Dr. Sudarshan Dutta Appointed IPNI Deputy Director (East), South Asia Program

r. Sudarshan Dutta joined the staff of the International Plant Nutrition Institute (IPNI) as of May 1, 2012. Dr. Dutta is based in Kolkata, West Bengal, and will be responsible for the East Zone of the South Asia program a region that covers the states of Chhattisgarh, Jharkhand, Bihar, West Bengal, Assam, Arunachal Pradesh, Nagaland, Manipur, Mizoram, Tripura, Meghalaya, and Sikkim, as well as Bangladesh.

"Dr. Dutta is again a valuable addition to our scientific staff, and IPNI will benefit greatly from his strong training in soil chemistry and environmental assessment," said IPNI President Dr. Terry Roberts. "We welcome Sudarshan to our staff as we are confident he will make an outstanding contribution towards our Program goals for South Asia."

Dr. Dutta received his B.Sc. in Agriculture (Adv. Soil Science) in 2003 from the State Agricultural University (Bidhan Chandra Krishi Viswavidyalaya), in West Bengal. He completed his M.Sc. in 2005 from Punjab Agricultural University, where he examined sorption and desorption behaviors of lead in different soils of India. Dr. Dutta obtained his Ph.D. in 2011 from the University of Delaware. His dissertation title was "Transport of free and conjugated estrogens in runoff from agricultural soils receiving poultry manure: A field and watershed scale evaluation." Since his completion of his Ph.D., Dr. Dutta continued his work at the University of Delaware as a Post Doctoral Research Associate within the Watershed Hydrochemistry group where he has made a significant contribution to the understanding of the fate and transport of nutrients (N and P),



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trace elements (As, Cu, and Zn), and emerging contaminants including steroidal hormones, antibiotics, and their degraded by-products within different runoff components of agricultural watersheds. Dr. Dutta's research has also involved quantifying exports of dissolved organic matter from the Fair Hill Natural Resource Management Area (NRMA) - a forested watershed in Maryland.

His research has generated a number of peer-reviewed journal articles and guest lecture invitations at the undergraduate and graduate student level. Dr. Dutta's research interests for South Asia include the implementation of regionally appropriate management practices supportive of 4R Nutrient Stewardship, soil conservation, and sustainable agriculture.

A Guide to Identifying and Managing Nutrient Deficiencies in Cereal Crops

IPNI South Asia Program staff, in cooperation with scientists from State Department Agriculture, Government of Rajasthan, and International Maize and Wheat Improvement Center (CIMMYT), developed a field guide for identifying and managing nutrient deficiencies in cereals last year. The guide is designed to describe the appearance and underlying causes of nutrient deficiencies in maize, wheat, sorghum, pearl millet, and barley. Hundreds of excellent deficiency photographs in the field guide helps the user to understand the development of nutrient deficiency symptoms through the growth stages of the crops. The field guide, developed in English, was distributed among scientists and extension workers in India, Bangladesh and Nepal, and has been widely appreciated as a significant knowledge dissemination tool. On popular demand, the guidebook has since been translated in Tamil and Kannada regional languages and translation in Hindi is in progress.

