

Biographical Sketch

SOO-HYUNG KIM

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a. Academic Preparation

Ph.D., 2001, Ecology, University of California, Davis, California, USA

M.S., 1994, Agronomy, Seoul National University, Seoul, Korea

B.S., 1992, Agronomy, Seoul National University, Seoul, Korea

b. Recent Positions

Assistant Professor, 2006-Present, College of Forest Resources, University of Washington, Seattle

Affiliate Faculty, 2008-Present, Interdisciplinary PhD Program in Urban Planning and Design, University of Washington

Postdoctoral Plant Physiologist, 2002-2006, Plant Sciences Institute, USDA-ARS, Beltsville

c. Research Interests

An overarching theme of my research lies in examining how plants interact with abiotic and biotic factors in the environment at scales from leaf to whole-plant through canopy and ecosystem. Major areas of my scholarly research include:

- Plant responses to climate change and urbanization
- Process-based modeling of plant-environment relationships and ecosystem services
- Resource management in urban and managed ecosystems
- Comparative ecophysiology of native and invasive plants

d. Professional Activities

- Secretary, 2008-2009, Environmental Stress Physiology Working Group, American Society for Horticultural Science
- Honorary Scientist, 2006-2008, Rural Development Administration, Korea
- Executive Council Member, 2007-2009, Korean Society of Agricultural and Forest Meteorology
- Organizing Committee, 2007, Biological Systems Simulation Group Annual Conference
- College Planning Committee, 2008, College of Forest Resources, University of Washington
- University of Washington Botanic Gardens Curation Committee, 2007 – 2009

In addition, I have been giving invited talks to professional societies and community organizations, serving as reviewer for grant proposals and peer-reviewed scientific journals, and establishing the partnerships between the University and local communities as part of my teaching activities.

e. Selected Recent Publications

1. Bae H., **S.-H. Kim**, M.S. Kim, R.C. Sicher, M.D. Strem, S. Natarajan, and B.A. Bailey. 2008. Coordinated regulation of polyamine biosynthesis in *Theobroma cacao* (cacao) tissues responding to stress. *Plant Physiology and Biochemistry* 46: 174-188
2. **Kim, S.-H.**, D.C. Gitz, R.C. Sicher, J.T. Baker and V.R. Reddy. 2007. Temperature dependence of photosynthesis, growth, and development in maize under elevated CO₂. *Environmental and Experimental Botany* 61(3): 224-236.
3. **Kim, S.-H.**, P.R. Fisher and J.H. Lieth. 2007. Analysis and modeling of gas exchange processes in *Scaevola aemula*. *Scientia Horticulturae* 114(3): 170-176.
4. Timlin, D., Fleisher, D., **Kim, S.-H.**, Reddy, V. and Baker J. 2007. Evapotranspiration measurement in controlled environment chambers: a comparison between time domain reflectometry (TDR) and accumulation of condensate from cooling coils. *Agronomy Journal* 99: 166-173.
5. **Kim, S.-H.**, R.C. Sicher, H. Bae, D.C. Gitz, J.T. Baker, D.J. Timlin and V.R. Reddy. 2006. Canopy photosynthesis, evapotranspiration, leaf nitrogen and transcription profiles of maize in response to CO₂ enrichment. *Global Change Biology* 12:588-600.

f. Other Selected Publications

1. Timlin, D., M. Kouznetsov, D. Fleisher, **S.-H. Kim**, and V.R. Reddy. 2008. Simulation of nitrogen demand and uptake in potato using a carbon-assimilation approach, p. 219-243, *In* L. Ma, et al., eds. *Quantifying and understanding plant nitrogen uptake for systems modeling*. CRC Press, Boca Raton, FL.
2. **Kim, S.-H.**, V.R. Reddy, J.T. Baker, D.C. Gitz and D.J. Timlin. 2004. Quantification of photosynthetically active radiation inside sunlit growth chambers. *Agricultural and Forest Meteorology* 126: 117-127.
3. **Kim, S.-H.**, K.A. Shackel, and J.H. Lieth. 2004. Bending alters water balance and reduces photosynthesis of rose shoots. *Journal of the American Society for Horticultural Science* 129(6): 896-901.
4. Baker, J.T., **S.-H. Kim**, D.C. Gitz, D.J. Timlin and V.R. Reddy. 2004. A method for estimating carbon dioxide leakage rates in controlled-environment-chambers using nitrous oxide. *Environmental and Experimental Botany* 51:103-110.
5. **Kim, S.-H.**, and J.H. Lieth. 2003. A coupled model of photosynthesis, stomatal conductance, transpiration for a rose leaf (*Rosa hybrida* L.). *Annals of Botany* 91 (7): 771-781.