

# Action in Agroforestry

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Michael Gold and Taylor Wanbaugh, editors

## Yield Differences Influenced by Distance from Riparian Buffers and Conservation Reserve Program

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Ranjith P. Udawatta, Clark J. Gantzer, Timothy M. Reinbottc, Ray L. Wright and Robert A. Pierce. 2016. Yield Differences Influenced by Distance from Riparian Buffers and Conservation Reserve Program. J. Agron. 108 (2): 647-655

Riparian buffers (RB) and conservation reserve program (CRP) land help improve ecosystem services such as soil and water quality while providing additional farm income. However, these practices compete for resources with annual grain crops.

In the March-April 2016 issue of Agronomy Journal, researchers compared corn-soybean yields from 2007 to 2010 as influenced by RB, CRP, and RB with root pruning (RRP). The goal of the study was to understand the effects of distance from cropbuffer interface on crop yields.

The researchers observed reduced corn yields near the cropbuffer interface for RB and RRP treatments. RB and CRP had no effect on soybean. Crop yields decreased with distance from the interface as the buffer matured. The increased yield for both crops from the crop-buffer interface for the RRP treatment implies the importance of tree pruning and/or selective removal to reduce the shading effect on crop yields.

Landowners may change cropping and management options to avoid yield decreases near the buffers. Results suggest selection of a less sensitive crop such as soybean for use with RB in the first 9 m (12 rows), or use of CRP to generate additional income and ecosystem services to offset any loss in grain crop yields.



## Center for Agroforestry Graduates Four Online MS Students -- Spring Semester, 2016.

Four working professionals with very diverse backgrounds, completed their online master's degrees in agroforestry at the close of the Spring Semester, 2016.

**Donald Whittaker,** J.D. Advisor: Dr. Jose. Start: Summer 2014 - Graduated May 2016. MS. Project Title "A modest proposal for enhancing water quality in Iowa: Amending Iowa's conservation easement statute to create a registry."

**Alex McCormick,** Sales Arborist at the Davey Tree Expert Company of Canada, Ltd. Advisor: Dr. Jose. Start: Fall 2014 - Graduated May 2016. MS. Project Title "An Analysis of the Potential for the Establishment of Mixed Riparian Forest Buffer and Short Rotation Woody Biomass Systems in the Alberta Parkland Natural Region."

**Michael Borucke,** Research Scientist at the Global Footprint Network. Advisor: Dr. Jose. Start: Fall 2014 - Graduated May 2016. MS. Project Title "Spatially-Explicit Decision Support System for Tree Selection on U.S. Farmland."

**Jonah Long,** Arborist at Longridge Tree Care, Saint Charles, Missouri. Advisor: Dr. Jose. Start: Spring 2015 - Graduated May 2016. MS. Project Title "Fire, Forests, and Forage in the Missouri Ozarks."

#### **KUDOS**

Dr. Sagar Gupta, a Postdoc working with Dr. Kattesh Katti and Dr. Chung-Ho Lin, has also completed his MBA degree and received the "Outstanding Business Generalist" award in the MU Crosby MBA Program.

Dr. Gupta was also named in Poets and Quants Class of 2016: The Best & Brightest MBAs (50 of them were named): http://poetsandquants.com/2016/05/14/2016-best-mbas-sagar-gupta-missouri-trulaske/.

#### **New UMCA Communications Intern**

After serving a year as the Communications Intern at UMCA, Taylor Wanbaugh has graduated from the University of Missouri's School of Journalism with an emphasis in Magazine Writing. She's off to Dallas to work as a Consulting Writer at Partner Comm.

Hylee Won will be taking as the new UMCA Communications Intern. Hyelee is a junior at the University of Missouri, studying journalism with an emphasis on strategic communication. Hyelee interned for Inside Columbia Magazine last summer as an editorial intern. She currently has two jobs on campus – one as a research assistant in a crop physiology lab and the second as a student photographer for Student Affairs. Hyelee will be an advertising intern for Shelter Insurance this summer before she begins her work at the Center for Agroforestry.

Hyelee was born in South Korea and lived in Seoul until she came to Columbia with her parents during elementary school, and she has been living here since. She is a Rock Bridge High School 'Bruin' who graduated in 2013. In her spare time, Hyelee likes to journal, go hiking and watch documentaries.



#### **Upcoming Events**

#### Agroforestry and Woodland Management for Small Farms

May 25-26, 2016

Lincoln University, Alan T. Busby & Carver Farms Jefferson City, Mo.

For more information, email Ajay Sharma at sharmaA@lincolnU.edu

### Alan T. Busby Farm Organic Agriculture Field Day

June 9, 2016

Alan T. Busby Farm

Jefferson City, Mo.

http://www.lincolnu.edu/web/cooperative-re-search/busby-farm-ag-field-day

#### **Chestnut Growers of America Conference**

June 10-12, 2016

MU Anheuser-Busch Natural Resources Building Columbia, Mo.

http://www.chestnutgrowers.org/

#### **MOSAF Summer Workshop**

Field Tour - June 14-15; Workshop - June 16, 2016

Rockwoods Reservation, Wildwood, Mo. Registration deadline, Tuesday May 31 Frances Main, MOSAF Treasurer, 417-895-6880 http://www.mosaf.net/

#### **Elderberry Workshop & Field Tour**

June 16-18, 2016
MU Bradford Research Center
Columbia, Mo.
Early registration ends May 1st
https://2015elderberryworkshop.wordpress.com/

#### 4th Annual Agroforestry Academy

July 25-29, 2016

Columbia, Mo.

Registration ends May 1. Limited scholarships available for military veterans.

http://www.centerforagroforestry.org/acade-my/2016/RegistrationBrochure.pdf