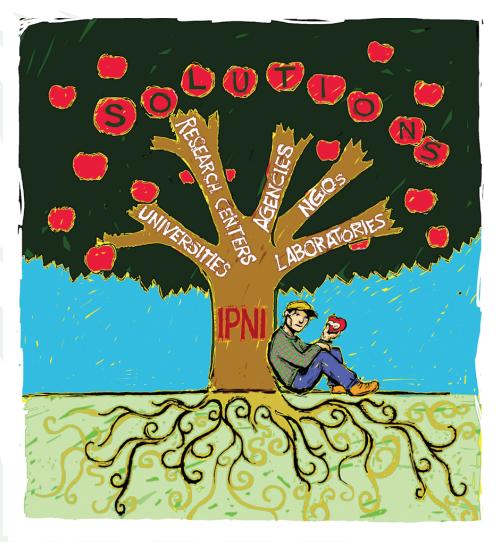
ROOTS IN REALITY

he technology of agronomy today is truly amazing, ranging from remarkable advances in genetics to tools for real-time cropping system monitoring and everything in-between. Equally amazing is the speed with which these technologies are advancing and the promised future acceleration resulting from research tools like the genome editing CRISPR/Cas9. It's a struggle for our scientific understanding of applications to keep up and offer essential guidance on how these technologies can form real solutions. More than ever in history, the effectiveness of agronomic science will be largely determined by its continuous linkage with the end-user and the dynamic technology surrounding that end-user.

It should not be surprising that at events today featuring the latest technologies, the greatest interest is not so much on hardware or anything that occupies physical space in a



warehouse, retail store, or farm. It's on reliable, credible knowledge on how those technologies can best be put to use in adding value to businesses, whether the business is a farm or an entity supporting the farm. Relevant, applied science, viewed through the filter of local experience, is the source of much of that valued knowledge for converting technology into solutions.

A recent paper by Daniel Sarewitz (http://www.thenewatlantis.com/publications/saving-science) entitled "Saving Science" provided a sobering review of contemporary science in general, but makes several points highly relevant to the science of crop nutrition. A key message from Sarewitz is that science is most valued when it is closely linked to the people and places whose urgent problems need to be solved—who are in need of solutions. He argues that successful research institutions will "link research agendas to the quest for improved solutions—often technological ones—rather than to understanding for its own sake."

The focus of IPNI programs and our network of collaborators around the world is squarely on developing and applying science-based solutions to critical nutrient stewardship problems. Our staff position themselves to engage the fertilizer industry and its farmer customers, not just as an audience for delivery of solutions, but as collaborators in developing them. We keep our **roots in reality**.

BETTER CROPS

International Plant Nutrition Institute 3500 Parkway Lane, Suite 550 Peachtree Corners, Georgia 30092-2844 www.ipni.net Paul E. Fixen

Paul Fixen

IPNI Senior Vice President and Director of Research