Nutrient Management Expert Joins University of Illinois

BLOOMINGTON, Ill. — Cameron Pittelkow, Ph.D., has joined the University of Illinois as an assistant professor of agronomy. His role will include teaching, research and extension responsibilities related to nutrient management practices, efficient crop production, and helping growers strike a balance between productive, profitable agriculture and potential environmental impacts.

Pittelkow was most recently at the University of California, Davis, where he completed his Ph.D. in agronomy and conducted postdoctoral research on the yield impacts of no-till farming systems. He has also partnered with the International Rice Research Institute (IRRI) in the Philippines, conducting research on improving the efficiency of high-yielding rice production practices.

He explains the ongoing collaborations between the University of Illinois and industry, as well as the larger conversation about nutrient management in the state, factored heavily into his decision to accept his new appointment.

“There’s already a great deal of momentum in Illinois focused on nutrient management issues, particularly nitrogen fertilizer use, in order to identify new management practices and technologies,” says Pittelkow. “I’m very happy to be joining that process, working with the many partnerships and programs that are trying to tackle these big issues facing agriculture.”

Pittelkow will develop an applied research program grounded in on-farm trials and will work with growers to ensure results will be useful to them, as well as to policy makers.

“If we’re going to be serious about the discussion on the environmental impacts of crop production, we need to benchmark our current practices to see where we stand and what improvements can be made,” he says. “The goal is that we can be proactive and address nutrient management concerns through good science and decision-making.”

By developing approaches for optimizing fertilizer management and making sure the efficiency is very high, growers can help make sure their nutrient recovery is also very high, explains Pittelkow. The key, he adds, is to find ways to ensure that optimum yields can be achieved without adding surplus nutrients. “When we are able to closely match fertilizer rates with crop demand, we also have the lowest environmental impact,” he explains.

“The potential for nitrogen and phosphorous losses from our fields is getting a lot of attention, but we also need to consider that productivity levels in Illinois are extremely high,” he says. “One option for bringing these two issues together is to use yield-scaled environmental metrics. We can measure yield improvements and environmental consequences and identify the practices that offer the lowest environmental impact per unit yield, not just view it on an absolute basis.”

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PHOTO CUTLINE: *Two researchers, Catherine O'Reilly of Illinois State University and Cameron Pittlekow of the University of Illinois, talk during an August field day near Lexington sponsored by the Nutrient Research and Education Council.*