

BRENDA S. TUBAÑA

School of Plant, Environmental, and Soil Sciences
309 M.B. Sturgis Hall, Louisiana State University, Baton Rouge, LA 70803
Tel: (225) 578-9420; Cell: (225) 252-6025; e-mail: btubana@agcenter.lsu.edu

HIGHLIGHTS

PUBLICATIONS	
Peer-Reviewed Articles (published)	51
Editor-Reviewed Articles	19
Book Chapter	1
Proceedings	23
Abstracts	149
PRESENTATIONS/INVITED SPEAKER	
International (Speaker/Workshop)	11
National/Regional	24
Field Day Demonstrations/Seminar	34
GRANTS	
Grants Awarded	
Total (Principal Investigator)	\$ 3,927,773
Total (Principal Investigator and Co-PI)	\$21,936,669
Total Grant Requested (Funded, Pending and Not Funded)	>\$26 million
RECOGNITIONS AND PROFESSIONAL CONTRIBUTIONS	
Jack E. and Henrietta Jones Endowed Professorship	
President, International Society for Silicon in Agriculture and Related Disciplines, 2018-2020	
Leader, Sensor-Based Nutrient Management Community, 2018	
Vice-Leader, Sensor-Based Nutrient Management Community, 2017	
Visiting Professor, Universidade de Federal Uberlandia, 2014	
Vice-President, International Society for Silicon in Agriculture and Related Disciplines, 2014-2017	
Review Panel Member, USDA-NIFA 2013	
Distinguished Service Award. The Rice Technical Working Group, 2012	
Associate Editor, Agrosystems, Geosciences, & Environment Journal, 2018-2020	
Associate Editor, Agronomy Journal 2007-2015	
Gerard O. Mott Meritorious Graduate Student Award in Crop Science, 2007	
Oklahoma State University Williams Outstanding Thesis Award, 2007	
Oklahoma State University Dept. of Plant and Soil Sciences Outstanding Ph.D. Student, 2006	
ADVISORY (Past and Current)	
Post-Doctoral Fellow	5
Graduate Students (as Major Advisor)	23
Graduate Students (as Member of Advisory Committee)	23
Dean's Representative	9
Graduate Visiting Scholars and Interns	22

PRESENT POSITION

Professor of Soil Fertility
School of Plant, Environmental, and Soil Sciences
Louisiana State University Agricultural Center and Louisiana State University

Address: School of Plant, Environmental, and Soil Sciences
104 M.B. Sturgis Hall
Baton Rouge, LA 70803

Phone: (225) 252-6025

Email: BTubana@agcenter.lsu.edu

Websites: <http://www.lsuagcenter.com/en/communications/authors/BTubana.html>;

<http://www.soilfertility.lsu.edu/>

EDUCATION

Oklahoma State University	Ph.D. (Soil Science)	May, 2007
University of the Philippines Los Baños	M.S. (Soil Science)	April, 2002
University of the Philippines Los Baños	B.S. (Agriculture)	April, 1992

PROFESSIONAL EXPERIENCE

2019 - present	Professor, Jack E. and Henrietta Jones Endowed Professor, School of Plant, Environmental, and Soil Sciences; Louisiana State University Agricultural Center
2015 - 2019	Associate Professor, Jack E. and Henrietta Jones Endowed Professor, School of Plant, Environmental, and Soil Sciences; Louisiana State University Agricultural Center
2013 - 2019	Associate Professor; School of Plant, Environmental, and Soil Sciences; Louisiana State University Agricultural Center
2007-2013 June	Assistant Professor; School of Plant, Environmental, and Soil Sciences; Louisiana State University Agricultural Center
2004-2007	Graduate Research Assistant; Oklahoma State University
1995-2003	Researcher; International Rice Research Institute
1993-1995	Research Associate; University of the Philippines Los Baños

PUBLICATIONS

Peer-Reviewed Articles

**denotes graduate student/post-doc/visiting scholar publications; B. Tubana as corresponding author*

1. Selim, M., T. Elbana, P. White, **B. Tubana**, and A. Arceneaux. 2019. Sediment and nutrient loading from sugarcane fields in South Louisiana: effect of residue management. *Journal of Soil and Water Conservation* 74:477-486.
2. Liuzza, L., E.W. Bush, B. Tubana, and L. Gaston. 2020. Determining nutrient recommendation for agricultural crops based on soil and plant tissue analyses between different analytical laboratories. *Comm. Soil Sc. Plant Anal.* 51:392-402.
3. *Dalen, M., **B. Tubana**, Y. Kanke, and C. Kimbeng. 2019. Relationship of red and red-edge reflectance vegetation indices with stalk and fiber yield of energy cane harvested at different dates. *Archives of Agronomy and Soils* published online (doi.org/10.1080/0.3650340.2019.1701658).
4. *Chanda, S., Y. Kanke, M. Dalen, J. Hoy, and **B. Tubana**. 2018. Coefficient of variation from vegetation index for sugarcane population and stalk evaluation. *Agrosystems, Geosciences, and Environment* 1:180016.doi:10.2134/age2018.07.0016.
5. Mascagni, Jr., H., **B. Tubana**, and M. Dalen. 2018. Late-nitrogen application on corn yield in Lower Mississippi River Delta alluvial soils. *Agrosystems, Geosciences, and Environment* 1:180029.doi:10.2134/age2018.08.0029.
6. *Agostinho, F., **B. Tubana**, D. Harrell, M. Martins, and L. Datnoff. 2018. Silicon fertilization reduced arsenic accumulation in rice grains. *Soil Science Society of American Journal* (*in preparation*).
7. *Kanke, Y., **B. Tubana**, J. Teboh, M. Dalen, and H. Viator. 2018. Sugarcane varieties and nitrogen affect the relationship between spectral reflectance and agronomic parameters. *Agrosystems, Geosciences, and Environment* (*in preparation*).
8. *Forestieri, D., **B. Tubana**, M. Dalen, M. Martins, and B. White. 2018. Effect of nitrogen source and rate on sugarcane yield and quality components. *Soil Science* (*in preparation*).
9. Stefanini, M., J.A. Larson, D.M. Lambert, X. Yin, C.N. Boyer, P. Scharf, **B.S. Tubana**, J.J. Varco, D. Dunn, H.J. Savoy, and M.J. Buschermohle. 2018. Effects of optical sensing based variable rate nitrogen management on yields, nitrogen use, and profitability for cotton. *Precision Agriculture* doi:10.1007/s11119-018-9599-9.
10. *Paye, W., **B. Tubana**, T. Babu, Y. Kanke, D. Harrell, and L. Datnoff. 2018. Determination of critical soil silicon levels for rice production in Louisiana using different extraction procedures. *Comm. Soil Sci. Plant Anal.* 47:17, 2091-2102. DOI: 10.1080/00103624.2018.1495731.
11. Selim, M., **B. Tubana**, A. Arceneaux, M. Elrashidi, C. Coreil, and P. White. 2018. Yield and water quality for different residue management of sugarcane in Louisiana. *J. American Soc. Sugar Cane Tech.* 38:1-22.
12. *White, B., **B. Tubana**, T. Babu, H. Mascagni, Jr., F. Agostinho, L. Datnoff, and S. Harrison. 2017. Effect of silicate slag application on wheat grown under two nitrogen rates. *Plants* 6:47-61.
13. *Agostinho, F.B., **B. Tubana**, M. Martins, and L.E. Datnoff. 2017. Effect of different silicon sources on yield and silicon uptake of rice grown under varying phosphorus rates. *Plants* 6:1-17.
14. Johnson, R.M., H.P. Viator, J.C. Stevens, and **B.S. Tubana**. 2017. Sugarcane yields do not respond to phosphorus fertilizer in ratoon crops of LCP 85-384 in Louisiana. *J. American Soc. Sugar Cane Tech.* 37:1-12.
15. **Tubana, B.**, T. Babu, and L. Datnoff. 2016. A review of silicon in soils and plants and its role in US agriculture: history and future perspective. *Soil Sci.* 181:393-411.
16. *Babu, T., **B. Tubana**, L. Datnoff, J. Yzenas, and K. Maiti. 2016. Release and sorption pattern of monosilicic acid from silicon fertilizers in different soils of Louisiana: a laboratory incubation study.

- Comm. Soil Sci. Plant Anal. 47:1559-1577. <http://dx.doi.org/10.1080/00103624.2016.1194995>
17. *Babu, T., **B. Tubana**, W. Paye, Y. Kanke, and L. Datnoff. 2016. Establishing soil silicon test procedure and critical silicon level for rice in Louisiana soils. *Comm. Soil Sci. Plant Anal.* 47:1578-1597. <http://dx.doi.org/10.1080/00103624.2016.1194996>
 18. *Babu, T., **B. Tubana**, P. Dupree, B. White, and L. Datnoff. 2016. Survey of plant-available silicon status of agricultural soils in Louisiana. *J. Plant Nutri.* 41:273-287. <http://dx.doi.org/10.1080/01904167.2017.1346668>
 19. *Dalen, M., **B. Tubaña**, Y. Kanke, J. Lofton, and H. J. Mascagni, Jr. 2015. Growth and yield of corn grown on two alluvial soils of Louisiana under different phosphorus rates. *J. Plant Nutr.* DOI:10.1080/01904167.2015.1105261(<http://dx.doi.org/10.1080/01904167.2015.1105261>).
 20. *Kanke, Y., **B. Tubana**, M. Dalen, J. Lofton, and H. Viator. 2016. Relation between early season-measured agronomic variables and sugar yield response to nitrogen. *Agron. J.* 108:794-804.
 21. *Kanke, Y., **B. Tubana**, M. Dalen, and D. Harrell. 2016. Evaluation of red and red-edge reflectance-based vegetation indices for rice biomass and grain yield prediction models in paddy fields. *Precision Ag.* 17:507-530. doi:10.1007/s11119-016-9433-1.
 22. Selim, M., A. Newman, L. Zhang, A. Arceneaux, B. Tubana, and L. Gaston. 2016. Distribution of organic carbon and related parameters in a Louisiana sugarcane soil. *Soil Till. Res.* 155:401-411.
 23. Lofton, J., B. Haggard, D. Fromme, and **B. Tubaña**. 2014. Utilization of poultry litter, tillage, and cover crops for cotton production on highly degraded soils in Northeast Louisiana. *J. Cotton Sci.* 18:376-384.
 24. Edmonds, D., **B. Tubaña**, J. P. Kelly, J.L. Crain, M.D. Edmonds, J.B. Solie, R.K. Taylor, and W.R. Raun. 2013. Maize grain yield response to variable row nitrogen fertilization. *J. Plant Nutr.* 36:1013-1024.
 25. *Lofton, J., and **B. Tubaña**. 2013. Effect of nitrogen rate and time of application on sugarcane yield, sucrose content, and juice quality. *J. Plant Nutr.* 38:161-176. DOI 10.1080/01904167.2013.828752.
 26. **Tubaña, B.**, D. Harrell, T. Walker, J. Teboh, J. Lofton, and Y. Kanke. 2012. In-season canopy reflectance-based estimation of rice yield response to nitrogen. *Agronomy Journal* 104:1604-1611.
 27. Lofton, J.*, **B. Tubaña**, J. Teboh, Y. Kanke, M. Dalen, and H. Viator. 2012. Estimating sugarcane yield potential using an in-season determination of normalized difference vegetative index. *Sensor* 12:7529-7547.
 28. Teboh, J., **B.S. Tubaña**, T.K. Udeigwe, Y. Emendack, and J. Lofton. 2012. Applicability of ground-based remote sensors for crop N management in Sub Saharan Africa. *Journal of Agricultural Science* 4:175-188.
 29. Harrell, D., **B. Tubaña**, T. Walker, and S. Phillips. 2011. Estimating rice grain yield potential using normalized difference vegetation index. *Agronomy Journal* 103:1717-1723.
 30. Lofton, J.*, **B. Tubaña**, Y. Kanke, J. Teboh, and H. Viator. 2012. Predicting sugarcane response to nitrogen using a canopy reflectance-based response index value. *Agronomy Journal* 104:106-113.
 31. **Tubaña, B.**, D. Harrell, T. Walker, J. Teboh, J. Lofton, Y. Kanke, and S. Phillips. 2011. Relationships of spectral vegetation indices, biomass and grain yield of rice at different sensor view angles. *Agronomy Journal* 103: 1405-1413.
 32. Harrell, D., **B. Tubaña**, J. Lofton, and Y. Kanke. 2011. Rice response to nitrogen fertilization under stale seedbed and conventional tillage systems. *Agronomy Journal* 103:494-500.
 33. Girma, K., S. Holtz, **B. Tubaña**, J. Solie, and W. Raun. 2010. Nitrogen accumulation in shoots as a function of growth stages of corn or winter wheat. *Journal of Plant Nutrition* 33:165-182.
 34. Lofton, J., D.C. Weindorf, B. Haggard, and **B. Tubaña**. 2010. Nitrogen variability: a need for precision agriculture. *Agricultural Journal* 5:6-11.
 35. Bueno, C.S., E. Pasuquin, **B. Tubaña**, and T. Lafarge. 2010. Improving sink regulation, and searching for promising hybrids, as a key avenue to increase yield potential of the rice crop in the

- tropics. *Field Crops Research*. 3:199-207.
36. Arnall, D.B., **B.S. Tubaña**, S.L. Holtz, K. Girma, and W.R. Raun. 2009. Relationship between nitrogen use efficiency and response to fertilizer in winter wheat. *Journal of Plant Nutrition* 32:502-515.
 37. Boquet, D.J., **B.S. Tubaña**, H. Mascagni, Jr., M. Holman, and S. Hague. 2009. Cotton yield responses to fertilizer nitrogen rates in a cotton-corn rotation. *Agronomy Journal* 101:400-407.
 38. Chung, B., K. Girma, K. Martin, **B.S. Tubaña**, D.B. Arnall, S. Holtz, and W.R. Raun. 2008. Determination of optimum resolution for predicting corn grain yield using sensor measurements. *Archives of Agronomy and Soil Science* 54:481-491
 39. **Tubaña, B.S.**, D.B. Arnall, O. Walsh, B. Chung, J.B. Solie, K. Girma, and W. R. Raun. 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.
 40. **Tubaña, B.S.**, D.B. Arnall, S. Holtz, J.B. Solie, K. Girma, and W. R. Raun. 2008. Effect of treating spatial variability in winter wheat at different resolutions. *Journal of Plant Nutrition* 31:1393-1419.
 41. Pasuquin, E., T. Lafarge, and **B. S. Tubaña**. 2008. Transplanting young seedlings in irrigated rice fields: early and high tiller production enhanced grain yield. *Field Crop Research* 105:141-155.
 42. Freeman, K., K. Girma, R. Teal, B. Arnall, **B.S. Tubaña**, S. Holtz, J. Mosali, and W.R. Raun. 2007. Long-term effects of nitrogen management practices on grain yield, nitrogen uptake and efficiency in irrigated corn (*Zea mays* L.). *Journal of Plant Nutrition* 30:2021-2036.
 43. Freeman, K.W., A.R. Klatt, W.R. Raun, K. Girma, D.B. Arnall, **B. Tubaña**, S.L. Holtz, K.D. Lawles, O. Walsh, B. Chung, and K.D. Sayre. 2007. Bed and flat planted dryland winter wheat as influenced by row configuration. *Archives of Agronomy and Soil Sci.* 53:293-304.
 44. Girma, K., K. Freeman, R. Teal, B. Arnall, **B. Tubaña**, S. Holtz and W. R. Raun. 2007. Analysis of yield variability in winter wheat (*Triticum aestivum* L.) due to temporal variability, and nitrogen and phosphorus nutrients. *Archives of Agronomy and Soil Sci.* 53:435-442.
 45. Girma, K., S. Holtz, D.B. Arnall, **B. Tubaña**, and W.Raun. 2007. The Magruder Plots: Untangling the puzzle. *Agronomy Journal* 99:1191-1198.
 46. Martin, K., K. Girma, K.W. Freeman, R.K. Teal, **B. Tubaña**, D.B. Arnall, B. Chung, O. Walsh, J.B. Solie, M.L. Stone, and W. R. Raun. 2007. Expression of variability in corn as influence by growth stage using optical sensor measurements. *Agronomy Journal* 99:384-389.
 47. Moges, S.M., K. Girma, R. Teal, K. Freeman, H. Zhang, D.B. Arnall, S.L. Holtz, **B. Tubaña**, O. Walsh, B. Chung, and W.R. Raun. 2007. In-season estimation of grain sorghum yield potential using a hand-held optical sensor. *Archives of Agronomy and Soil Science* 53:617-628.
 48. Teal, R., **B. Tubaña**, K. Girma, K. Freeman, B. Arnall, O. Walsh and W.R. Raun. 2006. In-season prediction of corn grain yield potential using normalized difference vegetation index. *Agronomy Journal* 98:1488-1494.
 49. Girma, K., K.L. Martin, R.H. Anderson, D.B. Arnall, K.D. Brixey, M.A. Casillas, B. Chung, B.C. Dobey, S. Kamenidou, S.K. Kariuki, E. Katsalirou, J.C. Morris, J.Q. Moss, C.T. Rohla, B.J. Sudbury, **B.S. Tubaña**, and W.R. Raun. 2006. Mid-season prediction of wheat grain yield potential using plant, soil and sensor measurements. *Journal of Plant Nutrition* 29:873-897.
 50. George, T., R. Magbanua, D.P. Garrity, **B.S. Tubaña** and J. Quiton. 2002. Rapid yield loss of rice cropped successively in aerobic soil. *Agronomy Journal* 94: 981-989.
 51. George, T., R. Magbanua, **B. Tubaña**, J. Quiton, A. Almendras, W. Khatib, F. Cox and R. Yost. 2000. Estimating buffer coefficients for the phosphorus decision support system: Preliminary comparison among field and laboratory estimates from three Asian upland soils. *Communication in Soil Science and Plant Analysis* 31:2101-2110.

Book Chapter

Tubana, B., and J. Heckman. 2015. Silicon in Soils and Plants. *In*: Rodrigues FA, Datnoff LE (eds)

Silicon and Plant Diseases. Springer, Switzerland, pp. 7-52.

Tubana, B., and W. Paye. 2020.

Editor-Reviewed Articles

1. Mascagni, Jr., H., and **B. Tubana**. 2018. Influence of seeding rate and nitrogen rate on grain yield of two corn hybrids differing in ear flex on Mississippi River Alluvial Soils. *Louisiana Agriculture* 61(3).
2. **Tubana, B.**, D. Burns, M. Dalen, D. Forestieri, and R. Frazier. 2018. Nitrogen-rich strip can be used to match nitrogen fertilizer rates to sugarcane needs. *Louisiana Agriculture* 62(1): 14-16.
3. **Tubana, B.**, R.L. Frazier, M. Dalen, and D. Burns. 2017. Producing more cotton with less nitrogen: taking optical remote sensing to a higher level. *Louisiana Agriculture* 60 (4):26-27.
4. Selim, M., A. Arceneaux, and **B. Tubana**. 2017. Influence of residue management strategies on sugarcane yield and water quality. *Louisiana Agriculture* 60 (4):46-47.
5. *Agostinho, F., and **B. Tubana**. 2017. Potential of Silicon Fertilization in Reducing Arsenic Accumulation in Rice Grains. *Louisiana Agriculture* 61(2):26-27.
6. **Tubana, B.S.**, R. Johnson, and H. Viator. 2015. Nitrogen management research in Louisiana sugarcane production systems. *Sugar Bulletin* 93(7):17-18.
7. Mascagni, H., **B. Tubana**, M. Salassi, and M. Deliberto. 2014. Influence of supplemental nitrogen applications at tassel emergence on corn yield on a Mississippi River alluvial soil. *Louisiana Agriculture* 57 (1):26-27.
8. **Tubana, B.S.** 2013. Protecting our soil. *Louisiana Agriculture* 56 (2):4-5.
9. **Tubana, B.S.**, H. Mascagni, Jr., and J. Wang. 2013. Soil phosphorus buffer coefficient can improve soil test-based phosphorus recommendation. *Louisiana Agriculture* 56 (2):20-21.
10. **Tubana, B.S.**, D. Boquet, and J. Wang. 2013. Soil fertility in soybean production. *Louisiana Agriculture* 56 (2):22-23.
11. **Tubana, B.S.**, D. Harrell, H. Mascagni, Jr., D. Boquet, and S. Viator. 2013. On-site optical sensor-based nitrogen recommendation makes sense. *Louisiana Agriculture* 56 (2):16-19.
12. Wang, J. **B. Tubana**, R. Henderson, and J. Stevens. 2013. Improving soil testing and interpretation. *Louisiana Agriculture* 56 (2):11.
13. Mascagni, H. Jr., and **B. Tubana**. 2013. Influence of nitrogen rate on corn yield over the past decade on two Mississippi River alluvial soils. *Louisiana Agriculture* 56(2) (available online at <http://www.lsuagcenter.com/en/communications/publications/agmag/>).
14. Viator, H., R. Johnson, and **B. Tubana**. 2013. Research leads to lower recommended nitrogen fertilizer rates for Louisiana sugarcane. *Louisiana Agriculture* 56(2):14-15.
15. Viator, H.P., **B. Tubana**, and R. Johnson. 2013. How much fertilizer nitrogen does sugarcane need? *Sugar Journal* 76(5):24-26.
16. Viator, H.P., **B. Tubana**, and T. Johnson. 2013. How much fertilizer nitrogen does sugarcane need? *Sugar Bulletin* 91(11):19-21.
17. Viator, H.P. and **B. Tubana**. 2012. Evaluation of the use of green manure soybean grown in rotation with sugarcane in a sub-tropical environment. *Journal of American Society of Sugar Cane Technologists* 32:51-60.
18. **Tubana, B.S.**, D. Harrell, T. Walker, and S. Phillips. 2011. Midseason nitrogen fertilization rate decision tool for rice using remote sensing technology. *Better Crops* 95:22-24.
19. **Tubana, B.S.**, J. Wang, J. Stevens and D. Boquet. 2011. Soil testing and calibration research in soybean. *Louisiana Agriculture* 54 (2):30-31.

Papers in Proceedings

1. **Tubana, B.**, T. Babu, B. White, F. Agostinho, W. Paye, and L. Datnoff. 2017. Understanding the dynamics of silicon in plant and soil are essential for establishing silicon fertilization guidelines. In 7th International Conference on Silicon in Agriculture, Bengaluru, India, Oct. 24-28, 2017.

2. Botta, A., **B. Tubana**, S. Nuria, M. Candido, P. Price, and L. Datnoff. 2017. Potential of Armurox®, a soluble silicon and peptides biostimulant, as a foliar source of silicon in wheat. In 7th International Conference on Silicon in Agriculture, Bengaluru, India, Oct. 24-28, 2017.
3. **Tubana, B.S.**, D. Harrell, T. Walker, and S. Phillips. 2016. Evaluation of optical sensor-based nitrogen recommendation for Mid-Southern U.S. rice production system. In 36th Rice Technical Working Group Meeting Proceedings. Galveston, TX, March 1-4, 2016.
4. *Agostinho, F., **B. Tubana**, G. Santos, and L. Datnoff. 2016. Effect of silicon fertilization on arsenic dynamics in soils and uptake by rice. In 36th Rice Technical Working Group Meeting Proceedings. Galveston, TX, March 1-4, 2016.
5. *Paye, W., **B. Tubana**, T. Babu, L. Datnoff, and D. Harrell. 2016. Effects of silicate slag application on soil pH and uptake of heavy metals by rice. In 36th Rice Technical Working Group Meeting Proceedings. Galveston, TX, March 1-4, 2016.
6. Griffin, T.W., Barnes, E.M., Allen, P.A., Andrade-Sánchez, P., Arnall, D.B., Balkcom, K., Barber, L.T., Bauer, P., Bronson, K.F., Buschermohle, M.J., Jones, A.P., Ge, Y., Roberson, G., Taylor, R.K., **Tubana, B.S.**, Varco, J.J., Vellidis, G., Vories, E.D., Wilkerson, J.B., and Yin, X. 2014. Pooled Analysis of Combined Primary Data across Multiple States and Investigators for the Development of a NDVI-Based On-the-Go Nitrogen Application Algorithm for Cotton. ASABE Paper No. 1900279. St. Joseph, Mich.: ASABE.
7. **Tubana, B.**, L. Datnoff, C. Narayanaswamy, B. White, T. Babu, and J. Yzenas. 2014. Changes on plant-available silicon level of selected soils from the Midwest and South USA applied with different rates of silicate slag. *In* 6th International Conference on Silicon in Agriculture, Stockholm, Sweden, Aug. 26-31, 2014.
8. *White, B., **B. Tubana**, P. Dupree, J. Yzenas, L. Datnoff, and H. Mascagni, Jr. 2014. Effect of enhanced soil silicon on grain yield and agronomic parameters of wheat under sufficient and high nitrogen application rates. *In* 6th International Conference on Silicon in Agriculture, Stockholm, Sweden, Aug. 26-31, 2014.
9. *Babu, T., **B. Tubana**, L. Datnoff, J. Yzenas, and J. Wang. 2014. Dynamics of monosilicic acid in solid and solution phases of different soils of Louisiana. *In* 6th International Conference on Silicon in Agriculture, Stockholm, Sweden, Aug. 26-31, 2014.
10. **Tubañá, B.** 2013. Variable nitrogen rate technology in cotton production using an integrated optical sensing system. National Conservation Systems Cotton and Rice Conference, Baton Rouge, LA, January 31 – February 1, 2013.
11. Lofton, J., J. Hendrix, **B. Tubañá**, and J. Cheston Stevens. 2013. Determining the effect of poultry litter as a soil amendment for cotton production on highly degraded loess soils of Northeast Louisiana. Beltwide Cotton Conferences, San Antonio, TX, January 7-10, 2013.
12. Harrell, D.L., **Tubana, B.S.**, Walker, T.W., and Phillips, S.B. 2012. Using normalized difference vegetation index to estimate rice grain yield potential. *Proc. Rice Tech. Wrkg. Grp.* 34:142.
13. **Tubañá, B.** 2010. Improving nitrogen use efficiency in cotton: a remote sensor-based approach. National Conservation Systems Cotton and Rice Conference. Tunica, MS, January 12-13, 2010.
14. Clawson, E., **B. Tubañá**, D. Boquet, J. Teboh, and T. Udeigwe. 2010. In-season estimation of lint yield potential using early to mid-season canopy reflectance. Beltwide Cotton Conference, New Orleans, LA, January 4-7, 2010.
15. *Lofton, J., S. Bhusal, D. Boquet, E. Clawson, J. Teboh, and **B. Tubañá**. 2010. Midseason estimates of cotton lint yield response to nitrogen fertilizer using in-season plant based-indices. Beltwide Cotton Conference, New Orleans, LA, January 4-7, 2010. **(2nd PLACE BEST POSTER PRESENTATION)**
16. Dotson, C., D.B. Arnall, S. Holtz, **B. Tubañá**, O. Walsh, B. Chung, P. Turner, K. Girma, and W.R. Ruan. 2007. Precision sidedress UAN application for corn production. *Proc 2007 Fluid Fertilizer*

Foundation Forum. AZ, Feb 2007.

17. Arnall, D.B., **B. Tubaña**, W.R. Raun, O. Walsh and S. Holtz. 2006. Three alternative nitrogen management strategies for cereal grain production. 2006. *In* Proc. Southern Plant Nutrient Management Conference and Southern CSREES Water Quality/Nutrient Management Meeting. Olive Branch, Mississippi. Oct. 3-5, 2006.
18. **Tubaña, B.**, R. Teal, K. Girma, K. Freeman, B. Arnall, O. Walsh, K. Martin and W. Raun. 2006. Corn yield potential prediction based on in-season spectral measurements. *In* Proc. 8th International Conference on Precision Agriculture. Minneapolis, MN. July 23-26, 2006.
19. Arnall, D.B., W.R. Raun, **B. Tubaña** and O. Walsh. 2006. Three alternative nitrogen management strategies for cereal grain production. Pgs. 77-78. In R.C. Schwartz, R.L. Baumhardt and J.M. Bell (eds) Proc. 28th Southern Conservation Systems Conf., Amarillo, Texas. June 26-28, 2006, USDA-ARS Conservation and Production Research Laboratory Report Np. 06-1, Bushland, TX.
20. Raun, W.R., J.B. Solie, M.L. Stone, K.W. Freeman, K.L., Martin, R.K. Teal, B. Arnall, **B. Tubaña**, B. Chung, K.B. Morris, K. Girma, S. Moges and C. Mack. 2005. Increasing cereal nitrogen use efficiency using sensor based technology. AAPRESID, Rosario, Argentina.
21. Lafarge, T., **B. Tubaña** and E. Pasuquin. 2004. Yield advantage of hybrid rice induced by its higher control in tiller emergence. 4th International Crop Science Congress, Brisbane, Australia. 26 Sept. - Oct. 1, 2004.
22. Pasuquin, E., **B. Tubaña**, J. Bertheloot and T. Lafarge. 2004. Impact of early transplanting on tillering and grain yield in irrigated rice. 4th International Crop Science Congress, Brisbane, Australia. 26 Sept. – Oct. 1, 2004.
23. George, T., R. Magbanua, **B. Tubaña**, J. Quiton and S. Virmani. 2001. Beyond traditional upland rice: high yielding rice in aerobic soils. *In*: Proc. Asian Congress, 24-27 April 2001.

Published Abstracts

1. **Tubana, B.**, M. Dalen, D. Forestieri, H. Mendoza, D. Valladares, J. Cruz, J. Bamrungrai, J. Mite, and W. Paye. 2019. Polyhalite fertilization in Louisiana sugarcane production systems: impacts on yield, quality components, and soil nutrient content. ASA-CSSA-SSSA Annual Meeting, Nov. 10-13, 2019, San Antonio, TX.
2. **Tubana, B.**, M. Dalen, D. Galam, D. Forestieri, H. Mendoza, D. Valladares, J. Cruz, J. Bamrungrai, J. Mite, and W. Paye. 2019. Effect of sulfur source on yield and quality components of sugarcane in Louisiana production systems. ASA-CSSA-SSSA Annual Meeting, Nov. 10-13, 2019, San Antonio, TX.
3. Forestieri, D., **B. Tubana**, M. Dalen, J. Mite, W. Paye, J. Cruz, D. Mayorga, H. Mendoza, and J. Bamrungrai. 2019. Predicting sugarcane yield and nitrogen requirement based on ground sensor- and aerial image-based vegetation indices in Louisiana production systems. ASA-CSSA-SSSA Annual Meeting, Nov. 10-13, 2019, San Antonio, TX.
4. Mayorga, D., **B. Tubana**, M. Dalen, J. Mite, D. Forestieri, J. Cruz, W. Paye, J. Mendoza, and J. Bamrungrai. 2019. Effect of different sources and application rates of sulfur on corn and soybean production systems in Louisiana. ASA-CSSA-SSSA Annual Meeting, Nov. 10-13, 2019, San Antonio, TX.
5. Forestieri, D., **B. Tubana**, M. Dalen, J. Mite, W. Paye, J. Garrett, S. Kwakye, and M. Martins. 2019. Monitoring the effect of different nitrogen sources on soil and leaf tissue nitrogen content, sugarcane yield, and quality parameters in Louisiana production systems. ASA-CSSA-SSSA Annual Meeting, Nov. 10-13, 2019, San Antonio, TX.
6. Bamrungrai, J., A. Polthanee, **B. Tubana**, M. Dalen, J. Mite, J. Cruz, W. Paye, D. Forestieri, and A. Promkhambut. 2019. Adventitious root development and aerenchyma formation responds to different auxin rates in two sugarcane cultivars grown under prolonged waterlogged condition. ASA-CSSA-SSSA Annual Meeting, Nov. 10-13, 2019, San Antonio, TX.

7. Mite, J., **B. Tubana**, L. Fultz, M. Dalen, D. Forestieri, J. Cruz, W. Paye, J. Bamrungrai, D. Mayorga, and H. Mendoza. 2019. Nutrient contribution and different cover crops species in row crops production systems in Louisiana. ASA-CSSA-SSSA Annual Meeting, Nov. 10-13, 2019, San Antonio, TX.
8. Cruz, J., **B. Tubana**, L. Fultz, J. Ham, J. Bamrungrai, M. Dalen, W. Paye, J. Mite, D. Forestieri, H. Mendoza, and D. Mayorga. 2019. Growth promoting potential of silicate-solubilizing bacteria in Louisiana soils. ASA-CSSA-SSSA Annual Meeting, Nov. 10-13, 2019, San Antonio, TX.
9. Cruz, J., **B. Tubana**, R. Farias, R. Calderon, J. Bamrungrai, M. Dalen, D. Forestieri, W. Paye, J. Mite, L. Fultz, J. Ham, H. Mendoza, and D. Mayorga. 2019. Identification and solubilization capacities of silicate-solubilizing bacteria in Louisiana soils. ASA-CSSA-SSSA Annual Meeting, Nov. 10-13, 2019, San Antonio, TX.
10. Paye, W., **B. Tubana**, S. Harrison, M. Dalen, D. Forestieri, J. Mite, J. Cruz, H. Mendoza, J. Bamrungrai, and D. Mayorga. 2019. Impact of silicon fertilizer in rice and what production in Louisiana. ASA-CSSA-SSSA Annual Meeting, Nov. 10-13, 2019, San Antonio, TX.
11. Coker, A., N. Adotey, T. Gentimis, D.L. Harrell, M. Kongchum, L. Shiratsuchi, and **B. Tubana**. 2019. Comparison of unmanned aerial system (UAS) and active crop canopy sensor derived vegetative indices to estimate rice grain yield. 2019 ASA-CSSA-SSSA Meeting. Nov. 10-13, 2019. San Antonio, TX.
12. **Tubana, B.**, D. Forestieri, M. Martins, W. Paye, J. Cruz, J. Mite, and M. Dalen. 2019. Soil fertility indicators for Louisiana sugarcane production systems. 48th American Society of Sugar Cane Technologists Annual Joint Meeting, Point Clear, AL, June 26-28, 2019. (Agricultural Session II Best Presentation)
13. **Tubana, B.**, D. Forestieri, M. Dalen, R. Frazier, and D. Burns. 2019. Nitrogen-rich strip: a fertilizer decision tool for Louisiana sugarcane production systems. 48th American Society of Sugar Cane Technologists Annual Joint Meeting, Point Clear, AL, June 26-28, 2019.
14. Bamrungrai, J., A. Polthanee, **B. Tubana**, and A. Promkhambut. 2019. Growth and yield response of two sugarcane cultivars to water stress conditions. 48th American Society of Sugar Cane Technologists Annual Joint Meeting, Point Clear, AL, June 26-28, 2019.
15. Forestieri, D., M. Dalen, M. Martins, J. Mite, W. Paye, J. Cruz, and **B. Tubana**. 2019. Evaluating the impacts of cover crops on nutrient cycling and sugarcane productivity. 48th American Society of Sugar Cane Technologists Annual Joint Meeting, Point Clear, AL, June 26-28, 2019.
16. Dalen, M., **B. Tubana**, H. Viator, L. Fultz, W. Paye, and D. Forestieri. 2019. Biomass and nutrient contribution of summer (sweet sorghum) and winter cover crops in energy cane production in Louisiana. 48th American Society of Sugar Cane Technologists Annual Joint Meeting, Point Clear, AL, June 26-28, 2019.
17. *Forestieri, D.F., **B. Tubana**, M. Dalen, W. Paye, J. Mite, M. Martins, J. Garrett, S. Kwakye, and B. Nicchio. 2018. Establishing the relationship between ground sensor- and aerial image-based vegetation indices for plant health monitoring and yield prediction in Louisiana sugarcane production systems. ASA-CSSA-SSSA International Annual Meetings. Nov. 4-7, 2018, Baltimore, MD. **(1st PLACE GRADUATE STUDENTS ORAL COMPETITION – Sensor Based Nutrient Management Community)**
18. Yin, F., **B. Tubana**, J.J. Varco, P.C. Scharf, J. Larson, and D. Dunn. 2018. Precision nitrogen injection for cotton using integrated optical sensing and variable rate technologies. ASA-CSSA-SSSA International Annual Meetings. Nov. 4-7, 2018, Baltimore, MD.
19. Coker, A., N. Adotey, T. Gentimis, D. Harrell, G. Hensgens, M. Kongchum, L. Shiratsuchi, and **B. Tubana**. 2018. Comparison of UAV and GreenSeeker NDVI vegetative indices to estimate rice grain yield potential. ASA-CSSA-SSSA International Annual Meetings. Nov. 4-7, 2018, Baltimore, MD. **(2nd PLACE GRADUATE STUDENTS ORAL COMPETITION – Sensor Based Nutrient**

Management Community)

20. Mascagni, Jr., **B. Tubana**, and M. Dalen. 2018. Summary of late nitrogen applications on corn grain yield on Lower Mississippi River Delta alluvial soils. ASA-CSSA-SSSA International Annual Meetings. Nov. 4-7, 2018, Baltimore, MD.
21. *Mite, J., **B. Tubana**, and D. Forestieri. 2018. Effect of planting date and fertilization on cover crops biomass production in soybean-corn rotation system. ASA-CSSA-SSSA International Annual Meetings. Nov. 4-7, 2018, Baltimore, MD. ASA-CSSA-SSSA International Annual Meetings. Nov. 4-7, 2018, Baltimore, MD. **(1st PLACE COVER CROP MANAGEMENT COMMUNITY POSTER AND 5-MINUTE RAPID TALK)**
22. *Paye, W., **B. Tubana**, S. Harrison, T. Price, and H. Mascagni, Jr. 2018. Granular size of silicate slag affects its solubility, application rates, and ability to supply silicon to wheat (*Triticum aestivum*). ASA-CSSA-SSSA International Annual Meetings. Nov. 4-7, 2018, Baltimore, MD.
23. *Nicchio, B., Dalen, M., D. Forestieri, W. Paye, J. Mite, M. Martins, J. Cruz, H. Viator and **B. Tubana**. 2018. Biomass and nutrient contribution of sweet sorghum as a summer cover crop in an energy cane production system in Louisiana. ASA-CSSA-SSSA International Annual Meetings. Nov. 4-7, 2018, Baltimore, MD.
24. **Tubana, B.**, H. Viator, M. Dalen, D. Forestieri, and M. Martins. 2017. Variable nitrogen rate technology in Louisiana sugarcane production systems. 47th American Society of Sugar Cane Technologists Annual Joint Meeting, New Orleans, LA, June 14-16, 2017.
25. *Dalen, M., **B. Tubana**, D. Forestieri, S. Kwakye, and M. Martins. 2017. Nutrient removal of energy cane and sugarcane as affected by nitrogen application, harvest date, planting scheme, and variety. 47th American Society of Sugar Cane Technologists Annual Joint Meeting, New Orleans, LA, June 14-16, 2017.
26. *Kwakye, S., J. Garrett, F. Forestieri, M. Dalen, M. Martins, W. Paye, F. Agostinho, and **B. Tubana**. 2017. Impact of different nitrogen sources and application time on sugarcane yield and nitrogen use efficiency. 47th American Society of Sugar Cane Technologists Annual Joint Meeting, New Orleans, LA, June 14-16, 2017.
27. *Kwakye, S., J. Garrett, M. Martins, D. Forestieri, W. Paye, M. Dalen, F. Agostinho, and **B. Tubana**. 2017. Effects of nitrogen fertilizer source on soil inorganic N content, sugarcane yield and quality parameters. ASA-CSSA-SSSA International Annual Meetings. October 22-25, 2017, Tampa, FL. **(3rd PLACE MS ORAL COMPETITION – SSSA Soil Fertility and Plant Nutrition)**.
28. *Garrett, J., **B. Tubana**, S. Kwakye, W. Paye, F. Agostinho, D. Forestieri, M. Dalen, and M. Martins. 2017. Controlled release nitrogen fertilizer and application timing: soil N, leaf N, and yield response in sugarcane. ASA-CSSA-SSSA International Annual Meetings. October 22-25, 2017, Tampa, FL.
29. *Paye, W., **B. Tubana**, F. Agostinho, M. Dalen, M. Martins, L. Datnoff, H. Mascagni, and S. Harrison. 2017. Effect of granular size of silicate slag on silicon availability in soils and uptake by wheat (*Triticum aestivum*). ASA-CSSA-SSSA International Annual Meetings. October 22-25, 2017, Tampa, FL.
30. *Forestieri, D., M. Martins, M. Dalen, J. Garrett, S. Kwakye, W. Paye, F. Agostinho, and **B. Tubana**. 2017. Improving nitrogen management strategies in Louisiana sugarcane production systems. ASA-CSSA-SSSA International Annual Meetings. October 22-25, 2017, Tampa, FL. **(2nd PLACE GRADUATE STUDENT ORAL COMPETITION – ASA Sensor-Based Nutrient Management)**
31. *Dalen, M., S. Kwakye, D. Forestieri, M. Martins, and **B. Tubana**. 2017. Relationship of red and red-edge reflectance-based vegetation indices with stalk and fiber yield of energy cane harvested at different dates. ASA-CSSA-SSSA International Annual Meetings. October 22-25, 2017, Tampa, FL.
32. Selim, M., A. Arceneaux, **B. Tubana**, and C. Coreil, Jr. 2017. Sugarcane residue management: influence of a modified sweeper on yields and water quality. ASA-CSSA-SSSA International Annual Meetings. October 22-25, 2017, Tampa, FL.

33. *Dalen, M., B. Nicchio, M. Martins, D. Forestieri, and **B. Tubana**. 2017. Sulfur fertilization in Louisiana sugarcane production systems. ASA-CSSA-SSSA International Annual Meetings. October 22-25, 2017, Tampa, FL.
34. *Agostinho, F., **B. Tubana**, M. Martins, W. Paye, and L. Datnoff. 2017. Arsenic adsorption in soil with increasing levels of monosilicic acid in solution: a laboratory incubation study. ASA-CSSA-SSSA International Annual Meetings. October 22-25, 2017, Tampa, FL. **(1st PLACE Ph.D. POSTER COMPETITION – SSSA Soil Fertility and Plant Nutrition)**
35. **Tubana, B.** 2017. Application of optical remote sensing technology in Louisiana sugarcane production system. In 5th TTC Annual International Sugarcane Conference. Phan Thiet City, Vietnam, August 17-18, 2017.
36. *Forestieri, D., **B. Tubana**, Y. Kanke, M. Martins, M. Dalen, S. Kwakye, and J. Garrett. 2016. Relation among early-season canopy reflectance readings, leaf N content, stalk N removal rate, and yield of cane treated with varying sources and rates of N fertilizer in Louisiana production system. ASA-CSSA-SSSA International Annual Meetings. November 6-9, 2016, Phoenix, AZ.
37. *Paye, W., **B. Tubana**, M. Dalen, M. Martins, L. Datnoff, and D. Harrell. 2016. Silicon and heavy metals dynamics in paddy soils and uptake by rice applied with silicate slag. ASA-CSSA-SSSA International Annual Meetings. November 6-9, 2016, Phoenix, AZ.
38. *Agostinho, F., **B. Tubana**, M. Martins, G. Alves, W. Paye, and L. Datnoff. 2016. Arsenic dynamics and fractions in silicon-treated soil and its accumulation in rice. ASA-CSSA-SSSA International Annual Meetings. November 6-9, 2016, Phoenix, AZ. **(1st PLACE Ph.D. ORAL COMPETITION – SSSA Soil Fertility and Plant Nutrition)**
39. *Shahrtash, M., **B. Tubana**, M. Martins, S. Kwakye, J. Garrett, and L. Datnoff. 2016. Effect of silicon fertilization on plant growth and drought stress tolerance in wheat (*Triticum aestivum*). ASA-CSSA-SSSA International Annual Meetings. November 6-9, 2016, Phoenix, AZ.
40. *Kwakye, S., **B. Tubana**, J. Garrett, W. Paye, F. Agostinho, D. Forestieri, M. Shahrtash, M. Dalen, and M. Martins. 2016. Trend of soil and leaf potassium content of sugarcane: impact of soil type, fertilizer source and application timing. ASA-CSSA-SSSA International Annual Meetings. November 6-9, 2016, Phoenix, AZ.
41. *Garrett, J., **B. Tubana**, S. Kwakye, W. Paye, F. Agostinho, D. Forestieri, M. Shahrtash, M. Dalen, and M. Martins. 2016. Changes in cane leaf nitrogen content and soil inorganic nitrogen as affected by fertilizer application timing and soil type. ASA-CSSA-SSSA International Annual Meetings. November 6-9, 2016, Phoenix, AZ.
42. *Shahrtash, M., **B. Tubana**, M. Martins, M. Dalen, S. Harrison, P. Price, and L. Datnoff. 2016. Silicon fertilization on productivity and leaf rust disease management in wheat production in Louisiana: A case study. ASA-CSSA-SSSA International Annual Meetings. November 6-9, 2016, Phoenix, AZ.
43. *Dalen, M., Y. Kanke, S. Kwakye, D. Forestieri, and **B. Tubana**. 2016. Using red and red-edge reflectance-based vegetation indices for stalk yield prediction of energy cane at different harvest dates. ASA-CSSA-SSSA International Annual Meetings. November 6-9, 2016, Phoenix, AZ.
44. **Tubana, B.**, M. Martins, M. Dalen, Y. Kanke, M. Shahrtash, B. White, T. Babu, and H. Mascagni. 2016. Impact of silicate slag fertilization on wheat yield and grain protein content. ASA-CSSA-SSSA International Annual Meetings. November 6-9, 2016, Phoenix, AZ.
45. *Forestieri, D., **B. Tubana**, M. Dalen, J. Garrett, D. Burns, and R. Frazier. 2016. Relationship of ground- and aerial image-based normalized difference vegetation indices of major crops grown in Louisiana. ASA-CSSA-SSSA International Annual Meetings. November 6-9, 2016, Phoenix, AZ.
46. *Babu, T., **B. Tubana**, W. Paye, B. White, P. Dupree, M. Dalen, D. Forestieri, and F. Agostinho. 2015. Calibration and categorization of plant available silicon in Louisiana agricultural soils. ASA-CSSA-SSSA International Annual Meetings. November 15-18, 2015, Minneapolis, MN.

47. *Paye, W., **B. Tubana**, T. Babu, and D. Harrell. 2015. Silicon fertilization in rice: establishment of critical silicon level and its impact on availability of nutrients in soils of Louisiana. ASA-CSSA-SSSA International Annual Meetings. November 15-18, 2015, Minneapolis, MN.
48. *Agostinho, F., L. Datnoff, J. Rabasse, M. Martins, and B. Tubana. 2015. Evaluation of absorption and uptake of soil- and foliar-applied silicon fertilizer in rice. ASA-CSSA-SSSA International Annual Meetings. November 15-18, 2015, Minneapolis, MN.
49. *Kwakye, S., M. Dalen, K.J. Han, and **B. Tubana**. 2015. Estimation of energy cane lignocellulosic composition using near infrared spectroscopy. ASA-CSSA-SSSA International Annual Meetings. November 15-18, 2015, Minneapolis, MN.
50. *Dalen, M., S. Kwakye, S. Chanda, J. Hoy, and B. Tubana. 2015. Effects of different planting schemes on yield, quality parameters, lignocellulosic composition, and nutrient uptake of different cane varieties. ASA-CSSA-SSSA International Annual Meetings. November 15-18, 2015, Minneapolis, MN.
51. *Forestieri, D., **B. Tubana**, G.A. Santos, T. Babu, M. Dalen, W. Paye, and B. White. 2015. Changes in soil inorganic nitrogen, leaf tissue nitrogen, yield, and primary components of sugarcane in response to varying source and rate of nitrogen fertilizer. ASA-CSSA-SSSA International Annual Meetings. November 15-18, 2015, Minneapolis, MN.
52. *Kanke, Y., **B. Tubana**, M. Dalen, and D. Harrell. 2015. Effects of water background and depth on red and red-edge reflectance based yield potential models in rice. ASA-CSSA-SSSA International Annual Meetings. November 15-18, 2015, Minneapolis, MN.
53. *Kanke, Y., **B. Tubana**, M. Dalen, J. Lofton, and H. Viator. 2015. Relation between early season-measured agronomic variables and sugar yield responses to nitrogen. ASA-CSSA-SSSA International Annual Meetings. November 15-18, 2015, Minneapolis, MN.
54. *White, B., T. Babu, L. Datnoff, H. Mascagni, Jr., and **B. Tubana**. 2015. Calcium silicate slag application influences nutrient availability in soil and uptake by wheat. ASA-CSSA-SSSA International Annual Meetings. November 15-18, 2015, Minneapolis, MN.
55. *Alves, G., **B. Tubana**, T. Babu, M. Dalen, B. White, F. Agostinho, and P. Dupree. 2015. Effect of CaSiO₃ slag rates and application time on sugarcane yield and soil silicon and plant-essential nutrient content. ASA-CSSA-SSSA International Annual Meetings. November 15-18, 2015, Minneapolis, MN.
56. *Shahrtash, M., M. Martins, M. Dalen, T. Babu, W. Paye, G.A. Santos, F. Agostinho, S. Kwakye, and **B. Tubana**. 2015. Effect of silicon fertilization on growth, yield, and disease development in wheat plant. ASA-CSSA-SSSA International Annual Meetings. November 15-18, 2015, Minneapolis, MN.
57. *Dalen, M., S. Kwakye, K.J. Han, S. Chanda, and **B. Tubana**. 2015. Nitrogen supply and harvest dates effects on nutrient removal and biomass chemical composition of energy cane. ASA-CSSA-SSSA International Annual Meetings. November 15-18, 2015, Minneapolis, MN.
58. **Tubana, B.**, H. Viator, M. Dalen, T. Babu, B. White, D. Forestieri, and R. Johnson. 2015. Evaluation of optical sensing and variable nitrogen rate application in Louisiana sugarcane production systems. In ASSCT Abstracts. American Society of Sugar Cane Technologists Joint Annual Meeting, New Orleans, LA, June 22-24, 2015.
59. *Dalen, M., S. Kwakye, S. Chanda, J. Hoy, and **B. Tubana**. 2015. Yield, quality parameters, biomass chemical composition, and nutrient uptake of different cane varieties planted as whole stalks and billets. In ASSCT Abstracts. American Society of Sugar Cane Technologists Annual Joint Meeting, New Orleans, LA, June 22-24, 2015.
60. *Santos, G.A., **B. Tubana**, T. Babu, B. White, M. Martins, and P. Dupree. 2015. Effect of CaSiO₃ slag applied at different rates and time on sugarcane yield, soil pH, and nutrients availability. In ASSCT Abstracts. American Society of Sugar Cane Technologists Annual Joint Meeting, New

- Orleans, LA, June 22-24, 2015.
61. *Forestieri, D., P. Dupree, M. Dalen, B. White, W. Paye, and **B. Tubana**. 2015. Effect of nitrogen source and rate on yield, N uptake, and quality parameters of sugarcane in Louisiana production systems. In ASSCT Abstracts. American Society of Sugar Cane Technologists Annual Joint Meeting, New Orleans, LA, June 22-24, 2015.
 62. **Tubana, B.**, W. Paye, T. Babu, P. Dupree, B. White, S. Chanda, M. Dalen, S. Maia, M. Martins, and D. Harrell. 2014. Impact of silicate slag fertilization on grain yield, silicon accumulation and plant essential nutrient content of rice. ASA-CSSA-SSSA International Annual Meetings. November 2-5, 2014, Long Beach, CA.
 63. **Tubana, B.** D.F. Munoz, P. Dupree, B. White, M. Martins, M. Selim, H. Viator, and R. Johnson. 2014. Site-specific management of nitrogen fertilizer in Louisiana sugarcane production system. ASA-CSSA-SSSA International Annual Meetings. November 2-5, 2014, Long Beach, CA.
 64. *Agostinho, F., L. Datnoff, J. Rabasse, M. Martin, and **B. Tubana**. 2014. Effect of silicon sources on grain yield and silicon accumulation of rice grown under different phosphorus rate. ASA-CSSA SSSA International Annual Meetings. November - 2-5, 2014, Long Beach, CA.
 65. *Babu, T. **B. Tubana**, L. Datnoff, J. Wang, and J. Yzenas. 2014. Release pattern of monosilicic acid from different sources of silicon in soils of Louisiana. ASA-CSSA-SSSA International Annual Meetings. November 2-5, 2014, Long Beach, CA. **(1ST PLACE Ph.D. ORAL PRESENTATION COMPETITION – SSSA Soil Fertility and Plant Nutrition Division)**
 66. *Dupree, P., H. Mascagni, Jr., J. Lofton, B. White, and **B. Tubana**. 2014. Relating soil-profile inorganic nitrogen distribution and grain yield in corn production in Northeastern Louisiana. ASA-CSSA-SSSA International Annual Meetings. November 2-5, 2014, Long Beach, CA.
 67. *White, B., H. Mascagni, Jr., P. Dupree, T. Babu, and **B. Tubana**. 2014. Effect of varying rates of silicon and nitrogen fertilizer on grain yield, yield components, and nutrient uptake of wheat. ASA-CSSA-SSSA International Annual Meetings. November 2-5, 2014, Long Beach, CA. **(2ND PLACE M.S. ORAL PRESENTATION COMPETITION – SSSA Soil Fertility and Plant Nutrition)**
 68. *Chanda, S., S. Maia, B. White, M Dalen, P. Dupree, and B. Tubana. 2014. Evaluation of nitrogen response pattern between early-season biomass production and biomass yield at harvest in energy cane. ASA-CSSA-SSSA International Annual Meetings. November 2-5, 2014, Long Beach, CA. **(1ST PLACE Ph.D. POSTER PRESENTATION COMPETITION – ASA Agronomy Production Division)**
 69. **Tubana, B.**, M. Martins, P. Dupree, B. White, M. Dalen, S. Chanda, T. Babu, D. Munoz, F. Agostinho, R. Frazier, and D. Burns. 2014. Analysis of within-field variability in cotton on large-scale field tests in north Louisiana. ASA-CSSA-SSSA International Annual Meetings. November 2-5, 2014, Long Beach, CA.
 70. *Dalen, M., K. Han, S. Chanda, S. Maia, L. Barbosa, P. Dupree, T. Babu, and **B. Tubana**. 2014. Nitrogen rate and harvest date effects on energy cane yield, quality parameters and biomass chemical composition. ASA-CSSA-SSSA International Annual Meetings. November 2-5, 2014, Long Beach, CA.
 71. **Tubana, B.**, M. Kongchum, T. Babu, J.M. Rabasse, and L. Datnoff. 2014. Effect of foliar formulation of bio-available on grain yield and silicon uptake of rice. 66th International Symposium on Crop Protection. Ghent, Belgium, May 20, 2014.
 72. Burns, D., **B. Tubana**, and R. Frazier. 2014. Mid-season applications of nitrogen in cotton using crop sensors. Beltwide Cotton Conferences, January 6-8, 2014, New Orleans, LA.
 73. **Tubana, B.**, M. Pontiff, C. Kimbeng, and H. Viator. 2013. Crop age and varietal impact on agronomic nitrogen use efficiency of sugarcane. ASA-CSSA-SSSA International Annual Meetings. November 3-6, 2013, Tampa, FL.
 74. **Tubana, B.**, D. Burns, R. Frazier, P. Dupree, W. Maddox, Y. Kanke, S. Chanda, M. Dalen, T. Babu,

- B. White, and J. Kruse. 2013. On-farm implementation of optical sensing system to increase nitrogen use efficiency in cotton production in Louisiana. ASA-CSSA-SSSA International Annual Meetings. November 3-6, 2013, Tampa, FL.
75. **Tubana, B.**, Kongchum, M., L. Datnoff, and T. Babu. 2013. Effect of silicon sources on rice biomass silicon uptake and grain yield. ASA-CSSA-SSSA International Annual Meetings. November 3-6, 2013, Tampa, FL.
 76. *Chanda, S., M. Dalen, S. Maia, P. Dupree, B. White, and **B. Tubana**. 2013. Calibrating energy cane biomass and nitrogen uptake with vegetation indices derived from red, red-edge, and near infrared wavebands. 2013. ASA-CSSA-SSSA International Annual Meetings. November 3-6, 2013, Tampa, FL.
 77. **Tubana, B.**, T. Babu, and L. Datnoff. 2013. Silicon dynamics in soils under different cropping systems in Louisiana. ASA-CSSA-SSSA International Annual Meetings. November 3-6, 2013, Tampa, FL.
 78. *Chanda, S., J. Hoy, P. Dupree, M. Dalen, T. Babu, and **B. Tubana**. 2013. Population stand monitoring of cane using coefficient of variance among canopy reflectance-based vegetation index readings. ASA-CSSA-SSSA International Annual Meetings. November 3-6, 2013, Tampa, FL.
 79. *White, B., H. Mascagni, Jr., P. Dupree, and **B. Tubana**. 2013. Silicon and nitrogen fertilization influences wheat biomass and grain yield. ASA-CSSA-SSSA International Annual Meetings. November 3-6, 2013, Tampa, FL. **(5TH PLACE MS STUDENT POSTER COMPETITION)**
 80. *Dupree, P., H. Mascagni, Jr., J. Lofton, B. White, Y. Kanke, and **B. Tubana**. 2013. Integrating soil nitrate testing to refine nitrogen fertilizer recommendation in Louisiana corn production systems. ASA-CSSA-SSSA International Annual Meetings. November 3-6, 2013, Tampa, FL.
 81. *Babu, T., L. Datnoff, J. Yzenas, and **B. Tubana**. 2013. Silicon status of Louisiana soils grown to different field crops. ASA-CSSA-SSSA International Annual Meetings. November 3-6, 2013, Tampa, FL.
 82. Mascagni, H.J., and B.S. Tubana. 2013. Optimal nitrogen rate for corn on two Mississippi River alluvial soils. ASA-CSSA-SSSA International Annual Meetings. November 3-6, 2013, Tampa, FL.
 83. Lofton, J., J. Hendrix, J.C. Stevens, **B. Tubaña**, M. Dalen, T. Udeigwe, J. Stapp, and T. Talbot. 2012. Evaluation of the effects of poultry litter application on cotton yields, soil nutrients, and runoff in Northeast Louisiana. ASA-CSSA-SSSA International Annual Meetings. October 21-24, 2012, Cincinnati, OH.
 84. Kruse, J. and **B. Tubaña**. 2012. Corn yield response to soil applied zinc sources. ASA-CSSA-SSSA International Annual Meetings. October 21-24, 2012, Cincinnati, OH.
 85. *Asis, Jr., C. §, **B. Tubaña**, M. Konchum, R. DeLaune, and C. Narayanaswamy. 2012. Agronomic and environmental impacts of silicon fertilizer application on rice grown in Louisiana soils. ASA-CSSA-SSSA International Annual Meetings. October 21-24, 2012, Cincinnati, OH.
 86. Mascagni, Jr., H., T. Udeigwe, M. Dalen, Y. Kanke, and **B. Tubaña**. 2012. Impact of annual phosphorus fertilization on Mehlich-III extractable phosphorus of an alluvial soil under corn and cotton rotation. ASA-CSSA-SSSA International Annual Meetings. October 21-24, 2012, Cincinnati, OH.
 87. **Tubaña, B.**, C. Narayanswamy, L. Datnoff, and J. Yzenas. 2012. Changes in pH and extractable nutrients of selected soils from the Midwest and South USA as influenced by different rates of iron calcium silicate slag. ASA-CSSA-SSSA International Annual Meetings. October 21-24, 2012, Cincinnati, OH.
 88. **Tubaña, B.**, C. Narayanswamy, J. Lofton, Y. Kanke, M. Dalen, and L. Datnoff. 2012. Potential of silicon fertilization in sugarcane production in Louisiana. ASA-CSSA-SSSA International Annual Meetings. October 21-24, 2012, Cincinnati, OH.
 89. *Narayanswamy, C., S. Chanda, L. Datnoff, and **B. Tubaña**. 2012. Effect of different silicon sources

- on acetic acid-extractable silicon content of two alluvial soils of Louisiana. ASA-CSSA-SSSA International Annual Meetings. October 21-24, 2012, Cincinnati, OH.
90. *Narayanaswamy, C., **B. Tubaña**, S. Chanda, and L. Datnoff. 2012. Biomass and silicon uptake of wheat in response to different levels of plant-available silicon. ASA-CSSA-SSSA International Annual Meetings. October 21-24, 2012, Cincinnati, OH.
 91. **Tubaña, B.**, C. Narayanaswamy, Y. Kanke, M. Dalen, J. Yzenas, and L. Datnoff. 2012. Estimation of plant available silicon using different extraction procedures for selected soils from the Midwest and South USA. ASA-CSSA-SSSA International Annual Meetings. October 21-24, 2012, Cincinnati, OH.
 92. *Kanke, Y., D. Harrell, M. Dalen, J. Teboh, and **B. Tubaña**. 2012. Improvement on sensor-based yield prediction model in rice using red edge reflectance. ASA-CSSA-SSSA International Annual Meetings. October 21-24, 2012, Cincinnati, OH.
 93. *Kanke, Y., D. Harrell, T. Walker, J. Lofton, J. Teboh, and **B. Tubaña**. 2012. Midseason nitrogen recommendation in rice using remote sensing technology. ASA-CSSA-SSSA International Annual Meetings. October 21-24, 2012, Cincinnati, OH.
 94. *Kanke, Y., M. Dalen, J. Lofton, J. Teboh, H. Viator, and **B. Tubaña**. 2012. Relationships between spectral reflectance and agronomic parameters in three different sugarcane varieties. ASA-CSSA-SSSA International Annual Meetings. October 21-24, 2012, Cincinnati, OH.
 95. *Dalen, M., **B. Tubaña**, J. Teboh, Y. Kanke, J. Lofton, and H. Mascagni. 2012. Changes on phosphorus functional fractions of two Louisiana alluvial soils grown to corn at different phosphorus rates. ASA-CSSA-SSSA International Annual Meetings. October 21-24, 2012, Cincinnati, OH.
 96. *Asis, Jr., C.A., **B. Tubaña**, M. Kongchum, and R. D. DeLaune. 2012. Effect of silicate fertilizer application on methane emission from rice. First National Conference on Research in Climate Change and Variability. National Academy of Science and Technology, Philippines. Pasay City, Philippines, September 27, 2012. **(BEST SCIENTIFIC POSTER AWARD)**
 97. **Tubaña, B.**, C. Narayanaswamy, J. Lofton, Y. Kanke, M. Dalen, and L. Datnoff. 2012. Impact of silicon fertilization to sugarcane grown on alluvial soils of Louisiana. 42nd American Society of Sugar Cane Technologists Annual Joint Meeting. June 20-22, 2012, St. Pete Beach, FL.
 98. *Narayanaswamy, C., L. Datnoff, N. Prakash, and **B. Tubaña**. 2012. Effect of calcium silicate slag on biomass yield and silicon uptake of perennial ryegrass (*Lolium perenne* Lam.) grown on low pH soils. The 8th International Symposium on Plant-Soil Interaction at Low pH. October 18-22, 2012, University of Agricultural Sciences, Bengaluru, India.
 99. **Tubaña, B.**, M. Dalen, C. Narayanaswamy, Y. Kanke, J. Lofton, and J. Wang. 2012. Changes in soil fertility indices of an acid Mississippi silty upland soil under soybean and corn production systems. The 8th International Symposium on Plant-Soil Interaction at Low pH. October 18-22, 2012, University of Agricultural Sciences, Bengaluru, India.
 100. *Lofton, J., **B. Tubaña**, Y. Kanke, and H. Viator. 2011. Predicting sugarcane response to fertilizer nitrogen using an in-season vegetative index. ASA-CSSA-SSSA International Annual Meetings. 16-19 October, San Antonio, TX.
 101. *Lofton, J.* Y. Kanke, J. Teboh, M. Dalen, J. Khan, H. Viator, and **B. Tubaña**. 2011. Estimation of sugarcane yield potential using normalized difference vegetative index. ASA-CSSA-SSSA International Annual Meetings. 16-19, October, San Antonio, TX.
 102. *Kanke, Y., J. Lofton, J. Teboh, M. Dalen, P. Jaa, H. Viator, and **B. Tubaña**. 2011. Relationship of sugarcane biomass and nitrogen uptake with canopy reflectance at different nitrogen fertilizer rates. ASA-CSSA-SSSA International Annual Meetings. 16-19 October, San Antonio, TX.
 103. *Dalen, M., **B. Tubaña**, D. Boquet, Y. Kanke, J. Lofton, and J. Wang. 2011. Effect of lime and annual application of phosphorus and potassium on soybean yield and soil fertility indices of an acid Mississippi silty upland soil. ASA-CSSA-SSSA International Annual Meetings. 16-19 October,

- San Antonio, TX.
104. *Kanke, Y., H. Viator, J. Lofton, J. Kraska, J. Teboh, and **B. Tubaña**. 2011. Quantitative relationship of sugarcane biomass and canopy reflectance as a function of nitrogen supply. In 8th European Conference on Precision Agriculture. Czech University of Life Sciences Prague, Prague, Czech Republic. July 11-14, 2011.
 105. Mascagni, H., and **B. Tubaña**. 2011. Influence of supplemental N application on corn yield on two Mississippi River Alluvial soils. Southern Association of Agricultural Scientist 111 Annual Meeting and Conference. Corpus, Christi, TX. Feb. 6-8, 2011.
 106. **Tubaña, B.**, H. Viator, J. Teboh, J. Lofton, and Y. Kanke. 2011. Feasibility of using remote sensing technology in nitrogen management in sugarcane production. *In* ASSCT Abstracts. American Society of Sugar Cane Technologists Joint Annual Meeting, New Orleans, LA, June 8-10, 2011.
 107. **Tubaña, B.**, C. Kennedy, H. Viator, A. Arceneaux, and J. Teboh. 2010. Nitrogen requirement for optimal yield and quality of sugarcane grown on alluvial soils in Louisiana. *In* Agronomy Abstracts. ASA, Madison, WI.
 108. Harrell, D., M. Kongchum, **B. Tubaña**, J. Lofton, J. Leonards, R. Regan, and J. Fluitt. 2010. Rice response to zinc fertilization on a high pH, low zinc soil. *In* Agronomy Abstracts. ASA, Madison, WI.
 109. Teboh, J., **B. Tubaña**, J. Lofton, D. Harrell, T. Walker, and S. Phillips. 2010. Response of in-season rice biomass and grain yield to nitrogen fertilization. *In* Agronomy Abstracts. ASA, Madison, WI.
 110. *Kanke, Y., J. Lofton, **B. Tubaña**, D. Harrell, J. Teboh, T. Walker, and S. Phillips. 2010. Algorithm for predicting rice yield potential at different sensor head orientation. *In* Agronomy Abstracts. ASA, Madison, WI. (Graduate Student Competition)
 111. *Lofton, J., **B. Tubaña**, D. Boquet, E. Clawson, J. Teboh, Y. Kanke, and T. Udeigwe. 2010. The use of plant indices for in-season prediction of cotton lint yield response to nitrogen fertilization. *In* Agronomy Abstracts. ASA, Madison, WI. (Graduate Student Competition)
 112. **Tubana, B.**, D. Harrell, T. Walker, T. Teboh, J. Lofton, J. Fluitt, and S. Phillips. 2010. Rice yield potential algorithms based on canopy reflectance measured at different sensor head orientations. Rice Technical Working Group Meeting. Biloxi, MS, February 22-25, 2010.
 113. Harrell, D. Lofton, J., and **B. Tubaña**. 2010. Rice yield and uptake response to zinc fertilization on a high pH, low zinc soil. Rice Technical Working Group Meeting. Biloxi, MS, February 22-25, 2010.
 114. **Tubaña, B.** 2010. Improving fertilizer recommendations for sugarcane: The Louisiana Soil Fertility and Nutrient Management Project. American Society of Sugar Cane Technologists Annual Meeting - Louisiana Division. Lafayette, LA, February 3, 2010.
 115. **Tubaña, B.**, H. Viator, R. Johnson, J. Teboh, and M. Kongchum. 2009. Estimating sugarcane yield potential and responsiveness to nitrogen fertilization using mid-season canopy reflectance. *In* Agronomy Abstracts. ASA, Madison, WI.
 116. **Tubaña, B.**, D. Harrell, T. Walker, and S. Phillips. 2009. Canopy reflectance-based algorithm for in-season estimation of rice grain yield. *In* Agronomy Abstracts. ASA, Madison, WI.
 117. **Tubaña, B.**, H. Viator, R. Johnson, J. Wang, J. Teboh, and M. Kongchum. 2009. Establishing the components of a remote sensor-based nitrogen decision tool for sugarcane production. In ASSCT Abstracts. American Society of Sugar Cane Technologists Annual Meeting, Biloxi, MS, June 17-19, 2009.
 118. Clawson, E., H.J. Mascagni, J.J. Wang, **B. Tubaña**, and J.S. Price. 2009. Mehlich 3 soil P for cotton on Commerce silt loam in Northeast Louisiana. Beltwide Cotton Conference. San Antonio, TX. January 5-8, 2009.
 119. **Tubaña, B.**, J. Steven, H. Mascagni, E. Clawson, D. Boquet, D. Harrell, J. Wang, and J. Teboh. 2008. Effect of phosphorus fertilization on early growth of corn on six alluvial soils in Louisiana. *In* Agronomy Abstracts. ASA, Madison, WI.

120. **Tubafía, B.**, C. Kennedy, A. Arceneaux, J. Teboh, D. Weindorf, and J. Wang. 2008. Analysis of sugarcane yield response to annual nitrogen fertilization. *In* ASSCT Abstract. American Society of Sugar Cane Technologist Annual Joint Meeting, Orlando, FL, June 18-20, 2008.
121. Kongchum, M., R.D. DeLaune, A. Jugsujinda, and **B. Tubafía**. 2008. Effect of soil redox and pH on nutrient availability in paddy soils. *In* Agronomy Abstracts. ASA, Madison, WI.
122. Arnall, D.B, **B. Tubafía**, K. Girma, S.L. Holtz, B. Chung, C.R. Dotson, P.L. Turner, D.E. Edmonds, B.B. England, M.C. Daft, W.R. Raun and R.K. Taylor. 2007. Evaluation of delayed Ramp Calibration Strip application for mid-season N recommendation in winter wheat. *In* Agronomy Abstracts. ASA, Madison, WI.
123. Chung, B.K., D.B. Arnall, **B.S. Tubafía**, K. Girma, S.L. Holtz, P.L. Turner, O.S. Walsh, C.R. Dotson, J.B. Solie and W.R. Raun. 2007. Changes in response indices as a function of time in winter wheat. *In* Agronomy Abstracts. ASA, Madison, WI.
124. England, B.B., D.B. Arnall, **B. Tubafía**, S.L. Holtz, C.R. Dotson, C. Daft, D.E Edmonds, and W.R. Raun. 2007. Stream vs. flat topdress application of UAN in winter wheat. *In* Agronomy Abstracts. ASA, Madison, WI.
125. Dotson C.R., D.B. Arnall, **B. Tubafía**, K. Girma, M.C. Daft, B.B. England, D. Edmonds, S.L. Holtz, P.L. Turner, and W.R. Raun. 2007. Nitrogen rate and placement in corn production. *In* Agronomy Abstracts. ASA, Madison, WI.
126. Edmonds, D.E., D.B. Arnall, B. Chung, M.C. Daft, K. Girma, Dotson, B.B. England, S.L. Holtz, C.J. Mack, W.R. Raun, J.B. Solie, R.K. Taylor, **B.S. Tubafía**, P.L. Turner, O.S. Walsh, and D.L. Zavodny. 2007. Extension and analysis of the Ramp Calibration Strip fertilization strategy. *In* Agronomy Abstracts. ASA, Madison, WI.
127. Girma, K., D.B. Arnall, S.L. Holtz, W.R. Raun, B. Chung, **B.S. Tubafía**, O. Walsh, P.L. Turner, C.R. Dotson, B.B. England, D.E. Edmonds, M.C. Daft and D. Zavodny. 2007. Weather, fertilizer, previous year grain yield and fertilizer response levels affect ensuing year grain yield and fertilizer response of winter wheat. *In* Agronomy Abstracts. ASA, Madison, WI.
128. Holtz, S.L., **B.S. Tubafía**, D.B. Arnall, K.W. Freeman, R.K. Teal, B. Chung, O. Walsh, P.L. Turner, K.D. Lawles, C.J. Mack, D.E. Edmonds, K. Girma and W.R. Raun. 2007. Response of corn (*Zea mays* L.) grain yields to variable row nitrogen fertilization. *In* Agronomy Abstracts. ASA, Madison, WI.
129. **Tubafía, B.S.**, D.B. Arnall, K.W. Freeman, R.K. Teal, B. Chung, O. Walsh, D.E. Edmonds, S. Holtz, P. Turner, C.R. Dotson, B. England, M.C. Daft, C.J. Mack, K. Lawles, K. Girma and W.R. Raun. 2007. Corn (*Zea mays* L.) grain yield response to by-plant nitrogen fertilization. *In* Agronomy Abstracts. ASA, Madison, WI.
130. Turner, P.L., **B.S. Tubafía**, K. Girma, S.L. Holtz, K.D. Lawles, D.E. Edmonds, C.R. Dotson, B.B. England, M.C. Daft, D.B. Arnall, R.K. Taylor and W.R. Raun. 2007. Indirect measurement of crop plant height. *In* Agronomy Abstracts. ASA, Madison, WI.
131. Chung, B., **B.S. Tubafía**, B. Arnall, S. Holtz, O. Walsh, K. Martin, K. Desta and W. Raun. 2006. Optimum spatial scale and management resolution for corn (*Zea mays* L.). *In* Agronomy Abstracts, ASA Madison, WI.
132. Holtz, S., K. Desta, B. Arnall, **B. Tubafía**, R. Teal, K. Lawles, C. Mack, B. Chung, O. Walsh and W. Raun. 2006. Aboveground nitrogen accumulation as a function of time in corn and winter wheat. *In* Agronomy Abstracts, ASA, Madison, WI.
133. Lafarge, T., E. Pasuquin, Z. Susanti, **B. Tubafía**, and C. Bueno. 2006. Achieving higher grain yield through integrated crop establishment in irrigated rice fields. Paper presented at the 2nd International Rice Congress, 9-13 Oct. 2006, New Dehli, India.
134. Lawles, K., K. Freeman, R. Teal, B. Arnall, **B. Tubafía**, O. Walsh, B. Chung, S. Holtz and W. Raun. 2006. Effect of delayed emergence on corn (*Zea mays* L.) grain yields. *In* Agronomy Abstracts,

- ASA, Madison, WI.
135. **Tubafía, B.**, R.K. Teal, B. Arnall, K. Freeman, B. Chung, O. Walsh, K. Lawles, C. Mack and W. Raun. 2006. Adjusting mid-season nitrogen using a sensor-based optimization algorithm to increase use efficiency in corn (*Zea mays* L). In *Agronomy Abstracts*, ASA, Madison, WI.
 136. Arnall, D.B., **B. Tubafía**, K. Girma, W.R. Raun, K.W. Freeman and R.K. Teal. 2006. Relationship between nitrogen use efficiency and response to fertilizer in winter wheat. *In* WCSS Abstract. ASA, Madison, WI.
 137. **Tubafía, B.S.**, J.B. Solie, M.L. Stone, J. Edwards and W.R. Raun. 2005. Effect of treating spatial variability in winter wheat at different resolutions. *In* *Agronomy Abstracts*. ASA, Madison, WI.
 138. Arnall, D.B., K.W. Freeman, K.L. Martin, K. Girma, R.K. Teal, C.J. Mack, W.R. Raun, **B. Tubafía**, O. Walsh, and B. Chung. 2005. Refining response index in winter wheat with the use of CV's. *In* *Agronomy Abstracts*, ASA, Madison, WI.
 139. Chung, B., K.L. Martin, K.W. Freeman, R.K. Teal, D.B. Arnall, K. Girma, **B. Tubafía**, and W.R. Raun. 2005. Identifying the optimum resolution for predicting corn (*Zea mays* L.) grain yield using optical sensor. *In* *Agronomy Abstracts*. ASA, Madison, WI.
 140. Girma, K., K.W. Freeman, K.L. Martin, R.K. Teal, D.B. Arnall, C.J. Mack, J. Mosali, **B. Tubafía**, B. Chung, O. Walsh, W.R. Raun, H. Zhang, and S. Moges. 2005. Long-term municipal biosolids and ammonium nitrate fertilizer effects on grain yield and nitrogen uptake, and concentration of selected metals in dry land winter wheat (*Triticum aestivum* L.) *In* *Agronomy Abstracts*. ASA, Madison, WI.
 141. Lafarge, T., **B. Tubafía** and E. Pasuquin. 2004. Yield advantage of hybrid rice induced by its higher control in tiller emergence. 4th International Crop Science Congress, Brisbane, Australia. 26 Sept. - Oct. 1, 2004.
 142. Pasuquin, E., **B. Tubafía**, J. Bertheloot and T. Lafarge. Impact of early transplanting on tillering and grain yield in irrigated rice. 4th International Crop Science Congress, Brisbane, Australia. 26 Sept. - Oct. 1, 2004.
 143. George, T., R. Magbanua, **B. Tubafía**, J. Quiton and S. Virmani. 2002. Beyond traditional upland rice: High yielding rice in aerobic soils. *In* Abstract. Annual Scientific Conference of the Crop Science Society of the Philippines. Tagbilaran City, Bohol, Philippines. April 23-26, 2002.
 144. George, T., R. Magbanua, J. Quiton, and **B. Tubafía**. 2002. Managing rice in the uplands for yield and profit: Overcoming the myths surrounding rice and uplands. *In* CSSP Abstract. Annual Scientific Conference of the Crop Science Society of the Philippines. Tagbilaran City, Bohol, Philippines. April 23-26, 2002.
 145. **Tubafía, B.**, R. Magbanua, E. Hondrade and T. George. 2001. Strategies for applying phosphorus fertilizer to upland rice in sloping uplands. Asian Agricultural Congress. Manila, Philippines. April 24-27, 2001.
 146. George, T., R. Magbanua, **B. Tubafía**, J. Quiton, A. Almendras, W. Khatib, F. Cox, and R. Yost. 1999. Estimating buffer coefficients for the Phosphorus Decision Support System. Poster presented at the 6th International Symposium on Soil and Plant Analysis "Opportunities for the 21st Century: Expanding the Horizons for Soil, Plant and Water Analysis". 22-26 March 1999, Brisbane, Australia.
 147. **Tubafía, B.**, R. Magbanua, J. Quiton and T. George. 1999. Estimating phosphorus buffer coefficient in a Philippine upland soil using short-term incubation. *In* CSSP Abstract. Annual Scientific Conference of the Crop Science Society of the Philippines Annual Conference. General Santos, Philippines. May 10-15, 1999.
 148. Manoharan, V., **B. Tubafía** and T. George. 1999. Effect of repeated phosphorus fertilization and consecutive cropping on phosphorus buffer coefficient in two Philippine upland soils. *In* CSSP Abstract. Annual Scientific Conference of Crop Science Society of the Philippines Annual Conference. General Santos, Philippines. May 10-15, 1999.
 149. **Tubafía, B.**, S. Weidelt, and T. George. 1997. Seed phosphorus effect on the early growth of

soybean under low phosphorus supply. *In* CSSP Abstract. Annual Scientific Conference of Crop Science Society of the Philippines Annual Conference. Baguio City, Philippines. June 1-5, 1997.

Annual Reports

1. **Tubana, B.**, D. Forestieri, M. Dalen, J. Mite, W. Paye, J. Cruz, D. Burns, R. Frazier, and S. Viator. 2019. Nitrogen management research in Louisiana sugarcane production systems: Sugarcane Research Annual Progress Report for 2018. Louisiana State University Agricultural Center. pp. 190-196.
2. Viator, S., R. Johnson, K. Gravois, and **B. Tubana**. 2019. Sugar crops production management research at the Iberia and Sugar Research Stations: Sugarcane Research Annual Progress Report for 2018. Louisiana State University Agricultural Center. pp. 186-190.
3. Viator, H.P., R. Johnson, **B. Tubana**, and K. Gravois. 2018. Sugar Crops Production Management Research at the Iberia and Sugar Research Stations: Sugarcane Research Annual Progress Report for 2017. Louisiana State University Agricultural Center. pp. 165-169.
4. **Tubana, B.**, M. Dalen, D. Forestieri, M. Martins, B. Nicchio, F. Agostinho, and W. Paye. 2018. Research on Soil Fertility in Sugarcane Production: Sugarcane Research Annual Progress Report for 2017. Louisiana State University Agricultural Center. pp. 170-175.
5. **Tubana, B.**, D. Forestieri, S. Kwakye, J. Garrett, M. Dalen, M. Martins, D. Burns, R. Frazier, and S. Viator. 2018. Nitrogen Management Research in Louisiana Sugarcane Production Systems: Sugarcane Research Annual Progress Report for 2017. Louisiana State University Agricultural Center. pp. 176-183.
6. **Tubana, B.**, M. Martins, M. Dalen, D. Forestieri, M. Shahrtash, F. Agostinho, and W. Paye. 2017. Research on Soil Fertility in Sugarcane Production: Sugarcane Research Annual Progress Report for 2016. Louisiana State University Agricultural Center. pp. 172-178.
7. **Tubana, B.**, D. Forestieri, S. Kwakye, J. Garrett, M. Martins, M. Dalen, F. Agostinho, W. Paye, and S. Viator. 2017. Nitrogen Management Research in Louisiana Sugarcane Production Systems: Sugarcane Research Annual Progress Report for 2016. Louisiana State University Agricultural Center. pp. 179-183.
8. Viator, H.P., R. Johnson, **B. Tubana**, and P. White. 2016. Sugar crops production management research at the Iberia and Sugar Research Station: Sugarcane Research Annual Progress Report for 2015, Louisiana State University Agricultural Center. pp. 176-178.
9. **Tubana, B.**, D. Forestieri, Y. Kanke, M. Martins, M. Dalen, T. Babu, G. Alves, S. Kwakye, and S. Viator. 2016. Nitrogen Management Research in Louisiana Sugarcane Production Systems: Sugarcane Research Annual Progress Report for 2015. Louisiana State University Agricultural Center. pp. 179-183.
10. **Tubana, B.**, Y. Kanke, M. Martins, M. Dalen, M. Shahrtash, F. Agostinho, G. Alves, W. Paye, and J. Hoy. 2016. Research on Soil Fertility and Cultural Management Practices in Sugarcane Production: Sugarcane Research Annual Progress Report for 2015, Louisiana State University Agricultural Center. pp. 184-192.
11. **Tubana, B.**, P. Dupree, M. Dalen, S. Chanda, M. Martins, W. Paye, and J. Hoy. 2015. Research on Soil Fertility and Cultural Management Practices in Sugarcane Production: Sugarcane Research Annual Progress Report for 2014, Louisiana State University Agricultural Center. pp. 162-176.
12. **Tubana, B.**, P. Dupree, M. Martins, D. Forestieri, B. White, T. Babu, H. Viator, and R. Johnson. 2015. Nitrogen Management Research in Louisiana Sugarcane Production Systems: Sugarcane Research Annual Progress Report for 2014, Louisiana State University Agricultural Center. pp. 154-161.
13. Viator, H.P. R. Johnson, **B. Tubana**, and P. White. 2015. Sugar crops production management research at the Iberia Research Station: Sugarcane Research Annual Progress Report for 2014, Louisiana State University Agricultural Center. pp. 177-183.

14. **Tubana, B.**, P. Dupree, M. Dalen, B. White, M. Murilo, and J. Hoy. 2014. Research on Soil Fertility and Cultural Management Practices in Sugarcane Production: Sugarcane Research Annual Progress Report for 2013, Louisiana State University Agricultural Center.
15. **Tubana, B.**, P. Dupree, B. White, A. Arceneaux, M. Selim, H. Viator, and R. Johnson. 2014. Evaluation of Decision Tools for Determination of Sugarcane Nitrogen Requirement: Sugarcane Research Annual Progress Report for 2013, Louisiana State University Agricultural Center.
16. Viator, H., R. Johnson, **B. Tubaña**, and P. White. 2013. Sugar Crops Production Management Research at the Iberia Research Station: Sugarcane Research Annual Progress Report 2012.
17. **Tubaña, B.**, P. Dupree, and H. Viator. 2013. Yield Response of Different Cane Varieties to Nitrogen and Silicon Fertilization: Sugarcane Research Annual Progress Report 2012.
18. Newman, N., H.M. Selim, L. Zhang, A. Arceneaux, **B. Tubaña**, and L. Gaston. 2012. Impact of Sugarcane Management on Carbon Sequestration in Soils: Sugarcane Research Annual Progress Report 2012.
19. **Tubaña, B.**, J. Teboh, and H. Viator. 2011. Soil Fertility Research in Sugarcane: Sugarcane Research Annual Progress Report for 2010. Louisiana State University Agricultural Center. pp. 151-165.
20. Viator, H., and **B. Tubana**. 2011. Varietal Response to Nitrogen Application Rates: Sugarcane Research Annual Progress Report for 2010. Louisiana State University Agricultural Center. pp. 168.
21. Viator, H., and **B. Tubana**. 2011. Evaluation of the Use of Green Manure Soybeans Grown in Rotation with Sugarcane in a Sub-tropical Environment: Sugarcane Research Annual Progress Report for 2010. Louisiana State University Agricultural Center. pp. 166-167.
22. **Tubaña, B.**, J. Teboh, and H. Viator. 2010. Soil Fertility Research in Sugarcane: Sugarcane Research Annual Progress Report for 2009. Louisiana State University Agricultural Center. Pp. 132-140.
23. **Tubaña, B.**, H. Viator, J. Wang, A. Arceneaux, and J. Teboh. 2009. Soil Fertility Research in Sugarcane: Sugarcane Research Annual Progress Report for 2008. Louisiana State University Agricultural Center. pp. 152-164.
24. Weindorf, D.C., and **B. Tubana**. 2008. Soil Survey of Saint James Parish, Louisiana (Soil Fertility Interpretations) [on-line]. USDA-NRCS. Available at http://soils.usda.gov/survey/printed_surveys/state.asp?state=Louisiana&abbr=LA.
25. Mascagni, H.J. Jr., **B. Tubaña**, and B. Bell. 2008. Influence of Nitrogen Fertilizer Rate and Time of Application on Corn Yield on a Mississippi River Alluvial Clay in Northeast Louisiana. 2008 Annual Report.
26. Mascagni, H.J. Jr., **B. Tubaña**, and B. Bell. 2008. Influence of Nitrogen Fertilizer Rate and Time of Application on Corn Yield on a Mississippi River Alluvial Silt Loam in Northeast Louisiana. 2008 Annual Report.
27. **Tubaña, B.**, C. Kennedy, A. Arceneaux, and J. Teboh. 2008. Soil Fertility Research in Sugarcane: Sugarcane Research Annual Progress Report for 2007. Louisiana State University Agricultural Center.

PARTICIPATION IN PROFESSIONAL MEETINGS, SYMPOSIA, WORKSHOPS, AND CONFERENCE

Conference Presentations (included those without abstract) – Presenter and Senior Author

1. **Tubana, B.**, D. Forestieri, M. Martins, W. Paye, J. Cruz, J. Mite, and M. Dalen. 2019. Soil fertility indicators for Louisiana sugarcane production systems. 48th American Society of Sugar Cane Technologists Annual Joint Meeting, Point Clear, AL, June 26-28, 2019. (**Agricultural Session II Best Presentation**)
2. **Tubana, B.**, D. Forestieri, M. Dalen, R. Frazier, and D. Burns. 2019. Nitrogen-rich strip: a fertilizer

- decision tool for Louisiana sugarcane production systems. 48th American Society of Sugar Cane Technologists Annual Joint Meeting, Point Clear, AL, June 26-28, 2019.
3. Botta, A., **B. Tubana**, S. Nuria, M. Candido, P. Price, and L. Datnoff. 2017. Potential of Armurox®, a soluble silicon and peptides biostimulant, as a foliar source of silicon in wheat. In 7th International Conference on Silicon in Agriculture, Bengaluru, India, Oct. 24-28, 2017.
 4. **Tubana, B.**, H. Viator, M. Dalen, D. Forestieri, and M. Martins. 2017. Variable nitrogen rate technology in Louisiana sugarcane production systems. 47th American Society of Sugar Cane Technologists Annual Joint Meeting, New Orleans, LA, June 14-16, 2017. **(Agricultural Session II Best Presentation)**
 5. **Tubana, B.S.**, D. Harrell, T. Walker, and S. Phillips. 2016. Evaluation of optical sensor-based nitrogen recommendation for Mid-Southern U.S. rice production system. In 36th Rice Technical Working Group Meeting Proceedings. Galveston, TX, March 1-4, 2016.
 6. **Tubana, B.**, H. Viator, M. Dalen, T. Babu, B. White, D. Forestieri, and R. Johnson. 2015. Evaluation of optical sensing and variable nitrogen rate application in Louisiana sugarcane production systems. In ASSCT Abstracts. American Society of Sugar Cane Technologists Joint Annual Meeting, New Orleans, LA, June 22-24, 2015.
 7. **Tubana, B.**, L. Datnoff, C. Narayanaswamy, B. White, T. Babu, and J. Yzenas. 2014. Changes on plant-available silicon level of selected soils from the Midwest and South USA applied with different rates of silicate slag. *In* 6th International Conference on Silicon in Agriculture, Stockholm, Sweden, Aug. 26-31, 2014.
 8. **Tubana, B.**, H. Viator, and R. Johnson. 2014. Optical sensor-based nitrogen rate decision tool for sugarcane production in Louisiana. Annual Meeting American Society of Sugar Cane Technologists Louisiana Division, Lafayette, LA, February 4-5, 2014.
 9. **Tubana, B.**, M. Pontiff, C. Kimbeng, and H. Viator. 2013. Crop age and varietal impact on agronomic nitrogen use efficiency of sugarcane. ASA-CSSA-SSSA International Annual Meetings. November 3-6, 2013, Tampa, FL.
 10. **Tubana, B.**, T. Babu, and L. Datnoff. 2013. Silicon dynamics in soils under different cropping systems in Louisiana. ASA-CSSA-SSSA International Annual Meetings. November 3-6, 2013, Tampa, FL.
 11. **Tubañá, B.**, H. Viator, J. Teboh, J. Lofton, and Y. Kanke. 2011. Feasibility of using remote sensing technology in nitrogen management in sugarcane production. *In* ASSCT Abstracts. American Society of Sugar Cane Technologists Joint Annual Meeting, New Orleans, LA, June 8-10, 2011.
 12. **Tubañá, B.**, C. Kennedy, H. Viator, A. Arceneaux, and J. Teboh. 2010. Nitrogen requirement for optimal yield and quality of sugarcane grown on alluvial soils in Louisiana. *In* Agronomy Abstracts. ASA, Madison, WI.
 13. **Tubana, B.**, D. Harrell, T. Walker, T. Teboh, J. Lofton, J. Fluitt, and S. Phillips. 2010. Rice yield potential algorithms based on canopy reflectance measured at different sensor head orientations. Rice Technical Working Group Meeting. Biloxi, MS, February 22-25, 2010.
 14. **Tubañá, B.** 2010. Improving fertilizer recommendations for sugarcane: The Louisiana Soil Fertility and Nutrient Management Project. American Society of Sugar Cane Technologists Annual Meeting - Louisiana Division. Lafayette, LA, February 3, 2010.
 15. Kanke, Y., D. Harrell, T. Walker, **B. Tubañá**, J. Lofton, J. Teboh, and S. Phillips. 2010. Algorithm for predicting rice yield potential at different sensor head orientations. Poster presentation at the 2010 Nitrogen Use Efficiency Conference, Stillwater, OK, Aug. 2-4, 2010.
 16. **Tubañá, B.** 2010. Improving nitrogen use efficiency in cotton: a remote sensor-based approach. National Conservation Systems Cotton and Rice Conference. Tunica, MS, January 12-13, 2010.
 17. **Tubañá, B.** 2009. Soil fertility research for sustainable crop production systems in Louisiana. Louisiana Cooperative Soil Survey Conference. Baton Rouge, LA. September 10, 2009.

18. **Tubafía, B.**, H. Viator, R. Johnson, J. Teboh, and M. Kongchum. 2009. Estimating sugarcane yield potential and responsiveness to nitrogen fertilization using mid-season canopy reflectance. *In* Agronomy Abstracts. ASA, Madison, WI.
19. **Tubafía, B.**, D. Harrell, T. Walker, and S. Phillips. 2009. Canopy reflectance-based algorithm for in-season estimation of rice grain yield. *In* Agronomy Abstracts. ASA, Madison, WI.
20. Harrell, D., **B. Tubafía**, T. Walker, and S. Phillips. 2009. Estimating in-season rice grain yield using mid-season canopy reflectance: a component of sensor-based nitrogen calculator. Poster presentation at the 2009 Nitrogen Use Efficiency Conference, W. Lafayette, IN, Aug. 4-6, 2009.
21. Teboh, J., J. Lofton, **B. Tubafía**, S. Viator and K. Gravois. 2009. Estimating sugarcane yield and response to nitrogen fertilization with a ground based remote sensor. Poster presentation at the 2009 Nitrogen Use Efficiency Conference, W. Lafayette, IN, Aug. 4-6, 2009.
22. **Tubafía, B.**, E. Barnes, K. Bronson, P. Scharf, A. Khalilian, P. Allen, J. Varco, and B. Arnall. 2009. Sensor-based approaches for cotton nitrogen management. Presentation at the 2009 Nitrogen Use Efficiency Conference, W. Lafayette, IN, Aug. 4-6, 2009.
23. **Tubafía, B.**, H. Viator, R. Johnson, J. Wang, J. Teboh, and M. Kongchum. 2009. Establishing the components of a remote sensor-based nitrogen decision tool for sugarcane production. In ASSCT Abstracts. American Society of Sugar Cane Technologists Annual Meeting, Biloxi, MS, June 17-19, 2009.
24. **Tubafía, B.**, J. Steven, H. Mascagni, E. Clawson, D. Boquet, D. Harrell, J. Wang, and J. Teboh. 2008. Effect of phosphorus fertilization on early growth of corn on six alluvial soils in Louisiana. *In* Agronomy Abstracts. ASA, Madison, WI.
25. **Tubafía, B.**, C. Kennedy, A. Arceneaux, J. Teboh, D. Weindorf, and J. Wang. 2008. Analysis of sugarcane yield response to annual nitrogen fertilization. *In* ASSCT Abstract. American Society of Sugar Cane Technologist Annual Joint Meeting, Orlando, FL, June 18-20, 2008.
26. **Tubafía, B.S.**, D.B. Arnall, K.W. Freeman, R.K. Teal, B. Chung, O. Walsh, D.E. Edmonds, S. Holtz, P. Turner, C.R. Dotson, B. England, M.C. Daft, C.J. Mack, K. Lawles, K. Girma and W.R. Raun. 2007. Corn (*Zea mays* L.) grain yield response to by-plant nitrogen fertilization. *In* Agronomy Abstracts. ASA, Madison, WI.
27. **Tubafía, B.**, R.K. Teal, B. Arnall, K. Freeman, B. Chung, O. Walsh, K. Lawles, C. Mack and W. Raun. 2006. Adjusting mid-season nitrogen using a sensor-based optimization algorithm to increase use efficiency in corn (*Zea mays* L.). *In* Agronomy Abstracts, ASA, Madison, WI.
28. **Tubafía, B.S.**, J.B. Solie, M.L. Stone, J. Edwards and W.R. Raun. 2005. Effect of treating spatial variability in winter wheat at different resolutions. *In* Agronomy Abstracts. ASA, Madison, WI.
29. George, T., R. Magbanua, **B. Tubafía**, J. Quiton and S. Virmani. 2002. Beyond traditional upland rice: High yielding rice in aerobic soils. *In* Abstract. Annual Scientific Conference of the Crop Science Society of the Philippines. Tagbilaran City, Bohol, Philippines. April 23-26, 2002.
30. **Tubafía, B.**, R. Magbanua, E. Hondrade and T. George. 2001. Strategies for applying phosphorus fertilizer to upland rice in sloping uplands. Asian Agricultural Congress. Manila, Philippines. April 24-27, 2001.
31. **Tubafía, B.**, R. Magbanua, J. Quiton and T. George. 1999. Estimating phosphorus buffer coefficient in a Philippine upland soil using short-term incubation. *In* CSSP Abstract. Annual Scientific Conference of the Crop Science Society of the Philippines Annual Conference. General Santos, Philippines. May 10-15, 1999.
32. **Tubafía, B.**, S. Weidelt, and T. George. 1997. Seed phosphorus effect on the early growth of soybean under low phosphorus supply. *In* CSSP Abstract. Annual Scientific Conference of Crop Science Society of the Philippines Annual Conference. Baguio City, Philippines. June 1-5, 1997.

Conference Presentation (without abstract) – Co-Author

1. Bamrungrai, J., **B. Tubana**, A. Polthanee, and A. Promkhambut. 2019. Nitrogen and potassium

- foliar fertilization of sugarcane production in Riceland of Northeast Thailand. 17th Annual Nitrogen Use Efficiency Conference, Columbia, MO. Aug. 5-7, 2019.
2. Costin, Z., **B. Tubana**, D. Forestieri, M. Dalen, W. Paye, J. Cruz, and J. Bamrungrai. 2019. Agricultural practices to improve nitrogen use efficiency for Louisiana sugarcane production systems. 17th Annual Nitrogen Use Efficiency Conference, Columbia, MO. Aug. 5-7, 2019.
 3. Forestieri, D., **B. Tubana**, M. Dalen, J. Mite, W. Paye, and J. Cruz. 2019. Predicting sugarcane yield and nitrogen requirement based on ground sensor- and aerial image-based vegetation indices in Louisiana production systems. 17th Annual Nitrogen Use Efficiency Conference, Columbia, MO. Aug. 5-7, 2019.
 4. Paye, W., **B. Tubana**, S. Harrison, M. Dalen, M. Martins, and H. Mascagni, Jr. 2019. The effect of granular size on the solubility and release of monosilicic acid from silicate slag and silicon uptake by wheat (*Triticum aestivum*). 17th Annual Nitrogen Use Efficiency Conference, Columbia, MO. Aug. 5-7, 2019.
 5. Mite-Caceres, J., M. Dalen, W. Paye, D. Forestieri, J. Cruz, L. Fultz, and **B. Tubana**. 2019. Effect of planting date and fertilization on cover crops biomass production in soybean-corn rotation system. 2019. 17th Annual Nitrogen Use Efficiency Conference, Columbia, MO. Aug. 5-7, 2019.
 6. Paye, W., **B. Tubana**, S. Harrison, M. Dalen, M. Martins, and H. Mascagni, Jr. 2018. Granule size and application rate of silicate slag affect plant-available silicon supply to wheat. 16th Annual Nitrogen Use Efficiency Conference, Manhattan, KS. Jul 30 to Aug. 1, 2018.
 7. Mite-Caceres, J., D. Forestieri, M. Martins, S. Kwakye, J. Garrett, M. Dalen, W. Paye, and **B. Tubana**. 2018. Effect of planting date and fertilization on cover crops biomass production in soybean-corn rotation system. 16th Annual Nitrogen Use Efficiency Conference, Manhattan, KS. Jul 30 to Aug. 1, 2018. **(1ST PLACE GRADUATE STUDENT POSTER-FLASH TALK COMPETITION)**
 8. Forestieri, D., **B. Tubana**, R. Diaz, M. Martins, M. Dalen, J. Mite, W. Paye, B. Nicchio, J. Garrett, and S. Kwakye. 2018. Establishing the relationship between ground sensor- and aerial image-based vegetation indices for precision nitrogen management in Louisiana sugarcane. 16th Annual Nitrogen Use Efficiency Conference, Manhattan, KS. Jul 30 to Aug. 1, 2018. **(3RD PLACE GRADUATE STUDENT POSTER COMPETITION)**
 9. Cruz, J., T.C. Fernando, E.T. Rasco, **B. Tubana**, M. Dalen, and E.S. Paterno. 2018. Endophyten nitrogen-fixing bacteria isolated from nipa palm as growth-promoters for upland rice. 2018. 16th Annual Nitrogen Use Efficiency Conference, Manhattan, KS. Jul 30 to Aug. 1, 2018. **(1ST PLACE GRADUATE STUDENT POSTER COMPETITION)**
 10. Dalen, M., D. Forestieri, D. Burns, R. Frazier, M. Martins, W. Paye, J. Cruz, M. Mangaoil, and **B. Tubana**. 2018. Application of N-rich strip technology in Louisiana sugarcane production systems. 16th Annual Nitrogen Use Efficiency Conference, Manhattan, KS. Jul 30 to Aug. 1, 2018.
 11. Nicchio, B., M. Martins, M. Dalen, and **B.S. Tubana**. 2017. Determination of rate and source of potassium and silicon to maximize sugarcane productivity in Louisiana. LSU International Research Fair, LSU Campus, Baton Rouge, LA. Nov. 15, 2017.
 12. Dalen, M., Y. Kanke, S. Kwakye, D. Forestieri, G. Alves, M. Martins, J. Garrett, and **B. Tubana**. 2016. Estimating energy cane stalk yield using red and red-edge reflectance-based vegetation indices harvested at different dates. Nitrogen Use Efficiency Meeting, Boise, ID, August 8-10, 2016.
 13. Forestieri, D., D. Burns, R. Frazier, J. Garrett, F. Agostinho, W. Paye, S. Kwakye, M. Dalen, M. Martins, and **B. Tubana**. 2016. Establishing the relationship between ground sensor- and aerial image-based vegetation indices for precision nitrogen management in Louisiana crop production systems. Nitrogen Use Efficiency Meeting, Boise, ID, August 8-10, 2016.
 14. Shahrtash, M., B. White, M. Dalen, M. Martins, G. Alves, F. Agostinho, and **B. Tubana**. 2016. Silicon and nitrogen fertilization effects on nitrogen use efficiency of wheat. Nitrogen Use Efficiency Meeting, Boise, ID, August 8-10, 2016. Nitrogen Use Efficiency Meeting, Boise, ID, August 8-10,

2016. **(Marvin Stone Graduate Student Poster Presentation – 3rd Place)**
15. Forestieri, D., J. Garrett, S. Kwakye, M. Martins, M. Dalen, W. Paye, F. Agostinho, M. Shahrtash, and **B. Tubana**. 2016. Relationship of leaf nitrogen content with red- and red-edge vegetation indices at early growth stages of sugarcane.
 16. Forestieri, D., G.A. Santos, T. Babu, M. Dalen, W. Paye, B. White, and **B. Tubana**. 2015. Evaluating the effect of nitrogen sources applied at different rates in Louisiana sugarcane production system. Nitrogen Use Efficiency Meeting, Auburn, AL. August 4-5, 2015.
 17. Dalen, M., S. Chanda, P. Dupree, B. White, D. Forestieri, T. Babu, W. Paye, and B. Tubana. 2015. Harvest date effects on the relationship between spectral reflectance and energy cane yield. Nitrogen Use Efficiency Meeting, Auburn, AL. August 4-5, 2015.
 18. Griffin, T. W., Barnes, E.M., Allen, P.A., Andrade-Sánchez, P., Arnall, D.B., Balkcom, K., Barber, L.T., Bauer, P., Bronson, K.F., Buschermohle, M.J., Jones, A.P., Ge, Y., Roberson, G., Taylor, R.K., **Tubana, B.S.**, Varco, J.J., Vellidis, G., Vories, E.D., Wilkerson, J.B., and Yin, X. 2014. Pooled analysis of combined primary data across multiple states and investigators for the development of a NDVI-Based On-the-Go nitrogen application algorithm for cotton. ASABE and CSBE/SCGAB Annual International Meeting, Montreal, Quebec Canada, July 13-16, 2014.
 19. Chanda, S., J. Hoy, P. Dupree, B. White, M. Martins, M. Dalen, T. Babu, D. Muñoz, and **B. Tubana**. 2014. Application of coefficient of variance for population stand monitoring of cane using canopy reflectance-based vegetation index readings. Nitrogen Use Efficiency Conference. Sioux Falls, SD, August 4-6, 2014.
 20. Dalen, M., S. Chanda, P. Dupree, and **B. Tubana**. 2014. Optical sensor based estimation of early-season biomass and yield of energy cane. Nitrogen Use Efficiency Conference. Sioux Falls, SD, August 4-6, 2014.
 21. Maia, S., P. Dupree, M. Dalen, S. Chanda, T. Babu, and **B. Tubana**. 2014. Relationship among optical sensor-based vegetation indices, chlorophyll content, nitrogen status, and yield of energy cane supplied with different rates of nitrogen fertilizer. Optical sensor based estimation of early-season biomass and yield of energy cane. Nitrogen Use Efficiency Conference. Sioux Falls, SD, August 4-6, 2014.
 22. M. Dalen, S. Chanda, S. Maia, B. White, P. Dupree, and **B. Tubana**. 2014. Non-destructive estimation of energy cane yield using optical sensor technology. Poster Presentation at the 10th Annual Economic Development Assistantships Symposium, LSU Union Ballroom, April, 28, 2014.

Invited Presentation (International)

- **Tubana, B.** 2017. Application of optical remote sensing technology in Louisiana sugarcane production system. In 5th TTC Annual International Sugarcane Conference. Phan Thiet City, Vietnam, August 17-18, 2017.
 - **Tubana, B.** 2017. Sugarcane in Louisiana: cultural management practices and production technologies. Khon Kaen University, Khon Kaen, Thailand. Dec. 12, 2017.
 - **Tubana, B.**, T. Babu, B. White, F. Agostinho, W. Paye, and L. Datnoff. 2017. Understanding the dynamics of silicon in plant and soil are essential for establishing silicon fertilization guidelines. In 7th International Conference on Silicon in Agriculture, Bengaluru, India, Oct. 24-28, 2017.
- (KEYNOTE SPEAKER)**
- **Tubana, B.** Integrating optical remote sensing technology to improve nitrogen management in Louisiana crop production systems. Xinjiang Academy of Agricultural Sciences, Urumqi, China, Oct. 27-30, 2015.
 - **Tubana, B.** 2014. Sugarcane nutrition: beyond boosting yield – A Louisiana sugarcane production perspective. Universidade de Federal Uberlandia, Uberlandia, BR. Nov. 28, 2014.
 - **Tubana, B.**, B. Arnall, K. Freeman, and W. Raun. 2007. Adjusting midseason nitrogen rate using sensor-based optimization algorithm to improve use efficiency in corn. Environmental Technology

Assessment for Agriculture Program, Agriculture and Agri-Food Canada, Ottawa, Ontario, Feb. 28 – March 1, 2007

Invited Presentation (National and Regional)

- **Tubana, B.**, and L. Shiratsuchi. 2018. Sensor-based N management update in Louisiana. 2018. 16th Annual Nitrogen Use Efficiency Conference, Manhattan, KS. Jul 30 to Aug. 1, 2018.
- **Tubana, B.** and L. Datnoff. Silicon dynamics and fertilization in Louisiana soils. Compass Mineral's Lunch and Learn. Kansas City, KS, Mar 14, 2018.
- **Tubana, B.** 2018. Remote sensor based nitrogen management in Louisiana. Compass Mineral's Lunch and Learn. Kansas City, KS, Mar 14, 2018.
- **Tubana, B.** 2018. Silicon fertilization in Louisiana Soils: impact on crop productivity. Plant Pathology and Crop Physiology 2018 Spring Seminar. Baton Rouge, LA, Apr 4, 2018.
- **Tubana, B.** 2016. Silicon fertilization in corn and wheat. 2016 Alabama Corn and Wheat Short Course. Auburn, AL. December 12, 2016.
- **Tubana, B.** 2015. Nitrogen management in sugarcane and cotton in Louisiana. Nitrogen Use Efficiency Meeting. Auburn, AL Aug. 4-5, 2015.
- **Tubana, B.** 2014. Silicon's role in soybean and corn production. 2014 Soybean and Corn College Lunch and Learn Session. July 28-30, 2014, Coldwater, MI.
- **Tubafia, B.** 2013. Variable nitrogen rate technology in cotton production using an integrated optical sensing system. National Conservation Systems Cotton and Rice Conference, Baton Rouge, LA, January 31 – February 1, 2013.
- **Tubana, B.** 2013. Soil fertility research in Louisiana for efficient management of NPK fertilizer in row-crop production. Southern Extension and Research Activity (SERA) 6 Meeting, The Lod Cook Alumni Center, LSU, June 16-18, 2013.
- **Tubana, B.** 2013. Silicon's role in soybean and corn production. 2013 Soybean and Corn College Lunch and Learn Session. July 29-August 1, 2013, Coldwater, MI.
- **Tubana, B.** 2008. Estimating N needs using GreenSeeker Technology. Louisiana Certified Crop Advisor Meeting, Rice Research Station in Crowley, LA, March 4, 2008.
- **Tubana, B.** 2006. Using sensor-based nitrogen fertilization to improve nitrogen use efficiency of cereal crop. Women in Agriculture and Business, Stillwater, OK. March 11, 2006.

Conference Meeting, Training, and Workshops Organized or Served

- Organizer and moderator, 2018 Sensor-Based Nutrient Management Community Symposium, ASA-CSSA-SSSA, Baltimore, MD, Nov. 4-7, 2018.
- Organizer, 15th Annual Nitrogen Use Efficiency Conference, LSU Campus, Baton Rouge, Aug. 7-9, 2017.
- Co-Organizer and Moderator, 2017 Sensor-Based Nutrient Management Community Symposium, ASA-CSSA-SSSA, Tampa, FL, Oct. 22-25, 2017.
- Co-Organizer and Speaker, 2017 New Strategies to Optimized Sugarcane Fertility. Cooperators: ICL Specialty Fertilizer, WolfTrax, and LSU AgCenter. LSU AgCenter Research Station, St. Gabriel, LA. Oct. 4, 2016.
- Moderator, Graduate Student Oral Presentation Competition, Soil Fertility and Plant Nutrition Division, 2015 Annual ASA-CSSA-SSSA Meeting, Nov. 1-4, 2015, Minneapolis, MN.
- Panel Member, 2015 Annual Nitrogen Use Efficiency Conference, Auburn, AL, Aug. 4-5, 2015.
- Co-Organizer and Speaker, Central America Producers and Consultants Visit to Sugar Research Station, St. Gabriel, LA, Aug. 24, 2017.
- Co-Organizer and Speaker, Central America Producers and Consultants Visit to Sugar Research Station, St. Gabriel, LA, Sep. 15, 2015.
- Moderator, Graduate Student Oral Presentation Competition, 2011 Annual ASA-CSSA-SSSA

Meeting, October 16-19, 2011, San Antonio, TX.

- Judge for Graduate Student Poster Competition, 2010 Annual ASA-CSSA-SSSA Meeting, October 31-November 3, 2010 Long Beach, CA.
- Moderator, 2010 Rice Technical Working Group Conference, February 22-25, 2010 Biloxi, MS.
- Moderator, 8th International Conference on Precision Agriculture, July 23-26, 2006, Minneapolis, MN.
- Topic Co-Coordinator and Speaker, Sensor-Based Nitrogen Fertilization Workshop. CIMMYT, Ciudad Obregon, Mexico. January 8-12, 2007
- Topic Co-Coordinator and Speaker, Sensor-Based Nitrogen Fertilization Workshop. Stockport, South Australia. August 1-3, 2006.
- Topic Co-Coordinator and Speaker, Sensor-Based Nitrogen Fertilization Workshop, CIMMYT, El-Batan, Mexico. September 12-13, 2005.

Awards/Recognition of Scholarly Achievement

- G. & H. Research Excellence Award (2018)
- Sedberry Outstanding Graduate Student Award (2018)
- Jack E. and Henrietta Jones Endowed Professorship (2015)
- Gamma Sigma Delta Teacher Merit Honor Roll (2013, 2014, 2016)
- Distinguished Service Award 2012. The Rice Technical Working Group.
- Gamma Sigma Delta 2011 Teacher Merit Honor Roll
- Recipient of the 2007 Oklahoma State University Williams Outstanding Thesis Award
- Appointed Associate Editor of the Agronomy Journal for a 6 year term
- Gerald O. Mott Meritorious Graduate Student Award in Crop Science, 2007
- Oklahoma State University - Dept. of Plant and Soil Sciences Outstanding Ph.D. Student Award, 2005-2006
- Oklahoma State University - Dept. of Plant and Soil Sciences International Agroecosystem Graduate Scholarship Award, 2005-2006

RESEARCH SUPPORT/GRANT ACTIVITIES

Research Proposals Funded

Competitive

- Kimbeng, C., M. Potif, B. Wilson, J. Hoy, G. Aita, A. Orgeron, K. Gravois, **B. Tubana**, and N. Baisakh. 2020. Capacity building of the LSU AgCenter Research Station's sucrose laboratory through the acquisition of a state-of-the art NIR equipment. Board of Regent Support Fund **\$200,000**.
- **Tubana, B.**, Fultz, L., Selim, M, and S. Viator. 2017-2021. Feedstock production potential of energy cane sweet-sorghum rotation with winter cover crop system. USDA-NIFA-AFRI **\$387,000**.
- Fultz, L., Selim, M. and **Tubana, B.** 2016-2020. Water quality and soil health under fallow season cover crops in Mid-South row-crop production. USDA-NRCS-CIG. **\$999,012**.
- **Tubana, B.** 2016. Program to establish collaboration between Brazilian Institutions and LSU AgCenter for soil fertility research. Louisiana Board of Regents – LINK. **\$4,000**.
- Stout, M., D. Ring, M. Way, **B. Tubana**, J. Beuzelin, and D. Groth. 2014-2017. Integrating management programs for the invasive Mexican rice borer into existing management programs in rice. USDA-NIFA Crop Protection and Pest Management Program. \$249,585. Sub-Award (**\$0**)
- **Tubana, B.**, S. Viator, and D. Harrell. 2015. Generating nitrogen fertilizer prescriptions for crop production based on nitrogen algorithm using unmanned aircraft vehicle-acquired images and ground-based optical sensor. LSU Board of Supervisors. **\$20,484**.
- Kochergin, V. et al. 2011-2016. A regional program for production of multiple agricultural

feedstocks and processing to biofuels and biobased chemicals. USDA-NIFA-AFRI. \$17,289,335. Sub-Award **\$298,071**.

- Yin, F., J. Varco, P. Scharf, T. Griffin, and **B. Tubana**. 2011-2014. Precision nitrogen management using integrated optical sensing and variable rate technologies. USDA-NRCS CIG - Multistate. Project Coordinator for LSU AgCenter. \$650,827. LSU AgCenter Sub-award - **\$ 161,025**.
- Selim, M., and **B. Tubana**. 2012-2016. Implementation of new strategies for sugarcane residue and fertilizer management. USDA-NRCS-CIG. **\$149,905**.
- **Tubana, B.**, and M. Kongchum. 2011. LSU USDA 2011 Global Research Alliance Fellowship Proposal. USDA-FAS. **\$29,980**.
- **Tubañá, B.** 2012-2016. Non-Invasive, field-scale estimation of feedstock-based energy cane production using remote sensing technology. LSU Graduate School Economic Development Assistantship. \$100,000.
- **Tubana, B.** 2010-2012. An integrated canopy structure characterization for sugarcane grown on alluvial soils of Louisiana using remote sensing technology. USDA-AFRI-CSRESS. **\$115,184**.
- **Tubana, B.** 2008. Estimating sugarcane yield potential and responsiveness to nitrogen fertilization using midseason canopy reflectance. Louisiana Board of Regents. PFund. \$10,000.

Commodity Boards

- **Tubana, B.S.**, and L. Fultz. 2018-2020. Impact of fertilization and planting date on cover crops biomass production and nutrient turnover on soybean-corn rotation systems. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$60,000**.
- **Tubana, B.S.**, L. Fultz, and R. Parvej. 2020. Sulfur fertilization updates: application rates, source, and potential of biostimulant. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$23,500**.
- **Tubañá, B.S.**, H. Viator, and R. Johnson. 2018-2020. Nitrogen research in Louisiana sugarcane production systems. American Sugar Cane League. Funded **\$35,000**.
- **Tubana, B.S.**, R. Johnson, and K. Gravois. 2019. Sulfur calibration research in Louisiana sugarcane production systems. American Sugar Cane League. Funded **\$25,000**.
- **Tubana, B.S.**, S. Harrison, and T. Price. 2018-2019. Soil fertility research: improving yield and alleviating disease in grain production in Louisiana. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$55,000**.
- **Tubañá, B.S.**, H. Viator, and R. Johnson. 2017. Nitrogen research in Louisiana sugarcane production systems. American Sugar Cane League. Funded **\$7,500**.
- **Tubana, B.S.**, S. Harrison, H. Mascagni, and T. Price. 2017. Soil fertility research: improving yield and alleviating disease in grain production in Louisiana. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$23,500**.
- **Tubañá, B.S.**, H. Viator, and R. Johnson. 2016. Nitrogen research in Louisiana sugarcane production systems. American Sugar Cane League. Funded **\$7,500**.
- **Tubana, B.S.**, S. Harrison, H. Mascagni, and T. Price. 2016. Soil fertility research: improving yield and alleviating disease in grain production in Louisiana. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$23,500**.
- **Tubañá, B.S.**, H. Viator, and R. Johnson. 2015. Nitrogen research in Louisiana sugarcane production systems. American Sugar Cane League. Funded **\$7,500**.
- **Tubana, B.S.**, S. Harrison, H. Mascagni, J. Lofton, T. Price, and S. Dodla. 2015. Soil fertility research: improving yield and alleviating disease in grain production in Louisiana. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$23,500**.
- **Tubañá, B.S.**, H. Viator, and R. Johnson. 2014. Nitrogen research in Louisiana sugarcane production systems. American Sugar Cane League. Funded **\$10,000**.
- **Tubana, B.**, R. Mascagni, B. Haggard-Lofton, and J. Lofton. 2014. Soil test calibration and

fertilization research for sustainable soybean and corn production in Louisiana. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$71,176**.

- **Tubaña, B.S.**, H. Viator, and R. Johnson. 2013. Nitrogen research in Louisiana sugarcane production systems. American Sugar Cane League. Funded **\$10,000**.
- **Tubana, B.**, R. Mascagni, B. Haggard-Lofton, and J. Lofton. 2013. Soil test calibration and fertilization research for sustainable soybean and corn production in Louisiana. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$108,877**.
- **Tubaña, B.S.**, H. Viator, and R. Johnson. 2012. Nitrogen research in Louisiana sugarcane production systems. American Sugar Cane League. Funded **\$10,000**.
- **Tubana, B.**, R. Mascagni, B. Haggard-Lofton, and J. Lofton. 2012. Soil test calibration and fertilization research for sustainable soybean and corn production in Louisiana. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$65,336**.
- **Tubaña, B.S.**, H. Viator, and R. Johnson. 2011. Nitrogen research in Louisiana sugarcane production systems. American Sugar Cane League. Funded **\$10,000**.
- **Tubana, B.**, J. Wang, J. Stevens, D. Boquet, H. Mascagni, T. Udeigwe, and R. Henderson. 2011. Soil test calibration and fertilization research for sustainable soybean and corn production in Louisiana. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$55,000**.
- **Tubana, B.**, J. Wang, J. Stevens, D. Boquet, H. Mascagni, T. Udeigwe, and R. Henderson. 2010. Soil test calibration and fertilization research for sustainable soybean and corn production in Louisiana. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$30,000**.
- **Tubaña, B.S.** and H. Mascagni. 2010. Evaluating a remote sensor-based nitrogen management scheme for corn production in Louisiana. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$20,000**.
- **Tubana, B.**, J. Wang, J. Stevens, D. Boquet, H. Mascagni, T. Udeigwe, and R. Henderson. 2009. Soil test calibration and fertilization research for sustainable soybean and corn production in Louisiana. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$36,077**.
- **Tubaña, B.S.** and H. Mascagni. 2009. Evaluating a remote sensor-based nitrogen management scheme for corn production in Louisiana. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$19,000**.
- Wang, J., **B. Tubana**, J. Stevens, D. Boquet, H. Mascagni, T. Udeigwe, and R. Henderson. 2008. Soil test calibration and fertilization research for sustainable soybean and corn production in Louisiana. Louisiana Soybean and Grain Research and Promotion Board. Funded **\$28,000**.
- **Tubana, B.**, J. Wang, D. Weindorf, and J. Teboh. 2008. Using ground-based remote sensor for predicting sugarcane yield potential. American Sugar Cane League. **\$6,500**.

Industry (Contract)

- Fultz, L., and **Tubana, B.** 2019-2023. Implementation and Demonstration of Best Management Practices on Model Farms in Louisiana. The Patrick F. Taylor Foundation. Funded **\$1.408 million**.
- **Tubana, B.S.**, D. Harrell, and D. Burns. 2018. Validation study: foliar application of Phyton solution in rice production systems in South and North Louisiana. Phyton Corp. Funded **\$33,893**.
- **Tubana, B.S.** 2017. Evaluation on the impact of Phyton AG27 application at different rate and frequency on copper uptake and productivity of rice in Louisiana. Phyton Corp. Funded **\$47,375**.
- **Tubana, B.S.** 2016. Effect of foliar application rate and frequency of copper sulfate containing solutions on rice copper uptake, growth, and yield. Phyton Corp. Funded **\$57,500**.
- **Tubana, B.S.**, D. Harrell, and L. Datnoff. 2015. Evaluating the effect of silicon sources on crop productivity, resistance to disease and tolerance to heavy metal. Edward Levy Co. Funded **\$83,662**.
- **Tubana, B.S.** 2015. Evaluation of copper sulfate pentahydrate-containing solution as a plant growth regulator. Marketing Arm International. Funded **\$21,625**.

- **Tubana, B.S.**, R. Schneider, D. Harrell, and L. Datnoff. 2014. Soil fertility, agronomic, and plant pathological research in relation to silicon dynamics of soils cultivated for field crops production. Edward Levy Co. Funded **\$87,000**.
- **Tubaña, B.S.** and L. Datnoff. 2014. Foliar-applied silicon research in rice production. Taminco, Inc. **\$33,675**.
- **Tubaña, B.S.** and L. Datnoff. 2014. Potential of liquid formulation containing soluble silicon and peptides as foliar source of silicon in wheat. Bioiberica. **\$40,902**.
- **Tubaña, B.S.** and L. Datnoff. 2014. Potential of silicic acid-containing solution as foliar and root silicon fertilizer in rice. Agro-Solutions. **\$39,450**.
- **Tubaña, B.S.**, L. Datnoff, and M. Kongchum. 2013. Effect of foliar formulation of bio-available silicate on grain yield and silicon uptake of rice. Taminco Inc. Funded **\$46,300**.
- **Tubana, B.S.**, R. Schneider, and L. Datnoff. 2012. Soil fertility, agronomic, and plant pathological research in relation to silicon dynamics of soils cultivated for field crops production. Edward Levy Co. Funded **\$88,500**.
- **Tubaña, B.S.**, R. Schneider, and L. Datnoff. 2011. Effect of silicon fertilization on the dynamics of plant available silicon in soils under different cropping systems in Louisiana. Harsco Minerals. **\$42,068**.
- **Tubana, B.**, R. Schneider, and L. Datnoff. 2011. Soil fertility calibration, agronomic, and plant pathological research for silicon. Edward Levy Co. Funded **\$90,048**.
- **Tubaña, B.S.**, D.J. Boquet, and E. Clawson. 2010. Real-time optimal nitrogen rates estimation for cotton using remote sensor-based algorithms. Submitted to Cotton Inc. Funded **\$10,000**.
- **Tubaña, B.S.**, D.J. Boquet, and E. Clawson. 2009. Real-time optimal nitrogen rates estimation for cotton using remote sensor-based algorithms. Submitted to Cotton Inc. Funded **\$10,000**.
- **Tubaña, B.S.**, D.J. Boquet, and E. Clawson. 2008. Real-time optimal nitrogen rates estimation for cotton using remote sensor-based algorithms. Submitted to Cotton Inc. Funded **\$10,000**.

Industry (Gift)

- Tubana, B. 2020. Soil fertility research in row crop production. Mosaic \$14,000.
- Tubana, B. 2020. Soil fertility research in row crop production. Pursell \$ 29,674.
- Tubana, B. 2020. Soil fertility research in row crop production. Sulvaris 23,000.
- Tubana, B. 2019. Soil fertility research in row crop production. Mosaic \$14,000.
- Tubana, B. 2019. Soil fertility research in row crop production. Pursell \$15,654.
- Tubana, B. 2019. Soil fertility research in row crop production. Sulvaris \$23,000.
- Tubana, B. 2019. Soil fertility research in row crop production. AgroSil Chemical \$3,631.
- Tubana, B. 2019. Soil fertility research in row crop production. ESL \$29,600
- Tubana, B. 2019. Soil fertility research in sugarcane production. Sirius Minerals \$29,000.
- Tubana, B. 2019. Soil fertility research in sugarcane production. AGx Symbiosis \$6,500.
- Tubana, B. 2019. Soil fertility research in row crop production. Yara \$ 20,000.
- Tubana, B. 2019. Soil fertility research in sugarcane production. Yara \$ 20,000.
- Tubana, B. 2018. Soil fertility research in row crop production. Yara \$19,992.
- Tubana, B. 2018. Soil fertility research in sugarcane production. AGx Solution \$4,000.
- Tubana, B. 2018. Soil fertility research in sugarcane production. Sirius Minerals \$29,547.
- Tubana, B. 2018. Soil fertility research in sugarcane production. Sulvaris \$22,803.
- Tubana, B. 2017. Foundation fund for 2017 NUE Conference. Multiple Industries \$8,750.
- Tubana, B. 2017. Soil fertility research in sugarcane production. Sirius Minerals \$25,200.
- Tubana, B. 2017. Soil fertility research in sugarcane production. Yara \$16,548.
- Tubana, B. 2017. Soil fertility research in sugarcane production. Sulvaris \$21,000.
- Tubana, B. 2017. Soil fertility research in sugarcane production. Mosaic \$7,000.
- Tubana, B. 2016. Soil fertility research in sugarcane production. Mosaic \$7,000.

- Tubana, B. 2016. Soil fertility research in sugarcane production. Everris \$24,666.
- Tubana, B. 2015. Silicon study in sugarcane. TMS International \$5,000
- Tubana, B. 2015. BioPath for growth and nutrient uptake enhancement in sugarcane. \$7,300.
- Tubana, B. 2015. Evaluation of liquid and dry silicon sources in sugarcane. \$11,600
- Tubana, B. 2015. Soil fertility research in sugarcane production. Everris \$4,000.
- Tubana, B. 2015. Soil fertility research in sugarcane production. Mosaic \$7,000.
- Tubana, B. 2014. Soil fertility research in sugarcane production. CF Industries \$8,000.
- Tubana, B. 2014. Soil fertility research in sugarcane production. Edward C. Levy Co. \$8,000.
- Tubana, B. 2014. Evaluation of P and K sources in sugarcane production. Mosaic \$14,000.
- Tubana, B. 2013. Evaluation of P and K sources in sugarcane production. Mosaic. \$7,000.
- Tubaña, B.S. and L. Datnoff. 2012. Effect of MontanaGrow on Supplying Plant Available Silicon and Influencing Ryegrass Growth and Development. MontanaGrow. \$ 6,000.
- Tubaña, B.S. and L. Datnoff. 2012. Effect of different silicon sources on silicon uptake by rice plants. Brandt Consolidated Inc. \$ 5,000.
- Tubana, B.S., and K. Gravois. 2011. Effect of foliar N source on N requirement of sugarcane. Donaghys LessN Company. Funded \$10,000.
- Tubaña, B.S. and K. Gravois. 2011. Effect of glutamic acid by-product on nitrogen requirement and uptake of sugarcane. ED & F Man Liquid Products Corp. Funded \$ 5,500.
- Tubaña, B.S., D. Harrell, T. Walker, J. Lofton, and K. Kanke. 2011. Validation of an on-site, active sensor-based midseason nitrogen decision tool for rice production in the Mid-South U.S.A. Submitted to International Plant Nutrition Institute. Funded \$4,000.
- Tubaña, B.S. 2010. Evaluation of by-product diammonium phosphate solution as a fertilizer for sugarcane production. Syngenta Crop Protection. Funded \$6,400.
- Tubaña, B.S. 2010. Effect of source and rate of potash on sugarcane yield. Great Salt Lake Minerals. Funded \$3,000.
- Tubaña, B.S., D. Harrell, J. Satterfield, and T. Walker. 2010. Precise midseason nitrogen rate determination for use efficiency and yield optimization of rice using a ground-based remote sensor. Submitted to International Plant Nutrition Institute. Funded \$10,920.
- Tubaña, B.S. 2009. Evaluation of by-product diammonium phosphate solution as a fertilizer for sugarcane production. Syngenta Crop Protection. Funded \$6,400.
- Tubaña, B.S. 2009. Effect of source and rate of potash on sugarcane yield. Great Salt Lake Minerals. Funded \$3,000.
- Tubaña, B.S., D. Harrell, J. Satterfield, and T. Walker. 2009. Precise midseason nitrogen rate determination for use efficiency and yield optimization of rice using a ground-based remote sensor. Submitted to International Plant Nutrition Institute. Funded \$12,000.
- Tubaña, B.S., D. Harrell, J. Satterfield, and T. Walker. 2008. Precise midseason nitrogen rate determination for use efficiency and yield optimization of rice using a ground-based remote sensor. Submitted to International Plant Nutrition Institute. Funded \$12,000.
- Tubana, B.S. 2008. Testing efficacy of Helena product. Helena Funded \$5,000 (inherited)
- Tubaña, B.S. 2008. Effect of source and rate of potash on sugarcane yield. Great Salt Lake Minerals. Funded \$3,000.
- Tubaña, B.S., J. Teboh, and A. Arceneaux. 2008. Effect of nitrogen and adjuvants fertilization on cane and sugar yield. Submitted to Aminogrow Fertilizers and Enhancers. Funded \$5,000.

Research Proposals Submitted, Not Funded

- Sandhu, H., J. Erickson, **B. Tubana**, and J. Silva. 2018-2023. Evaluation of new energy cane cultivars for sustainably and economic feasibility in marginal soils of Florida, Louisiana, and Texas. Department of Energy. \$2.5 million. Sub-Award (\$559,016)
- Prakash, N. and **B. Tubana**. 2018. Silicon mediated amelioration of heavy metals contamination in

soils. Indo-US Fellowship for Women in STEMM through the Bi-National Science and Technology Endowment Fund. **\$15,500.**

- **Tubana, B.** and L. Datnoff. 2017. Evaluation of Eco-Sil™ as silicon source: impact on the concentration of plant-available silicon and uptake by rice. SioTex. **\$36,887.**
- **Tubana, B.,** and L. Datnoff. 2017. Influence of enhancing soil silicon on arsenic uptake in rice using different sources of silicon. Imerys. **\$82,740.**
- **Tubana, B.** 2017. Establishment of soil fertility and agronomic management zones on sugarcane productions areas in Ingenio San Antonio based on soil properties map. SER San Antonio Sugar Mill. **\$205,751.**
- **Tubana, B.** and L. Datnoff. 2017. Evaluation of release pattern of monosilicic acid from different soil types treated with Agrisilica and its impact on rice productivity. AgriTex. **\$35,525.**
- **Tubana, B.** 2017. Reducing risk of arsenic accumulation in Louisiana rice through silicon fertilization. LSU Graduate School Economic Development Assistantship. **\$100,000.**
- Manas, G.R., M. Sun, M. Selim, **B. Tubana,** and J.W. Finley. 2016. Fusion of data sciences and intelligent sensor system for in-situ transport modeling of nutrients in watershed level in support of food-energy-water nexus. NSF. **\$1,000,000.**
- **Tubana, B.,** D. Harrell, and R. Price. 2016. Development of unmanned aircraft vehicle imaging-based nitrogen fertilizer mapping and recommendation systems for rice production. USDA-AFRI-NIFA. **\$131,150.**
- **Tubana, B.,** J. Hubchen, D. Harrell, J. Tallada, and N. Adusumilli. 2015. Implementation of an on-site nitrogen decision tool based on optical sensor/N-rich strip technology in Philippine rice production systems. Global Center for Food Systems Innovation Grants. **\$235,692.**
- **Tubana, B.** 2015. Reducing risk of arsenic accumulation in Louisiana rice through silicon fertilization. LSU Graduate School Economic Development Assistantship. **\$100,000.**
- Knopf, K., **B. Tubana,** M. Selim, and K. Dooley. 2014. Next Generation Organic Humectants for Water Retention in Soils. USAID BAA for Securing Water for Food. **\$100,000.**
- **Tubana, B.,** D. Harrell, and S. Viator. 2014. Taking Optical Sensor-Based Nitrogen Algorithm to Farm-Scale Operational Settings. LSU LIFT 2. **\$48,380.**
- Russin, J., S. Hall, R. Price, C. Malveaux, and **B. Tubana.** 2014. The Environmental Robotics Institute of the Sea Engineering Consortium. GoMRI. **\$8,458,865.**
- **Tubana, B.,** M. Selim, M. Salassi, and S. Hall. 2014. Implementation of an On-Site, Optical Sensor-Based Nitrogen Decision Tool and New Strategies for Residue Management in Louisiana Sugarcane Production. 4-R Nutrient Stewardship IPNI. **\$277,794.**
- Villordon, A., and **B. Tubana.** 2013. Climate variability and the hidden half: optimizing sweetpotato root architecture for climatic adaptation and resilient yields under conditions of reduced nitrogen and water usage. USDA-NIFA-AFRI. **\$1,000,000.**
- **Tubana, B.,** M. Selim, J. Wang, and A. Ogram. 2012. An Integrative Assessment on the Environmental Impact of Energy Cane Production on Non-Traditional Cropland Ecosystems in the South Central U.S. USDA-NIFA-AFRI. **\$498,627.**
- Tubana, B., and G. Aitra. 2012. Regulations of Energy Cane Lignin Biosynthesis by Induced-Micronutrient Deficiency. Louisiana Board of Regents. **\$ 192,193.**
- Tubana, B., and G. Aita. 2012. Impact of Micronutrient-Induced Deficiency on Lignin Content of High Fiber Sugarcane. American Sugar Cane League. **\$12,500**
- Schneider, R., and B. Tubana. 2011. Development of agronomic practices to manage Asian Soybean Rust using results from a geographic information system analysis. Southern SARE. 2011-2012. **\$116,867.**
- Schneider, R., and B. Tubana. 2011. Development of prescription nutrient management practices to manage Asian Soybean Rust based upon results from a geographic information systems

analysis. USDA-NRCS. **\$46,667.**

- **Tubana, B.,** J. Wang, M. Selim, K. Gravois, and H. Mascagni. 2011. Impact of energy cane and sweet sorghum cropping systems on carbon sequestration and greenhouse gas emission in the South Central U.S. USDA-NIFA-AFRI. **\$941,164.**
- **Tubana, B.,** J. Wang, M. Selim, B. Golden, and T. Udeigwe. 2011. Management strategies to enhance carbon sequestration and reduce greenhouse gas emission in corn production on grassland ecosystems. USDA-NIFA-AFRI. PI –2011-2016. **\$910,962.**
- Kongchum, M., and B. Tubana. 2011. Establishment of soil fertility and optimum nutrient level for smooth cordgrass in Louisiana Coastal ecosystem. Louisiana Board of Regents. **\$191,812.**
- Tubana, B., and D. Harrell. 2010. Establishing a remote sensor-based approach for in-season characterization of biomass and yield potential of rice in the Mid-South. Sustainable Agriculture Research and Education. **\$45,000.**
- Tubana, B., and J. Wang. 2009. Improving nutrient uptake efficiency of major crops in Louisiana using humic acid-based agricultural additives. Louisiana Board of Regents. **\$192,250.**
- Tubana, B., J. Wang, and J. Teboh. 2009. Using ground-based remote sensor for predicting sugarcane yield potential. American Sugar Cane League. **\$15,000.**
- Schneider, R., and B. Tubana. 2009. Spatial analysis of Asian Soybean Rust and Cercospora Leaf Blight and development of agronomic practices, including prescription nutrient amendments, to manage these and other diseases. United Soybean Board. **\$82,578.**
- Schneider, R., and B. Tubana. 2009. Management of Asian Soybean Rust with Prescription Supplemental Chloride Nutrition. USDA-CSRESS Pest Management Alternative. **\$78,990.**
- Tubana, B., J. Wang, and D. Harrell. 2008. Precise midseason nitrogen rate determination for use efficiency and yield optimization of rice using a ground-based remote sensor. Louisiana Rice Research Board. **\$10,153.**
- Tubana, B., D. Boquet, and E. Clawson. 2008. In-season estimation of cotton responsiveness to nitrogen fertilization using midseason optical sensor readings. Cotton Foundation. 2008. **\$10,000.**
- Tubana, B., D. Boquet, and E. Clawson. 2008. Real-time optimal nitrogen rates estimation for cotton using remote sensor-based algorithms. Cotton Inc. State Support Committee. **\$10,000.**

OUTREACH

Field Days, Training Meetings, and Collaboration with Extension Specialists and Field Agents

- Johnson, R., and B. Tubana. 2020. Sugarcane fertility with emphasis on phosphorus, sulfur, and building potassium levels. Louisiana Agricultural Technology and Management Conference. Paragon Casino Resort, Marksville, LA. Feb. 14, 2020.
- Tubana, B. 2020. Soil fertility and soil nutrients. Soil Health Workshop & Cover Crops Field Day. LSU AgCenter Northeast Research Station, St. Joseph, LA. Feb. 26, 2020.
- Tubana, B. 2020. Demonstrating best management practices in Louisiana on sugarcane model farm: overview of the project. Louisiana Association of Conservation Districts Meeting. Crowne Plaza, Baton Rouge, LA. January 9, 2020.
- Tubana, B. 2019. Zinc deficiency in Cotton. 2019. Louisiana Agricultural Technology and Management Conference. Marksville, LA. Feb. 12, 2019.
- Tubana, B, J. Mite, and D. Forestieri. 2019. Soil fertility research in sugarcane production in Louisiana and overview of Taylor Project. Central America Producers and Consultants Visit to Sugar Research Station, Sep. 4, 2019
- Tubana, B. 2019. Nitrogen reference strips in fertilizer rate validation. SuSTEMable Agriculture. SPESS, LSU Campus, June 12, 2019.
- Tubana, B. 2019. Sulfur validation and updates on soil test interpretation and Taylor Foundation

Project. Sugarcane Spring Meeting, Sugar Research Station, St. Gabriel, May 15, 2019.

- Tubana, B. 2019. N strip and best management practices in sugarcane production. Inter-Agency Day Sugarcane Model Farm. Assumption LSU AgCenter Extension Office, Napoleonville, LA. Sep. 17, 2019.
- Tubana, B. 2019. Demonstrating best management practices in Louisiana row crop production. Sugar Research Station Field Day. July 17, 2019. St. Gabriel, LA.
- Tubana, B. 2018. Reference strips for fertilizer rate validation. 2018 LSU AgCenter Annual Staff Conference. ANR (Agronomy) Agent Training. Dec. 12, 2018.
- Tubana, B. 2018. Soil fertility and nutrients. 2018. New Iberia/St. Mary/Vermilion Sugarcane Field Day and Soil Health Workshop. West St. Mary Civic Center, Jeanerette, LA. Jul 26, 2018.
- Tubana, B. 2018. Soil fertility program. SuSTEMable Agriculture. SPESS, LSU Campus, June 26, 2018.
- Tubana, B. 2018. Soil fertility and nutrients. 2018. Louisiana Soil Health and Cover Crop Conference. Hampton Inn, West Monroe, LA. Jan. 23, 2018.
- Tubana, B. 2018. Soil fertility and nutrients. 2018. Louisiana Soil Health and Cover Crop Conference. Alexandria, LA. Jan. 24, 2018.
- Tubana, B. 2018. Introduction to soils. Sugarcane Production School. 214 Efferson Hall, LSU Campus, Baton Rouge, LA. April 19, 2018.
- Tubana, B. 2018. Basic soil-plant relationship. Sugarcane Production School. 214 Efferson Hall, LSU Campus, Baton Rouge, LA. April 20, 2018.
- Tubana, B. 2018. Soil properties and basic soil-plant relationship. Louisiana Agricultural Technology and Management Conference. Marksville, LA. Feb. 14, 2018.
- Tubana, B., and R. Johnson. 2018. Status of sulfur soil tests and fertilizer applications. 2018 Spring Sugarcane Extension Meeting, LSU AgCenter Sugar Research Station, St. Gabriel, LA. May 23, 2018.
- Tubana, B., D. Burns, and R. Frazier. 2018. Nitrogen and sulfur research in sugarcane production in Louisiana. 2018 Assumption Parish Field Day, Donaldsonville, July 10, 2018.
- Tubana, B. 2017. Soil fertility research in sugarcane production in Louisiana. Central America Producers and Consultants Visit to Sugar Research Station, Aug. 24, 2017.
- Tubana, B. 2017. Soil, soil moisture, and nutrition. Louisiana Master Gardener, City Park Botanical Gardens, New Orleans, LA. May 25, 2017.
- Tubana, B. 2017. Introduction to soils. Sugarcane Production School. 214 Efferson Hall, LSU Campus, Baton Rouge, LA. March 16, 2017.
- Tubana, B. 2017. Basic soil-plant relationship. Sugarcane Production School. 214 Efferson Hall, LSU Campus, Baton Rouge, LA. March 17, 2017.
- Tubana, B. 2017. Nitrogen Cycle and Loss Potential in Sugarcane. Louisiana Agricultural Technology & Management Conference. Paragon Casino Resort, Marksville, LA, February 17, 2017.
- Tubana, B. 2016. Variable nitrogen rate application. 2016 Iberia- St. Mary-Vermilion Parish Sugarcane Field Day. Iberia Research Station, Jeanerette, LA. July 15, 2016.
- Tubana, B. 2016. Sugarcane fertilizer recommendation. 2016 Assumption Parish Sugarcane Field Day. Assumption Parish Agricultural Complex, Napoleonville, LA. July 12, 2016.
- Tubana, B. 2016. Fertilizing wheat in Louisiana production systems. 2016 Wheat and Oat Field Day, LSU AgCenter Macon Ridge Research Station, April 20, 2016.
- Tubana, B. 2016. Nutrient management in sugarcane production. Teche Grower's Association Meeting, March 15, 2016, Jeanerette, LA.
- Tubana, B., and M. Dalen. 2015. Nitrogen loss in sugarcane production. Sugar Research Station Field Day July 15, 2015.

- Tubana, B. 2014. N P K Studies in Sugarcane. Louisiana Agricultural Technology & Management Conference. Paragon Casino Resort, Marksville, LA, February 14, 2014.
- Tubana, B. 2013. Soil fertility for Louisiana row crops. Soil Fertility Workshop 2013, Louisiana Agricultural Technology and Management Conference, Marksville, LA, February 13, 2013.
- Tubana, B. Nitrogen: Soil Fertility Workshop 2012 (Agent Soil Training), Dean Lee Research Station, Alexandria, LA, December 4, 2012.
- Tubana, B., and R. Johnson. 2012. Cultural practices and soil fertility. AFRI Biofuels Field Day, USDA-ARS Sugar Research Unit, Houma, La. October 2, 2012.
- Tubana, B., and R. Johnson. 2011. Soil fertility and fertilizer recommendation. Extension/Research Sugarcane Training Meeting, USDA-ARS Sugarcane Research Unit, Houma, LA, January 19, 2011.
- Tubana, B., S. Viator, J. Wang, and R. Johnson. 2011. Fertilizer recommendation. Extension/Research Sugarcane Training Meeting, Sugar Research Station, St. Gabriel, LA, May 19, 2011.
- Tubana, B. 2013. Soil fertility research in sugarcane production. New Iberia-St. Mary-Vermillion Sugarcane Field Day, Abbeville, July 13, 2011.
- Tubana, B., and J. Lofton. 2011. Soil Fertility. Sugar Research Station Field Day, St. Gabriel, LA, July 20, 2011.
- LSU AgCenter Exchange (ACE) group meeting
 - Precision Ag ACE Group, December 13, 2011.
 - Sugarcane ACE Group, December 14, 2011.
- Soils and Soil Fertility ACE Group, January 9, 2012.
- Sugarcane ACE Group, St. Gabriel, LA, December 13, 2010.
- Louisiana Agricultural Consultants Association Fall Retreat, Marksville, LA, Oct. 14-15, 2010
- 2010 Northeast Research Station's Field Day, St. Joseph, June 18, 2010 (Speaker)
- 2009 LSU AgCenter Exchange (ACE) groups meeting
 - Precision Ag ACE Meeting, Baton Rouge, LA, December 2 (Speaker).
 - Sugarcane ACE Group, St. Gabriel, LA, December 15.
- Tubana, B., and D. Boquet. 2009. Sensor-based N rate calculator for optimizing in-season application timing and rates. LSU AgCenter 7th Annual Dean Lee Research and Extension Field Day, Alexandria, LA. Aug. 20, 2009.
- Tubana, B. 2009. Sensor-based N rate calculator for sugarcane. New Iberia Research Station
- Louisiana Agricultural Consultants Association Fall Retreat, Marksville, LA, Oct. 1-2, 2009.
- LSU AgCenter Louisiana Agriculture Outlook, LSU Campus (Lod Cook), Baton Rouge, February 26, 2009.
- Louisiana Agricultural Consultants Association Fall Retreat, St. Francis Ville, LA, Oct 2-3, 2008.
- 2008 LSU AgCenter Annual Staff Meeting (Precision Ag ACE Group), (Speaker)
- Louisiana Certified Crop Advisor Meeting, Dean Lee Research Station in Alexandria, LA, Oct 1, 2008
- 2008 Research Stations' Field Days:
 - Red River Research Station, Bossier City, LA, June 17, 2008
 - Northeast Research Station, St. Joseph, LA, June 24, 2008 (Speaker)
 - Rice Research Station, Crowley, LA, July 2, 2008
 - Sugar Research Station, St. Gabriel, LA, July 16, 2008 (Speaker)
- Louisiana Agricultural Consultants Association Fall Retreat, St. Francis Ville, LA, Sep 27-28, 2007.

Media/Press Coverage

- Louisiana Delta Crop Podcast. Dr. Brenda Tubana discusses mid-season applications of nitrogen on crop. May 8, 2020.

- Louisiana: LSU AgCenter teaches benefits of new tech. Writer: Bruce Schultz. In Agfax – Jan. 27, 2020.
- LSU AgCenter receives \$1.4 million from Patrick F. Taylor Foundation for nutrients runoff research. 2019. Writer: Olivia McClure. In LSU AgCenter Headlines News.
- Taylor Foundation awards \$1.4M to LSU AgCenter for work that could reduce Gulf dead zone. Baton Rouge Business Report. July 16, 2019.
- LA Delta Crop Podcast: Dr. Brenda Tubana discusses fertility in Delta row crops. April 8, 2019.
- Louisiana Sugarcane News Podcast: Tubana on nitrogen use efficiency. Sep. 14, 2018.
- Louisiana Sugarcane: Cover crops featured at field day. 2018. Writer: Bruce Schultz. In Agfax – 07/27/2018.
- Sugarcane field day held for farmers. 2018. Writer: Mariah Simoneaux. In Donaldsonville Chief. 07/26/2018.
- Louisiana: soil fertility featured at consultants meeting. 2018. Writer: Johny Morgan. In Agfax – 02/20/2018.
- Technology helps sugar cane crops, cuts pollution. 2018. Writer: John Harper. In Houma Today – 11/26/2018.
- LSU AgCenter researchers get grant to study cover crops in energy cane. 2017. Writer: Richard Bogren. In The Latest News in Louisiana Agriculture – 08/31/2017.
- Diseases, weather highlight small grains field day. 2016. In ArkLatex – 04/26/2016.
- Sensors help reduce nitrogen rates. 2013. Writer: Craig Gautreaux. In Soybean and Grain Promotion Board Reports.
- Researcher aims to help corn farmers cut down on nitrogen fertilizer. 2013. Writer: Craig Gautreaux. In LSU AgCenter Headline News.
- Scientists try optical sensors to determine nitrogen rates in corn. 2012. Writer: Craig Gautreaux. In LSU AgCenter Headline News.
- Photograph associated with our article entitled “Predicting sugarcane response to nitrogen using a canopy reflectance-based response index value” was featured on January-February 2012 Issue of Agronomy Journal.
- Photograph associated with our article entitled “Relationships of spectral vegetation indices, biomass, and grain yield of rice at different sensor view angles” was featured on September-October 2011 Issue of Agronomy Journal.
- Tubaña up to challenge of focusing on fertility issues. 2011. Writer: Craig Gautreaux. In Soybean and Grain Promotion Board Reports.
- Improved soil fertility can boost yields, reduce runoff. Sep. 27, 2011. Craig Gautreaux. Delta Farm Press.
- New Varieties, management featured at sugarcane field day. 2011. Featured in Zacharytoday.com and Delta Farm Press.
- Sensor calculates N Needs. 2011. Writer: Betty Valle Gegg-Naeger. In MidAmerica Farmer Grower Issue 8 pp 10 and 16.
- Fertilizer best early in growing season. 2010. Natchezdemocrat.com November 22, 2010.
- Featured in “Behind the Scenes – LSU AgCenter Research Profiles”. Louisiana Crop Newsletter. 2010. Volume 1, Issue 6.
- Determining fertilizer needs critical for corn growers. 2010. Writer: Craig Gautreaux. In Soybean and Grain Promotion Board.
- Farmers hear from experts at sugarcane field days. 2009. Writer: Bruce Schultz. In LSU AgCenter Headline News.
- Precision technology may hold promise of prescription N applications for rice. 2009. David Bennett. In Agricultural Technology pp 12-13.

- Precision fertilizer rates may help sugarcane farmers save money. 2008. Writer: Rick Borgen. In LSU AgCenter Headline News.

TEACHING AND SERVICES

Served as Chairman of Graduate Student Advisory Committee

1. Josh Lofton, Ph.D. – May 2012; Dissertation – Improving nitrogen management in sugarcane production of the Mid-South Using Remote Sensing Technologies
2. Yumiko Kanke, Ph.D., - May 2013; Dissertation – Optimizing yield and crop nitrogen response characterization by integrating spectral reflectance and agronomic properties in sugarcane and rice.
3. Marilyn Dalen, M.S. –December 2012; Thesis – Understanding phosphorus dynamics of two alluvial soils grown with corn at different phosphorus rates.
4. Saoli Chanda, Ph.D., - August 2015; Dissertation – The agronomic use and application of canopy reflectance within the visible and near-infrared wavebands and its relation with nitrogen fertilization in energy cane production in Louisiana
5. Tapasya Babu, Ph.D., December 2015; Dissertation – Calibration and categorization of plant available silicon in Louisiana soils
6. Brandon White, M.S., May 2015; Thesis – Evaluating the effects of silicon and nitrogen fertilization on wheat production
7. Payton Dupree, M.S., August 2015; Thesis – Integrating soil nitrate level in refining nitrogen fertilizer management in Louisiana corn production systems
8. Flavia Bastos Agostinho, M.S., May 2016; Thesis – Evaluation of absorption and uptake of soil- and foliar-applied silicon in rice and its accumulation under different phosphorus rates
9. Wooiklee Paye, M.S., May 2016; Thesis – Silicon fertilization in rice: establishment of critical silicon level and its impact on availability of nutrients in soils of Louisiana
10. Daniel Forestieri, M.S., August 2017; Thesis – Improving nitrogen use efficiency and yield in Louisiana sugarcane production systems
11. Maryam Shahrtash, M.S., May 2017; Thesis – Effects of silicon and nitrogen fertilization on growth, yield, and leaf rust disease development in wheat
12. Marilyn Dalen, Ph.D., May 2017; Dissertation – Integration of optical remote sensor-based yield prediction and impact of nitrogen fertilization, harvest date, and planting scheme on yield, quality, and biomass chemical composition of energy cane production in Louisiana
13. Flavia Bastos Agostinho, Ph.D., May 2018; Dissertation – Effect of increasing levels of monosilicic acid on arsenic and phosphorus sorption in soil
14. Joseph Garrett, M.S., May 2018; Thesis – Effects of application timing and soil type on optimal nitrogen rate requirement of sugarcane (*Saccharum spp.*) and Changes in soil inorganic and leaf nitrogen concentrations
15. Samuel Kwakye, M.S., May 2018; Thesis – Evaluation of controlled-released nitrogen and potassium fertilizer in Louisiana sugarcane production
16. Wooiklee Paye, Ph.D. ANTICIPATED (Spring 2019); Research project – Silicon fertilization in wheat and rice; Dynamics with heavy metals and slag granular size effect on the long-term release pattern of monosilicic acid
17. Jose Mite-Caceres, Ph.D. ANTICIPATED (Summer 2020); Research project – Impact of cover crops on productivity of major row crops of Louisiana and nutrient cycling
18. Daniel Forestieri, Ph.D. ANTICIPATED (Spring 2021); Research project – Effect of N source on sugarcane productivity under rotation with soybean and cover crops
19. Joseph Woodard, M.S. ANTICIPATED (Fall 2019); Research project – Effect of silicon fertilization

on herbivore damage in soybean-oats rotation

20. Jayvee Cruz, Ph.D., ANTICIPATED (Fall 2021); Research project – Chemical and biological changes in soil and plant root rhizosphere in response to nutrient deficiency.
21. Diego Mayorga, M.S., ANTICIPATED (Spring 2022); Research project – Soil sulfur calibration study and evaluation of S source and rate on corn and soybean production.
22. Hector Mendoza, M.S., ANTICIPATED (Spring 2022); Research project – Evaluation of slow release N and urea-ammonium nitrate solution as N source in sugarcane production
23. Hector Fajardo, M.S., ANTICIPATED (Spring 2022); Research project – Evaluate the impact of planting method and rate of mixed cover crops species on biomass production, sensor readings, nutrient turnover, and sugarcane production.

Served as Member of Graduate Student Advisory Committee

1. Joe Kraska, M.S., Summer 2009, School of Plant, Environmental, and Soil Sciences
2. Vipin Kumar, M.S., Fall 2011, School of Plant, Environmental, and Soil Sciences
3. Herath Khularatha, M.S., Fall 2013, Department of Plant Pathology and Crop Physiology
4. Samantha Swanhart, M.S., Fall 2013, School of Plant, Environmental, and Soil Sciences
5. Michael Barron, M.S., Summer 2014, School of Plant, Environmental, and Soil Sciences
6. Brian Ward, M.S., Spring 2015, Department of Plant Pathology and Crop Physiology
7. Brian Ward, Ph.D., Spring 2017, Department of Plant Pathology and Crop Physiology
8. April Neman, M.S., Spring 2014, School of Plant, Environmental, and Soil Sciences
9. Shanice Jones, M.S., Spring 2015, School of Plant, Environmental, and Soil Sciences
10. Nutifafa Adotey, Ph.D., Fall 2016, School of Plant, Environmental, and Soil Sciences
11. Jifeng Li, M.S., Spring 2016, School of Plant, Environmental, and Soil Sciences
12. Eduardo Chagas de Silva, M.S., Spring 2014, Department of Plant Pathology and Crop Physiology
13. Eduardo Chagas de Silva, Ph.D., Spring 2017, Department of Plant Pathology and Crop Physiology
14. Autumn Acree, M.S., Spring 2017, School of Plant, Environmental, and Soil Sciences
15. Sanjay Pokhrel, M.S., Fall 2017, Department of Plant Pathology and Crop Physiology
16. James Villegas, M.S., Fall 2017, Department of Entomology
17. Jhonson Leonard, M.S., Summer 2019, Department of Plant Pathology and Crop Physiology
18. Donna Morgan, Ph.D., Fall 2019, SPESS
19. Allison Guidroz, M.S., ANTICIPATED, Spring 2020, SPESS
20. Caitlin Woodard, M.S., Fall 2019, SPESS
21. Kathleen Bridges, Ph.D., ANTICIPATED, Fall 2018, SPESS
22. Lauren Liuzza, M.S., Spring 2019, SPESS
23. Kritsanee Iamjud, Ph.D., ANTICIPATED, Spring 2021, SPESS
24. Anna Coker, M.S. Fall 2019, SPESS
25. Maria Izabel Costa de Novaes, Ph.D., Department of Plant Pathology and Crop Physiology
26. Akshara Athelly, M.S., ANTICIPATED, Spring 2022, SPESS
27. Paola Muela Neglete, M.S. ANTICIPATED, Fall 2021, SPESS
28. Jobelle Bruno, Ph.D., Department of Plant Pathology and Crop Physiology

Dean's Representative

1. Biswamitra Patro, Ph.D., Spring 2012, Renewable Natural Resources
2. Mala Ganiger, Ph.D., Fall 2013, Department Plant Pathology and Crop Physiology
3. Daniel Meandor, Ph.D., Spring 2014, Department of Chemistry
4. Emily Smith, Ph.D., Spring 2014, Department of Oceanography and Coastal Sciences
5. Jie Chen, Ph.D., Summer 2017, Department of Entomology
6. Tamara Estes, Ph.D., Spring 2017, Department of Environmental Sciences
7. Ying Niu, Ph.D., Spring 2018, Department of Entomology

8. Nathan Harms, Ph.D., Spring 2018, Department of Entomology
9. Nga Nguyen, Ph.D., Spring 2019, School of Renewable Natural Resources

Post-Doctoral Fellow

1. Dominique Galam – Aug 2019 to date; Research project – Demonstrating best management practices on model farms in Louisiana; micronutrient foliar application in rice and soybean production
2. Marilyn Dalen – May 2017 to date; Research project – Energy cane and sweet sorghum rotation with winter cover crops: impact on soil quality and feedstock production
3. Yumiko Kanke – May 2015 to May 2016; Research project – Integration of optical sensor and variable rate technology in improving nitrogen use efficiency in cotton
4. Constancio Asis – April to June 2012; Research Project - Implementation of best management practices to mitigate methane emission in rice production
5. Narayanaswamy Chowdappa – September 2011 to September 2012; Research Project - Silicon calibration research and plant nutrition

Visiting Scholar/Interns

1. Benjamin Rossopa, M.S. student, Kasetsart University, Summer 2009
2. Yaowaret Kittittrakarn, M.S. student, Kasetsart University, Summer 2010
3. Bangon Ubon, M.S. student, Kasetsart University, Summer 2011
4. Pintip Bootkaew, M.S. student, Kasetsart University, Summer 2012
5. Maneetip Khunthong, M.S. student, Kasetsart University, Summer 2012
6. Pilatluk Lunliu, Ph.D. student, Kasetsart University, Summer 2013
7. Elizabeth Rivera, M.S. student, University of Guadalajara, Sep 29 to Oct 11, 2013
8. Suelen Cristina Mendioca Maia, Ph.D. student, Universidade Estadual Paulista, May 2013 to February 2014
9. Lucas Barbosa, Ph.D. student, Universidade Estadual Paulista, September 2013 to March 2014
10. Daniel Ernesto Forestieri Muñoz, B.S. student, Zamorano Pan-Americana Agricultural School – January to June 2014
11. Ivan Andres, B.S. student, Zamorano Pan-Americana Agricultural School, January to April 2014
12. Klaopirun Nokweed Pirunworrawong, M.S. student Kasetsart University, August to October 2014
13. Samuel Kwakye, B.S. student, Earth University, Jan to March 2015
14. Gustavo Alves, Ph.D. student, Uberlandia Federal University, Mar to Dec 2015
15. Bruno Nicchio, Ph.D. student, Uberlandia Federal University, July 2017 to June 2018
16. Kaylyn Bromfield, High School student, East Baton Rouge School System – July 2013 (2 weeks)
17. John Belen, High School student, New York – July 2016 (2 weeks)
18. Diego Mayorga, Zamorano Pan-Americana Agricultural School, Feb to July 2019
19. Hector Mendoza, Zamorano Pan-Americana Agricultural School, April to Jul 2019
20. Jiraporn Bamrungrai, Khon Kaen University, Mar to Nov. 2019
21. Daniele Scudeletti, University of Sao Paulo State, Aug 2019 to Feb 2020
22. Barbara Campos, Federal University of Uberlandia, Sep 2019 to Aug 2020
23. Jia Tu, Institute of Bamnoo, Hunan Academy of Forestry, Nov. 2019 to Oct. 2020.
24. Elias Escobar, Universidad Nacional de Agricultura, Honduras, Feb. to Jul 2020.

Services to the Department, College and University

- Member: Search Committee for the faculty position (Precision Ag.), 2018 (open)
- Member: Search Committee for the faculty position (Precision Ag.), 2017
- Affiliate Member, LSU Graduate Council, Spring 2018
- Member, Internal Advisory Committee for the LSU AgCenter Global Network, 2018
- Member, Editorial Board of Louisiana Magazine (2017-2019)
- Program review committee, School of Animal Sciences in the College of Agriculture, 2017

- Marching Faculty Member (Commencement Exercise for Spring 2010, 2011, 2018)
- Chairman – Search Committee for the Soil Microbiologist position in SPESS, 2013
- Member of the Search Committee for the Water and Soil Resources/Environmental Scientist, 2013
- Faculty Council Representative 2012
- Co-Chair Soils and Soil Fertility ACE Group 2011, 2012
- Member of the LSU AgCenter Soil Fertility Recommendation Committee
- Member of the Resource and Planning Committee of the SPESS, 2008
- Member of the Search Committee for the Director of SPESS, 2008
- Member of the Search Committee for Sugarcane Breeder, 2010
- Member of the Unit Head Evaluation Input Committee, 2010
- Member of the SPESS Faculty Council, 2010

Membership in Professional Societies

- Member, American Society of Agronomy since 2004
- Member, Crop Science Society of America since 2004
- Member, Soil Science Society of America since 2004
- Member, American Society of Sugar Cane Technologist since 2007
- Member, Gamma Sigma Delta Honor Society of Agriculture since 2011
- Member, International Society for Silicon in Agriculture since 2014

Professional Service

- USDA-NIFA-AFRI Bioenergy Water Peer Review Panel Member (July 15-17, 2013)
- Associate Editor
 - Agronomy Journal 2009-2012 (13), 2013 (10), 2014 (8), 2017 (7)
 - Agrosystems, Geosciences, and Environment, (2018-2020), 2018 (1)
 - Frontiers, (2018 to date) (0)
- Reviewer
 - Agronomy Journal 2011-2012 (10), 2013 (2), 2014 (1), 2018 (2)
 - Precision Agriculture 2011 (1), 2014 (1)
 - Journal of Plant Nutrition 2015 (1), 2016 (2)
 - Journal of American Society of Sugar Cane Technologists 2012 (1), 2015 (1)
 - Soil Science Society American Journal 2013 (1), 2015 (1)
 - Crop Science 2016 (1)
 - Silicon 2015 (1)
 - Soil Science 2016 (1)
 - Crop, Forage, and Turf grass 2017 (1)
 - Bioenergy Research 2018 (1)
- In-house reviewer
 - Hatch project proposals 2010 (3), 2014 (2), 2015 (2), 2016 (1), 2017 (1), 2018 (1)
 - Manuscript for journal articles (3)

Other External Service Related to Appointment

- External reviewer – Promotion Evaluation for Faculty 2016, 2019 (University of Florida)
- President, International Society for Silicon in Agriculture (2018-2020)
- Leader, Sensor-Based Nutrient Management Community (2018)
- Vice President, International Society for Silicon in Agriculture (2014-2017)
- Vice-Leader, Sensor Based Nutrient Management Community (2017)

Courses Taught in Present Appointment

AGRO 4052 (4 credit hours) – Factors affecting plant growth and utilization of essential elements; mechanisms of nutrient uptake; diagnosis of deficiencies; use of lime and fertilizers; potential nutrient losses.

AGRO 7051 (4 credit hours) – Principles of bioavailability and acquisition of mineral nutrients by crop plants; interaction of plant roots with the soil environment; fertilizer use efficiency.

AGRO 4092 (1-3 credit hours) – Special Topics in Soil Science

AGRO 8902 (3-6 credit hours) – Research in Soil Science

AGRO 8000 (1-12 credit hours) – Thesis Research

AGRO 9000 (1-12 credit hours) – Dissertation Research

Development and Recruitment

- Developed course syllabus and materials (powerpoint presentations, handouts, etc.) for AGRO 7051, both lecture and laboratory.
- Collaboration
Collaboration with Federal University in Uberlandia has led to recruitment of a graduate student (complete her M.S. and Ph.D. in PMESS) and two visiting scholars joining my research program. These two visiting scholars were Ph.D. students at Federal University in Uberlandia; part of their dissertation project was conducted under my supervision. Two Ph.D. visiting students from Universidade Estadual Paulista also conducted their internship at LSU under my supervision.
- Recruitment
 - Provided a presentation on Soil Fertility Program 2018 UNA research Tour for students of the Univesidad Nacional de Agirultura in Catacamas, Honduras. April 18, 2018.
 - Participated in hosting participants (teachers) of the 2018 LSU AgCenter SuSTEMable Agriculture. Participants were given perspective on the importance of agriculture in our society and the nature and career that can be pursued in agriculture.
 - Hosted graduate interns from Kasertsart University in Thailand through the LSU AgCenter International Programs during the summer of 2009-2013 and 2014 (7 graduate interns), undergraduate students from Zamorano Pan-Americana Agricultural School and Earth University, 2 of 3 pursued their graduate program at LSU. **Note:** List is provided at 1.3.1.5
 - Provided a presentation about an overview of the LSU AgCenter Soil Fertility Program to undergraduate students (60) from McNeese State University during their visit to the Sugar Research Station in St. Gabriel, October 30, 2008.

Professional Meetings, Seminars, Workshops, and Conference

- Provost's Seminar on Teaching for New Faculty, Baton Rouge, LA, Aug 15-17, 2007
- Annual Dean's Teaching Conference, LSU Campus, Baton Rouge, LA (2007, 2008, 2009)
- SPESS Seminar Presentation, LSU Campus, Baton Rouge, November 5, 2010. "Soil Testing and Remote Sensing: Evaluation Tools for Soil Nutrient Supplying Capacity".
- Guest Lecture: BAE 4362 Precision Ag System, November 10, 2011. "Remote Sensing – Tool for Non-Destructive Evaluation of Crop N Status".