

Résumé

Steven G. Pueppke
Department of Plant, Soil and Microbial Sciences
Center for European, Russian, and Eurasian Studies
Michigan State University
East Lansing, MI 48824
517-303-5042; pueppke@msu.edu

Personal and Education

Born 1 August 1950 in Fargo, North Dakota

B. Sc. in Horticultural Sciences (Emphasis: Chemistry, mathematics, and botanical sciences), Michigan State University, 1971

Ph.D. in Plant Pathology (Minors in Organic Chemistry and Plant Physiology), Cornell University, 1975

Academic Appointments

Professor of Plant, Soil & Microbial Sciences, Michigan State University, 2013 to present

Professor of Plant Pathology, Michigan State University, 2006-2013

Professor of Crop Sciences, University of Illinois, 1998-2005

Visiting Professor, University of Marburg, Germany, 1996-1997

Visiting Professor, University of Geneva, Switzerland, 1989-1990

Professor of Plant Pathology, University of Missouri, 1984-1998

Associate Professor of Plant Pathology, University of Florida, 1983-1984

Assistant Professor of Plant Pathology, University of Florida, 1979-1983

Assistant Professor of Biology, University of Missouri-St. Louis, 1976-1979

Senior Research Associate, Charles F. Kettering Laboratories, 1975-1976

Professional Activities, Awards, and Service

External MBA thesis examiner, Nyenrode Business University, Netherlands, 2014

Panelist, AAAS Charles Valentine Riley Memorial Lecture on Why Innovation in Agriculture Matters, 2012

Co-chair, Monsanto Insect Knowledge Research Program, 2012 to 2016

Board of Directors, Canadian Studies Center, Michigan State University, 2009 to present

Chair, Experiment Station Committee on Policy, National Association of State Universities and Land Grant Colleges, 2008-2009

Recipient of the Chevalier de l'Ordre des Palmes Académiques from the Republic of France, 2008

Member, National Committee on Development, Sigma Xi, 2006 to 2008

Member, USDA Secretary's Advisory Committee on Biotechnology and 21st Century Agriculture, 2006-2008

Member, Michigan Renewable Fuels Commission, 2006-2010

Chair, Science and Technology Committee, Experiment Station Committee on Policy (ESCOP), National Association of State Universities and Land Grant Colleges, 2004-2007

Principal Investigator, U. S. Department of State funded grant to create a curriculum in biotechnology at the Latvia University of Agriculture, 2004-2006

President of the Board of Directors, National Council on Food and Agricultural Research, 2003-2004

Chair, National Agricultural Biotechnology Council, 2003-2004

Chair, National Agricultural Biotechnology Council's Committee on Best Management Practices for Field Trials with Transgenic Plants, 2003-2006

Vice-President of the Board of Directors, National Council on Food and Agricultural Research, 2003-2004

Board of Advisors, Office of Technology Management, University of Illinois, 2001-2005

Panel Manager, USDA/NRI Plant Pathology and Microbiology Grants Program, 2000-2001

USDA/NRI Biology of Plant-Microbe Associations Grants Panel, 2000

Scientific Liaison Committee, Donald Danforth Plant Science Center, St. Louis, MO, 1999-2002

Fellow, American Phytopathological Society, 1997

External Ph. D. dissertation examiner, University of Helsinki, 1997

Consulting Professor, Harbin University, China, 1994

USDA/NRI Strengthening Grants Panels, 1993-1995

NSF Graduate Research Training Grants Panels and Plant Science Postdoctoral Training Grants Panels, 1992-1995

Chair, Strategic Planning Committee, American Phytopathological Society, 1991-1992

USDA/NRI Nitrogen Fixation and Metabolism Grants Panel, 1989-1990

Editorial Board, *Plant Physiology*, 1986-1992

Senior Editor, *Phytopathology*, 1988-1991

Manager, USDA/NRI Biological Stress Grants Program, 1986-1987

Associate Editor, *Phytopathology*, 1986-1987

Editor, *Symbiosis*, 1984-2004

Administrative Appointments

Director of Global and Strategic Initiatives, College of Agriculture and Natural Resources, Michigan State University, 2013-2016

Associate Vice-President for Research and Graduate Studies, Michigan State University, 2010-2015

Director, MSU AgBioResearch, 2006-2013

Assistant Vice-President for Research and Graduate Studies, Michigan State University, 2006-2010

Director, Office of Biobased Technologies, Michigan State University, 2006-2010

Director, National Soybean Research Laboratory, University of Illinois, 2003-2005

Director, ACES Global Connect, University of Illinois, 2002-2005

Interim Director, Functional Foods for Health Program, University of Illinois, 2000-2001

Associate Dean for Research, College of Agricultural, Consumer, and Environmental Sciences, University of Illinois, 1998-2005

Unit Leader in Plant Sciences, University of Missouri, 1990-1996

Chair, Department of Plant Pathology, University of Missouri, 1984-1989

Selected Recent Panels and Presentations

- 2012 Our nation's renewable energy challenge, Bioenergy Days, Tulsa Community College, Tulsa, OK
- 2012 America's climate choices: looking at the science, Annual Meeting of the Michigan Agri-Business Association, Lansing, MI
- 2013 The unlikely wisdom of Chairman Mao: Thoughts on managing invasive plants, Spring Meeting of the North Central Regional Association of Experiment Station Directors, Nebraska City, NE
- 2014 Curiosity comes naturally, but three other C's must be learned, the earlier the better, Annual Meeting of the American Fisheries Society, Quebec, QC, Canada
- 2014 Wicked problems, human nature, and a few other real-world challenges that you might not have faced in the classroom. Keynote Address, Annual Science and Engineering Symposium, Saginaw Valley State University, Saginaw, MI
- 2015 Inland fisheries and global food security, United Nations FAO Conference on Inland Fisheries, Rome, Italy
- 2015 Rapporteur on Implementation, NABC27 – Stewardship of genetically engineered crops: The way forward in pest management, coexistence, and trade. Annual meeting of the North American Agricultural Biotechnology Council, State College, PA
- 2015 A rationale for global partnerships in water-energy-food in Southeast Asia, Southeast Asia Regional WEF Nexus Workshop, Ho Chi Minh City, Vietnam
- 2015 What it takes to commercialize agricultural technologies in the United States, Belarus Academy of Sciences, Minsk, Belarus
- 2016 Rapporteur on Food Availability and Food Security, Annual meeting of Presidents United to Stop Hunger, University of Missouri, Columbia, MO
- 2016 A systems framework for addressing biodiversity in the Ili River ecosystem, Symposium on Biodiversity, Al Farabi Kazakh National University, Almaty, Kazakhstan
- 2017 Creation and capture of returns for intensive urban agricultural systems, 12th International European Forum on System Dynamics and Innovation in Food Networks, Igls, Austria.

- 2017 The role of science and policy to ensure future agriculture industry stability and food security, Agricultural Bioscience International Conference, Winnipeg, Manitoba (September)
- 2017 A systems framework for facing the challenge of water, energy, and food in the Ili River-Lake Balkhash ecosystem, Annual Conference of the Central Eurasian Studies Society, Seattle, Washington (October)

Publications Since 1998

- 125 Krishnan, H. B. and S. G. Pueppke. 1998. Genetic characterization of a mutant of *Sinorhizobium fredii* strain USDA208 with enhanced competitive ability for nodulation of soybean, *Glycine max* (L.) Merr. FEMS Microbiol. Lett. 165, 215-220.
- 126 Lambaret, Y., R. A. Bellogin, T. Cubo, R. Espuny, A. Gil, H. B. Krishnan, M. Megias, F. J. Ollero, S. G. Pueppke, J. E. Ruiz-Sainz, H. P. Spaink, P. Tejero-Mateo, J. Thomas-Oates and J. M. Vinardell. 1999. Mutation in GDP-fucose synthesis genes of *Sinorhizobium fredii* alters Nod factors and significantly decreases competitiveness to nodulate soybeans. Mol. Plant-Microbe Interact. 12, 207-217.
- 127 Pueppke, S. G. and W. J. Broughton. 1999. *Rhizobium* sp. Strain NGR234 and *R. fredii* USDA257 share exceptionally broad, nested host ranges. Mol. Plant-Microbe Interact. 12, 293-318.
- 128 Sonka, S. and S. G. Pueppke. 1999. Exploring the Public's role in agricultural biotechnology research. AgBioForum 2, 33-36.
- 129 Pueppke, S. G. 2001. Agricultural biotechnology and plant improvement: What's the context and what are the opportunities? Amer. Behav. Sci. 44, 1233-1245.
- 130 Eaglesham, A., S. G. Pueppke, and R. W. F. Hardy, Eds. 2002. Genetically Modified Food and the Consumer. National Agricultural Biotechnology Council, Ithaca, NY. 248 p.
- 131 Krishnan, H. B., J. Lorio, W. S. Kim, G. Jiang, K. Y. Kim, M. DeBoer and S. G. Pueppke. 2003. Extracellular proteins involved in soybean cultivar-specific nodulation are associated with pilus-like surface appendages and exported by a Type III protein secretion system in *Sinorhizobium fredii* USDA257. Mol. Plant-Microbe Interact. 16, 617-625.
- 132 Pueppke, S. G. 2005. Nitrogen fixation by soybean in North America, pp. 15-23, in: Nitrogen Fixation: Origins, Applications, and Research Progress (Ed. W. E. Newton and D. Werner), Springer Press.

- 133 Pueppke, S. G. 2009. Megatrends reshaping agriculture and American agricultural universities. pp. 39-44, in: Reshaping American agriculture to meet its biofuel and biopolymer roles (Ed. A. Eaglesham, S. A. Slack, and R. W. F. Hardy), National Agricultural Biotechnology Council, Ithaca, NY.
- 134 Sappington, T. W., K. R. Ostlie, C. DiFonzo, B. E. Hibbard, C. H. Krupke, P. Porter, S. Pueppke, E. J. Shields and J. J. Tollefson. 2010. Conducting public-sector research on commercialized transgenic seed: In search of a paradigm that works. *GM Crops* 1, 1-4.
- 135 Pueppke, S. G. 2014. Curiosity comes naturally, but three other C's must be learned, the earlier the better. pp. 141-145 in: *Future of Fisheries: Perspectives for Emerging Professionals* (Ed. W. W. Taylor, A. J. Lynch and N. J. Leonard). American Fisheries Society, Bethesda, MD.
- 136 Pueppke, S. G. 2014. The state agricultural experiment station system meets biotechnology: A perspective. *Industrial Biotech.* 10, 323-327.
- 137 Pueppke, S. G. 2014. Roundtable discussion: The evolving role of agricultural experiment stations and land grant institutions in driving agricultural and environmental biotechnology development and employment. *Industrial Biotech.* 10, 328-335.
- 138 Andow, D. A., S. G. Pueppke, A. W. Schaafsma, A. J. Gassman, T. W. Sappington, L. J. Meinke, P. D. Mitchell, T. M. Hurley, R. L. Hellmich and R. P. Porter. 2015. Early detection and mitigation of resistance to Bt maize by western corn rootworm (Coleoptera: Chrysomelidae). *J. Econ. Entomol.* 109, 1-12.
- 139 Pueppke, S. G., N. Graham, and J. Qi. Central Asia's Ili River ecosystem as a wicked problem: Unraveling complex interrelationships at the interface of water, energy, and food. In preparation for *Water*.