

Mary T. Saunders Bulan, PhD

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Education

- Ph.D. University of Wisconsin-Madison. Agronomy. 2014. Dissertation Title: *A crop in context: Buckwheat (Fagopyrum spp.) farming systems in Yunnan, China and Wisconsin, USA.* Dissertation advisors: David Stoltenberg and Joshua Posner.
- B.A Brown University. International Relations. 2002

Professional Appointments

- 2016-present. Professor of Sustainable Agriculture, Environmental Studies Department, Warren Wilson College
- 2016-present. Sustainable Agriculture Programs Director, Warren Wilson College
- 2014 - 2016. Assistant Professor of Sustainable Agricultural Enterprise, Unity College
- 2014 - 2016. Director, Half Moon Gardens & McKay Agricultural Research Station, Unity College

Research

- Organic seed production for the Northeast USA. 2015-2016
- Landscape genetics and agroecology of *Fagopyrum tataricum* (tartary buckwheat) landraces in Yunnan, China. 2008-2014
- Buckwheat cover crops on Wisconsin organic vegetable farms: grower perspective, weed ecology, and reduced tillage management. 2010-2012

Farming

- Director, McKay Farm and Research Station. Developed and executed strategic business plan for new Unity College farm property. Directly managed operations. 2014-2016
- Oversaw full and part-time staff and student workers. Developed community educational and and business partnerships. 2005-2006

- Owner and Farmer. Scratch Farm, Cranston RI.
- Community Supported Agriculture Program Coordinator. Southside Community Land Trust's Urban Edge Farm. AmeriCorps VISTA. Providence RI. 2004
- WWOOF volunteer farm worker, British Columbia. 2002
- Laborer at family rice paddy and vegetable garden. Sarawak, Malaysia. 1998

Teaching/Mentoring

- Soil Science, Introduction to Sustainable Agriculture, Sustainable Farm Management, Agroecology. Warren Wilson College. 2016-present
- Trained staff and work study students in vegetable, flower, and seedling production. Unity College, McKay Farm and Research Station. 2014-2016
- Advised undergraduate students in Sustainable Agriculture major. Unity College. 2014-2016
- Ethnobiology, Honors Seminar. Unity College Spring 2016
- Sustainable Agriculture Project. Unity College. Spring 2015
- Cold Season Food Production. Unity College. Fall 2014
- Agronomy Department Honorary Teaching Fellow. Cropping Systems of the Tropics. UW-Madison. Spring 2013
- Teaching Assistant. Introductory Agronomy Laboratory. UW-Madison. Fall 2012
- Teaching Assistant. Ecology, Evolution, & Genetics Laboratory. UW-Madison. Fall 2009
- Instructed volunteers in organic farming methods. Cranston, RI. 2004-2006

Publications

- Saunders Bulan, M.T., Posner, J.L., Peng, D., Emshwiller, E., Wang, X., Li, J., Stoltenberg, D., and Stoecker, R. (2017). Old Crop, New Society: Persistence and Change of Tartary Buckwheat Farming in Yunnan, China. *Hum Ecol* 45, 37–51.
- Balda, J.B., Saunders Bulan, M.T., and Desmarais, W. (2017). Igniting Leadership: Ritual and Interaction within the AI Summit. In *Developing Leaders for Positive Organizing*, B. Vogel, R. Koonce, and P. Robinson, eds. (Emerald Group Publishing) (*forthcoming*)
- Saunders Bulan M, Wu J, Emshwiller E, Berres ME, Posner JL, Peng D, et al. Social and environmental influences on tartary buckwheat (*Fagopyrum tataricum* Gaertn.) varietal diversity in Yunnan, China. *Genet Resour Crop Evol*. 2015 Oct 24;1–13.
- Saunders Bulan MT, Stoltenberg DE, Posner JL. Buckwheat Species as Summer Cover Crops for Weed Suppression in No-Tillage Vegetable Cropping Systems. *Weed Science*. 2015 Mar 16;63(3):690–702.
- Saunders, M. (2012). Tartary buckwheat less effective than common buckwheat as a summer cover crop in southern Wisconsin. In J. L. Posner & J. L. Hedtcke (Eds.), *The Wisconsin Integrated Cropping Systems Trial 13th Technical Report (2009 & 2010)* (pp. 175–187).

- Saunders, M. (2010). Losing ground: An uncertain future for buckwheat farming in its center of origin. In V. Zotikov & N. Parakhin (Eds.), *Advances in Buckwheat Research - Proceedings from the 11th International Symposium on Buckwheat* (pp. 60-68). Orel, Russia: All-Russia Research Institute of Legumes and Groat Crops.

Selected Presentations

- *Buckwheat cover crops for WI vegetable production.* Poster presentation. Midwest Organic Farming Conference. La Crosse, WI. Feb. 2013
- *Unique cultural and ecological role of tartary buckwheat facilitates genetic resources conservation in Yunnan, China.* Society for Economic Botany 53rd Annual Meeting, Frostburg, MD. Jun. 2012
- *Unique cultural and ecological role of tartary buckwheat facilitates genetic resources conservation in Yunnan, China.* Poster presentation. 25th International Congress for Conservation Biology, Auckland, New Zealand. Dec. 2011
- *Shifting cultivation: The decline of tartary buckwheat farming in its center of origin.* 1st Himalayan Studies Conference, Macalester College, St. Paul, MN. Oct. 2011
- *Investigating in-situ crop genetic resource conservation using landscape genetics.* Poster presentation. 17th International Symposium on Society and Resource Management. Madison, WI. Jun. 2011
- *Cultural influences on crop genetics: Tartary buckwheat and the Yi in Yunnan.* Presentation at the Research Institute of Resource Insects, Chinese Academy of Forestry. Kunming, China. Apr. 2011
- *Seeking buckwheat: An American PhD student's research experience.* Field team presentation at Yunnan University. Kunming, China. (In Chinese). Apr. 2011
- *Losing ground: The decline of buckwheat farming in its center of origin.* Session Co-chair. 11th International Symposium on Buckwheat. Orel, Russia. Jul. 2010
- *Buckwheat cover crop research.* On-site research presentation. Organic Field Day, West Madison Agricultural Research Station. Middleton, WI. Jun. 2010

Selected Grants/Awards

- O.N. Allen Graduate Scholarship. UW-Madison Agronomy Dept. \$500. 2011-2012
- Dible-Terra Scholarship. UW-Madison College of Agriculture and Life Sci. \$500. 2011-2011
- USDA NCR-SARE Graduate Student Research Grant. \$9300. 2010-2012
- NSF Graduate Research Fellow. Three years tuition & stipend. 2009-2013
- NSF Integrated Graduate Education & Research Trainee (IGERT). Two years tuition & stipend. 2007-2010
- NSF IGERT Linkage Grant. \$5000 2010-2011

- NSF GRF International Travel Award. \$1000. 2010
- Foreign Language & Area Studies Fellow. One year tuition & stipend. 2008-2009

Affiliations/Activities

- Core Member, Maine Soil Health Mixed Vegetable Team 2015-2016
- Steering Committee Member, Maine Sustainable Year Round Agriculture Cluster 2014-2016
- Academic Advisor, Maine Sustainable Year Round Agriculture Cluster demonstration sites: Olivia's Garden and Tao Yuan. 2014-2016
- Member, Society for Economic Botany. 2012 -2016
- Member, Open Science Network in Ethnobiology. 2012 -2016
- Agronomy Representative, UW-Madison Plant Sciences Graduate Student Council. 2010
- Volunteer, FairShare CSA Coalition. Madison, WI. 2008-2013
- Conference Volunteer & Participant, Midwest Organic and Sustainable Education Service. La Crosse, WI. 2008-2013
- Farmer and Member, Little City Growers Cooperative. Providence, RI. 2005-2006

Skills and Interests

- Greenhouse and farm management
- Operation of tractors and typical farm equipment
- TIG welding, bicycle mechanics, basic carpentry and mechanical repair
- Software: R; ArcGIS; Microsoft Access, Excel, Powerpoint; Gene Marker; Garage Band; iMovie
- I speak, read, and write Mandarin Chinese. I speak basic Kelabit, a Borneo tribal language.