STEVE PHILLIPS

Principal Scientist African Plant Nutrition Institute Lot 660, Hay Moulay Rachid Benguerir, Morocco 43150 Tel: 212.666.712436 s.phillips@apni.net

Professional Experience:

2019 – present | African Plant Nutrition Institute

Dr. Phillips is currently Principal Scientist for the African Plant Nutrition Institute, headquartered on the campus of Mohamed VI Polytechnic University (UM6P) in Benguerir, Morocco, where he also holds the academic rank of Professor. Dr. Phillips serves as research theme leader for all precision nutrient management projects within APNI. He also organized and hosted the West African Forum on Precision Agriculture (WAFPA; 100+ attendees representing 10 countries; <u>https://www.apni.net/wafpa/</u>), the 1st African Conference on Precision Agriculture (AfCPA; 750+ attendees representing 50+ countries; <u>https://paafrica.org/</u>), and founded the African Association for Precision Agriculture (AAPA; <u>https://paafrica.org/About/AAPA</u>). In his role as professor at UM6P, Dr. Phillips developed and serves as coordinator for an Executive MS curriculum in precision agriculture. He also lectures each semester on precision agriculture topics in courses on Fertilizer Science and Technology and Crop Nutrition. He currently serves as major advisor for three Ph.D. students and one M.S. student pursuing degrees in precision agriculture.

2007 – 2019 | International Plant Nutrition Institute

As North American Director for IPNI, Dr. Phillips led research and educational programs related to precision nutrient management. He served as organizer and chairman for the annual InfoAg Conference, one of the largest precision agriculture events in the world (1300+ attendees representing 20+ countries; <u>https://infoag.org/</u>). Dr. Phillips also represented IPNI in many international research collaborations, training events, and conferences on precision agriculture.

1999 – 2007 | Virginia Polytechnic Institute and State University

At Virginia Tech, Dr. Phillips led an internationally recognized research and extension program in precision agriculture and developed the first crop sensor-based algorithms for nutrient management in the eastern USA. He mentored several graduate students and post-docs in precision nutrient management during his tenure.

Education:

- Ph.D. Soil Fertility, Oklahoma State University, Stillwater, Oklahoma, 1999
- M.S. Agronomy, Oklahoma State University, Stillwater, Oklahoma, 1995
- B.S. Agronomy, Cameron University, Lawton, Oklahoma, 1993

Affiliations:

African Association for Precision Agriculture, 2020-present International Society of Precision Agriculture, 2010-present American Society of Agronomy, 1995-present Soil Science Society of America, 1995-present

Honors and Awards:

Agronomic Industry Award, American Society of Agronomy, 2017 Robert Glenn Rapp Foundation Distinguished Graduate Fellowship, 1997-1999 Outstanding Ph.D. Student, Dept. of Plant and Soil Sci., Oklahoma State University, 1999 Outstanding Senior in Agriculture, Cameron University, 1993

Publication Summary:

Refereed Journal Articles – 39 Proceedings – 14 Non-Refereed Research Reports – 35 Web-Based Communications – 7 Extension/Technical – 79 Abstracts – 52 Book Chapters – 4

Selected Publications:

Phillips, S.B. 2018. Precision Agriculture Opportunities for African Small-Holder Farming Systems. *In* New Ag International, May/June. New Ag International SARL.

Phillips, S.B. 2018. Advances in global precision agriculture research and application. *In* Proceedings of the International Symposium on Advancements in soil, water, and plant nutrition research. T. Satyanarayana (ed) International Plant Nutrition Institute, Gurgaon, Haryana, India.

Abit, J.M., D.B. Arnall, and S.B. Phillips. 2018. Environmental implications of precision agriculture. *In* Precision agriculture basics. (ed) Shannon et al. ASA. Madison, WI.

Phillips, S.B. 2018. Adoption of Precision Agriculture Technologies in the US: current trends in the main markets. *In* resúmenes del Primer Congreso Latinoamericano de Agricultura de Precisión. CLAPS, Santiago de Chile.

Phillips, S.B. 2017. Precision ag adoption trends in the USA. *In* Proceedings of the 7th Asian-Australasian Conference on Precision Agriculture. W. Nelson (ed). New Zealand Institute for Plant & Food Research Ltd. Hamilton, NZ.

Phillips, S.B. 2017. Precision K management for high production agriculture. *In* Sanyal, S.K. et al. Advances in potassium research for efficient soil and crop management. New Delhi, India.

Harrell, D.L., B.S. Tubaña, T.W. Walker, and S.B. Phillips. 2011. Estimating rice grain yield potential using normalized difference vegetation index. Agron. J.103:1717-1723.

Thomason, W.E., S.B. Phillips, P.H. Davis, J.G. Warren, M.M. Alley, and M.S. Reiter. 2011. Variable nitrogen rate determination from plant spectral reflectance in soft red winter wheat. Precision Agriculture. 12(5):666-681.

Liu, X., P. He, J. Jin, and S.B. Phillips. 2011. Yield gaps, indigenous nutrient supply, and nutrient use efficiency of wheat in China. Agron. J. 103(5):1452-1463.

Khurana, H.S., S.B. Phillips, A.S. Sidhu, Bijay-Singh, Yadvinder-Singh, A. Dobermann, and S. Peng. 2008. Agronomic and economic evaluation of site-specific nutrient management for irrigated wheat in northwest India. Nutr. Cycl. Agroecosyst 82(1):15-31.