

ZHENLI L HE

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EDUCATION:

Ph.D.	Soil Chem. & Environ. Sci.	Zhejiang University	1988
M.S.	Soil Chem. & Fertility	Zhejiang University	1984
B. S.	Soil Sci. & Plant Nutrition	Zhejiang University	1981

PROFESSIONAL APPOINTMENTS:

Institution	Position	Date
University of Florida	Professor	07/2012-Present
Institute of Food & Agric. Sci.	UF Res. Found. Prof.	05/2009-05/2012
Indian River Research & Education Center	Associate Professor	07/2008-06/2012
Fort Pierce, FL 34945	Assistant Professor	01/2004-06/2008
	Assistant Scientist	10/2001- 12/2003
	Postdoctoral Fellow	05/1997-10/2001
Virginia Polytechnic Institute and State University, Dept. of Crop & Soil Environ. Sci.	Postdoctoral Fellow	06/1996-05/1997
Blacksburg, VA 24061	Visiting Scientist	11/1993-11/1994
Zhejiang University	Junction Professor	07/1996-Present
Coll. Nat. Res. & Environ. Sci.	Professor	12/1993-06/1996
Dept. of Resource Sci.	Associate Professor	04/1991-12/1993
Hangzhou, China	Assistant Professor	02/1989-04/1991
Macaulay Land Use Research Institute, Aberdeen, UK	Visiting Scientist	03/1993-06/1993
University of Newcastle Upon	Visiting Scientist	06/1991-02/1993

Tyne, Dept. of Agric. & Environ.
Sci., Newcastle Upon Tyne, UK

AWARDS, HONORS, FELLOWSHIPS:

Technical Cooperative Research Award	British Edu. Council, UK	1992
3 rd place Award for Sci. & Tech. Progress	Zhejiang Province, China	1992
3 rd place Award for Sci. & Tech. Progress	Education Ministry, China	1994
2 nd Place Award for Sci. & Tech. Progress	Zhejiang Province, China	1996
Trans-Century Talent Young Scientist Award	Education Ministry, China	1996
Employee of the Quarter	University of Florida-IRREC	1998
2 nd place Award for Sci. & Tech. Progress	Education Ministry, China	2000
Research Foundation Professorship award	University of Florida	2009
Superior Accomplishment Award	University of Florida	2010

MEMBERSHIPS AND SERVICES IN PROFESSIONAL SOCIETIES:

Leader, US-Sino Agricultural Research Forum Community	2012-
President, Chinese Association of Soil and Plant Scientist in North America	2009-2010
International Steering Committee Member	
International Symposium on Trace Elements and Ecosystem Health	2004-
International Steering Committee Member	
International Symposium on Plant-Soil Interactions at Low pH	1996-2006
The American Association for Advancement of Science	2008-
The American Chemical Society	2008-
Florida Society of Environmental Analysis	2000-
International Union of Soil Science	1989-
American Society of Agronomy	1996-
Soil Science Society of American	1996-
The Southern Region Soil Science Society of American	1997-
Florida Soil and Crop Sci. Society	1997-
Associate chair, Soil Chemistry Division, Soil Science Society of China	1995-1999

INVITED KEYNOTE SPEECHES AND REVIEW PAPERS FOR ACADEMIC SCHOLARS AND JOURNALS

A. Invited Keynote Speeches for National and International Academic Conferences

Loading of trace elements in runoff water from agricultural fields. The 2nd International Symposium on Trace Elements and Health, 17-21 June, 2007, Helsinki, Finland.

Nitrogen and phosphorus pollution in water body and phytoremediation. The International Symposium on Phytoremediation of Polluted Soil and Water, 15-17 December, 2006, Rawalpindi, Pakistan.

Best management practices to reduce nitrogen and phosphorus loads in surface runoff from agricultural production systems. The International Symposium on Phytoremediation and Ecosystem Health, 10-14 September 2005, Hangzhou, China.

Trace elements in agroecosystems and impacts on the environments. The International Symposium on Trace Elements and Health-Trace Elements in Agroecosystems and Health, 10-13 October, 2004, Hangzhou, China.

Microbiological and biochemical indexes for assessing quality of acid soils. The 5th International Symposium on Soil-Plant Interactions at Low pH, 12-16 March, 2001, South Africa.

B. Invited Review Papers for Academic Journals

He, S. Y., **Z. L. He**, X. E. Yang, and V. C. Baligar. 2012. Mechanisms of nickel uptake and hyperaccumulation by plants and implications for soil remediation. **Adv. Agron.**(in press).

He, Z. L., X. E. Yang, V. C. Baligar, and D. V. Calvert. 2003. Microbiological and biochemical indexing systems for assessing acid soil quality. **Adv. Agron.** 78: 89-138.

CITATIONS IN BIOGRAPHICAL WORKS:

Who's Who IBC, Cambridge, UK, 1998

RESEARCH EXPERIENCE:

Research interests:

- Biogeochemistry of nutrients and contaminants in plant-soil-water systems
- Management of nutrients and wastes, and water quality
- Phytoremediation of contaminated soils and waters
- Microbial ecology

A. CONTRACTS AND GRANTS: Total Secured, \$ 3,971,203

a. Funded Externally

Date	Value	Funding Agency	Title	Role
2011-2013	\$84,000	UFRF	Development of nanotechnology to enhance use efficiency of fertilizers and pesticides	PI
2010-2012	\$318,003	USDA	Field Evaluation of Broad-Spectrum Non-Fumigant Pest Control for Vegetable and Strawberry Production in Florida	Co-PI
2009-2011	\$30,000	UF	Field Evaluation of a Novel Organic Compound as an Alternative to Currently Registered Fumigants for Floriculture and Vegetable Production in Florida	PI
2009-2011	\$48,524	FIPR	Development of DPR Fertilizers Using Dolomite Phosphate Rock and Biosolids for Citrus and Vegetable Crops (Phase II)	PI
2009-2011	\$83,030	SFWMD	Nutrient Budget Analysis for the Lake Okeechobee Watershed	PI
2009-2010	\$132,552	SFWMD	Assessment and Reduction of Dissolved Organic Matter Loads in Surface Runoff Water	PI

			from Agricultural Fields in the Indian River Area	
2009-2010	\$134,967	SFWMD	Phytoremediation to Remove Excessive Copper in High Accumulation Soils of Citrus Groves in the Indian River Area	Co-PI
2009-2010	\$115,381	SFWMD	Contribution of agricultural runoff to <i>Escherichia coli</i> populations in the St. Lucie River Estuary	Co-PI
2008 - 2010	140,531	Mosaic Inc.	Development of DPR-Based Slow Release Fertilizers for Agriculture and Landscapes	PI
2008 - 2009	\$50,000	Water Management Districts	Laboratory and Greenhouse-Scale Evaluation of Using Biological Amendments to Consolidate Floc in The Stormwater Treatment Areas	PI
2008 - 2009	\$141,303	Water Mgmt Districts	Assessment and Reduction of Dissolved Organic Matter Loads in Surface Runoff Water From Agricultural Fields in The Indian River Area	PI
2008 - 2009	\$120,000	Water Management Districts	Contribution of Agricultural Runoff to <i>Escherichia Coli</i> Populations in The St. Lucie River Estuary	Co-PI
2006 – 2010	\$324,992	Water Management Districts	Soil Amendment to Reduce N, P and Heavy Metal in Surface Run Off from Citrus Groves in the Indian River Area	PI
2005 – 2009	\$365,251	Water Management Districts	Phytoremediation to Remove Nitrogen And Phosphorus from Stormwaters in Detention Water Systems	PI
2007 - 2009	\$95,002	FL Inst of Phosphate Research	Development of DPR Fertilizers Using Dolomite Phosphate Rock and Biosolids for Citrus and Vegetable Crops (Phase II)	PI
2007-2008	\$50,000	Water Management District	Biogeochemical Approaches to Minimize Sediment Colloidal Suspension	PI
2005 - 2010	\$75,000	U S Dept of Agriculture	Evaluation of Soil Quality Parameters in Tropical Soils and Assessment of Elemental Composition in Tropical Crops	PI
2005- 2009	\$415,594	Water Management Districts	Correlation among Rainfall Events, Nutrients and Phytoplankton Composition in Ten Mile Creek and the St. Lucie River Estuary	Co-PI
2003 - 2007	\$177,587	FL Inst of Phosphate Research	Development of DPR Fertilizers Using Dolomite Phosphate Rock and Biosolids for Citrus and Vegetable Crops (Phase I)	PI
2004 - 2007	\$304,850	Dept Of Agric & Consumer Ser	Use of Organic Amendments to Reduce Loads of Nitrogen and Phosphorus in Surface Runoff from Citrus Groves and Vegetable Farms	Co-PI
2005 - 2006	\$15,624	Water Management Districts	Soil Amendments to Reduce Nitrogen, Phosphorus, and Heavy Metals (Including Copper) in Surface Runoff from Citrus.	Co-PI
2004 - 2006	\$50,015	TETRA Tech Inc.	Use of Calcium Chloride to Reduce Phosphorus Loading In Surface Runoff from Vegetable Farms	PI

2003 - 2006	\$42,000	FL N-Viro	Development of Slow Release Fertilizers Using Dolomite Phosphate Rock and N-Viro Soil	PI
2001 - 2005	\$504,380	FL Dept. of Environmental Protection.	Assessment and Evaluation of Nitrogen, Phosphorus, and Heavy Metals (Including Copper) in Surface Runoff From Citrus Groves and Vegetable Farms in the Indian River Area.	Co-PI
2004 - 2005	\$50,000	Dept Of Environmental Protection	Implementation of Best Management Practices (BMPs) For Citrus & Vegetable Crops to Reduce Surface Water Runoff and Improve Surface Water Quality in the Indian River Area.	Co-PI
2003 - 2004	\$72,986	Water Management Districts	Re-Use of St. Estuary Muck Sediment to Improve Pastureland	Co-PI
2002 - 2004	\$56,680	St. Lucie River Initiative	Characterization of Organic and Inorganic Colloidal Fractions In the St. Lucie Marine Muck Sediments	PI
2000 -2004	\$324,684	Dept Of Environmental Protection	Implementation and Demonstration of Best Management Practices (BMPs) For Citrus and Vegetable Crops to Reduce Surface Water Runoff and Improve Surface Water Quality in the Indian River Area.	Co-PI
2000-2004	\$33,570	St John River Water Management District (Matching)	Implementation and Demonstration of Best Management Practices (BMPs) For Citrus and Vegetable Crops to Reduce Surface Water Runoff and Improve Surface Water Quality in the Indian River Area.	Co-PI
2000 - 2004	\$16,700	South Florida Water Management Districts (Matching)	Implementation of Citrus Agriculture Nutrient Best Management Practices in the Indian River area.	Co-PI

TEACHING EXPERIENCE:

Serve as graduate faculty at the University of Florida since 2002.

A. The Courses taught:

a. Undergraduate level:

ALS 3133 Agriculture and Environmental Quality: Every Spring Semester since 2005.

SWS 3022L Soil Science Laboratory
Every Spring Semester since 2004

b. Graduate level:

SWS 6134 Soil Quality: Even Fall Semester since 2005

B. Postdoctoral Fellows, Visiting Scholars, and Graduate Student Supervision:

a. M.S. Graduate Students:

Chair:

Wen Gu	2010-12	Soil and Water Science	On-going
Klink K. Joseph	2010-13	Environmental Science	On-going
James H. Lindsay	2010-13	Environmental Science	On-going
Cheryl Dunne	2009-13	Environmental Science	On-going
Ellen M. Bourne	2009-13	Environmental Science	On-going
John C. Katsantonis	2007-13	Environmental Science	On-going

Committee:

Kristen Helseth	2012-14	Environmental Horticulture	On-going
Nicole Flowers	2010-13	Environmental Science	On-going
Rubin Koch	2008-11	Environmental Science	Graduated
Sean Fromang	2008-11	Environmental Science	Graduated
Louis Philor	2009-11	Environmental Science	Graduated
Christin Campbell	2007-10	Environmental Science	Graduated
David Mahnken	2006-08	Environmental Science	Graduated
Richard Yudin	2005-07	Environmental Science	Graduated
Jeanna D. Ragsdale	2004-06	Soil Science	Graduated
Laura Parkel	2004-06	Environmental Science	Graduated

b. Ph.D. Graduate Students:

Chair:

Santanu Bakshi	2009-2013	Soil Science	On-going
Jinghua Fan	2006-10	Soil Science	Graduated
Qin Lu	2005-09	Soil Science	Graduated

Committee:

Eduardo Chavez	2012-16	Soil Science	On-going
Ramona Smith	2005-13	Soil Science	On-going

c. Co-chair/Committee of Graduate Students abroad:

Eloise Mello Viana	2009-12	Soil Science	University of São Paulo, Brazil
Alexandre Merlin	2009-12	Soil Science	São Paulo State University, Brazil
Thiago A. Nogueira	2008-11	Soil Science	University of São Paulo, Brazil
Bruno F Pereira	2007-10	Soil Science	University of São Paulo, Brazil (graduated)
Frederico C Vieira	2005-08	Soil Science,	Federal University of Rio Grande do Sul,

Brazil (Graduated)

Shentu Jiali	2004-08	Soil Science,	Zhejiang University (graduated)
Jin Yande	2004-07	Soil Science,	Zhejiang University (graduated)
Xiong Jibing	2004-07	Soil Science,	Zhejiang University (graduated)
Sun Quan	2003-06	Soil Science,	Zhejiang University (graduated)
JinyanYang	2003-06	Soil Science,	Zhejiang University (graduated)

c. Postdoctoral Fellows and Visiting Scientists:

Michele Rinaldi	Visiting Scientist	Environ. Ecology	3/2012-present
Suli Li	Visiting Scientist	Environ. Ecology	2/2012-present
Zhigang Li	Visiting Scientist	Environ. Ecology	2/2012-present
Shengke Tian	Postdoctoral Scientist	Environ. Physiology	8/2010-1/2012
Yuangen Yang	Postdoctoral Scientist	Soil Biogeochemistry	9/2004-3/2012
Yuhua Zhao	Visiting Scientist	Soil Microbiology	12/2010-2/2011
Yunlong Liu	Visiting Scientist	Soil Geography	5/2009-5/2010
Xuxia Zhou	Postdoctoral Scientist	Molecular Biology	5/2009-4/2010
Zhanbei Liang	Postdoctoral Scientist	Soil Microbiology	5/2008-8/2010
Yanbo Wang	Postdoctoral Scientist	Aquatic Science	6/2008-4/2010
Wenrong Chen	Postdoctoral Scientist	Environ. Ecology	2007-2008
Mohammad Iqbal Lone	Visiting Scientist	Environ. Ecology	2007-2008
Jinyan Yang	Postdoctoral Scientist	Environ. Chemistry	2006-2007
Guochao Chen	Postdoctoral Scientist	Environ. Chemistry	2005-2007
Shen Yu	Postdoctoral Scientist	Environ. Chemistry	2005-2007
Huaiying Yao	Postdoctoral Scientist	Environ. Chemistry	2005-2006
Jun Lu	Visiting Scientist	Soil Physics	2004-2005
Mingkui Zhang	Postdoctoral Scientist	Soil Chemistry	2003-2006
Mustafa Elrasgidi	Postdoctoral Scientist	Soil Chemistry	2000-2001
Yiping Xia	Visiting Scientist	Environ. Horticulture	2003-04

PROFESSIONAL SERVICES FOR SCHOLARLY JOURNALS AND FUNDING AGENCIES:**B. Editorial Board for Academic Journals**

International Scholar Research Network Soil Science
 Communications in Soil Science and Plant Analysis

C. Reviewer for Academic Journals

Environmental Science and Technology
 Soil Science Society of America Journal
 Journal of Environmental Quality
 Environmental Pollution
 Biogeochemistry
 Chemosphere
 Environmental Science and Pollution Research
 Soil Science
 Plant and Soil
 Journal of Soil and Water Conservation
 Journal of Agricultural and Food Chemistry

Agriculture, Ecosystems and Environment
Geoderma
Environmental Toxicology and Chemistry
Australian Journal of Agricultural Research
Australian Journal of Soil Research
Environmental Toxicology
Waste Management
Journal of Plant Nutrition
Journal of Soil Science and Plant Nutrition
Science of the Total Environment
Water, Air and Soil Pollution
International Journal of Agricultural Biology
Scientia Horticulturae
Aquaculture

B. Reviewer for Books and Book Chapters

Springer Publishers

C. Reviewer for Grant Proposal of Funding Agencies

USDA Small Business Initiative Research (SBIR) Program
FORMAS, Sweden
International Foundation for Science, Sweden
Agriculture and Agri-Food, Canada
The PLANT-KBBE, European Union
Romania National Research Council
Qatar National Research Council
National Natural Science Foundation of China

PUBLICATIONS:

A. Books Edited:

Wilson, M. J., **Z. L. He**, and X. E. Yang (eds). **The Red Soils of China: Their Nature, Management and Utilization.** Kluwer Academic Publishers, Dordrecht, Netherlands, May 2004, ISBN:1-4020-2137-2, Pp 416, Hardbound. E-book ISBN: 1-4020-2138-0

B. Books, Contributor of Chapters:

He, Z. L., J. Shentu, and X. E. Yang. 2010. Chapter 20. Manganese and Selenium. P 481-496 In: Trace Elements in Soils. (P. Hooda Ed.), Wiley-Blackwell Publishers, London ISBN:978-1-4051-6037-7

He, Z. L. M. K. Zhang, and M. J. Wilson. 2004. Distribution, properties, and utilization of red soil resources in China. P.29-33 In: The Red Soils of China: Their Nature, Management and Utilization. M J Wilson, Z L He, X E Yang (Eds.), Kluwer Academic Publishers, Dordrecht, Netherlands.

- He, Z. L.,** M. K. Zhang, and M. J. Wilson. Chemical soil constraints to crop production in the red soils area of Southern China. P.103-109 In: *The Red Soils of China: Their Nature, Management and Utilization*. M J Wilson, Z L He, X E Yang (Eds.), Kluwer Academic Publishers, Dordrecht, Netherlands.
- He, Z. L.,** M. K. Zhang, and M. J. Wilson. 2004. Challenges in the management and utilization of red soils. P163-169. In: *The Red Soils of China: Their Nature, Management and Utilization*. M J Wilson, Z L He, X E Yang (Eds.), Kluwer Academic Publishers, Dordrecht, Netherlands.
- Li, Y. C., M. Zhang, P. J. Stoffella, **Z. L. He**, and H. Bryan. 2003. Influence of coal ash/organic waste application on distribution of trace metals in soil, plant, and Water. Pp 251-264 In: *Chemistry of Trace Elements in Fly Ash* (Sajwan Kenneth S., Alva A. K. and Keefer R. F. eds.) Kluwer Academic Publishers, Dordrecht, Netherlands.
- He, Z. L.,** X. E. Yang, H. Yao, and G. Chen, D. V. Calvert, and V. C. Baligar. 2001. Microbiological and biochemical indices for assessing acid soil quality. P 114-155 In: *Integrated Management and Use of Acid Soils for Sustainable Production*, (Farina, M, De villiers, M, Barnard, R, and Walters M. eds.), ARC, South Africa.
- He, Z. L.,** X. E. Yang, B. A. Kahn, P. J. Stoffella, and D. V. Calvert. 2001. Plant nutrition benefits of phosphorus, potassium, calcium, magnesium, and micronutrients from compost utilization. Chapter 15. P. 307 - 317. In: Stoffella, P. J. and B. A. Kahn (Eds.), *Compost Utilization in Horticultural Cropping Systems*. CRC Press, Boca Raton, FL.
- Zhang, M., **Z. L. He**, and M. J. Wilson. 1997. Development of soil profile in relation to mineral transformation in subtropical hilly region. P.122-128 In Huang C et al. (Eds) *Soil Chemistry Research and Application*. Environmental Science Publisher, Beijing.
- Yang Y., K. N.Yuan, **He Z. L.**, and Zhang Mingkui.1997. Distribution and availability of rare earth elements in Zhejiang red soils. P.88-92 In Huang C et al. (Eds) *Soil Chemistry Research and Application*. Environmental Science Publisher, Beijing.
- D. Refereed Journal Research Articles:**
- Pereira, B. F. F., Z. L. He, P. J. Stoffella, C. R. Montes, A. J. Melfi, and V. C. Baligar. 2012. Nutrients and nonessential elements in soil after 11 years of wastewater irrigation. *J. Environ. Qual.* 41: 920-927.
- Yang, Y. G., Z. L. He, X. E. Yang, J. Fan, P. J. Stoffella, and C. Brittain. 2012. Dolomite phosphate rock-based slow release fertilizer for agriculture and landscapes. *Commun Soil Sci. Plant Anal.* 43 (9): 1344-1362.
- Wang, K, Z. Q. Zhu, H.G. Huang, T. Q. Li, X. E. Yang, A. Alva, and Z. L.He. 2012.

- Interactive effects of Cd and PAHs on removal of Cd and PAHs in co-contaminated soil with plantation of hyperaccumulator plant *Sedum alfredii*. *J. Soils and Sediment* 12: 556-564.
- Tian, S., L. Lu, J. Labavitch, X. E. Yang, Z. L. He, H. Hu, R. Sarangi, M. Newville, J. Commisso, and P. Brown. 2012. Cellular sequestration of cadmium in the hyperaccumulator plant species *Sedum alfredii*. *Plant Physiol.* 157: 1914-1925.
- Zhao, F. L., S. Xi, X. E. Yang, W. Yang, J. Li, B. Gu, and Z. L. He. 2012. Purifying eutrophic river water by integrated floating island systems. *Ecological Engineering* 40: 53-60.
- Li, H., H. Hao, X. E. Yang, L. Xiang, F. L. Zhao, H. Jiang, and Z. L. He. 2012. Purification of refinery wastewater by different perennial grasses growing in floating-bed. *J. Plant Nutrition* 35: 93-110.
- Fan, J., Z. L. He, Y. G. Yang, L. Q. Ma, and P. J. Stoffella. 2012. Calcium water treatment residue reduces copper phytotoxicity in contaminated sandy soils. *J. Hazardous Materials* 199-200: 375-382.
- Liang, Z., Z. L. He, P. J. Stoffella, and C. A. Powell. 2012. High diversity and differential persistence of fecal Bacteroidales population spiked in freshwater microcosm. *Water Res.* 46: 247-257.
- Huang, H., N. Yu, L. Wang, D. K. Gupta, Z. L. He, K. Wang, Z. Q. Zhu, X. C. Yan, T. Q. Li, and X. E. Yang. 2012. The phytoremediation potential of bioenergy crop *Ricinus communis* for DDTs and cadmium co-contaminated polluted soil. *Bioresource Technol.* 102 (23): 11034-11038.
- Shohag, M. J. I., Y. Wei, N. Yu, J. Zhang, K. Wang, J. Patring, Z. L. He, and X. E. Yang. 2011. Natural Variation of Folate Content and Composition in Spinach (*Spinacia oleracea*) Germplasm. *J. Agric. Food Chem.* 59 (23): 12520-12526.
- Pereira, B. F. F., Z. L. He, P. J. Stoffella, and A. J. Melfi. 2011. Irrigation with reclaimed wastewater affects citrus nutrition. *J. Agric. Water. Management* 98: 1828-1833.
- Zhang, M. Q., C. A. Powell, L. Zhou, Z. L. He, E. Stover, and Y. P. Duan. 2011. Effective chemical compounds against '*Candidatus Liberibacter asiaticus*', the citrus huanglongbing bacterium. *Phytopathology* 101: 1097-1103.
- Lu, Q., Z. L. He, D. A. Graetz, P. J. Stoffella, and X. E. Yang. 2011. Uptake and distribution of metals by water lettuce (*Pistia stratiotes* L.). *Environ. Sci. Pollution Res.* 18: 978-986.
- Fan, J., Z. L. He, L. Q. Ma, X. E. Yang, and P. J. Stoffella. 2011. Immobilization of Cu in

- contaminated sandy soils using Calcium-Water Treatment Residues. *J. Hazardous Materials* 189: 710-718.
- Fan, J., Z. L. He, L. Q. Ma, and P. J. Stoffella. 2011. Accumulation and availability of copper in citrus-grove soils as affected by fungicide application. *J. Soil and Sediments* 11: 639-648.
- Pereira, B. F. F., Z. L. He, M. S. Silva, U. Herpin, S. F. Nogueira, C. R. Montes, and A. J. Melfi. 2011. Reclaimed wastewater irrigation: effects on soil and citrus nutrition under tropical conditions. *J. Hazardous Materials* 192: 54-61.
- Liang, Z. , Z. L. He, C. A. Powell, and P. J. Stoffella. 2011. Survival of *Escherichia coli* in soil with modified microbial community composition. *Soil Biol. Biochem.* 43: 1591-1599.
- Zhou, X., Z. L. He, Z. B. Liang, P. J. Stoffella, J. Fan, Y. G. Yang, and C. A. Powell. 2011. Long-term use of copper-containing fungicide affects microbial properties of citrus grove soils. *Soil Sci. Soc. Am. J.* 75: 898-906.
- Tian, S. K., L.L. Lu, X.E. Yang, H. Huang, P. Brown, and Z. L. He. 2011. The impact of EDTA on lead distribution and speciation in the accumulator *Sedum alfredii* by synchrotron X-ray investigation. *Environmental Pollution* 159:782-788.
- Tian, S.K., L. L. Lu, K. Wang, X. E. Yang, and Z. L. He. 2011. Calcium protects roots of *Sedum alfredii* H. against cadmium-induced oxidative stress. *Chemosphere* 84: 63-69.
- Li, H, H. P. Zhao, H. L. Hao, J. Liang, F. L. Zhao, L. C. Xiang, X. E. Yang, Z. L. He, and P. J. Stoffella. 2011. Enhancement of nutrient removal from eutrophic water by a plant-microorganism combined system. *Environmental Engineering Science* 28:543-553.
- Zhu, E. D. Liu, J. G. Li, T. Q. Li, X. E. Yang, Z. L. He, and P. J. Stoffella. 2010. Effect of nitrogen fertilizer on growth and cadmium accumulation in *sedum alfredii* Hance. *J. Plant Nutrition.* 34 (1):115-126.
- Yang, Y.G., Z. L. He, Y. Lin, and P. J. Stoffella. 2010. Phosphorus availability in sediments from a tidal river receiving runoff water from agricultural fields. *J. Agric. Water Management* 97: 1722-1730.
- Wu, C. Y., L. L. Lu, X. E. Yang, Y. Feng, Y. Y. Wei, H. L. Hao, P. J. Stoffella, and Z. L. He. 2010. Uptake, translocation, and remobilization of zinc absorption at different growth stage by rice genotypes of different Zn densities. *J. Agric. Food Chem.* 58: 6767-6773.
- Yang, X. E., Y. E. Chao, H. B. Ye, Z. L. He and P. J. Stoffella. 2010. Zinc and lead accumulation by two contrasting ecotypes of *sedum alfredii* Hance at different zinc/lead

complex levels. *Commun Soil Sci. Plant Anal.*

Chen, W.R., Z.L. He, X.E. Yang, S. Mishra and P. J. Stoffella. 2010. Chlorine nutrition in higher plants. **J. Plant Nutrition** 33:943–952.

Nogueira, T.A.R., W.J. DeMelo, I.M. Fonseca, M.O Marques, and Z. L. He. 2010. Barium uptake by maize plants as affected by sewage sludge in a long-term field study. *J. Hazardous Materials* 181: 1148-1157.

Lin, Y.J., Z.L. He, E. N. Roskopf, K. L. Conn, C.A. Powell, and G. Lazarovits. 2010. A nylon membrane bag assay for determination of the effect of chemicals on soilborne plant pathogens in soil. **Plant Disease** 94 (2): 201-206.

Lu, Q., Z. L. He, D. A. Graetz, P. J. Stoffella , and X. E. Yang. 2009. Phytoremediation to remove nutrients and improve eutrophic stormwaters using water lettuce (*Pistia stratiotes* L.). **Environ. Sci. Pollution Res.** 17: 84-96.

Li, T.Q., X. E. Yang, L.L. Lu, E. Islam and Z. L. He. 2009. Effects of zinc and cadmium interactions on root morphology and metal translocation in a hyperaccumulating species under hydroponic conditions. **J. Hazardous Materials** 169 (1-3): 734-741.

Jin, X.F., D. Liu, E. Islam, Q. Mahmood, X. E. Yang, Z. L. He, and P. J. Stoffella. 2009. Effects of zinc on root morphology and antioxidant adaptations of cadmium-treated sedum *alfredii* H. **Journal of Plant Nutrition** 32 (10): 1642-1656.

Vieira, F. C. B. Z. L. He, C. Wilson, and C. Bayer 2009. Speciation of aluminum in solution of an acidic sandy soil amended with organic composts. **Commun Soil Sci. Plant Anal.** 40: 2094-2110.

Lu, L.L., S. K. Tian, X.E. Yang, T.Q. Li and Z.L. He. 2009. Cadmium uptake and xylem loading are active processes in the hyperaccumulator sedum *alfredii*. *J. Plant Physiol.* 166(6): 579-587.

Yang, Y.G., Z.L. He , Y.J. Lin¹, E.J. Phlips, P. J. Stoffella , and C. A. Powell. 2009 (January). Temporal and spatial variations of Cu, Cd, Pb, and Zn in Ten Mile Creek in South Florida, USA. **J. Water Environ. Res.** 81: 40-50.

Chen, W.R., Z. L. He, and X. E. Yang. 2009. Zinc efficiency is correlated with root morphology, ultrastructure and antioxidative enzymes in rice. **J. Plant Nutri.** 32: 287-305.

Wang, Y. B. and Z. L. He. 2009. Effect of probiotics on alkaline phosphatase activity and nutrient level in sediment of shrimp, *Penaeus vannamei*, ponds. **Aquaculture** 287 (1 & 2): 94-97.

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