Effects of Long-Term Manure Applications on Soil in the Irrigated Northwest

November 17, 2017
2:30 pm (eastern), 1:30 pm (central), 12:30 pm (mountain), 11:30 am (pacific)

An eight-year study of manure in crop rotations that include root crops (sugar beets and potatoes) is taking a very comprehensive look at manure use. Researchers are studying everything from yields, soil health, characteristics of the harvested crop, nutrient leaching, and much more. Join us for a look at the results to date and what is being learned about repeated manure application in relation to the value of food crops and environmental impacts. An application for continuing education credit for Certified Crop Advisors (CCAs) and members of the American Registry of Professional Animal Scientists (ARPAS) will be submitted.

Dr. April Leytem is a research scientist at the USDA Agricultural Research Service in Kimberly, Idaho. Dr Leytem’s research addresses problems in nutrient management in animal agriculture systems and conducts research to help assure sustainable animal production while better protecting water and air quality. Her research projects have focused on understanding feed management, housing, manure handling and storage, manure application methods and timing, and soil processes that affect nitrogen and phosphorus cycling and off site transport (both air and water) from livestock-crop production systems. Phone: (208) 423-6530; Email: April.Leytem@ARS.USDA.GOV

Dr. Amber Moore is an extension soil fertility specialist with Oregon State University in Corvallis, Oregon. Dr. Moore also spent 9 years with the University of Idaho at the UI Twin Falls Research and Extension Center. Her research and extension efforts at the University of Idaho were focused on the nutrient management of dairy manure applications to irrigated crop fields. The focus of her current position with Oregon State University is to conduct applied research and to develop nutrient and lime recommendations that improve nutrient use efficiency by large acreage crops grown in Oregon. Phone: (541) 737-2870; Email: amber.moore@oregonstate.edu

Dr. Joe Harrison is a faculty member of the Department of Animal Sciences at Washington State University and has been conducting research and demonstration projects related to livestock nutrient management, including feeding management. His projects include: fate and transport of bacteria from anaerobically digested manure (including the impact on surface water quality), utilization of nutrients in AD effluent for production of grass forage, production of a phosphorus based fertilizer (struvite) from anaerobically digested manure, development of an economic decision aid tool for predicting the financial risks associated with community based ADs that utilize pre-consumer food-wastes, effect of AD on odor and gaseous emissions, reduction in nitrogen import to dairy farms in feeds by precision ration balancing, extraction of phosphorus from liquid dairy manure for off farm use as a fertilizer, relationship of manure application to ground water nitrate content, and potassium nutrition of the early lactation dairy cow. Joe will serve as the moderator for this webinar. Phone: (253) 445-4638; Email: jhharrison@wsu.edu

How Do I Participate?
On the day of the webcast, go to www.extension.org/58813 to download the speaker’s power point presentations and connect to the virtual meeting room. First time viewers should also follow the steps at: www.extension.org/8924.

For More Information
* Idaho Nutrient Management http://www.extension.uidaho.edu/nutrient/
* Nitrogen mineralization as affected by temperature in calcareous soils receiving repeated applications of dairy manure will soon be available at https://dl.sciencesocieties.org/publications/sssaj doi:10.2136/sssaj2017.02.0044

The LPE Learning Center is a project dedicated to the vision that individuals involved in public policy issues, animal production, and delivery of technical services for confined animal systems should have on-demand access to the nation's best science-based resources. See our website at: lpelc.org.