

November 19-20, 2020

ITEM 191-2003-R1120

Request for Authorization to confer the title of Professor Emeritus of Soil Nutrient Management upon Richard Engel; Montana State University

THAT

Upon the occasion of the retirement of Rick Engel from the faculty of Montana State University, the Board of Regents wishes to express its appreciation for his service to the University, the Montana University System, and the people of Montana.

EXPLANATION

Dr. Rick Engel received his B.S. from University of Maine, his M.S. from North Dakota State University, and Ph.D. from University of Minnesota. He started at MSU as an assistant professor in 1983. During his 37.5 years at MSU, Dr. Rick Engel has made significant and lasting contributions in research, teaching, and service.

Dr. Rick Engel worked at the Southern Agricultural Research Center from 1983 to 1995 and since then has been in the Department of Land Resources and Environmental Sciences where he is Professor of soil nutrient management, with particular focus on on-farm research and dedicated to identifying projects that will benefit farmers. Rick has been the PI or co-PI on 102 successful grant proposals totaling over \$7 million and was the lead on the majority of those. He has authored or co-authored over 40 Extension documents, 50 journal articles and 90 proceedings papers or abstracts, including many with his graduate students. USDA-WSARE has featured his research in a video on their homepage, and he was the senior author on the journal Invasive Plant Science and Management's 2010 Outstanding Paper. He was also one of only six Associate Editors who received the Editor's Citation of Excellence Award from the Soil Science Society of America in 2018. He was recently recognized by his peers across the region and Canadian prairie provinces when awarded the 2020 Great Plains Soil Fertility Leadership Award.

Throughout his career, Professor Engel has worked on soil nutrient management research to benefit Montana producers across dryland and irrigated fields, organic and conventional operations, and studied both micronutrients and macronutrients. Some of his bigger accomplishments include him being the first ever to determine that chloride deficiency was the cause of "Physiological Leaf Spot" in cereal grains and help cereal breeders identify varieties that are less susceptible to this deficiency, which has helped producers correct the problem. Rick also identified the gold standard for measuring ammonia volatilization from fertilized wheat fields, changing how nitrogen loss is measured to guide producers and their advisers to apply urea at appropriate times. Rick has also studied nitrous oxide emissions, finding losses were much smaller in the northern Great Plains than assumed based on loss coefficients in the Intergovernmental Panel on Climate Change. Since 2016, Rick has been studying soil acidification to help Montana producers prevent and mitigate this emerging problem which can lead to complete yield loss on some fields. In a recent study, he provided producers and their advisers with methods to determine the presence and extent of soil acidity, effective liming rates using local sources, benefits of phosphorus fertilization, and soil acidification prevention strategies.

Dr. Rick Engel has served the College of Agriculture, Montana Agricultural Experiment Station, MSU and the State of Montana with innovation and distinction.

For these and other contributions, the Board of Regents of Higher Education is pleased to confer on Dr. Rick Engel the rank of Professor Emeritus of Soil Nutrient Management at Montana State University and wishes him well for many years in the future.

ATTACHMENTS – None