

Welcome to Better Crops South Asia 2012

On behalf of the International Plant Nutrition Institute (IPNI) it is a pleasure to introduce our 2012 edition of *Better Crops South Asia*. This is the sixth issue—released annually in the fourth quarter—that follows a format similar to our quarterly publication known as *Better Crops with Plant Food*.

For 2012 we are happy to release this publication to coincide with the 3rd International Agronomy Congress on agriculture diversity, climate change management, and livelihoods being held in New Delhi November 26 to 30th. We applaud the organizing committee of the conference for their great efforts

and wish them success in the conference. *Better Crops South Asia* features research articles and information pertinent to this specific region. The research featured 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 in a positive mode for South Asian agriculture.

Dr. Terry L. Roberts, President, IPNI



2012 Scholar Award Recipients Announced by IPNI

The 2012 winners of the IPNI Scholar Award have been selected. The awards of USD 2,000 (two thousand dollars) are available to graduate students in sciences relevant to plant nutrition and management of crop nutrients. “Solid interest in the IPNI Scholar Award was once again apparent based on the quantity of applications received from a global mix of agricultural researcher centers, this year located in Argentina, Australia, Brazil, China, India, Russia, South Africa, Sri Lanka, Uruguay, and the United States,” said Dr. Terry L. Roberts, IPNI President. “Being selected from this group is a great accomplishment that each student should be proud of, as should their advisers, professors, and supporting institutions. Our selection committee adheres to rigorous guidelines in considering important aspects of each applicant’s academic achievements.”

In total, 24 graduate students were named to receive the IPNI Scholar Award in 2012. The three winners from the South Asia Region are:

Mr. Pardeep Kumar, Punjab Agricultural University in Ludhiana, India.

Ms. Ekta Joshi, Indian Agricultural Research Institute in New Delhi, India.

Ms. Angelene Mariaselvam, University of Peradeniya in Peradeniya, Sri Lanka.

Funding for the Scholar Award program is provided through support of IPNI member companies, primary producers of N, P, K, and other fertilisers. Graduate students attending a degree-granting institution located in any country with an IPNI program region are eligible. Following is a brief summary for each of the winners from South Asia.

Mr. Pardeep Kumar is pursuing his Ph.D. in Agronomy at Punjab Agricultural University in Ludhiana, India. The focus of his present research is on agronomic biofortification and enhancement of productivity of bread wheat varieties, where he is studying the impact of nutrient management on growth, productivity, and quality of common bread wheat varieties popular in the region, and also the agronomic biofortification of wheat grains by managing N, Zn Fe, Mn, and Cu at critical phenological stages of wheat through soil and/or foliar fertil-



Pardeep Kumar

ization strategies. He has an excellent record of academics, co-curricular activities, and extension services. In the future, Mr. Kumar wants to continue his research efforts in crop nutrition and do a postdoctoral fellowship in the United States.



Ekta Joshi

Ms. Ekta Joshi is working toward a Ph.D. in Agronomy at Indian Agricultural Research Institute in New Delhi, India. Her dissertation is titled “Nutrient omission studies in maize-wheat cropping system”. The main objectives of her study are to: (a) determine indigenous nutrient supplying capacity of soil, (b) develop soil-test based recommendations for N, P, K, and

Zn for different yield targets of wheat and maize, (c) determine the effect of omitted nutrients on soil quality and soil microbial population, (d) work out a site-specific nutrient management strategy for the maize-wheat system, (e) develop an apparent soil nutrient balance sheet, and (f) assess the direct, residual, and cumulative effect of omitted nutrients on productivity and profitability of maize and wheat crops and as maize-wheat system. For the future, Ms. Joshi hopes to become an agricultural scientist working on soil fertility and soil biology.

Ms. Angelene Mariaselvam is completing requirements for her master of philosophy degree at University of Peradeniya in Peradeniya, Sri Lanka. Her thesis title is “Improving a low productive Ultisol soil through fertility enhancement and carbon stocks improvement”. This study has two main objectives including the selection of a suitable organic amendment to improve soil carbon stock, and developing a beneficial nutrient management practice specific to the area. The work is expected to pave the way for future research on specific nutrient management practices to improve marginal agricultural lands. **ICASA**



Angelene Mariaselvam

Common abbreviations and notes: N = nitrogen; P = phosphorus; K = potassium, Cu = copper; Fe = iron; Mn = manganese.