

**Communications in Soil Science and Plant Analysis**  
**Volume 46, Numbers 8–11, 2015**

**Contents**

**Volume 46, Number 8**

- Soil Particulate Organic Matter (POM) Prediction in a Mountainous Watershed using Artificial Neural Networks 925  
*M. Aghajani, A. Jalalian, and A. A. Besalatpour*
- Distribution of Boron in Different Fractions in Some Alkaline Calcareous Soils 939  
*Rajeev Padbhushan and Dinesh Kumar*
- Humic Acid–Like Substances Extracted from Compost Improve Fe Nutrition of Lemon Grown on Calcareous Soil: An Environmentally Safe Approach 954  
*Tarek G. Ammari, Yasin Al-Zu'bi, Samih Abubaker, and Issam Qrunfleh*
- Molybdenum Requirements of Dry Bean with and without Liming 965  
*N. K. Fageria, L. F. Stone, and A. B. Santos*
- Copper-Use Efficiency in Dry Bean Genotypes 979  
*N. K. Fageria, L. F. Stone, and L. C. Melo*
- Silicon and Potassium Nutrition Enhances Salt Adaptation Capability of Sunflower by Improving Plant Water Status and Membrane Stability 991  
*M. Ashraf, M. Abid, J. A. Teixeira da Silva, S. M. Shahzad, A. Hussain, and M. Imtiaz*
- Emergence Rate, Yield, and Nitrogen-Use Efficiency of Sunflowers (*Helianthus annuus*) Vary with Soil Salinity and Amount of Nitrogen Applied 1006  
*Wenzhi Zeng, Chi Xu, Jiasheng Huang, Jingwei Wu, and Tao Ma*
- Ammonia Volatilization from Exposed Soil and Tanzania Grass Pasture Fertilized with Urea and Zeolite Mixture 1024  
*Mariana Campana, Ana Carolina Alves, Patrícia Perondi Anchão de Oliveira, Alberto Carlos de Campos Bernardi, Eduardo Alvarez Santos, Valdo Rodrigues Herling, Jozivaldo Prudêncio Gomes de Moraes, and Waldomiro Barioni Júnior*
- Improving Sensitivity of Solution <sup>31</sup>P NMR Analysis in Australian Xeralfs 1034  
*Melinda R. S. Moata, Ronald J. Smernik, Ashlea L. Doolette, Ann M. McNeill, and Lynne M. Macdonald*

- Approaching a Standardized Method for the Hot-Water Extraction of Peat Material to Determine Labile SOM in Organic Soils 1044  
*C. Heller and K. Weiß*

### Volume 46, Number 9

- Dry Bean Genotype Evaluation for Potassium-Use Efficiency 1061  
*N. K. Fageria, L. C. Melo, and A. M. Knupp*
- Upland Rice Genotype Evaluations for Acidity Tolerance 1076  
*N. K. Fageria, O. P. Morais, M. C. S. Carvalho, and J. M. Colombari Filho*
- Agronomic Evaluation of Phosphorus Sources Applied to Upland and Lowland Rice 1097  
*N. K. Fageria, A. B. Santos, and M. C. S. Carvalho*
- Effects of Gypsum Particle Size on Reclaiming Saline-Sodic Soils in Egypt 1112  
*Mohamed K. Abdel-Fattah, Sara Fouda, and Urs Schmidhalter*
- Phosphorus Nutrition of Upland Rice, Dry Bean, Soybean, and Corn Grown on an Oxisol 1123  
*N. K. Fageria, M. C. S. Carvalho, and A. M. Knupp*
- Uncomposted Sheep and Cow Manures as a Source of Commercial Humic Amendments: An Exploratory Study 1137  
*Jamal Alrefai, Pere Rovira, Fares Alsewailem, Issa Abaalkheel, Abdullellah Alsolami, Hassan Albishi, and Sami Alfantokh*
- Lime and Cattle Manure in Soil Fertility and Soybean Grain Yield Cultivated in Tropical Soil 1157  
*A. Moreira, G. J. Sfredo, L. A. C. Moraes, and N. K. Fageria*
- Bioorganic Nutrient Source Effect on Growth, Biomass, and Quality of Natural Sweetener Plant Stevia and Soil Fertility in the Western Himalayas 1170  
*Rakesh Kumar, Saurabh Sharma, Swati Sood, Ramdeen Prasad, and Y. P. Dubey*

### Volume 46, Number 10

- Vertical Distribution of Copper in Copper-Contaminated Coffee Fields in Kilimanjaro, Tanzania 1187  
*Yasin Hassan Senkondo, Ernest Semu, and Filip M. G. Tack*
- Phosphorus Sources: Effects on Growth and Phosphorus Fractions of Curauá (*Ananas erectifolius* L. B. Smith) 1200  
*Tainah Manuela Benlolo Barbosa, José Zilton Lopes Santos, Carlos Alberto Franco Tucci, Silvio Vieira da Silva, Arnon Afonso de Souza Cardoso, and Bruno Fernando Faria Pereira*

Physiological Mechanism of Salt Tolerance in <i>Suaeda fruticosa</i> Collected from High Saline Fields of Khyber Pukhtoon-Khwa, Pakistan <i>Sami Ullah and Asghari Bano</i>	1212
Comparing Nitrate-N Losses through Leaching by Field Measurements and Nitrogen Balance Estimations <i>Virginia Aparicio, José Luis Costa, Hernán Sainz Rozas, Daniel Gimenez, and Fernando García</i>	1229
Effect of Zinc Application on Cadmium Uptake of Maize Grown in Alkaline Soil <i>Bahar Sozubek, Korkmaz Belliturk, and M. Turgut Saglam</i>	1244
Influence of Drought Stress on Leaf Traits of Different Strawberry ( <i>Fragaria ananassa</i> L.) Varieties in Natural Environment <i>Arash Nezhadahmadi, Golam Faruq, and Kamaludin Rashid</i>	1249
Comparison of 1 M HCl and Mehlich 3 for Assessment of the Micronutrient Status of Polish Soils in the Context of Winter Wheat Nutritional Demands <i>Jolanta Korzeniowska and Ewa Stanisławska-Glubiak</i>	1263
Increase in the Capacity of Interlayer Sites in a Paddy Soil as a Possible Factor Affecting the Dynamics of Fixed Ammonium at the Initial Stage of Anaerobic Incubation <i>Kaori Matsuoka and Naoki Moritsuka</i>	1278
Phosphorus Availability in Low-P and Acidic Soils as Affected by Liming and P Addition <i>V. Antoniadis, F. Hatzis, D. Bachtsevanidis, and S. D. Koutroubas</i>	1288
Effects of Sugar Foam Liming on the Water-Retention Properties of Soil <i>C. Pérez-de-los-Reyes, J. A. Amorós Ortíz-Villajos, F. J. García Navarro, S. Bravo Martín-Consuegra, and R. Jiménez Ballesta</i>	1299
Amelioration of Heavy-Metal Toxicity in Cauliflower by Application of Salicylic Acid <i>Pratima Sinha, A. K. Shukla, and Y. K. Sharma</i>	1309
Liming Effects on Extractable Boron in Six Acidic Soils <i>Dibyendu Sarkar, Saptarshi Ghosh, Kaushik Batabyal, Biswapati Mandal, and Asoke Prasun Chattopadhyay</i>	1320

### Volume 46, Number 11

Agronomic Evaluation of Lowland Rice Genotypes for Potassium-Use Efficiency <i>N. K. Fageria and A. B. dos Santos</i>	1327
--	------

- Field-Scale Evaluation of Calcium Ammonium Nitrate, Urea, and Urea Treated with N-(N-Butyl) Thiophosphoric Triamide Applied to Grassland in Ireland 1345  
*Diogenes L. Antille, Nyncke J. Hoekstra, and Stanley T. J. Lalor*
- Transformation and Bioavailability of Selenate and Selenite Added to a *Nicotiana tabacum* L. Planting Soil 1362  
*Jun Fan, Rui Wang, Hongqing Hu, Guan Huo, Qingling Fu, and Jun Zhu*
- Efficiency of Magnesium Use by Common Bean Varieties Regarding Yield, Physiological Components, and Nutritional Status of Plants 1376  
*B. T. Canizella, A. Moreira, L. A. C. Moraes, and N. K. Fageria*
- Predicting the Distribution of Naturally Occurring Phosphatic Soils across a Countywide Landscape, Florida, USA 1391  
*Ravindra Ramnarine, Willie G. Harris, and Sabine Grunwald*
- Analysis of Quercetin and Kaempferol in an Alcoholic Extract of *Convolvulus pilosellifolius* using HPLC 1411  
*Asma'a Al-Rifai, Ahmad Aqel, Amani Awaad, and Zeid A. AlOthman*
- Changes in Chemistry of Rice Husk Compost and Its Effect on Negative Charge and Nutrient Content of a Chemically Degraded Oxisol 1419  
*Markus Anda and J. Shamshuddin*
- Nitrogenase Activity and Nodule Biomass of Cowpea (*Vigna unguiculata* L. Walp.) Decrease in Cover Crop Mixtures 1443  
*Sam E. Wortman and Jeffrey O. Dawson*