

Curriculum vitae

March 2013

Dr. John Klironomos

Professor

Department of Biology

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Education

1994	Ph.D. Biology	University of Waterloo
1990	B.Sc. Biology	Concordia University

Academic Positions held

2013-	Associate Dean of Research, Arts and Sciences, UBC
2012-	Acting Director, Institute for Species at Risk, UBC
2009-	Professor, UBC, Okanagan campus
2008-2010	Humboldt Research Fellow, Free University Berlin, Germany
2007-2009	Research Coordinator, Arboretum, University of Guelph
2006-2009	Professor, University of Guelph
2005-2006	Visiting Professor, Université Paul Sabatier, France
2003-2009	Canada Research Chair, University of Guelph
2003-2004	Bullard Research Fellow, Harvard University
2001-2006	Associate Professor, University of Guelph
1996-2001	Assistant Professor, University of Guelph
1994-1996	Postdoctoral Fellow, San Diego State University

ACADEMIC AND PROFESSIONAL SERVICE

University Service

2013-	Associate Dean of Research, Barber School of Arts and Sciences
2012-	Acting-Director, Institute for the Species at Risk and Habitat Studies
2013	Member, Executive Committee on Research, UBC
2012-2013	Member, Dean's Advisory Committee on Promotion and Tenure
2009-2012	Chair, Biology Curriculum Review Committee
2009-2011	Chair, Biology Graduate Program Committee
2009-2011	Biology Graduate Coordinator
2011	Member, merit and PSA Review Committee
2011	Member, Committee for the Review of Biology Curricula of Universities in Greece
2010	Member, Biology Workload Equity Committee
2010	Member, UBC Animal Care Committee
2007-2009	Research Coordinator, University of Guelph Arboretum
2007-2009	Chair, Arboretum Research Associates Committee
2007-2009	Chair, Department Graduate Program Development Committee
2007-2008	Member, College Tenure and Promotion Committee
2007-2009	Member, Guelph Institute for the Environment
2005-2008	Member, Department Chair's Advisory Council
2005-2008	Member, College Core Curriculum Development Committee
2005-2007	Organizer, EcoLunch Discussion Group
2005-2006	Member, Department Graduate Program Committee
2005	Member, Department Tenure and Promotion Committee
2004-2005	Member, Biocomplexity Faculty Search Committee
2004	Member, Department Chair Search Committee
2003	Member, Microbial Ecologist Faculty Search Committee
2001-2003	Chair, Growth Facilities Development Committee
2002.	2001-2002 Member, Plant Ecologist Faculty Search Committee
2003.	2001-2003 Member, B.Sc. (Environmental Science) Program Committee
1999-2004	Member, Plant Biology Undergraduate Curriculum Committee
1999-2004	Academic Advisor, B.Sc. Ecology Major
1999-2000	Member, College Awards Committee
1997-2000	Member, Growth Facilities Development Committee
1997-2000	Chair, Department Awards Committee

Editorial Positions and Referee Activities

2009-present (& 2002-2005)	Editor	<i>Ecology Letters</i>
2006-present	Subject Editor	<i>Ecology</i>
2006-present	Subject Editor	<i>Ecological Monographs</i>
2003-present	Editorial Board	<i>Pedobiologia</i>
2008-2010	Subject Editor	<i>Functional Ecology</i>
2003-2005	Associate Editor	<i>EcoScience</i>
2002-2004	Editorial Board	<i>Biol Fertil Soils</i>
2005-2006	Member, Ontario Graduate Fellowships Committee	
2002-2005	Member, Discovery Grant Selection Committee 18 (Evolution and Ecology), Natural Sciences and Engineering Research Council of Canada	
2007	Referee, Tenure and Promotion, UBC, Vancouver	
2004	Referee, Tenure and Promotion, UBC, Vancouver	
2004	Referee, Tenure and promotion, U. Northern Arizona	
2003	Referee, Tenure and Promotion, UBC, Vancouver	
2000	Referee, Tenure and Promotion, U. Montana	

A regular reviewer of manuscripts submitted to a wide variety of ecology, plant, microbiology, and soils journals, and also many national and international granting agencies.

Society Positions and Memberships

2010-2011	President, International Soil Ecology Society
2008-2009	President-elect, International Soil Ecology Society
2007-present	Planning and Development Committee, International Mycorrhiza Society
2006-present	Member, Canadian Society for Ecology and Evolution
2006-present	Member, International Mycorrhiza Society
1995-present	Member, Ecological Society of America
1991-present	Member, International Soil Ecology Society

Symposia Organized

2011	Klironomos (Program Organizer and local organizer) International Soil Ecology Society Biennial Meeting. UBC Okanagan, Kelowna, BC.
2006	McCann, K. and Klironomos, J. (co-organizers) Peter Yodzis Colloquium in Fundamental Ecology (Theme-Biodiversity: Structure And Function). University of Guelph, Guelph, ON.
2005	Powell, J.R, Wolfe, B.E. and Klironomos, J.N. (co-organizers) Ecological Society of America Meeting. Theme: Mutualists as parasites: How mutualistic are mutualists? Montreal, QC.

TEACHING

Undergraduate Courses Taught Since 1996

BIOL 414	Ecological Methods
BIOL 422	Conservation Biology
BIOL 417	Evolutionary Ecology
BIOL 116	Biology for Science Majors
ASCI*4030	Topics in Arts and Science Research
BIOL*2060	Ecology
BIOL*3050	Mycology
BIOL*4110	Ecological Methods
BOT*2050	Plant Ecology
BOT*4060	Restoration Ecology
BOT*4820	Research Opportunities in Botany and Microbiology
ENVB*4420	Microbial Ecology
MICR 4140	Topics in Microbiology

Graduate Courses Taught Since 1996

BOT*6301	Plant Ecology I
IBIO*6000	Advances in Ecology and Behaviour
Topics in Environmental Studies (a one-semester course at Paul Sabatier University, Toulouse, France)	
Advanced Microbial Ecology (a 2-week course at the University of Wageningen, Netherlands)	

Students Supervised Since 1996

13 Post-Doctoral Fellows
21 Ph.D. students
34 M.Sc. students
17 B.Sc. Project students
5 High School Coop students.

Graduate Student Committees Since 1996

Member of 51 graduate student advisory committees

RESEARCH

Awards

2007	Humboldt Research Prize, Germany
2006	NSERC Steacie Research Fellowship
2003	Harvard University Bullard Fellowship
2003	Canada Research Chair
2001	President's Distinguished Professor Award, University of Guelph
2000	Ontario Premier's Research Excellence Award

Working Group Invitations

2004-2005	National Centre for Ecological Analysis and Synthesis. Santa Barbara, U.S.A. Topic: Mycorrhizal Functioning in Ecosystems.
2004-2006	National Centre for Ecological Analysis and Synthesis. Santa Barbara, U.S.A. Topic: Plant Invasions.

Research Funding:

2013-2018	Klironomos J. Functional diversity among arbuscular mycorrhizal symbioses. NSERC Discovery. \$285,000
2010-2013	Klironomos J. Functional diversity within arbuscular mycorrhizal symbioses. NSERC Discovery. \$213,000
2007-2010	Klironomos, J.N., Wagner-Riddle, C., and Dunfield, K.E. Evaluating soil-plant-microbe interactions as a technology for forest ecosystem restoration. NSERC Strategic. \$452,000.
2009.	2006-2009 Whalen J.K., Bradley, R.L., Gordon, A.M., Shipley, J.W., Klironomos, J.N., and Smith, E.G. Environmental and economic benefits of tree-based intercropping systems in Canada. NSERC Strategic. \$328,150.
2008.	2006-2008 Klironomos, J. Mechanisms of plant invasion. NSERC Steacie Discovery Supplement. \$200,000.
2010.	2005-2010 Klironomos, J. Functional diversity of plant microbe interactions. NSERC Discovery \$335,000.
2008.	2005-2008 Malcolm, J., Drapeau, P., Klironomos, J., Moncalvo, J.-M., Peng, C., Smith, S., Thompson, I.

- Dynamics of woody debris in eastern boreal forests.
Sustainable Forest Management Network. \$444,700
- 2004 Klironomos, J.
 Soil Ecology Laboratory Facility
CFI / OIT Infrastructure. \$249,000
2008. 2003-2008 Klironomos, J.
Canada Research Chair in Ecology. \$500,000.
2006. 2003-2006 Swanton, C.L., Klironomos, J.N., Pauls, K.P., and
 Trevors, J.T. Persistence of recombinant DNA in soil ecosystems
 from genetically modified corn and soybean.
NSERC Strategic. \$595,603.
2005. 2001-2005 Klironomos, J. N.
 Functional diversity of plant-microbe interactions
NSERC Discovery. \$187,600.
- 2001 Klironomos, J.
 Microbial degradation of hydrocarbons.
NSERC/Industry Program. \$38,600
- 2001 Klironomos, J.N.
 Mycorrhizal fungi as determinants of plant community structure.
Premier's Research Excellence Award. \$150,000.
- 2000 Larson, D.W., Husband, B.C., Reader, R.J. and Klironomos, J.N.
 Research Vehicles.
NSERC Equipment. \$37,000.
- 2000 Klironomos, J. N.
 Microbial Incubators
NSERC Equipment. \$21,640.
- 1999 Klironomos, J. N.
 Mycorrhizal inoculation of native trees in city parks and
 streetscapes.
International Society of Arboreculture Research Trust. \$15,000.
- 1998 Posluszny, U., Husband, B.C., Klironomos, J.N., Peterson, R.L. &
 Greenwood, J.S.
 Image Capture and Analysis System.
NSERC Equipment. \$25,470.
2001. 1997-2001 Klironomos, J.N.
 Functional diversity among plant microbe interactions
NSERC Discovery. \$131,400.
- 1997 Klironomos, J.N.
 Research Microscope
NSERC Equipment. \$40,200.

Publications

1. Klironomos, J.N., Widden, P. and Deslandes, I. (1992) Feeding preferences of the collembolan, *Folsomia candida*, in relation to microfungal successions on decaying litter. ***Soil Biology and Biochemistry*** 24, 685-692.
2. Klironomos, J.N., Moutoglis, P., Kendrick, B. and Widden, P. (1993) A comparison of spatial heterogeneity of vesicular-arbuscular mycorrhizal fungi in two maple-forest soils. ***Canadian Journal of Botany*** 71, 1472-1480.
3. Klironomos, J.N. and Kendrick, W.B. (1993) Research on mycorrhizas: trends in the past 40 years as expressed in the 'MYCOLIT' database. ***New Phytologist*** 125, 595-600.
4. Moutoglis, P., Klironomos, J.N., Widden, P. and Kendrick, B. (1995) Direct observation of spores of vesicular-arbuscular mycorrhizal fungi growing on sugar maple roots in the field, using sodium hexametaphosphate as a soil dispersant. ***Mycologia*** 87, 419-423.
5. Klironomos, J.N. and Kendrick, B. (1995) Relationships among microarthropods, fungi, and their environment. ***Plant and Soil*** 170, 183-197.
6. Klironomos, J. and Bainbridge, D. (1995) Collembolas for biocontrol? ***Forest Nursery Notes***. USDA Forest Service, January, 20- 21.
7. Klironomos, J.N. and Kendrick, B. (1995) Stimulative effects of arthropods on endomycorrhizae of sugar maple in the presence of decaying litter. ***Functional Ecology*** 9, 528-536.
8. Klironomos, J.N. and Allen, M.F. (1995) UV-B-mediated changes on belowground communities associated with the roots of *Acer saccharum*. ***Functional Ecology*** 9, 923-930.
9. Klironomos, J.N. (1995) Arbuscular mycorrhizae of *Acer saccharum* in different soil types. ***Canadian Journal of Botany*** 73, 1824-1830.
10. Klironomos, J.N. and Kendrick, B. (1996) Palatability of microfungi to soil arthropods in relation to the functioning of arbuscular mycorrhizae. ***Biology and Fertility of Soils*** 21, 43-52.
11. Klironomos, J.N. Rillig, M.C. and Allen, M.F. (1996) Below-ground microbial and microfaunal responses to *Artemisia tridentata* grown under elevated atmospheric CO₂. ***Functional Ecology*** 10, 527-534.
12. Klironomos, J. (1996) Book Review. Mycorrhiza: Structure, Function, Molecular Biology and Biotechnology, 1995, edited by A. Varma and B. Hock. Springer-Verlag. ***Mycologia*** 88, 519-520.
13. Klironomos, J.N., Allen, M.F., Rillig, M.C., Zak, D.R., Pregitzer, K.S. and Kubiske, M.E. (1997) Increased levels of airborne fungal spores in response to *Populus tremuloides* grown under elevated atmospheric CO₂. ***Canadian Journal of Botany*** 75, 1670-1673.
14. Klironomos, J.N., Rillig, M.C., Allen, M.F., Zak, D.R., Kubiske, M. and Pregitzer, K.S. (1997) Soil fungal-arthropod responses to *Populus*

- tremuloides* grown under enriched atmospheric CO₂ under field conditions. **Global Change Biology** 3, 473-478.
15. Allen, M.F., Klironomos, J.N. and Harney, S. (1997) The epidemiology of mycorrhizal fungi during succession. In: G. Carroll and P. Tuzdzynski (Eds.) Plant Relationships, **The Mycota**, Vol V, Part B, Springer-Verlag, Pg 169-183.
 16. Rillig, M.C., Scow, K.M., Klironomos, J.N., and Allen, M.F. (1997) Microbial carbon-substrate utilization in the rhizosphere of *Gutierrezia sarothrae* grown in elevated atmospheric carbon dioxide. **Soil Biology and Biochemistry** 29, 1387-1394.
 17. Klironomos, J. N. and Ursic, M. (1998) Density-dependent grazing on the extra-radical hyphal network of the arbuscular mycorrhizal fungus, *Glomus intraradices*, by the collembolan, *Folsomia candida*. **Biology and Fertility of Soils** 26, 250-253.
 18. Klironomos, J. N., Ursic, M., Rillig, M., and Allen, M. F. (1998) Interspecific differences in the response of arbuscular mycorrhizal fungi to *Artemisia tridentata* grown under elevated atmospheric CO₂. **New Phytologist** 138, 599-605.
 19. Rillig, M.C., Allen, M.F., Klironomos, J.N., Chiariello, N.R., Field, C.B. (1998) Plant-species specific changes in root-inhabiting fungi in a California annual grassland: responses to elevated CO₂ and nutrients. **Oecologia** 113, 252-259.
 20. Rillig, M. C., Allen, M. F., Klironomos, J. N., and Field C. B. (1998) Arbuscular-mycorrhizal percent root infection and infection intensity of *Bromus hordeaceus* grown in elevated atmospheric CO₂. **Mycologia** 90, 199-205.
 21. Van der Heijden, M.G.A., Klironomos, J.N., Ursic, M., Moutoglis, P., Streitwolf-Engel, R., Boller, T., Wiemken, A., Sanders, I.R. (1998) Mycorrhizal fungal diversity determines plant biodiversity, ecosystem variability and productivity. **Nature** 396, 69-72.
 22. Klironomos, J. N., Rillig, M. C. and Allen, M. F. (1999) Designing below-ground field experiments with the help of semi-variance and power analyses. **Applied Soil Ecology** 12, 227-238.
 23. Klironomos, J.N. and Moutoglis, P. (1999) Colonization of non-mycorrhizal plants by mycorrhizal neighbours as influenced by the collembolan, *Folsomia candida*. **Biology and Fertility of Soils** 29, 277-281.
 24. Van der Heijden, M.G.A., Klironomos, J.N., Ursic, M., Moutoglis, P., Streitwolf-Engel, R., Boller, T., Wiemken, A., Sanders, I.R. (1999) "Sampling effect", a problem in biodiversity manipulation? A reply to David A. Wardle. **Oikos** 87, 408-410.
 25. Klironomos, J. (1999) Mycorrhizae. In: Sumner, M.E. editor, **Handbook of Soil Science**, CRC Press, Boca Raton. Pp. C37-C43.
 26. Klironomos, J. N., Bednarczuk, E. M. and Neville, J. (1999) Reproductive significance of feeding on saprobic and arbuscular mycorrhizal fungi by the collembolan, *Folsomia candida*. **Functional Ecology** 13, 756-761.
 27. Klironomos, J. (1999) Mycorrhizae research. **Ontario Arborist** 27, 8.

28. Duguay, K.J. and Klironomos, J.N. (2000) Direct and indirect effects of enhanced UV-B radiation on the decomposing and competitive abilities of saprobic fungi. *Applied Soil Ecology* 14, 157-164.
29. Klironomos, J.N., McCune, J., Hart, M., Neville, J. (2000) The influence of arbuscular mycorrhizae on the relationship between plant diversity and productivity. *Ecology Letters* 3, 137-141.
30. Klironomos, J.N. (2000) Host-specificity and functional diversity among arbuscular mycorrhizal fungi. In: Bell, CR, Brylinsky, M, Johnson-Green, P (eds). **Microbial Biosystems: New Frontiers**. Proceedings of the 8th International Symposium on Microbial Ecology. Atlantic Canada Society for Microbial Ecology, Halifax, Canada. Pp 845-851.
31. Hart, M.M., Reader, R.J., and Klironomos, J.N. (2001) Biodiversity and ecosystem function: alternate hypotheses or a single theory? *Bulletin of the Ecological Society of America* 82 (1), 88-90.
32. Klironomos, J.N. and Hart, M.M (2001) Animal nitrogen swap for plant carbon. *Nature* 410, 651-652.
33. Philip, L.J., Posluszny, U. and Klironomos, J.N. (2001) The influence of mycorrhizal colonization on the vegetative growth and sexual reproductive potential of *Lythrum salicaria* L. *Canadian Journal of Botany*, 79, 381-388.
34. Klironomos, J.N., Hart, M.H., Gurney, J.E. and Moutoglis, P. (2001) Interspecific differences in the tolerance of arbuscular mycorrhizal fungi to freezing and drying. *Canadian Journal of Botany*, 79, 1161-1166.
35. Hart, M.M., Reader, R.J. and Klironomos, J.N. (2001) Life history strategies of arbuscular mycorrhizal fungi in relation to their successional dynamics. *Mycologia* 93, 1186-1194.
36. Neville, J., Tessier, J.L., Morrison, I., Scarratt, J., Canning, B., and Klironomos, J.N. (2002) Soil depth distribution of ecto- and arbuscular mycorrhizal fungi associated with *Populus tremuloides* within a 3-year-old boreal forest clear-cut. *Applied Soil Ecology* 19, 209-216.
37. Kirk, J.L., Klironomos, J.N., Lee, H., and Trevors, J.T. (2002) Phytotoxicity assay to assess plant species for phytoremediation of petroleum-contaminated soil. *Bioremediation Journal* 6, 57-63.
38. Klironomos, J.N. and Hart, M.M. (2002) Colonization of roots by arbuscular mycorrhizal fungi using different sources of inoculum. *Mycorrhiza* 12, 181-184.
39. Klironomos, J.N. (2002) Feedback with soil biota contributes to plant rarity and invasiveness in communities. *Nature* 417, 67-70.
40. Hart, M.M. and Klironomos, J.N. (2002) Diversity of arbuscular mycorrhizal fungi and ecosystem functioning. In: M.G.A. van der Heijden and I. Sanders (Eds.) **Mycorrhizal Ecology. Ecological Studies**, Vol. 157. Springer-Verlag, Berlin. Pg 225-242.
41. Klironomos, J.N. (2002) Another form of bias in conservation research. *Science* 298, 749.
42. Hart, M.M., Reader, R.J., and Klironomos, J.N. (2003) Plant coexistence mediated by arbuscular mycorrhizal fungi. *Trends in Ecology and*

- Evolution** 18, 418-423.
43. Klironomos, J.N. (2003) Variation in plant response to native and exotic arbuscular mycorrhizal fungi. **Ecology** 84, 2292-2301.
 44. Klironomos, J.N., McCune, J., and Moutoglis, P. (2004) Species of arbuscular mycorrhizal fungi affect mycorrhizal responses to simulated herbivory. **Applied Soil Ecology** 26, 133-141.
 45. Wardle, D., Bardgett, R., Klironomos, J. Setälä, H., Van der Putten, W., Wall, D. (2004). Ecological linkages between aboveground and belowground biota. **Science** 304, 1629-1633.
 46. Correia, P., Carvalho, L., Tavares, A., Martins-Loução, M.A., and Klironomos, J. (2004) Using native plants to assess arbuscular mycorrhizal fungi when restoring quarries in maquis ecosystems (Portugal). **Ecological Restoration** 22, 233-234.
 47. Kirk, J.L., Beaudette L.A., Hart, M., Moutoglis, P., Klironomos, J.N., Lee, H., and Trevors, J.T. (2004) Methods of studying soil microbial diversity. **Journal of Microbiological Methods** 58, 169-188.
 48. Piotrowski, J.S., Denich, T., Klironomos, J.N., Graham, J.M., and Rillig, M.C. (2004) The effects of arbuscular mycorrhizae on soil aggregation depend on the interaction between plant and fungal species. **New Phytologist** 164, 365-373.
 49. Kirk, J.L., Klironomos, J.N., Lee, H., and Trevors, J.T. (2005) The effects of perennial ryegrass and alfalfa on microbial abundance and diversity in petroleum contaminated soil. **Environmental Pollution** 133, 455-465.
 50. Wolfe, B.E., Husband, B.C., and Klironomos, J.N. (2005) Effects of a belowground mutualism on an aboveground mutualism. **Ecology Letters** 8, 218-223.
 51. Klironomos, J.N., Allen, M.F., Rillig, M.C., Piotrowski, J., Makvandi-Nejad, S., Wolfe, B.E., and Powell, J.R. (2005) Abrupt rise in atmospheric CO₂ overestimates community response in a model plant-soil system. **Nature** 433, 621-624.
 52. Lerat, S., England, L.S., Vincent, M.L., Pauls, K.P., Swanton, C.J., Klironomos, J.N., and Trevors, J.T. (2005) Real-time polymerase chain reaction (PCR) quantification of the transgenes for Roundup Ready corn and Roundup Ready soybean in soil samples. **Journal of Agricultural and Food Chemistry** 53, 1337-1342.
 53. Rillig, M.C., Lutgen, E.R., Ramsey, P.W., Klironomos, J.N., Gannon, J.E. (2005) Microbiota accompanying different arbuscular mycorrhizal fungal isolates influence soil aggregation. **Pedobiologia**, 49, 251-259.
 54. Wolfe, B., and Klironomos, J.N. (2005) Breaking new ground: soil communities and exotic plant invasion. **BioScience** 55, 477-487.
 55. Kirk, J.L., Moutoglis, P., Klironomos, J., Lee, H. and Trevors, J.T. (2005) Toxicity of diesel fuel to germination, growth and colonization of *Glomus intraradices* in soil and *in vitro* transformed carrot root cultures. **Plant and Soil**, 270, 23-30.
 56. Gulden, R.H., Lerat, S., Hart, M.M., Powell, J.R., Trevors, J.T, Pauls, K.P., Klironomos, J.N., and Swanton, C.J. (2005) Quantification of transgenic

- plant DNA in leachate water: real-time PCR analysis. **Journal of Agricultural and Food Chemistry** 53, 5858-5865.
57. Gulden, R.H., Lerat, S., Hart, M.M., Campbell, R., Powell, J., Pauls, K.P., Klironomos, J.N., Swanton, C.J., and Trevors, J.T. (2005) Tracking plant transgenes in soil; where do they go? **IBS News Report**. May 2005.
58. Allen, M.F., Klironomos, J.N., Treseder, K.K., and Oechel, W.C. (2005) Responses of soil biota to elevated CO₂ in a chaparral ecosystem. **Ecological Applications** 15, 1701-1711.
59. Agrawal, A.A., Kotanen, P.M., Mitchell, C.E., Power, A.G., Godsoe, W. and Klironomos, J., (2005) Enemy release? An experiment with congeneric plant pairs and diverse above- and belowground enemies. **Ecology** 86, 2979-2989.
60. Schwartz, M.W., Hoeksema, J.D., Gehring, C.A., Johnson, N.C., Klironomos, J.N., Abbott, L.K., Pringle, A. (2006) The promise and potential consequences of the global transport of mycorrhizal fungal inoculum. **Ecology Letters**, 9, 501-515.
61. Mitchell, C.E., Agrawal, A.A., Bever, J.D., Gilbert, G.S., Hufbauer, R.A., Klironomos, J.N., Maron, J.L., Morris, W.F., Parker, I.M., Power, A.G., Seabloom, E.W., Torchin, M.E., Vázquez, D.P. (2006) Biotic interactions and plant invasions. **Ecology Letters** 9, 726-740.
62. Stinson, K.A., Campbell, S.A., Powell, J.R., Wolfe, B.E., Callaway, R.M., Thelen, G.C., Hallett, S.G., Prati, D., Klironomos, J.N. (2006) Invasive Plant Suppresses the Growth of Native Tree Seedlings by Disrupting Belowground Mutualisms. **PLoS Biology** 4(5): e140. DOI: 10.1371/journal.pbio.0040140
63. Wolfe BE, Weishampel PA, and Klironomos JN (2006) Arbuscular mycorrhizal fungi and water table affect wetland plant community composition. **Journal of Ecology** 94, 905-914.
64. Rillig MC, Mummey DL, Ramsey PW, Klironomos JN, Gannon JE (2006) Phylogeny of arbuscular mycorrhizal fungi predicts community composition of symbiosis-associated bacteria. **FEMS Microbiology Ecology**, 57, 389-395.
65. Johnson NC, Hoeksema J, Bever, JD, Chaudhary VB, Gehring C, Klironomos J, Koide R, Miller RM, Moore J, Moutoglis P, Schwartz M, Simard S, Swenson W, Umbanhowar J, Wilson G, Zabinski C (2006) From Lilliput to Brobdingnag: Extending models of mycorrhizal function across scales. **BioScience** 56, 889-900.
66. Gulden RH, Levy-Booth D, Campbell R, Powell JR, Hart MM, Dunfield KE, Trevors JT, Pauls KP, Klironomos JN, and Swanton CJ (2007) An empirical approach to target DNA quantification in environmental samples using real-time polymerase chain reactions. **Soil Biology and Biochemistry**, 39, 1956-1967.
67. Powell JR and Klironomos JN (2007) Ecology of plant-microbial interactions. In: **Soil Microbiology, Ecology, and Biochemistry**, 3rd edition (E.A. Paul, editor). Pg 257-281. Academic Press, Burlington.
68. Van der Putten WH, Klironomos JN, and Wardle DA (2007) Microbial

- ecology of biological invasions. *The International Society for Microbial Ecology Journal* 1, 28-37.
69. Wolfe BE, Mummey DL, Rillig MC and Klironomos JN (2007) Small-scale spatial heterogeneity of arbuscular mycorrhizal fungal abundance and community composition in a wetland plant community. *Mycorrhiza*, 17, 175-183.
 70. Maherali H and Klironomos JN (2007) Influence of phylogeny on fungal community assembly and ecosystem functioning. *Science* 316, 1746-1748.
 71. Levy-Booth DJ, Campbell RG, Gulden RH, Hart MM, Powell JR, Klironomos JN, Pauls KP, Swanton CJ, Trevors JT, Dunfield KE (2007) Cycling of extracellular DNA in the soil environment. *Soil Biology and Biochemistry* 39, 2977-2991.
 72. Klironomos, J.N. (2007) The actions of fungi in ecosystems (Book Review. Fungi in Biogeochemical Cycles. 2006, edited by G.M. Gadd. Cambridge University Press. *BioScience* 57, 981-982.
 73. Schnitzer SA, Londré RA, Klironomos J, and Reich PB (2007) Biomass and toxicity responses of poison ivy (*Toxicodendron radicans*) to elevated atmospheric CO₂: Comment. *Ecology* 89, 581-585.
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