

GUEST LECTURE

“Improved Strategies of
Crop Nutrient Management
for Ensuring Economic and Environmental
Sustainability of Indian Small Holder Farmers”

By

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Biodata of Dr. T. Satyanarayana

Dr. Satyanarayana Talatam, born on 22nd August 1977 in Yanam (Pondicherry), has joined the staff of International Plant Nutrition Institute as Deputy Director, South Asia Programme, effective November 1, 2008. He graduated from Pandit Jawaharlal Nehru College of Agriculture and Research Institute (PAJANCOA & RI), Karaikal, Pondicherry in 1998 and obtained his M. Sc (Soil Science) from Dr. Y S Parmar University of Horticulture & Forestry, Nauni, Solan in Himachal Pradesh during 2001. In the year 2002, Dr. Satyanarayana secured admission for PhD at Indian Agricultural Research Institute (IARI), New Delhi and obtained his doctorate degree in Soil Science during 2005.

Most recently, Dr. Satyanarayana was Deputy Manager-Business Development & Agri Technical Services, at DSCL, New Delhi and was involved with identifying emerging trends in agriculture and other allied businesses, imparting training, developing publications, and coordinating the functioning of 110 Shriram Krishi Vikas Kendras (SKVKs). From 2005 to 2007, he worked as Deputy Manager-Regulatory Affairs, with Coromandel Fertilisers Ltd. in Hyderabad. Dr. Satyanarayana was also a Senior Research Fellow at IARI from 2001 to 2002 and worked on projects related to the rice-wheat cropping system. In his current position with IPNI, he is responsible to develop and promote scientific information about the responsible use of plant nutrients. He conducts effective plant nutrition research programs, participate in member and leadership roles in professional societies, national and state fertilizer organizations and agricultural groups. He is also involved in developing educational tools and publications for promoting right use of plant nutrients for the benefit of farmers. He is author or co-author of several research publications and published 20 research papers in the international and national journals.

Improved Strategies of Crop Nutrient Management for ensuring Economic and Environmental Sustainability of Indian Smallholder Farmers

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Abstract:

Agriculture in India is characterized by smallholder farmers (land holding < 2 ha) and it is estimated that about 83% of India's 116 million landholdings are cultivated by smallholders. Profitable farming under such fragmented landholding is constrained by limited availability of resources and lack of awareness on improved crop management practices. Food and Agricultural Organization of the UN (FAO) projected that use of commercial fertilizers and practicing right nutrient management contributes to 40 to 60% of world's food production. However, the current nutrient management practices are influenced by farmer's own perception (~80-85% adoption) leaving limited scope to official state fertilizer recommendations (~10-15% adoption) and improved approaches such as STCR (~5% adoption). As a result, yield gaps among crops are noticed across the regions and between the farmers of the same region, and provides opportunities for promoting advanced strategies of nutrient management as a means of bridging the yield gaps while improving the profitability of farmers.

In a country with large diversity of soils having wide variability in native fertility both in spatial and temporal dimensions, practicing site-specific nutrient management offers scope for bridging the yield gaps while ensuring economic sustainability of farmers. Recent advancements in technologies and development of decision support tools like Nutrient Expert[®] helps in large-scale dissemination of principles of Site Specific Nutrient Management among millions of smallholder farmers. Studies are currently being undertaken for delineation of farm typology as a means of making better fertilizer recommendations based on socio-economic and biophysical aspects of farmers in addition to considering the resource availability of farmers. Of late, climate smart agriculture is gaining momentum for ensuring food security while adapting to climate change, which undermines the importance of right use and management of fertilizers. Practicing principles of 4R Nutrient Stewardship and new approaches such as ecological intensification provide guidelines for improving crop productivity while maintaining acceptable standards of environmental quality. It is observed that improvement in crop yields, economics and environmental stewardship through improved nutrient management can produce significant benefits to the smallholder farming society of the country.

Press Coverage of the Guest Lecture

News item in Andhra Jyothi on 2-03-2016

'పంటలకు మందులు మోతాదులో వాడాలి'

రాజేంద్రనగర్: వ్యవసాయ ధారులు తమ పంటపొలాలకు సరైన మోతాదులో మందులు వేసుకోవాలని ఇంటర్నేషనల్ ప్లాంటు న్యూట్రిషన్ ఇన్స్టిట్యూట్ జాయింట్ డైరెక్టర్ డాక్టర్ పి.సత్యనారాయణ అన్నారు. రాజేంద్రనగర్ లోని తెలంగాణ రాష్ట్ర వ్యవసాయ విశ్వవిద్యాలయంలో 'చిన్న వ్యవసాయ కమతాలను, సుస్థిర వ్యవసాయానికి పోషక యాజమాన్యం' అనే అంశంపై జరిగిన సదస్సులో ఆయన పాల్గొని ప్రసంగించారు. రైతులు తమ పంట భూములను బట్టి సరైన సమయం, పద్ధతి, మోతాదులో మందులు వేయాలన్నారు. కార్యక్రమంలో డాక్టర్ కె.జీ.వన్.రామ్, డాక్టర్ కె.వీ. రమణ, డాక్టర్ హరీష్ కుమార్ శర్మ, డాక్టర్ టి.అంజయ్య, డాక్టర్ రాజేశ్వర్ నాయక్ పాల్గొన్నారు.



సదస్సులో పాల్గొన్న శాస్త్రవేత్తలు
