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fertilizer rates were applied, how to define a subset, how to improve current models, and how to apply other methods of linear statistics to meta-analysis. Last but not least, in order to achieve the agro-ecosystem level of data synthesis and bring the 4R concept into practice, the networking of research efforts across political jurisdictions is urgently needed.

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Potassium Fellowship Program Request for Proposals

ver 50% of the world's food supply exists today because of the use of commercial fertilizers. By 2050, global demand for food is expected to increase by 70 to 100% and it is highly likely that its production will be even more dependent on fertilizers than it is today. The three nutrients most frequently limiting to crop production globally are N, P and K. It is critical that the science of how these nutrients can efficiently and effectively contribute to productivity in rapidly evolving cropping systems be advanced to meet the increased demand for agricultural products. Due to environmental aspects, significant research funding is often available on N; however, funding for production-oriented P and K research is more difficult to acquire. Nutrient stewardship based on the 4Rs—application of the right nutrient source at the right rate, time and place—requires a balanced approach addressing the full complement of needed nutrients in systems focused on meeting economic, environmental and social goals. Therefore, P and K must be efficiently and effectively managed if N performance is to be optimized. Leading fertilizer manufactures have established the Phosphorus and Potassium Graduate *Fellowship* programs to help fill the need for additional P and K research. This request for proposals is part of the *Potassium* Fellowship program.

Goals of the Potassium Fellowship Program

The program is a long-term commitment by the fertilizer

- 1. Establish research programs that will attract top students and additional funding for production-oriented aspects of K research.
- 2. Build human resources needed by the industry that are strong scientifically, knowledgeable about K as a plant nutrient, and understand how farms and the fertilizer industry function.
- 3. Advance the science of K use in agriculture.

Funding and Donors

Individual fellowships are for a maximum of \$70,000 per year for a maximum of four years. Fellowships cover the tuition, fees and stipend for the institution plus expenses associated

Common abbreviations and notes: N = nitrogen; P = phosphorus; K = potassium.

with the research project proposed in response to the Fellowship Program RFP. The fellowship program is supported by voluntary contributions from K fertilizer manufacturers servicing the needs of the North American



Corn Belt and Great Plains. Program donors are: Agrium Inc., Intrepid Potash Inc., Mosaic Company, Potash-Corp, and Simplot.

Eligibility

Fellowships are awarded to individuals in the early stages of their graduate study or about to enter a graduate program in sciences relevant to plant nutrition and management of crop nutrients. Typical applicants would be seniors in a B.Sc. program who want to start a Ph.D. program, M.Sc. candidates in their final year who want to pursue a Ph.D., or First year Ph.D. students. Eligible institutions must be degree granting and generally located within the Corn Belt or Great Plains of the U.S. or Canada. Exceptional applications from outside these regions will be considered.

Submissions

Research proposals in response to this request should be received by IPNI (e-mail: ppates@ipni.net; phone: 605-692-6280) by April 1, 2013. Awards will be announced by June 1, 2013.

These and more details on this opportunity are available at http://info.ipni.net/KFellow M