

## Welcome...

You are reading the eighth issue of *Better Crops South Asia*. This publication is released annually in the fourth quarter and follows a format similar to our quarterly publication known as *Better Crops with Plant Food*.

For 2014, the issue is focused on the Nutrient Expert® Decision Support Tool. The need to develop a science-based fertiliser recommendation tool in South Asia has been the focus of IPNI for several years. While soil testing has been the standard approach to past recommendations, the cost, access or timeliness for delivery of results have limited its use significantly. The development of Nutrient Expert® (NE) as a decision support tool advisors can use to make site-specific nutrient management recommendations for small-holder farmers is our response to this challenge.

With the data from on-farm verification trials, and the support of many in the scientific community, we are encouraged to advance the use of NE as one of the options that supports science-based fertiliser recommendations.

The research featured in this issue is a tribute to the scientific progress that is continually being made in the fields and laboratories throughout South Asia. Once again, we at IPNI wish to congratulate and thank the many cooperators, researchers, farmers, industry representatives, and others who are working for the benefit of agriculture in South Asia.

Dr. Terry L. Roberts, President, IPNI



## IPNI Scholar Award Recipients Announced for 2014

The IPNI Scholar Award Program has once again expanded its reach by awarding Scholarships to 30 graduate students in 2014. Each Scholar receives a certificate, the equivalent of US\$2,000, and they are welcomed as the latest additions to a prestigious group of young scientists who have demonstrated great dedication and promise within their respective careers.

“We have had another record response to our Scholar Award program this year,” said Dr. Terry L. Roberts, IPNI President. “The global representation of universities and the wide array of fields of study that were represented in this year’s submissions were impressive. The academic institutions these young people represent, and their professors and advisers, can be proud of their student’s accomplishments. Our selection committee adheres to rigorous guidelines in considering important aspects of each applicant’s academic and personal achievements.”

Graduate students attending a degree-granting institution located in any country within an IPNI regional program are eligible. The award is available to graduate students in science programs relevant to plant nutrition science and the management of crop nutrients including: agronomy, horticulture, ecology, soil fertility, soil chemistry, crop physiology, environmental science, and others. [ICSA](#)



Dheeraj Kumar Tiwari

**Mr. Dheeraj Kumar Tiwari**, C.C.S. Haryana Agricultural University, India, is pursuing his Ph.D. in agronomy since 2013. His dissertation is titled “Performance of maize hybrids under different planting methods and nitrogen levels.” The focus of his research is on evaluating the effect of N levels on growth and yield of maize hybrids under different planting methods and N levels on economics, quality and physicochemical properties of soil. In the future, Mr. Tiwari wants to become a research scientist in an international organization.



Ramesh Chandra Yadav

**Mr. Ramesh Chandra Yadav**, Indian Agricultural Research Institute, India, is working toward his Ph.D. in soil science. The focus of his research is on the development and testing of nano-based novel carriers of N for enhancing its use efficiency and reducing greenhouse gas emissions under elevated carbon dioxide and temperatures. It is expected that this study will lead to the development of nano-clay composites that can then be used as slow-release N fertilisers to improve N use efficiency and mitigate the effect of climate change on crop productivity. Mr. Yadav aims to establish a career in agricultural research and contribute to the well being of the farming community.



Krishnendu Ray

**Mr. Krishnendu Ray**, Bidhan Chandra Krishi Viswavidyalaya, India, is completing requirements for his Ph.D. in agronomy. His dissertation title is “Site-specific nutrient management for improving nutrient use efficiency in hybrid *rabi* maize cultivars in the lower Gangetic plains.” This study will evaluate the impact of site-specific nutrient management on growth, yield and quality of maize by managing large spatial and temporal variability observed in smallholder farming systems. In the future, Mr. Ray wishes to extend his research further and quantify soil-plant-atmosphere interactions for better crop and soil management.



J.A.S. Chaturika

**Ms. Jayathunga Arachchige Surani Chaturika**, Postgraduate Institute of Agriculture, Sri Lanka, is working toward a Ph.D. in soil science. Her dissertation is titled “Improving soil fertility of low productive lands by beneficial management practices for maize.” The main objective of her study is to identify beneficial management practices to improve soil fertility of marginal agricultural lands. This research will help to develop approaches to improve C sequestration using available resources, thereby improving the overall soil fertility to support higher crop yields on marginal agricultural lands in the long-run. For the future, Ms. Chaturika wishes to pursue a career in soil science research and extension.