its importance to plant and ecosystem responses to rising CO₂. Institute of Plant Science, ETH-Zurich, Switzerland
- July 00 **H BassiriRad**, Responses of plant nutrition and carbohydrate production in FACE. *FACE 2000 Conference*. Tsukuba, Japan.
- Apr 00 **H BassiriRad**, Predicting plant and ecosystem responses to global change: Root system regulation of CO₂ responses. *Department of Biology Seminars, San Diego State University*. San Diego, California.
- Oct 99 **H BassiriRad**, Nutrient uptake and global change: physiological regulations. *Global Change and Terrestrial ecosystems (GCTE) & New Phytologist Symposium. Root Dynamics and Global Change: An Ecosystem Perspective*. Knoxville, Tennessee.
- Oct 99 **H BassiriRad**, Does elevated CO₂ alter mycorrhizal control of N nutrition in trees? *Global Change and Terrestrial ecosystems (GCTE) & New Phytologist Symposium. Root Dynamics and Global Change: An Ecosystem Perspective*. Knoxville, Tennessee.
- Sept 99 **H BassiriRad**, Elevated CO₂ alters mycorrhizal influence on root system N uptake capacity in trees. *Second international root symposium "Dynamics of Physiological Processes in Woody Roots"*. Nancy, France.
- Jan 99 **H BassiriRad**, The role of atmospheric N deposition in terrestrial C sequestration. *Electric Utilities Environmental Conference on Science, Regulation & Impact of SO₂, CO₂, O₃, Nox & Mercury*. Tucson, AZ.
- Nov 98 **H BassiriRad**, Balance of C and N uptake in plants grown in elevated CO₂. *Department of Biology Seminars, New Mexico State University, Las Cruces, NM*.
- Jul 98 **H BassiriRad**, Nitrogen status of trees in response to CO₂ enrichment is determined by compensatory adjustments in size and activity of fine roots. *International conference on "The Supporting Roots: Structure and Function"*. Bordeaux, France.
- Feb 98 **H BassiriRad**, Compensatory adjustments in plant nutrient uptake: Varying responses to CO₂ enrichment. *Ecology Seminars, Penn. State University, University Park, PA*.
- Feb 98 **H BassiriRad**, Terrestrial N and C cycles in a changing climate: Role of plants. *Earth and Environmental Sciences, University of Illinois, Chicago*.
- Nov 97 **H BassiriRad**, *Global Change. Biology Colloquium speaker, Dept. of Biological Sciences, University of Illinois, Chicago*.
- Oct 97 **H BassiriRad**, Responses of terrestrial plants to Global change: Effects of elevated atmospheric CO₂ concentration. *Illinois Institute of Technology, Biology Seminars, Chicago, IL*.

- Oct 96 **H BassiriRad**, Plant N Uptake responses to CO₂ enrichment. *Multi-agency workshop on Response of Terrestrial Ecosystems to CO₂. Organized by NASA.* Washington DC.
- May 92 **H BassiriRad**, Physiological consequences of root temperature in two annual grasses of the Intermountain West. *Symposium on Ecology and Restoration of Intermountain Rangeland.* Boise, ID.

Presentations at Other Scientific Meetings (Select): Updated only to 2010

- 1984 **BassiriRad, H.**, J.L. Stroehlein, A.D. Matthias, and G.R. Dutt. Yield and Physiological Aspects of 17 Varieties of Corn Grown in Runoff Farming. American Society of Agronomy, Las Vegas, Nevada.
- 1987 Mancino, C.F., **H. BassiriRad**, D.M. Kopec, and W. B. Miller. Influence of Antitranspirants of Turfgrass Growth and Physiology. American Society of Agronomy, Atlanta, Georgia.
- 1989 **BassiriRad, H.**, K. Matsuda, and J.W. Radin. Differential Temperature Response of Exudation from Barley and Sorghum Roots: Osmotic and Hydraulic Components. American Society of Plant Physiologists, Toronto, Canada.
- 1992 **BassiriRad, H.** and M. M. Caldwell. Growth and water relations of *Artemisia tridentata* roots in response to and recovering from drought: Implications for NO₃ uptake. Ecological Society of America, Honolulu, Hawaii.
- 1994 **BassiriRad, H.**, D.C. Tremmel, J.F. Reynolds, and R.A. Virginia. Temporal differences in resource capture between two desert shrubs following a simulated rainfall event. ESA meeting, Knoxville, Tennessee.
- 1995 **BassiriRad, H.**, D.C. Tremmel, J.F. Reynolds, and R.A. Virginia. Differential nutrient uptake responses to CO₂ enrichment in three desert species. Ecological Society of America, Snowbird, Utah.
- 1996 **BassiriRad, H.**, D.T. Tissue, J.F. Reynolds, and F.S. Chapin, III. Responses of *Eriophorum vaginatum* to CO₂ enrichment at different soil temperature: Effects on growth, root respiration and ³²PO₄ uptake kinetics. Ecological Society of America, Providence, Rhode Island.
- 1997 **BassiriRad, H.**, S. Holaday, J.D. Lewis, F.S. Chapin, III, and J.F. Reynolds. Sink activity does not regulate photosynthetic downregulation in *Eriophorum vaginatum* at high CO₂. Ecological Society of America, Albuquerque, New Mexico.
- 1998 **BassiriRad, H.**, and V. Gutschick. Control of leaf N concentration and photosynthetic responses to CO₂ enrichment by root activity. Ecological Society of America, Baltimore, Maryland.

- 1998 Zerihun, A. and **H. BassiriRad**. Growth and biomass allocation responses of *Helianthus annuus* cv. Teddy Bear to CO₂ and nitrogen supply. Ecological Society of America, Baltimore, Maryland.
- 1999 **BassiriRad, H.** A novel method for measuring root ammonium and nitrate uptake kinetics in field-grown plants. Ecological Society of America, Spokane, Washington.
- 1999 Zerihun, A., and **H. BassiriRad**. Effect of N supply on photosynthetic acclimation to elevated CO₂ in *Helianthus annuus* L. Ecological Society of America, Spokane, Washington.
- 1999 Lane, D.R. and **H. BassiriRad**. Effects of nitrogen dose and nitrate to ammonium ratio on the growth of six common tallgrass prairie species. Ecological Society of America, Spokane, Washington.
- 1999 Rudy, M.R., and **H. BassiriRad**. Atmospheric N deposition: Effects of dose and inorganic N composition on two conifer species. Ecological Society of America, Spokane, Washington.
- 1999 Constable, J.V.H., and **H. BassiriRad**. Growth CO₂ effects on nitrogen uptake capacity and assimilation in *Liquidambar styraciflua* and *Pinus taeda*. Ecological Society of America, Spokane, Washington.
- 1999 Constable, J.V.H., and **H. BassiriRad**. Mycorrhizal influence on N uptake and assimilation in two southern forest trees. Botanical Society of America, St. Louis, Missouri.
- 2000 **BassiriRad, H.** and D. Nyberg. Species-specific responses of tall-grass prairie legumes to nitrogen addition. Ecological Society of America, Snowbird, Utah.
- 2000 Zerihun, A. and **H. BassiriRad**. Comparative analysis of biomass and nitrogen accumulation and partitioning responses to carbon dioxide enrichment in fast and slow-growing species. Ecological Society of America, Snowbird, Utah.
- 2000 Rudy, M.R. and **H. BassiriRad**. Variation in nitrate assimilation and growth responses of tree seedlings to nitrate loading. Ecological Society of America, Snowbird, Utah.
- 2000 Lane, D.R. and **H. BassiriRad**. Changes in nitrogen cycling across a 25-year chronosequence of tall-grass prairie restoration sites. Ecological Society of America, Snowbird, Utah.
- 2000 Constable, J.V.H. and **H. BassiriRad**. Response of growth and nitrate reductase activity in trees to elevated CO₂ varies with mycorrhizal status. Ecological Society of America, Snowbird, Utah.

- 2001 Lussenhop, J. and **H. BassiriRad**. Contrasting effects of collembola on mass and N uptake of ash seedlings. Ecological Society of America, Madison, Wisconsin.
- 2001 Zerihun, A and **H. BassiriRad**. Growth, nitrogen uptake and allocation responses of six temperate tree species to elevated CO₂. Ecological Society of America, Madison, Wisconsin.
- 2001 S. Silim and **H. BassiriRad**. Utilization of amino acids by tree seedlings and its potential influence on growth responses to elevated CO₂. Ecological Society of America, Madison, Wisconsin.
- 2001 Lane, D.R. and **H. BassiriRad**. Changes in net primary productivity and soil N status across a 25 year chronosequence of tall grass prairie restoration sites. Ecological Society of America, Madison, Wisconsin.
- 2001 **BassiriRad H.** and J.V. Constable. Foliage produced under FACE experiments have lower $\delta^{15}\text{N}$ compared to ambient plants. Ecological Society of America, Madison, Wisconsin.
- 2002 Lane, D.R. and **H. BassiriRad**. Nitrogen enrichment in ant mounds varies across a prairie restoration chronosequence. Ecological Society of America, Tucson, Arizona.
- 2002 BassiriRad, H. and H.L. Sehtiya. Root nitrogen and water fluxes to the shoot are influenced by growth CO₂. Ecological Society of America, Tucson, Arizona.
- 2002 Sehtiya, H.L., S. Silim and **H. BassiriRad**. Nitrate loading alters NH₄⁺, glutamine, glycine and glucosamine uptake capacity in conifer roots. Ecological Society of America, Tucson, Arizona.
- 2002 Kline, K.A. and **H. BassiriRad**. Interspecific variation in CO₂ effects on seed quality, germination rate and early seedling physiology. Ecological Society of America, Tucson, Arizona.
- 2002 Dybzinski, R.J., H.L. Sehtiya and **H. BassiriRad**. Negative effects of nitrate loading on the physiological responses of a nitrogen-fixing tree, *Robinia pseudoacacia*. Ecological Society of America, Tucson, Arizona.
- 2002 Silim S., H.L. Sehtiya and **H. BassiriRad**. Elevated CO₂ increases uptake and assimilation of NH₄⁺ but not NO₃⁻ in tree seedlings. Ecological Society of America, Tucson, Arizona.
- 2003 Kline K and **BassiriRad H.** Maternal CO₂ affects seed nitrogen and seedling growth but not uptake and assimilation of N in wheat. Ecological Society of America, Savannah, Georgia.

- 2003 Newingham BA, Vivano JM, **BassiriRad H**, Callaway RM. Root herbivory affects nitrogen uptake and secondary chemical production in the invasive plant, *Centaurea maculosa*. Ecological Society of America, Savannah, Georgia..
- 2003 Silim S., H.L. Sehtiya and **H. BassiriRad**.. Control of nitrogen uptake responses to elevated CO₂ in tree seedlings. Ecological Society of America, Savannah, Georgia.
- 2004 Johnson M, Lussenhop J and **BassiriRad H**. Seasonal variability of atmospheric nitrogen deposition in the Chicagoland area; causes and consequences. Chicago joint Conference on the environment, Chicago, IL.
- 2004 **BassiriRad H**, Borden KK and Lussenhop J. Organic and inorganic soil nitrogen dynamics of temperate forests along a gradient of atmospheric nitrogen deposition in the Chicagoland area. Ecological Society of America, Portland, Oregon.
- 2004 Borden KK and **BassiriRad H**, Differential effects of inorganic nitrogen forms on growth and biomass allocation responses of *Acer saccharinum* and *Ulmus americanum* seedlings to CO₂ enrichment. Ecological Society of America, Portlan, Oregon
- 2004 **BassiriRad H** MA Gonzalez-Meler, Trueman, Taneva RL, and Oleynik S. Legacy effects of **CO₂** treatments on plant and soil isotopic composition of a Mediterranean type community. Applications of Stable Isotope Techniques to Ecological Studies Conference, Wellington New Zealand
- 2005 Sehtiya, H **BassiriRad H**. Differential adjustments in nitrate assimilation capacity of seven tree species in response to CO₂ enrichment. ESA, Montreal, CA
- 2005 **BassiriRad H** and Sehtiya, H Elevated CO₂ alters xylem sap profile of amino acids and their supply rate to the shoot. ESA, Montreal, CA
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