

IPNI Scholar Award Recipients - 2016

The International Plant Nutrition Institute (IPNI) has selected the winners of the annual Scholar Award Program. A total of 36 graduate students, representing 14 countries, were chosen in 2016. Each winner receives the equivalent of US\$2,000.

AFRICA



Amira Hachana



Bayou Bunkura Allito



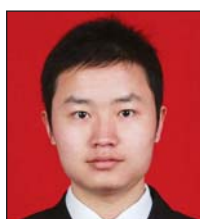
Muneta Grace Manzeke

Ms. Amira Hachana, National Institute of Agronomy, Tunis, Tunisia. **Ph.D. Program:** Diagnostic of the Biodiversity of Rhizosphere Microflora and its Interaction with *Rhizobium Leguminosarum* Nodulating Pea in Different Bioclimatic Areas of Tunisia.

Mr. Bayou Bunkura Allito, Kwame Nkrumah University of Science and Technology, Kumasi, Ashanti, Ghana, Africa. **Ph.D. Program:** *Rhizobium* Strain and Host-variety Interaction Effect on N₂ Fixation and Yield of Faba Bean in Southern Ethiopia.

Ms. Muneta Grace Manzeke, University of Zimbabwe, Harare, Zimbabwe. **Ph.D. Program:** Geospatial Variation of Bioavailable Micronutrients in Tropical Soils and its Effects on Crop Productivity and Human Nutrition.

CHINA



Gu Chiming



Li Ting



Liang Guopeng



Khalid Mehmood



Zhang Qian

Dr. Gu Chiming, Wuhan Botanical Garden of Chinese Academy of Science, Moshan, Wuchang, Wuhan, China. **Ph.D. Program:** Study on Non-Point Pollution Condition and Control Measures in Danjiangkou Reservoir, Hubei, China.

Ms. Li Ting, Institute of Soil Science, Chinese Academic of Sciences, Nanjing, China. **Ph.D. Program:** Composition and Bioavailability of Soil Available Potassium of Typical Farmland in China.

Mr. Liang Guopeng, Chinese Academy of Agricultural Sciences, Beijing, China. **M.Sc. Program:** Seasonal Patterns of Soil Respiration and Soil Biochemical Properties under Nitrogen Addition.


Mr. Khalid Mehmood, University of Chinese Academy of Sciences, Beijing, China. **Ph.D. Program:** Amelioration of Acid Soils Using Low Energy Consuming Biochars Combined with Inorganic Fertilizers for Improved Crop Growth.

Ms. Zhang Qian, Chinese Academy of Agricultural Sciences, Beijing, China. **Ph.D. Program:** Effect of Organic Amendments and its Microbiological Mechanism under Rice-Wheat Rotation.

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.

Regional committees of IPNI scientific staff select the recipients of the IPNI Scholar Award. The awards are presented directly to the students at a preferred location and no specific duties are required of them.

Funding for the scholar award program is provided through support of IPNI member companies, primary producers of nitrogen, phosphate, potash, and other fertilizers.

More information is available from IPNI staff, individual universities, or from the IPNI website: www.ipni.net/awards. 

EASTERN EUROPE/MIDDLE EAST

Mr. Andrey Paratunov, Volgograd State Agrarian University, Volgograd, Russia. **M.Sc. Program:** Tomato Fertilization in a Dry Steppe Zone of Volga-Don Interfluve.



Andrey Paratunov



Alena Ozheredova



Anastasia Chobanu



Muhammad Asif

Ms. Alena Ozheredova, Stavropol State Agrarian University, Stavropol, Russia. **Ph.D. Program:** The Effect of Fertilizers and Technologies on Winter Wheat Production in Central Ciscaucasia.

Ms. Anastasia Chobanu, Belgorod Agrarian University, Belgorod, Russia. **M.Sc. Program:** The Effect of Fertilizers on Biological Indicators of Soil Fertility.

Mr. Muhammad Asif, Sabanci University, Tuzla/Istanbul, Turkey. **Ph.D. Program:** Impact of Climate Change on Wheat Nutrition and Physiology.

NORTH AMERICA



Carolyn Wilson



Sara Berg



John Breker



Jarom Davidson

Ms. Carolyn Wilson, Dalhousie University, Halifax, Nova Scotia, Canada. **M.Sc. Program:** Effect of Diverse Compost Products on Soil Quality and Potato Productivity.

Ms. Sara Berg, South Dakota State University, Brookings, South Dakota, USA. **M.Sc. Program:** Evaluation of Tillage and Cover Crop Impacts on Corn Nitrogen Requirements in Southeastern South Dakota.

Mr. John Breker, North Dakota State University, Fargo, North Dakota, USA. **M.Sc. Program:** Recalibration of Potassium Soil Test for Corn in North Dakota.



Kelsey Hoegenauer



Sarah Mueller



Jared Spackman



Elizabeth Trybula

Mr. Jarom Davidson, University of Arkansas, Fayetteville, Arkansas, USA. **M.Sc. Program:** Validation of N-STaR Nitrogen Rate Recommendations and Evaluation of N-STaR Soil Sampling Procedures for Clay Soils in Arkansas.

Ms. Kelsey Hoegenauer, University of Arkansas, Fayetteville, Arkansas, USA. **Ph.D. Program:** Using Cover Crops to Recycle Nutrients in an Arkansas No-Till System.

Ms. Sarah Mueller, Purdue University, West Lafayette, Indiana, USA. **Ph.D. Program:** Supplemental Late-vegetative Nitrogen Application for High-yield Corn: Agronomic, Economic and Environmental Implications with Modern versus Older Hybrids.

Mr. Jared Spackman, University of Minnesota, Minneapolis, Minnesota, USA. **M.Sc. Program:** Nitrogen Fertilizer Source, Timing and Rate Impacts on Maize Nitrogen Use Efficiency and Mineralization Potential of Minnesota Soils.

Ms. Elizabeth Trybula, Purdue University, West Lafayette, Indiana, USA. **Ph.D. Program:** Crop Water Productivity Response to Potassium Rate Application in Humid and Semi-Arid Conditions.

OCEANIA

Mr. Getachew Agegnehu Jenberu, James Cook University, Cairns, Queensland, Australia. **Ph.D. Program:** Biochar, Compost and Biochar-compost: Crop Performance, Soil Quality and Greenhouse Gas Emissions in Tropical Agricultural Soils.



Getachew Agegnehu Jenberu

SOUTH AMERICA



Walter Carciochi



Clara Milano



Martín Torres Duggan



Eduardo Cancellier



Shively Los Galettos



Lauren Menandro



Saulo Augusto Quassi de Castro

Mr. Walter Carciochi, University of Mar del Plata, Balcarce, Buenos Aires, Argentina. **Ph.D. Program:** Evaluation of Diagnosis Methods of Sulfur Availability in Maize.

Ms. Clara Milano, National Southern University, Bahia Blanca, Buenos Aires, Argentina. **M.Sc. Program:** Biological Nitrogen Fixation of Native Legume Grasses Introduced to the Degraded Grasslands of Southwestern Buenos Aires Province, Argentina.

Mr. Martín Torres Duggan, University of Buenos Aires, Buenos Aires, Argentina. **Ph.D. Program:** Forage Productivity Improvement under Manure, Rock Phosphate, and Zeolites Applications.

Mr. Eduardo Cancellier, Federal University of Lavras, Lavras, Minas Gerais, Brazil. **Ph.D. Program:** Development of Bio-based Coatings for Production of Controlled-Release Fertilizers and Availability of Controlled-Release Phosphorus.

Ms. Shively Los Galettos, State University of Ponta Grossa, Ponta Grossa, Parana, Brazil. **Ph.D. Program:** Efficiency of Phosphate Fertilization as Influenced by the Application of Phosphogypsum in No-till System.

Ms. Lauren Menandro, Agronomic Institute of Campinas, Campinas, São Paulo, Brazil. **M.Sc. Program:** Characterization, Agronomic and Industrial Recovery of Sugarcane Shoots and Old Leaves.

Mr. Saulo Augusto Quassi de Castro, University of São Paulo, Piracicaba, São Paulo, Brazil. **M.Sc. Program:** Contribution of Nitrogen Fertilizer in Sugarcane Due to Crop Rotation, Straw Removal and Nitrogen Rates.

SOUTH ASIA



Ridham Kakar



Kiran K.R.



Rumesh Ranjan



Pragyan Paramita Rout



Vijayakumar Shanmugam



Arunbabu Talla



Abdul Rehman

Ms. Ridham Kakar, Dr. Y.S. Parmar University of Horticulture and Forestry, Nauni, Solan, Himachal Pradesh, India. **Ph.D. Program:** Integrated Nutrient Management under Ginger-cauliflower Cropping Sequence in North-West Himalayas.

Mr. Kiran K.R., Indian Agricultural Research Institute, New Delhi, India. **Ph.D. Program:** Mobilization of Soil Iron to Minimize Iron Deficiency Chlorosis of Soybean under Ambient and Elevated CO₂ and Temperature Conditions.

Mr. Rumesh Ranjan, Indian Agricultural Research Institute, New Delhi, India. **Ph.D. Program:** Genetic Analysis and Identification of QTLs Influencing Nitrogen Use Efficiency in Wheat.

Ms. Pragyan Paramita Rout, Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India. **Ph.D. Program:** Development and Standardization of Sensors for Soil Moisture Monitoring and Precision Nutrient Management for Growing Flower Crops under Fertigation and Matric Suction Irrigation.

Mr. Vijayakumar Shanmugam, Indian Agricultural Research Institute, New Delhi, India. **Ph.D. Program:** Potassium Management in Aerobic Rice–Wheat Cropping System.

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Mr. Arunbabu Talla, Indian Institute of Technology, Kharagpur, West Bengal, India. **Ph.D. Program:** Planting Time and Nitrogen Management for Improving Hybrid Rice Production under Changing Climate of Subtropical India.

Mr. Abdul Rehman, University of Agriculture, Faisalabad, Pakistan. **Ph.D. Program:** Exploring the Role of Zinc Nutrition in Yield Improvement, Grain Biofortification and Resistance against Abiotic Stresses in Wheat.



Chuck Chuan Ng

SOUTHEAST ASIA

Mr. Chuck Chuan Ng, University of Malaya, Kuala Lumpur, Malaysia. **Ph.D. Program:** Soil-plant Interaction of Trace Elemental Metals in Vetiver Grass.

Frontiers of Potassium Science Conference | kfrontiers.org

Organizers have designed this unique international conference being held in Rome, Italy on January 25-27, 2017, as a forum to exchange information on how to improve potassium plant nutrition and soil management to better the health of soils, plants, animals, and humans. The 4R Nutrient Stewardship framework is integrated into the conference structure to keep the discussions anchored to the information needs of farmers and those who provide nutrient management guidance.

Please visit <http://KFrontiers.org> to obtain all program and registration details, and to sign up for all pre- and post-conference updates.



Speakers (Selected list)

Marta Alfaro, Instituto de Investigaciones Agropecuarias (INIA), Chile.
 Michael Bell, University of Queensland, Australia.
 Sylvie Brouder, Purdue University, USA.
 Ismail Cakmak, Sabanci University, Turkey.
 Heitor Cantarella, Agronomic Institute of Campinas, Brazil.
 Paul Fixen, International Plant Nutrition Institute, USA.
 David Franzen, North Dakota State University, USA.
 Keith Goulding, Rothamsted Research, UK.
 Philippe Hinsinger, UMR Eco&Soils, INRA-Montpellier SupAgro, France.
 John Kovar, USDA ARS, USA.
 Kaushik Majumdar, International Plant Nutrition Institute, India.

Robert Mikkelsen, International Plant Nutrition Institute, USA.
 Scott Murrell, International Plant Nutrition Institute, USA.
 Steven Oosthuysen, HortResearch SA, SQM, South Africa.
 Mike Rahm, The Mosaic Company, USA.
 Michel Ransom, Kansas State University, USA.
 Zed Rengel, The University of Western Australia, Australia.
 Vinod Kumar Singh, Indian Agricultural Research Institute, India.
 Michael Stone, Purdue University, USA.
 Jeff Volenec, Purdue University, USA.
 Connie Weaver, Purdue University, USA.
 Philip White, James Hutton Institute, Scotland.

Example Discussion Topics

Potassium in Sustainable Intensification of Cropping Systems

How do potassium inputs and outputs compare for different cropping systems and geopolitical boundaries?

4R Source: Improving Decisions About the Source of Potassium to Apply

How does the source of potassium fertilizer affect its proper placement in the soil?

4R Rate: Improving the Accuracy of Potassium Rate Recommendations

Why and to what extent do various crops differ in their recovery efficiency of potassium?

4R Time: Improving Decisions About When to Apply Potassium

What are the genetic effects on potassium accumulation rates, partitioning, and plant metabolism?

4R Place: Improving Potassium Placement Decisions

What plant characteristics (rhizosphere biology and chemistry, root architecture, etc.) most influence potassium placement decisions?

Connecting Frontier Science to Frontier Practice

How do we increase the impact of scientific findings on soil and crop management of potassium in the field?