

From Scientific Staff of the International Plant Nutrition Institute (IPNI) 3500 Parkway Lane, Suite 550 Peachtree Corners, Georgia 30092-2844 USA Phone: 770-447-0335 Fax: 770-448-0439 E-mail: info@ipni.net Website: www.ipni.net

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SCIENTISTS MEET TO CHART FUTURE COURSE FOR IMPROVING POTASSIUM NUTRITION OF CROPS

A small group of internationally recognized scientists met recently in Kona Beach, Hawaii to brainstorm the future of potassium (K) nutrition of crops. The Frontiers in Potassium Science Workshop focused on creating a list of strategies for explaining and managing significant spatial and temporal variability in the contributions of fertilizer K and soil K to plant nutrition. The group was asked to identify critical concepts that were missing or were inadequately characterized in existing soil K assessments or K recommendations.

"One of the key findings of the group was the need to focus on research and education that deals with how quickly the soil can supply potassium to the growing plant," says Dr. Scott Murrell, a Director in the North American Program of the International Plant Nutrition Institute (IPNI) who led the organizing committee for the workshop. "Improving potassium management ultimately relies on improving our understanding of how to manage the myriad of factors that affect a soil's ability to supply adequate amounts of K in a timely manner. This group is proposing that certain scientific measurements and concepts become a priority in our research and education efforts. That kind of focus is a first in this area and is critical to working collaboratively to make advancements as quickly and efficiently as possible."

"Potassium management is growing in importance in cropping systems around the world as genetic yield potential climbs, new regions of K deficiency appear, and the need for more efficient use of all system inputs increases," comments Dr. Paul Fixen, Director of Research for IPNI. "This group clearly demonstrated that science has more to offer the world of K management and that there are highly knowledgeable and passionate scientists that can contribute to that effort."

The workshop was held in conjunction with the International Symposium for Soil and Plant Analysis. Many of the attendees represented commercial and private soil testing and plant analysis laboratories or scientific disciplines impacting soil testing and plant analysis methodology.

Before the workshop, symposium attendees were given the opportunity to discuss ideas with the invited scientists. After the workshop, recommended priorities were presented to symposium attendees. "The attendees were impressed with how much this small group of scientists had accomplished in the short time they met," says Murrell, "and they provided very valuable feedback that will be used as we move this effort forward."

Twelve scientists from ten different institutions participated in the workshop and represented plant and soil science programs in Australia, Brazil, China, France, the United Kingdom, and the United States. A report of the workshop, complete with a list of attendees, objectives, outcomes, and short background papers and abstracts can be downloaded at http://www.ipni.net/article/IPNI-3396.

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For more information, contact Dr. T. Scott Murrell, IPNI Director, North American Program, Phone: (765) 413-3343. E-mail: smurrell@ipni.net.