

OLGA S. WALSH

RANK: Research Associate Professor, Plant Sciences, University of Idaho, Tenured July 1, 2019

CONTACT INFORMATION: Parma R&E Center, Parma, ID; owalsh@uidaho.edu; (208)590-6939

APPOINTMENT: 30% Research, 62% Extension, 3% Teaching and Advising, 5% Service

AREAS OF EXPERTIZE: Soil Fertility, Nutrient and Water Management, and Precision Agriculture

EDUCATION:

Ph.D. Soil Science, 2009, Oklahoma State University, Stillwater, Oklahoma

M.S. Soil Science, 2006, Oklahoma State University, Stillwater, Oklahoma

B.S. Soil Science, 1997, St. Petersburg State University, St. Petersburg, Russia

TEACHING, EXTENSION AND RESEARCH APPOINTMENTS:

2019-current, Research Associate Professor, Cropping Systems Agronomy, University of Idaho

2014-2019, Assistant Extension Professor, Cropping Systems Agronomy, University of Idaho

2010-2014, Assistant Professor, Soil Nutrient Management, Montana State University

2004-2009, Graduate Research Assistant, Precision Nutrient Management, Oklahoma State University

SELECTED COMMITTEE ASSIGNMENTS:

2019-2020, Agronomy Journal, Outstanding Paper Award Committee, **Member**

2019, SSSA, National Student Speech Contest, **Chair**

2018, Golden Opportunity Scholars Institute – Scholar and Mentor Selection, **Chair**

2016-2018, ASA/CSSA/SSSA Early Career Member Committee, **Past Chair**

2017-2018, ASA, Sensor-Based Nutrient Management Community, **Past Chair**

2017, ASA, Sensor-Based Nutrient Management Community, **Chair**

2017, ASA, Innovative Applications of Crop Sensors for Improved Nutrient Management, **Organizer**

2017-2018, CSA, Student Speech Contest, **Committee Member**

2016, ASA, Sensor-Based Nutrient Management Community, **Vice-Chair**

2015-2016, ASA/CSSA/SSSA, National Student Advisory Committee, **ASA Representative**

2015-2016, ASA/CSSA/SSSA, Early Career Member Committee, **Chair**

2015-2017, ASA/CSSA/SSSA, Golden Opportunity Scholars Institute, **ASA Representative**

2015-2020, Golden Opportunity Scholars Institute, **Undergraduate Student Mentor**

2015, ASA/CSSA/SSSA, Student Speech Contest, **Committee Member**

2015-2016, ASA/CSSA/SSSA, Early Career Members, **Chair-Elect**

2014-2016, ASA/CSSA/SSSA, Early Career Members Committee, **CSA Representative**

2014-2016, ASA/CSSA/SSSA, Student Speech Contest Committee, **Member**

2019-2021, WSCS, **President**

2019, WERA-103 Nutrient Management and Water Quality multi-state project, **Chair**

2017, WSCS, **Annual Meeting Host/Organizer**

EDITORIAL EXPERIENCE:

2018-current, Agronomy Journal Editorial Board, **Technical Editor** – Soils & Crops

2013-2017, Agronomy Journal Editorial Board, **Associate Editor** – Precision Ag

2017, Outstanding Associate Editor Award, Agronomy Journal

2019-current, University of Idaho Extension Editorial Board, **Editor**

2013, Western Nutrient Digest, WERA103: Nutrient Management and Water Quality multistate project publication - **Editor**

2009-current, Agronomy Journal, Journal of Soil Science Society of America, Journal of Soil Science and Plant Nutrition, Journal of Biomass and Energy, Journal of the Science of Food and Agriculture, Soil Science – **Reviewer**

SELECTED REFEREED JOURNAL PUBLICATIONS (Total – 27, Since 2006):

- Walsh OS**, Torrion JA, Liang X, Shafian S, Yang R, Belmont KM, and JR McClintick-Chess. 2020. Grain Yield Quality and Spectral Characteristics of Wheat Grown Under Varied Nitrogen and Irrigation. *Agrosystems Geosciences & Environment*. (In Print)
- Walsh OS**. 2019. Nitrogen Fertilizer and Residue Management on No-Till Hard Red Spring Wheat Production. *Agrosystems Geosciences & Environment*. 2(1):1-7
- Walsh OS**, and WL Walsh. 2019. Seeding Rate and Nitrogen Fertilizer Rate Effect on Wheat Grain Yield and Quality. *Agrosystems Geosciences & Environment*. doi:101002/agg220001
- Walsh OS**. 2019. Nitrogen and Potassium Fertilization on No-Till Hard Red Spring Wheat Production. *Agrosystems Geosciences & Environment*. doi:10.1002/agg2.20018
- Torrion JA, **Walsh OS**, Liang X, Bicego B, and A Sapkota. 2019. Managing a wheat cultivar ‘Egan’ with gene for high grain protein. *Agrosystems Geosciences & Environment*. doi:102134/age2019030019
- Yang R, Liang X, Torrion JA, **Walsh OS**, O’Brien K, and Q Liu. 2018. The Influence of Water and Nitrogen Availability on the Expression of End-Use Quality Parameters of Spring Wheat. *Agronomy*. 8 257. doi:103390/agronomy8110257
- Walsh OS**, Shafian S, Marshall JM, Jackson C, McClintick-Chess JR, Blanscet SM, Swoboda K, Thompson C, Belmont KM, and WL Walsh. 2018. Assessment of UAV Based Vegetation Indices for Nitrogen Concentration Estimation in Spring Wheat. *Advances in Remote Sensing*. doi:104236/ars201872006
- Walsh OS**, Shafian S, and RJ Christiaens. 2018. Evaluation of Sensor-Based Nitrogen Rates and Sources in Wheat. *International Journal of Agronomy* doi:101155/2018/5670479
- Samborski SM, Gozdowski D, **Walsh OS**, Kyveryga P and M Stepień. 2017. Sensitivity of Sensor Based Nitrogen Rates to Selection of Within-Field Calibration Strips in Winter Wheat. *Crop and Pasture Science* 68(2):101-114
- Walsh OS**, Solie JB, and Raun WR. 2013. Can Oklahoma Mesonet Cumulative Evapotranspiration Data Be Accurately Predicted Using Three Interpolation Methods? *Communications in Soil Science and Plant Analysis*. 44(5):892-899
- Walsh OS**, Klatt AR, Solie JB, Godsey CB, and Raun WR. 2012. Use of Soil Moisture Data for Refined Greenseeker Sensor Based Nitrogen Recommendations in Winter Wheat (*Triticum aestivum* L). *Journal of Precision Agriculture*. 14:343-356
- Walsh OS**, Klatt AR, Solie JB, and Raun WR. 2012. Effect of Delayed N Fertilization on Corn Grain Yields. *Journal of Plant Nutrition*. 35(4):538-555
- Tubaña BS, Arnall DB, **Walsh OS**, Chung B, Solie JB, Girma K, and Raun WR. 2008. Adjusting Midseason Nitrogen Rate Using a Sensor-Based Optimization Algorithm to Increase Use Efficiency in Corn (*Zea mays* L). *Journal of Plant Nutrition*. 31:1975-1998
- Martin K, Girma K, Freeman KW, Teal RK, Tubaña B, Arnall DB, Chung B, **Walsh OS**, Solie JB, Stone ML, and Raun WR. 2007. Expression of Variability in Corn as Influence by Growth Stage Using Optical Sensor Measurements. *Agronomy Journal*. 99:384-389
- Teal R, Tubaña B, Girma K, Freeman K, Arnall B, **Walsh OS**, and Raun WR. 2006. In- Season Prediction of Corn Grain Yield Potential Using Normalized Difference Vegetation Index. *Agronomy Journal*. 98:1488-1494

PEER-REVIEWED EXTENSION PUBLICATIONS (Since 2014): 17

ABSTRACTS (Since 2005): 61; PROCEEDINGS (Since 2010): 45

POPULAR PRESS ARTICLES: 25

SCHOLARLY PRESENTATIONS (Since 2005): 190

GRANTS (Since 2010): Total awarded \$3,250,595 (Spending authority - \$2,500,750)

TEACHING EXPERIENCE: Sensor Technology, Soil Nutrient Management, Remote Sensing

ADVISING (Since 2014): 2 PhD students, 7 MS students, 2 Postdoctoral Fellows, 1 Visiting Scientist.