Karen A. Garrett

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Preeminent Professor
Plant Pathology Department
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PROFESSIONAL PREPARATION

Ph.D. Botany and Plant Pathology, Oregon State University
M.S. Statistics, Colorado State University
M.S. Plant Pathology and Weed Science, Colorado State University
B.S. International Agronomy (with distinction), Purdue University

PROFESSIONAL APPOINTMENTS

2015-present, Preeminent Professor, Plant Pathology Department, Institute for Sustainable Food Systems, Emerging Pathogens Institute, University of Florida
2010-2015, Professor, Department of Plant Pathology, Kansas State University
2005-2010, Associate Professor, Department of Plant Pathology, Kansas State University
2000-2005, Assistant Professor, Department of Plant Pathology, Kansas State University
1991-1996, Statistician, Savannah River Ecology Lab, University of Georgia

PROFESSIONAL RECOGNITION

Fellow to the American Association for the Advancement of Science, 2019

UF IFAS, High Impact Publication Award, 2018 (*for* Asche, F., T. M. Garlock, J. L. Anderson, S. R. Bush, M. D. Smith, C. M. Anderson, J. Chu, **K. A. Garrett**, A. Lem, K. Lorenzen, A. Oglend, S. Tveteras, and S. Vannuccini. 2018. Three pillars of sustainability in fisheries. Proceedings of the National Academy of Sciences 15:11221-11225.)

PUBLICATIONS

Journal Articles

Bold = Member of Garrett Lab
Underline = Other scientist mentored by Garrett
*Asterisk = *Equivalent contributions*

Preprints

Choudhury, R. A., H. L. Er, M. Hughes, J. Smith, G. Pruett, J. Konkol, R. Ploetz, J. Marois, **K. A. Garrett**, A. H. C. van Bruggen. 2019. Host density dependence and environmental factors affecting laurel wilt invasion. bioRxiv: 642827. [open access link]

Garrett, K. A., **E. E. Frank**, **S. P. Dendy**, J. F. Leslie, and **A. Saleh.** 2017. Microbiome engineers: Grazers, browsers, and the phytobiome stampede. bioRxiv: 087494. [open access link]

Xing*, Y., **J. Hernandez Nopsa***, J. Andrade-Piedra, F. Beed, G. Blomme, M. Carvajal Yepes, D. Coyne, G. Forbes, J. Kreuze, J. Kroschel, L. Kumar, J. Legg, M. Parker, E. Schulte-Geldermann, and

K. A. Garrett. 2018. Global cropland connectivity: A risk factor for invasion and saturation by emerging pathogens and pests. bioRxiv: 106542. [open access link]

Published Journal Articles

Alcalá-Briseño, R. I., K. Casarrubias-Castillo, D. López-Ley, **K. A. Garrett**, L. Silva-Rosales. 2019. Network analysis of the papaya orchard virome from two agroecological regions of Chiapas, Mexico. mSystems, accepted. [open access link to preprint in bioRxiv]

Andersen, K. F., **C. E. Buddenhagen**, P. Rachkara, R. Gibson, S. Kalule, D. Phillips, and **K. A. Garrett.** 2019. Modeling epidemics in seed systems and landscapes to guide management strategies: The case of sweetpotato in Northern Uganda. Phytopathology 109:1519-1532. [open access link]

Ascunce, M. S., Keumchul Shin, J. C. Huguet-Tapia, **R. Poudel**, **K. A. Garrett**, A. H. C. van Bruggen, E. M. Goss. 2019. Penicillin trunk injection affects bacterial community structure in citrus trees. Microbial Ecology 78:457-469. [link]

Bell, T. H., K. Hockett, **R. I. Alcalá-Briseño**, M. Barbercheck, G. A. Beattie, M. A. Bruns, J. Carlson, T. Chung, A. Collins, B. Emmett, P. Esker, **K. A. Garrett**, L. Glenna, B. K. Gugino, M. d. M. Jimenez Gasco, L. Kinkel, J. Kovac, K. Kowalski, G. Kuldau, J. Leveau, M. Michalska-Smith, J. Myrick, K. Peter, M. V. Salazar, A. Shade, N. Stopnisek, X. Tan, A. Welty, K. Wickings, and E. Yergeau. 2019. Manipulating wild and tamed phytobiomes: challenges and opportunities. Phytobiomes 3:3-21. [open access link]

Bennett, A. E., K. Preedy, A. Golubski, J. Umbanhowar, S. R. Borrett, L. Byrne, K. Apostol, J. D. Bever, L. Biederman, A. T. Classen, K. Cuddington, M.-A. de Graaff, **K. A. Garrett**, L. Gross, A. Hastings, J. D. Hoeksema, V. Hrynkiv, J. Karst, M. Kummel, C. T. Lee, C. Liang, W. Liao, K. Mack, L. Miller, B. Ownley, C. Rojas, E. L. Simms, V. K. Walsh, M. Warren and J. Zhu. 2019. Beyond the black box: promoting mathematical collaborations for elucidating interactions in soil ecology. Ecosphere 10:e02799. [open access link]

Carvajal-Yepes, M., K. Cardwell, A. Nelson, **K. A. Garrett**, B. Giovani, D. G. O. Saunders, S. Kamoun, J. P. Legg, V. Verdier, J. Lessel, R. A. Neher, R. Day, P. Pardey, M. L. Gullino, A. R. Records, B. Bextine, J. E. Leach, S. Staiger, J. Tohme. 2019. A global surveillance system for crop diseases. Science 364:1237-1239. [link]

Fayette, J., S. Bec, S. Loubeau, J. C. Fulton, **K. A. Garrett**, and C. Lapaire Harmon. 2019. First report of *Lasiodiplodia hormozganensis* causing fruit rot of eggplant in Haiti. [Disease note] Plant Disease 103 [open access link]

Ogero, K., J. Kreuze, M. McEwan, N. Luambano, H. Bachwenkizi, **K. A. Garrett**, **K. F. Andersen**, S. Thomas-Sharma, and R. A. A. van der Vlugt. 2019. Efficiency of insect-proof net tunnels in reducing virus-related seed degeneration in sweetpotato. Plant Pathology 68:1472-1480. [open access link]

Poudel, R., A. Jumpponen, M. M. Kennelly, C. Rivard, **L. Gomez-Montano** and **K. A. Garrett**. 2019. Rootstocks shape the rhizobiome: Rhizosphere and endosphere bacterial communities in the grafted tomato system. Applied and Environmental Microbiology 85:e01765-18. [link]

Asche, F., T. M. Garlock, J. L. Anderson, S. R. Bush, M. D. Smith, C. M. Anderson, J. Chu, **K. A. Garrett**, A. Lem, K. Lorenzen, A. Oglend, S. Tveteras, and S. Vannuccini. 2018. Three pillars of sustainability in fisheries. Proceedings of the National Academy of Sciences 15:11221-11225. [link]

Delaquis, E., **K. F. Andersen**, N. Minato, C. T. L. Thuy, M. E. Karssenberg, S. Sophearith, K. A. G. Wyckhuys, J. Newby, D. D. Burra, P. Srean, I. Phirun, L. D. Niem, P. T. Nhan, **K. A. Garrett**, C. J. M. Almekinders, P. C. Struik, S. de Haan. 2018. Raising the stakes: cassava seed networks at multiple scales in Cambodia and Vietnam. Frontiers in Sustainable Food Systems 2:73. [open access link]

Garrett, K. A., **R. I. Alcalá-Briseño**, **K. F. Andersen**, **C. E. Buddenhagen**, **R. A. Choudhury**, **J. C. Fulton**, **J. F. Hernandez Nopsa**, **R. Poudel**, and **Y. Xing**. 2018. Network analysis: A systems framework to address grand challenges in plant pathology. Annual Review of Phytopathology 56: 559-580. [open access link]

Hatfield, J. L., J. Antle, **K. A. Garrett**, R. C. Izaurralde, T. Mader, E. Marshall, M. Nearing, G. P. Robertson, and L. Ziska. 2018. Indicators of climate change in agricultural systems. Climatic Change. https://doi.org/10.1007/s10584-018-2222-2

Savary, S., A. D. Nelson, A. Djurle, P. D. Esker, A. Sparks, L. Amorim, A. Bergamin Filho, T. Caffi, N. Castilla, and **K. Garrett**. 2018. Concepts, approaches, and avenues for modelling crop health and crop losses. European Journal of Agronomy 100:4-18. [link]

Ziska, L.H., B. A. Bradley, R. D. Wallace, C. T. Bargeron, J. H. LaForest, **R. A. Choudhury**, **K. A. Garrett**, F. E. Vega. 2018. Climate change, carbon dioxide, and pest biology, managing the future: Coffee as a case study. Agronomy 8:152. [open access link]

Buddenhagen*, **C. E.**, **J. F. Hernandez Nopsa***, **K. F. Andersen**, J. Andrade-Piedra, G. A. Forbes, P. Kromann, **S. Thomas-Sharma**, P. Useche, and **K. A. Garrett.** 2017. Epidemic network analysis for mitigation of invasive pathogens in seed systems: Potato in Ecuador. Phytopathology 107:1209-1218. [open access link]

Choudhury, R. A., **K. A. Garrett**, S. J. Klosterman, K. V. Subbarao, and N. McRoberts. 2017. A framework for optimizing phytosanitary thresholds in seed systems. Phytopathology 107:1219-1228. [link]

Dendy, S. P., **B. Tong**, H. A. Alexander, P. A. Fay, L. Murray, **Y. Xing**, and **K. A. Garrett.** 2017. A long-term study of burning effects on a plant pathogen in tallgrass prairie. Plant Pathology 66:1308-1317. [link]

Garrett, K. A., **K. F. Andersen**, F. Asche, R. L. Bowden, G. A. Forbes, P. A. Kulakow, and B. Zhou. 2017. Resistance genes in global crop breeding networks. Phytopathology 107:1268-1278. [open access link] [interactive interface for exploring model behavior]

Hilker, F. M., L. J. S. Allen, V. A. Bokil, C. J. Briggs, Z. Feng, **K. A. Garrett**, L. J. Gross, F. M. Hamelin, M. J. Jeger, C. A. Manore, A. G. Power, M. G. Redinbaugh, M. A. Rúa and N. J. Cunniffe. 2017. Modelling virus coinfection to inform management of maize lethal necrosis in Kenya. Phytopathology 107:1095-1108. [open access link] [in the news]

Hondrade*, R. F., E. Hondrade*, **L. Zheng***, F. Elazegui, J. Duque, C. C. Mundt, C. M. Vera Cruz, and **K. A. Garrett.** 2017. Cropping system diversification for food production in Mindanao rubber plantations: A rice cultivar mixture and rice intercropped with mungbean. PeerJ 5:e2975. [open access link]

Ploetz, R. C., P. E. Kendra, **R. A. Choudhury**, J. A. Rollins, A. Campbell, **K. Garrett**, M. Hughes, and T. Dreaden. 2017. Laurel wilt in natural and agricultural ecosystems: understanding the drivers and scales of complex pathosystems. Forests 8:48. [open access link]

Savary, S., S. Bregaglio, L. Willocquet, D. Gustafson, D. M. D'Croz, A. Sparks, N. Castilla, A. Djurle, C. Allinne, M. Sharma, V. Rossi, L. Amorim, A. Bergamin, J. Yuen, P. Esker, N. McRoberts, J. Avelino, E. Duveiller, J. Koo, and **K. Garrett.** 2017. Crop health and its global impacts on the components of food security. Food Security 9:311–327. [link]

Thomas-Sharma, S., J. Andrade-Piedra, M. Carvajal Yepes, **J. Hernandez Nopsa**, M. Jeger, R. Jones, P. Kromann, J. Legg, J. Yuen, G. A. Forbes, and **K. A. Garrett.** 2017. A risk assessment framework for seed degeneration: Informing an integrated seed health strategy for vegetatively-propagated crops. Phytopathology 107:1123-1135. [open access link] [Interactive interface for exploring model behavior]

Poudel, R., A. Jumpponen, D. C. Schlatter, T. C. Paulitz, B. McSpadden Gardener, L. L. Kinkel, and **K. A. Garrett**. 2016. Microbiome networks: A systems framework for identifying candidate microbial assemblages for disease management. Phytopathology 106:1083-1096. [open access link]

Sanatkar, M. R., W. N. White, B. Natarajan, C. Scoglio, and **K. A. Garrett**. 2016. Epidemic threshold of an SIS model in dynamic switching networks. IEEE Transactions on Systems, Man, and Cybernetics 46:345-55. [link]

Thomas-Sharma, S., A. Abdurahman, S. Ali, J. L. Andrade-Piedra, S. Bao, A. O. Charkowski, D. Crook, M. Kadian, P. Kromann, P. C. Struik, L. Torrance, **K. A. Garrett**, and G. A. Forbes. 2016. Seed degeneration in potato: the need for an integrated seed health strategy to mitigate the problem in developing countries. Plant Pathology 65:3-16. [link] [CGIAR press release]

Hernandez Nopsa, J. F., G. J. Daglish, D. W. Hagstrum, J. F. Leslie, T. W. Phillips, C. Scoglio, **S. Thomas-Sharma**, G. H. Walter, and **K. A. Garrett**. 2015. Ecological networks in stored grain: identifying key nodes for emerging pests and mycotoxins in postharvest networks. BioScience 65:985-1002. [open access link] [UF press release] [UF/IFAS FAES High Impact Award winner]

Sanatkar, M. R., C. Scoglio, B. Natarajan, S. Isard, and **K. A. Garrett**. 2015. History, epidemic evolution, and model burn-in for a network of annual invasion: Soybean rust. Phytopathology 105:947-955. [open access link]

Alexander, H. M., K. E. Mauck, A. E. Whitfield, **K. A. Garrett**, and C. M. Malmstrom. 2014. Plant-virus interactions and the agro-ecological interface. European Journal of Plant Pathology 138:529-547. [link]

Gray, M. M., P. St Amand, N. M. Bello, M. B. Galliart, M. Knapp, **K. A. Garrett**, T. J. Morgan, S. G. Baer, B. R. Maricle, E. D. Akhunov, and L. C. Johnson. 2014. Ecotypes of an ecologically dominant prairie grass (*Andropogon gerardii*) exhibit genetic divergence across the US Midwest grasslands' environmental gradient. Molecular Ecology 23:6011-6028. [link]

Scherm, H., C. S. Thomas, **K. A. Garrett**, and J. M. Olsen. 2014. Meta-analysis and other approaches for mining and synthesizing structured and unstructured data in plant pathology. Annual Review of Phytopathology 52:453-476. [link]

Sparks, A. H., G. A. Forbes, R. J. Hijmans, and **K. A. Garrett**. 2014. Climate change may have limited effect on the global risk of potato late blight. Global Change Biology 20:3621-3631. [link]

Cox, C. M., W. W. Bockus, R. D. Holt, L. Fang, and **K. A. Garrett**. 2013. The spatial connectedness of plant species: Potential links for apparent competition via plant diseases. Plant Pathology 62:1195-1204. [link]

Garrett, K. A. 2013. Big data insights into pest spread [invited commentary]. Nature Climate Change 3:955-957. [link]

Garrett, K. A., A. Dobson, J. Kroschel, B. Natarajan, S. Orlandini, H. E. Z. Tonnang, and C. Valdivia. 2013. The effects of climate variability and the color of weather time series on agricultural diseases and pests, and decision making for their management. Agricultural and Forest Meteorology 170:216-227. [link]

Gomez-Montano, L., A. Jumpponen, M. A. Gonzales, J. Cusicanqui, C. Valdivia, P. Motavalli, M. Herman, and **K. A. Garrett**. 2013. Do bacterial and fungal communities in soils of the Bolivian Altiplano change under shorter fallow periods? Soil Biology & Biochemistry 65:50-59. [link] [Supplemental materials, including beautiful photos] [Associated R scripts]

Skelsey, P., K. A. With, and **K. A. Garrett**. 2013. Why dispersal should be maximized at intermediate scales of heterogeneity. Theoretical Ecology 6:203-211. [open access link]

Skelsey, P., K. A. With, and **K. A. Garrett**. 2013. Pest and disease management: Why we shouldn't go against the grain. PLoS ONE 8:e75892. [open access link]

Garrett, K. A. 2012. Information networks for plant disease: Commonalities in human management networks and within-host signaling networks. [Invited] European Journal of Plant Pathology 133:75-88. [link]

Garrett, K. A., A. Jumpponen, C. Toomajian, and **L. Gomez-Montano**. 2012. Climate change and plant health: Designing research spillover from plant genomics for understanding the role of microbial communities. [Invited] Canadian Journal of Plant Pathology 34:349-361. [link]

Sutrave, S., C. Scoglio, S. A. Isard, J. M. S. Hutchinson, and **K. A. Garrett**. 2012. Identifying highly connected counties compensates for resource limitations when evaluating national spread of an invasive pathogen. PLoS ONE 7:e37793. [open access link]

Borer, E. T., J. Antonovics, L. L. Kinkel, P. J. Hudson, P. Daszak, M. J. Ferrari, **K. A. Garrett**, C. R. Parrish, A. F. Read, and D. M. Rizzo. 2011. Bridging taxonomic and disciplinary divides in infectious disease. EcoHealth 8:261-267. [open access link]

Garrett, K. A., G. A. Forbes, S. Savary, **P. Skelsey**, **A. H. Sparks**, C. Valdivia, A. H. C. van Bruggen, L. Willocquet, A. Djurle, E. Duveiller, H. Eckersten, S. Pande, C. Vera Cruz, and J. Yuen. 2011. Complexity in climate change impacts: A framework for analysis of effects mediated by plant disease. Plant Pathology 60:15-30. [link]

Rouse, M. N., **A. A. Saleh**, A. Seck, K. H. Keeler, **S. E. Travers**, S. H. Hulbert, and **K. A. Garrett**. 2011. Genomic and resistance gene homolog diversity of the dominant tallgrass prairie species across the U.S. Great Plains precipitation gradient. PLoS ONE 6:e17641. [open access link]

Savary, S., A. Nelson, A. H. Sparks, L. Willocquet, E. Duveiller, G. Mahuku, G. Forbes, **K. A. Garrett**, D. Hodson, J. Padgham, S. Pande, M. Sharma, J. Yuen, A. Djurle. 2011. International agricultural research tackling the effects of global and climate changes on plant diseases in the developing world. Plant Disease 95:1204-1216. [open access link]

Sparks, A. H., G. A. Forbes, R. J. Hijmans, and **K. A. Garrett**. 2011. A metamodeling framework for extending the application domain of process-based ecological models. Ecosphere 2:art90. [open access link]

Perez, P., C. Nicklin, O. Dangles, S. Vanek, S. Sherwood, S. Halloy, **K. Garrett**, and G. Forbes. 2010. Climate change in the High Andes: Implications and adaptation strategies for small-scale farmers. The International Journal of Environmental, Cultural, Economic and Social Sustainability 6:71-88. [link]

Saleh, A. A., **H. U. Ahmed**, T. C. Todd, **S. E. Travers**, K. A. Zeller, J. F. Leslie, and **K. A. Garrett**. 2010. Relatedness of *Macrophomina phaseolina* isolates from tallgrass prairie, maize, soybean, and sorghum. Molecular Ecology 19:79-91. [link]

Travers, S. E., **Z. Tang**, D. Caragea, **K. A. Garrett**, S. H. Hulbert, J. E. Leach, J. Bai, **A. Saleh**, A. K. Knapp, P. A. Fay, J. Nippert, P. S. Schnable, and M. D. Smith. 2010. Variation in gene expression of *Andropogon gerardii* in response to altered environmental conditions associated with climate change. Journal of Ecology 98:374-383. [Editor's choice]

Webb, K. M., I. Oña, J. Bai, **K. A. Garrett**, T. Mew, C. M. Vera Cruz, and J. E. Leach. 2010. A benefit of high temperature: Increased effectiveness of a rice bacterial blight disease resistance gene. New Phytologist 185:568-576. [link]

Yin, C., K. L. Jones, D. E. Peterson, **K. A. Garrett**, S. H. Hulbert, and T. C. Paulitz. 2010. Members of soil bacterial communities sensitive to tillage and crop rotation. Soil Biology & Biochemistry 42:2111-2118. [link]

Cheatham, M. R.*, **M. N. Rouse***, **P. D. Esker**, S. Ignacio, W. Pradel, R. Raymundo, **A. H. Sparks**, G. A. Forbes, T. R. Gordon, and **K. A. Garrett**. 2009. Beyond yield: Plant disease in the context of ecosystem services. Phytopathology 99:1228-1236. [open access link]

Garrett, K. A., L. N. Zúñiga, E. Roncal, G. A. Forbes, C. C. Mundt, **Z. Su**, and R. J. Nelson. 2009. Intraspecific functional diversity in hosts and its effect on disease risk across a climatic gradient. Ecological Applications 19:1868-1883. [link]

Margosian, M. L., **K. A. Garrett**, J. M. S. Hutchinson, and K. A. With. 2009. Connectivity of the American agricultural landscape: Assessing the national risk of crop pest and disease spread. BioScience 59:141-151. [open access link]

Worapong, J., **S. P. Dendy**, **Z. Tang**, D. J. Awl, and **K. A. Garrett**. 2009. Limiting temperatures for urediniospore germination are low in a systemic rust fungus of tallgrass prairie. Mycologia 101:390-394. [link]

Chakraborty, S., J. Luck, G. Hollaway, A. Freeman, R. Norton, **K. A. Garrett**, K. Percy, A. Hopkins, C. Davis, and D. F. Karnosky. 2008. Impacts of global change on diseases of agricultural crops and forest trees. CAB Reviews: Perspectives in Agriculture, Veterinary Science, Nutrition and Natural Resources 3, No. 054.

Han, X., **S. P. Dendy**, **K. A. Garrett**, **L. Fang**, and M. D. Smith. 2008. Comparison of damage to native and exotic tallgrass prairie plants by natural enemies. Plant Ecology 198:197-210. [link]

Bockus, W. W., **Z. Su**, **K. A. Garrett**, B. S. Gill, J. P. Stack, R. L. Bowden, A. K. Fritz, K. L. Roozeboom, and T. J. Martin. 2007. Number of experiments needed to determine wheat disease phenotypes for four wheat diseases. Plant Disease 91:103-108. [open access link]

Milliken, G. A., **K. A. Garrett**, and **S. E. Travers**. 2007. Experimental design for two-color microarrays applied in a pre-existing split-plot experiment. Statistical Applications in Genetics and Molecular Biology 6, Article 20. [link]

Travers, S. E., M. D. Smith, J. Bai, S. H. Hulbert, J. E. Leach, P. S. Schnable, A. K. Knapp, G. Milliken, P. Fay, **A. Saleh**, and **K. A. Garrett**. 2007. Ecological genomics: making the leap from model systems in the lab to native populations in the field. Frontiers in Ecology and the Environment 5:19-24. [link]

Garrett, K. A., **S. P. Dendy**, **E. E. Frank**, **M. N. Rouse**, and **S. E. Travers**. 2006. Climate change effects on plant disease: Genomes to ecosystems. Annual Review of Phytopathology 44:489-509. [link]

Garrett, K. A., S. H. Hulbert, J. E. Leach, and **S. E. Travers**. 2006. Ecological genomics and epidemiology. European Journal of Plant Pathology 115:35-51. [link]

Al-Naimi, F. A., **K. A. Garrett**, and W. W. Bockus. 2005. Competition, facilitation, and niche differentiation in two foliar pathogens. Oecologia 143:449-457. [link]

Cox, C. M., **K. A. Garrett**, and W. W. Bockus. 2005. Meeting the challenge of disease management in perennial grain systems. Renewable Agriculture and Food Systems 20:15-24. [link]

Cox, C. M., **K. A. Garrett**, T. S. Cox, W. W. Bockus, and T. Peters. 2005. Reactions of perennial grain accessions to four major cereal pathogens of the Great Plains. Plant Disease 89:1235-1240. [open access link]

Jiang, W., **K. A. Garrett**, D. E. Peterson, T. L. Harvey, R. L. Bowden, and **L. Fang**. 2005. The window of risk for emigration of *Wheat streak mosaic virus* varies with host eradication method. Plant Disease 89:853-858. [open access link]

Cox, C. M., **K. A. Garrett**, R. L. Bowden, A. K. Fritz, **S. P. Dendy**, and W. F. Heer. 2004. Cultivar mixtures for the simultaneous management of multiple diseases: Tan spot and leaf rust of wheat. Phytopathology 94:961-969. [open access link]

Garrett, K. A., **S. P. Dendy**, A. G. Power, G. K. Blaisdell, H. A. Alexander, and **J. K. McCarron**. 2004. Barley yellow dwarf disease in natural populations of dominant tallgrass prairie species in Kansas [Disease Note]. Plant Disease 88:574. [open access link]

Garrett, K. A., M. Kabbage, and W. W. Bockus. 2004. Managing for fine-scale differences in inoculum load: Seeding patterns to minimize loss to wheat take-all. Precision Agriculture 5:291-301. [link]

Garrett, K. A., L. V. Madden, G. Hughes, and W. F. Pfender. 2004. New applications of statistical tools in plant pathology. Phytopathology 94:999-1003. [open access link]

Ortiz, O., **K. A. Garrett**, **J. J. Heath**, R. Orrego, and R. J. Nelson. 2004. Management of potato late blight in the Andean highlands: Evaluating the benefits of Farmer Participatory Research and Farmer Field Schools. Plant Disease 88:565-571. [open access link]

Rosenberg, M. S., **K. A. Garrett**, **Z. Su**, and R. L. Bowden. 2004. Meta-analysis in plant pathology: Methods for research synthesis. Phytopathology 94:1013-1017. [open access link]

Garrett, K. A. and R. L. Bowden. 2002. An Allee effect reduces the invasive potential of *Tilletia indica*. Phytopathology 92:1152-1159. [open access link]

Mundt, C. C., C. Cowger, and **K. A. Garrett**. 2002. Relevance of integrated disease management to resistance durability. Euphytica 124:245-252. [link]

Garrett, K. A., R. J. Nelson, C. C. Mundt, G. Chacón, R. E. Jaramillo, and G. A. Forbes. 2001. The effects of host diversity and other management components on epidemics of potato late blight in the humid highland tropics. Phytopathology 91:993-1000. [open access link]

Garrett, K. A., and C. C. Mundt. 2000. Effects of planting density and the composition of wheat cultivar mixture on stripe rust: An analysis taking into account limits to the replication of controls. Phytopathology 90:1313-1321. [open access link]

Garrett, K. A., and C. C. Mundt. 2000. Host diversity can reduce potato late blight severity for focal and general patterns of primary inoculum. Phytopathology 90:1307-1312. [open access link]

Hijmans, R. J., **K. A. Garrett**, Z. Huamán, D. P. Zhang, M. Schreuder, and M. Bonierbale. 2000. Assessing the geographic representativeness of germplasm collections: the case of the Bolivian wild potato genebank. Conservation Biology 14:1755-1765. [link]

Garrett, K. A., and C. C. Mundt. 1999. Epidemiology in diverse host populations. Phytopathology 89:984-990. [open access link]

Garrett, K. A., and P. M. Dixon. 1998. When does the spatial pattern of weeds matter? Predictions from neighborhood models. Ecological Applications 8:1250-1259. [link]

Garrett, K. A., and H. F. Schwartz. 1998. Epiphytic populations of *Pseudomonas syringae* on dry beans treated with copper-based bactericides. Plant Disease 82:30-35. [open access link]

Garrett, K. A., and P. M. Dixon. 1997. Environmental pseudointeraction: The effects of ignoring the scale of environmental heterogeneity in competition studies. Theoretical Population Biology 51:37-48. [link]

Garrett, K. A. 1997. Use of statistical tests of equivalence (bioequivalence tests) in plant pathology. Phytopathology 87:372-374. [open access link]

Garrett, K. A. 1995. Selecting a method for sampling weed densities: The case of weed removal in strips. Weed Science 43:394-401. [link]

VanGessel, M. J., E. E. Schweizer, K. A. Garrett, and P. Westra. 1995. Influence of weed density and distribution on corn (*Zea mays*) yield. Weed Science 43:215-218. [link]

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