2008 Scholar Award Recipients Named by International Plant Nutrition Institute

he 2008 winners of the Scholar Award sponsored by the International Plant Nutrition Institute (IPNI) have been selected. The awards of US\$2,000 (two thousand dollars) each are conferred to deserving graduate students in sciences relevant to plant nutrition and management of crop nutrients.

"We received a significant number of applications for the Scholar Award and were impressed with the academic records, research programs, and other credentials of the graduate students," said Dr. Terry L. Roberts, IPNI President. "The academic institutions these young people represent and their professors and advisers can be justifiably proud."

A total of 14 (fourteen) graduate students were named to receive the IPNI Scholar Award in 2008. They are listed below by region and university/institution.

North America: Carolina Medina, University of Florida; Trenton Roberts, University of Arkansas; Darrin Roberts, University of Nebraska; Fernando Salvagiotti, University of Nebraska; Mark Slavens, Cornell University; Amy Burton, Pennsylvania State University.

China: Xiaofeng HU, Southwest University; Xiaokun LI, Huazhong Agricultural University; Wenjuan LI, Graduate School, Chinese Academy of Agricultural Sciences.

India: I. Vimal Jothi, Tamil Nadu Agricultural University; Wasim Iftikar, Visva Bharati University.

Latin America: Nahuel Reussi Calvo, National University of Mar del Plata, Argentina; Sebastian Mazzilli Vanzini, Universidad de Buenos Aires, Argentina.

Southeast Asia: Trinh Quang Khuong, Cuu Long Rice Research Institute (CLRRI), Vietnam.

Funding for the Scholar Award program is provided through support of member companies of IPNI, primary producers of nitrogen, phosphate, potash, and other fertilizers. Graduate students attending a degree-granting institution located in any country with an IPNI program region are eligible. Students in the disciplines of soil and plant sciences including agronomy, horticulture, ecology, soil fertility, soil chemistry, crop physiology, and other areas related to plant nutrition are encouraged to apply. Following is a brief summary of information for each of the 2008 winners.







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Mark Slavens

Ms. Carolina Medina is pursuing her Ph.D. degree at the University of Florida, with a doctorate dissertation titled "Towards Acceptance of a Short-Term Laboratory Test to Measure Nutrient Release Characteristics of Controlled-Release Fertilizers." Her research has been centered on developing methodologies to quantify the release properties of controlled-release fertilizer (CRF) sources.

Mr. Trenton Roberts is working toward his Ph.D. degree in the Department of Crop, Soil and Environmental Science at the University of Arkansas. His doctoral dissertation title is "Soil-Based Tests for Nitrogen Fertilizer Recommendations in Arkansas Rice and Wheat Production." His objectives include development of a soil-based N test that accurately quantifies potentially mineralizable N, total N uptake and relative grain yield with N fertilizer recommendations.

Mr. Darrin Roberts is pursuing his Ph.D. degree in the Department of Agronomy and Horticulture at the University of Nebraska-Lincoln. His dissertation is entitled "An Integrated Crop- and Soil-Based Strategy for Variable Rate **Trenton Roberts**



Fernando Salvagiotti



Amy Burton



Mr. Mark Slavens is pursuing a Ph.D. degree in Horticulture at Cornell University in Ithaca, New York. His thesis title is "Nutrient and Pesticide Fate in Home Lawns through Runoff and Leachate", and seeks to help homeowners, turfgrass managers, and others better assess use of fertilizers and pesticide products.

is returning to Argentina to continue research and extension projects.

Ms. Amy Burton is working toward a Ph.D. degree in Horticulture at Pennsylvania State University. Her dissertation title is "Physiological Trade-Offs to Nutrient Uptake and Genetic Regulation of Aerenchymatous Root Tissue of Zea mays", with a focus on the formation of aerenchyma in the roots of maize (corn)







Wasim Iftikar



Sebastian Mazzilli Vanzini

and the role of this tissue in nutrient acquisition in crop plants. Aerenchyma is a tissue formed from root cortical cells in response to environmental factors which offers great potential for greater uptake and use efficiency of some nutrients.

Ms. Xiaofeng HU is completing her Ph.D. degree at Southwest University in Chongqing, China, with a thesis title of "Effect of Slow Release Compound Fertilizers (SRCF) on Environment and Crops." The development of SRCF technology offers several potential advantages, including the opportunity to improve resource utilization, improve profitability, and reduce environmental concerns in China.

Mr. Xiaokun LI is completing his Ph.D. degree program at Huazhong Agricultural University in Wuhan, Hubei Province, China. His dissertation title is "Research on Two Kinds of Fish Grasses and Balanced Fertilization", and seeks to improve understanding of grasses produced for fresh water fish production. Working with sudangrass and rye grass, his study is showing the advantage of properly balanced applications of N, P, and K to increase forage yields.

Ms. Wenjuan LI is pursuing studies for a Ph.D. degree at the Chinese Academy of Agricultural Sciences (CAAS) with a thesis title of "Effect of Potassium on Sugar, Phenol Metabolism, and Its Relation to Corn Stalk Rot." Her study has found that when corn (maize) plants are infected by the stalk rot pathogen, they tend to absorb more K, which increases resistance.

Ms. I. Vimal Jothi has been involved in doctoral studies at Tamil Nadu Agricultural University (TNAU), India, for the past 2 years with the thesis title of "Effect of Neem-Coated Urea on Nitrogen Use Efficiency, Yield, and Quality of Sugarcane." Her study seeks to address the problem of storing more N in soils of arid and semi-arid regions, which is complicated by limitations to build-up of soil organic matter.

Mr. Wasim Iftikar is pursuing a Ph.D. degree in Agronomy through a program called "Studies on Geographic Information System (GIS)-Based Soil Fertility Mapping for Nutrient Management in Red and Lateritic Soils" at Visva Bharati University, India. Its objectives include assessment of spatial variability, comparing the relative efficiency of a GIS map-based soil fertility evaluation system to conventional soil testing for native fertility prediction in farmer fields, and exploring use of GIS maps in site-specific nutrient management in the ricepotato-sesame cropping sequence.

Mr. Nahuel Reussi Calvo is seeking his Ph.D. degree at the National University of Mar del Plata, Buenos Aires, Argentina. His dissertation title in "Sulphur Deficiency in Wheat: Indicators of Availability in Plant Tissue", and involves research to better understand sulphur nutrition and its relationship with N availability.

Mr. Sebastian Mazzilli Vanzini is earning his Ph.D. degree at Universidad de Buenos Aires in Argentina with a dissertation title of "Tillage and Root Production and Distribution Importance in the Balance of Carbon in Cultivated Soils." A native of Paysandu, Uruguay, he graduated as Agronomist from Universidad de la Republica in 2005. As part of his Ph.D. program, he initiated a large long-term study at the Experiment Station of Facultad de Agronomia in Uruguay. His work addresses the impact of management on long-term carbon balance of soils.

Mr. Trinh Quang Khuong is working toward his Ph.D. in Agronomy at Can Tho University, Vietnam. His thesis is "Optimization of Integrated Crop Management (ICM) with Emphasis on Plant Population, Fertilizer N Management, and Water Regime under Different Cropping Systems in Intensive Rice Farming." He has worked previously for over 20 years in the Department of Agronomy of Cuu Long Rice Research Institute (CLRRI) and played an important role in national and international studies regarding fertilizer management and integrated crop management for rice and maize.

The IPNI Scholar Award recipients are selected by regional committees of IPNI scientific staff. The awards are presented directly to the students at their universities and no specific duties are required of them. More information is available from IPNI staff, from individual universities, or from the IPNI website: >www.ipni.net/awards<.









Abbreviations and notes: N = nitrogen; P = phosphorus; K = potassium.