

CURRICULUM VITAE

JAMES A. IPPOLITO

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EDUCATIONAL BACKGROUND:

Ph.D., Environmental Soil Quality/Chemistry, Colorado State University, **December 2001**.
Dissertation Title: Phosphorus adsorption/desorption of water treatment residuals and biosolids co-application effects. 108 pp.

M.S., Soil Chemistry/Fertility, Colorado State University, **August 1992**.
Thesis Title: Determination of salinity threshold levels for selected grass and legume forage species. 95 pp.

B.S., Plant Science, University of Delaware, **May 1989**.

PROFESSIONAL EMPLOYMENT:

2007-present: Research Soil Scientist, USDA-ARS-Northwest Irrigation and Soils Research Laboratory, Kimberly, ID.

2002-2007: Assistant Professor, Environmental Soil Quality/Chemistry, Department of Soil and Crop Sciences, Colorado State University, Fort Collins, CO.

1991-2002: Research Associate, Department of Soil and Crop Sciences, Colorado State University, Fort Collins, CO.

1989-1991: Masters candidate, Research Assistant, Department of Soil and Crop Sciences, Colorado State University. Fort Collins, CO.

AREAS OF INTEREST

Nutrient and trace element biogeochemical cycling; soil and water quality.

REFEREED/NON-REFEREED PUBLICATIONS

Over 100 refereed and non-refereed publications.

Refereed Publications relative to biosolids and other residuals land application:

- Barbarick, K.A., J.A. Ippolito, J. McDaniel, N.C. Hansen, and G.A. Peterson. 2012. Biosolids application to no-till dryland agroecosystems. *Agric. Ecosys. Environ.* 150:72-81.
- Meiman, P.J., N.R. Davis, J.E. Brummer, and J.A. Ippolito. 2011. Riparian shrub metal concentrations and growth in amended fluvial mine tailings. Accepted in *Water, Air, Soil Pollut.*
- Ippolito, J.A., K.A. Barbarick, and H.A. Elliott. 2011. Drinking Water Treatment Residuals: A Review of Recent Uses. *J. Environ. Qual.* 40:1-12.
- Barbarick, K.A., J.A. Ippolito, and J. McDaniel. 2010. Fifteen years of wheat yield, N uptake, and soil nitrate-N dynamics in a biosolids amended agroecosystem. *Agric. Ecosys. Environ.* 139:116-120.
- Ippolito, J.A., K.A. Barbarick, M.W. Paschke, and R.B. Brobst. 2010. Composted biosolids applications effect semi-arid grassland soils and plants. *J. Environ. Management.* 91:1123-1130.
- Ippolito, J.A., K.A. Barbarick, M.E. Stromberger, M.W. Paschke, and R.B. Brobst. 2009. Water treatment residuals and biosolids long-term co-applications effects to semi-arid grassland soils and vegetation. *Soil Sci. Soc. Am. J.* 73:1880-1889.
- Ippolito, J.A., K.G. Scheckel, and K.A. Barbarick. 2009. Selenium adsorption to aluminum-based water treatment residuals. *J. Colloid Interf. Sci.* 338:48-55.
- Ippolito, J.A., K.A. Barbarick, R.B. Brobst. 2009. Fate of biosolids Cu and Zn in a semi-arid grassland. *Agric., Ecosys., Environ.* 131:325-332.
- Barbarick, K.A., and J.A. Ippolito. 2009. Continuous biosolids application affects wheat grain elemental concentrations in a dryland-wheat agroecosystem. *Agric. Ecosys. Environ.* 129:340-343.
- Ippolito, J.A., and K.A. Barbarick. 2008. Fate of biosolids trace metals in a dryland wheat agroecosystem. *J. Environ. Qual.* 37:2135-2144.
- Bayley, R.M., J.A. Ippolito, M.E. Stromberger, K.A. Barbarick, and M.W. Paschke. 2008. Water treatment residuals and biosolids co-applications affect the activity of phosphatases in a semi-arid rangeland soil. *Comm. Soil Sci. Plant Anal.* 39:2812-2826.
- Bayley, R.M., J.A. Ippolito, M.E. Stromberger, K.A. Barbarick, and M.W. Paschke. 2008. Water treatment residuals and biosolids coapplications affect semi-arid rangeland phosphorus cycling. *Soil Sci. Soc. Am. J.* 72:711-719.
- Barbarick, K.A., and J.A. Ippolito. 2008. Predicting soil-extractable zinc, phosphorus, copper, and iron in a biosolids-amended dryland-wheat agroecosystem. *Soil Sci.* 173:175-185.
- Barbarick, K.A., and J.A. Ippolito. 2007. Dryland wheat nutrient assessment for 12 years of biosolids applications. *Agron. J.* 99:715-722.

- Ippolito, J.A., K.A. Barbarick, and K.L. Norvell. 2007. Biosolids impact soil phosphorus recovery, fractionation, and potential environmental risk. *J. Environ. Qual.* 36:764-772.
- Ippolito, J.A., and K.A. Barbarick. 2006. Biosolids affect soil Ba in a dryland wheat agroecosystem. *J. Environ. Qual.* 35:2333-2341.
- Ippolito, J.A., and K.A. Barbarick. 2006. Phosphorus Extraction Methods from Water Treatment Residual-Amended Soil. *Comm. Soil Sci. Plant Anal.* 37:859-870.
- Sullivan, T.S., M.E. Stromberger, M.W. Paschke, and J.A. Ippolito. 2005. Long-term impacts of infrequent biosolids application on chemical and microbial properties of a semi-arid rangeland soil. *Biol. Fert. Soils.* 42:258-266.
- Barbarick, K.A., and J.A. Ippolito. 2003. Termination of Sewage Biosolids Application Affects Wheat Yield and Other Agronomic Characteristics. *Agronomy Journal.* 95:1288-1294.
- Ippolito, J.A., K.A. Barbarick, D.M. Heil, J.P. Chandler, and E.F. Redente. 2003. Phosphorus retention mechanisms of a water treatment residual. *J. Environ. Qual.* 32:1857-1864.
- Ippolito, J.A., K.A. Barbarick, and E.F. Redente. 2002. Combinations of water treatment residuals and biosolids affect on two range grasses. *Comm. Soil Sci. Plant Anal.* 33(5&6):831-844.
- Ippolito, J.A., and K.A. Barbarick. 2001. Environmental management of biosolids and water treatment residuals. *WEF/AWWA/CWEA Joint Residuals and Biosolids Management Conference Proceedings Biosolids 2001.* Feb. 21-25. San Diego, CA.
- Stowe, D.W., C.J. Caudill, J.E. Tallent Jr., K.A. Barbarick, and J.A. Ippolito. Long term biosolids research on dryland wheat farms. *WEF/AWWA/CWEA Joint Residuals and Biosolids Management Conference Proceedings Biosolids 2001.* Feb. 21-25. San Diego, CA.
- Barbarick, K.A., and J.A. Ippolito. 2000. Nitrogen fertilizer equivalency of sewage biosolids applied to winter wheat. *J. Environ. Qual.* 29:1345-1351.
- Ippolito, J.A., K.A. Barbarick, and R.F. Redente. 1999. Co-application effects of water treatment residuals and biosolids on two range grasses. *J. Environ. Qual.* 28:1644-1650.
- Barbarick, K.A., J.A. Ippolito, and D.G. Westfall. 1998. Extractable trace elements in the soil profile after years of biosolids application. *J. Environ. Qual.* 27:801-805.
- Barbarick, K.A., J.A. Ippolito, and D.G. Westfall. 1997. Sewage biosolids cumulative effects on extractable-soil and grain elemental concentrations. *J. Environ. Qual.* 26:1696-1702.
- Barbarick, K.A., J.A. Ippolito, and D.G. Westfall. 1996. Distribution and mineralization of biosolids nitrogen applied to dryland wheat. *J. Environ. Qual.* 25:796-801.
- Barbarick, K.A., J.A. Ippolito, and D.G. Westfall. 1995. Biosolids effect on phosphorus, copper, zinc, nickel, and molybdenum concentrations in dryland wheat. *J. Environ. Qual.* 24:608-611.

PRESENTATIONS, SEMINARS, AND SYMPOSIA:

~100 presentations at local, region, national, and international venues.

TEACHING EXPERIENCE:

18 years of teaching experience at Colorado State University and Front Range Community College – Larimer Co. Campus.

SUBMITTED/ACCEPTED RESEARCH PROPOSALS:

Have received over \$1,000,000 in research grants focused on land application of biosolids, drinking water treatment residuals, and zeolites.

OUTSTANDING ACHIEVEMENTS/RECOGNITIONS:

US EPA National Clean Water Act Recognition Award for Outstanding Biosolids Research, 2005;
Rocky Mountain Water Environment Association State of Colorado Analytical Award of Merit, 2005;
First place in the EPA 2003 Clean Water Act National Recognition Awards for Biosolids Exemplary Management for Operating Projects > 5 DMTD;
Joan Gaynor Kuder Colorado State University Employee Scholarship Award, 2001;
Charles N. Shepardson Graduate Student Teaching Award, 2000;
Association of Metropolitan Sewerage Agencies National Environmental Achievement Award in Research & Technology, 2000;
US EPA Wastewater Management Research Excellence Award, First Place, 1999;
Rocky Mountain Water Environment Association - State of Colorado Biosolids Management Merit award, 1998;
Hunter Follett Graduate Student Award, 1998; George M. Worrilow Scholarship for Academic Performance, 1989; Agricultural College Council Recognition Award, 1988; Outstanding College Students of America, 1987 and 1988.
