

COMMUNICATIONS IN SOIL SCIENCE AND PLANT ANALYSIS

CONTENTS

Volume 48 Number 8 2017

Articles

- Impact of Various Ratios of Nitrogen and Sulfur on Maize and Soil pH in Semiarid Region
Muhammad Anees Afsar, Shad Khan Khalil, Said Wahab, Iftikhar H. Khalil, Amir Z. Khan, and Mansoor K. Khattak 825
- Effect of Nitrogen Application Timing on Yield Components, Fodder, Grain, and Oil Yields of *Brassica* Cultivars
Muhammad Arif, Muhammad Tariq, Mohammed Jan, Habib Akbar, Ishaq Mian, and Muhammad Sajid 835
- Mineral Nutrient Acquisition by Cotton Cultivars Grown under Salt Stress
Ibrahim Ilker Ozyigit, Ilhan Dogan, Goksel Demir, and Ibrahim Ertugrul Yalcin 846
- Kinetics and Adsorption-Desorption Behavior of AM Nitrification Inhibitor in Mollisols
K. S. Rawat, A. Srivastava, S. C. Bhatt, S. P. Pachauri, and P. C. Srivastava 857
- Identifying the Sources and Contamination Status of Potentially Toxic Trace Elements in Agricultural Soils
U. K. P. S. Sanjeevani, S. P. Indraratne, R. Weerasooriya, U. W. A. Vitharana, and D. Kumaragamage 865
- Plant Nitrogen Status of Southern Highbush Blueberry (*Vaccinium corymbosum* L. Interspecific Hybrid) Grown in Pine Bark Amended Soils with Varying Rates of Nitrates
Erick D. Smith and Glendon Harris 878
- Chemical Fractions of Mn in Acidic Soils and Selection of Suitable Soil Extractants for Assessing Mn Availability to Maize (*Zea Mays* L.)
Dibya Joshi, Prakash C. Srivastava, Rama Dwivedi, Satya P. Pachauri, and Arvind K. Shukla 886
- Changes in Metallic Cation Accumulation in Tomato (*Solanum Lycopersicum* L.) Affected by Boron and Potassium
Halil Samet, Yakup Çikili, and Sevda Dursun 898
- Effect of Soil Sample Size on Saturated Soil Hydraulic Conductivity
Roya Jafari, Vahedberdi Sheikh, Mohsen Hossein-Alizadeh, and Hasan Rezaii-Moghadam 908
- Wheat Yield Differences between Two Cropping Systems in Permanent Raised-Beds as Affected by Components of Nitrogen Use Efficiency
Agustin Limon-Ortega 920
- Changes in Soil Phosphorus Fractions Resulting from Crop Residue Removal and Phosphorus Fertilizer
O. Sonmez and G. M. Pierzynski 929
- A Highly Sensitive Spectrophotometric Method for Gallium Determination with Chrome Azurol S in the Presence of Mixed Cationic-Nonionic Surfactants and its Application in Plant Analysis
Justyna Poledniok, Joanna Orzeł, Justyna Gałeczka, and Rozalia Czoik 936

Integrated Fertilizer Management: Influence on Soil Nitrogen, Available Phosphorus, Potassium, Nutrient Uptake and Maize Yield <i>D. S. Ogundijo, M. T. Adetunji, J. O. Azeez, and T. A. Arowolo</i>	943
Phosphorus Sorption in Hydromorphic Soils Overlying Alluvium and Coastal Plain Sand Parent Materials in Delta State, Nigeria <i>P. E. Osayande, P. O. Oviasogie, E. R. Orhue, B. E. Awanlemhen, and E. Oko-oboh</i>	955

Volume 48 Number 9 2017

Articles

Effect of Primary Biomechanated Spentwash on Soil Properties, Nutrient Uptake, and Yield of Wheat on Sodic Soil <i>A. N. Deshpande, B. M. Kamble, L. B. Said, and S. M. Wadekar</i>	963
Soil Respiration Characteristics in Three Shrublands along an Elevation Gradient in a Semiarid Loess Plateau Mountain Area <i>Junxia Yan, Zhong Hao, Junjian Li, Hongian Li, and Guangwei Ding</i>	977
Growth and Nutrient Composition of Sugarcane Genotypes Subjected to Salinity and Drought Stresses <i>S. Vasantha, R. Gomathi, and C. Brindha</i>	989
Agro-Industry Sludge as a Potential Organic Fertilizer for Prompt Nitrogen Release <i>Toselli Moreno, Marcolini Graziella, Baldi Elena, Quartieri Maurizio, Sorrenti Giovambattista, Muzzi Enrico, Innocenti Angelo, and Dal Re Lamberto</i>	999
Evaluation of Chemical Extraction Methods for Determining Plant-Available Potassium in Some Soils of West Bengal, India <i>Suranjit Sarkar and Sanmay Kumar Patra</i>	1008
Transfer of Metals in Soil-Grass Ecosystems under Long-Term N, P, K Fertilization in Hesse, Germany <i>Sezin Czarnecki and Rolf-Alexander Düring</i>	1020
Within-Field Variability of Winter Wheat Yield and Grain Quality versus Soil Properties <i>Dariusz Gozdowski, Elżbieta Leszczyńska, Michał Stępień, Jan Rozbicki, and Stanisław Samborski</i>	1029
Influence of Organic Matter Vis-à-Vis Humic Acid on the Transformation of Inorganic and Organic Forms of Nitrogen in a Typic Haplustept Soil <i>N. Surbala Devi and D. Saha</i>	1042
Effect of Mixing Pine Needles Litters on Soil Biological Properties and Phosphorus Availability in Soil Amended with Fertilizers and Manures <i>Arvind Kumar Rai, Rakesh Bhardwaj, and Amish Kumar Sureja</i>	1052
Solubility Relationships of Iron and Evaluation of its Fertility Status in Degraded Soils <i>Babu Lal Meena, Raj Kumar Rattan, and Siba Prasad Datta</i>	1059
Landscape, Soil, and Plant Analysis of Japanese Stiltgrass (<i>Microstegium vimineum</i>) Invasion in the Piedmont Region, SC <i>Elena A. Mikhailova, Donald Hagan, Julia Sharp, Brian Ritter, Roxanne Stiglitz, Veeander Mealing, Tristan Allerton, Kylie Burdette, Allen Solomons, and Mark A. Schlautman</i>	1068
Reducing the Risk of Iron Toxicity by Imposing Unsaturated Conditions before Flooding <i>Kazuyuki Matsuo, Noriharu Ae, and Saykham Vorachit</i>	1078
Metal Extractability in Binary and Multi-metals Spiked Calcareous Soils <i>Mohsen Jalali and Ziba Hoursesht</i>	1089

Articles

- Estimating Net Primary Productivity and Carbon Inputs by Soybean Crops in Argentina
Maria del Pilar Muschietti Piana and Gabriela Civeira 1105
- Effects of Silicon Application on Wheat Growth and Some Physiological Characteristics under Different Levels and Sources of Salinity
J. Saleh, N. Najafi, and S. Oustan 1114
- Relation of Toxicity in Corn Seeds Treated with Zinc and Salicylic Acid
Adão Felipe dos Santos, Otoniel Magalhães Morais, Renato de Mello Prado, Aginaldo José Freitas Leal, and Rouverson Pereira da Silva 1123
- Nitrogen Fertilizer Replacement Value of Concentrated Liquid Fraction of Separated Pig Slurry Applied to Grassland
J. C. van Middelkoop and G. Holshof 1132
- Evaluation of a Suitable Extractant and Determination of Critical Limit of Boron in Soil and Mustard (*Brassica Juncea* L.) Plant by Various Extractants in Inceptisols of Varanasi
Shobh Nath Yadav, S. K. Singh, Omkar Kumar, A. M. Latare, and Manish Kumar 1145
- Site-Specific Nitrogen Management in Rice Using Remote Sensing and Geostatistics
Rahul Tripathi, A. K. Nayak, R. Raja, Mohammad Shahid, S. Mohanty, B. Lal, Priyanka Gautam, B. B. Panda, Anjani Kumar, and R. N. Sahoo 1154
- Copper Accumulation and Availability in Sandy, Acid, Vineyard Soils
Alcione Miotto, Carlos Alberto Ceretta, Eduardo Giroto, Gustavo Trentin, João Kaminski, Lessandro De Conti, Toselli Moreno, Baldi Elena, and Gustavo Brunetto 1167
- Release Kinetics of Si, Al, Fe, and Mn from Acid Soils in the Presence of EGCG
Da-Gang Yuan, Yong-Gang Deng, Guang-Lan Pu, Gang He, Jun-Si Zhang, Qian Weng, and Chang-Quan Wang 1184
- Yield and Heavy Metal Content of Wastewater-Irrigated Cauliflower and Soil Chemical Properties
Talip Tunc and Ustun Sahin 1194
- Examination of Correlation between Histidine, Sulfur, Cadmium, and Cobalt Absorption by *Morus* L., *Robinia pseudoacacia* L., and *Populus nigra* L.
Sukran Akkus Ozen and Mehmet Yaman 1212
- Effects of Salinity on Growth, Water-Use Efficiency, and Nutrient Leaching of Three Containerized Ornamental Plants
Pedro García-Caparrós, Alfonso Llanderal, and María Teresa Lao 1221
- Effect of Different Nitrogen Doses on Dry Matter Ratio, Chlorophyll and Macro/Micro Nutrient Content in Sweet Herb (*Stevia rebaudiana* Bertoni)
Esra Ucar, Yasar Ozyigit, Ahmet Demirbas, Dilek Yasin Guven, and Kenan Turgut 1231
- Cover Crops and Soil Phosphorus Availability
Moniki Campos Janegitz, Ana Rita Helene Martins, and Ciro Antonio Rosolem 1240

Articles

- Interaction of Different Wheat Genotypes and Nitrification Inhibitor 3,4-Dimethylpyrazole Phosphate Using ¹⁵N Isotope Tracing Techniques
Mir Ahmad Mousavi Shalmani, Amir Lakzian, Reza Khorassani, Kazem Khavazi, and Mohammad Zaman 1247
- Critical Limit of Available Boron for Berseem in Major Soils of Lesser Himalayas (Kashmir)
Shaista Nazir and Mushtaq A. Wani 1259
- The Use of Coal Gangue as a Cultivation Bed Conditioner in Forage Maize Inoculated with Arbuscular Mycorrhizal Fungi
Babak Moteszarezaee, Elaheh Ahmadiyan, Hossein Ali Alikhani, and Hossein Azarnivand 1266
- Lime and Nutrients Effects on *Jatropha curcas* Cultivated on an Amazonian Soil
José Zilton Lopes Santos, Bruno Fernando Faria Pereira, José Augusto Figueira da Silva, Carlos Alberto Franco Tucci, Silvio Vieira da Silva, Tainah Manuela Benlolo Barbosa, and Daiana Soares da Silva 1280
- Crambe Growth in a Soil Amended with Biochar and under Saline Irrigation
Ana Carolina F. de Vasconcelos, Lucia Helena G. Chaves, Hans R. Gheyi, Josely D. Fernandes, and Gilvanise A. Tito 1291
- Effect of pH on Removal of Cu, Cd, Zn, and Ni by Cement Kiln Dust in Aqueous Solution
Abu El-Eyoon Abu Zied Amin and Salman A. H. Selmy 1301
- Comparing SSURGO Data with Geospatial Field Measurements to Estimate Soil Texture and Infiltration Rate Classes in Glaciated Soils
Stephen Cole, Elena Mikhailova, Christopher Post, Charles Privette, Mark A. Schlautman, and Michael Cope 1309
- Chemical Fractions of Phosphorus: The Effect of Soil Orders, Soil Properties, and Land Use
Veli Uygur, Burak Durgun, and Hüseyin Senol 1319
- Phosphorus Availability in *Lolium perenne* L. in Acidic and Limed Soils
V. Antoniadis, S. D. Koutroubas, and S. Fotiadis 1336
- Genotypic Variation for Water-Deficit Tolerance in Cotton (*Gossypium hirsutum* L.) Germination in Southern Iran
Vahid Ghodrat, Reza Hamidi, Omid Alizadeh, Forood Bazrafshan, and Shahram Sharafzadeh 1343
- Magnetic Solid-Phase Extraction Based on Modified Iron Oxide Nanoparticles for the Preconcentration of Ultra-Trace Amounts of Copper Ions in the Environmental and Plant Samples and its Determination Using FAAS
Sayed Zia Mohammadi, Tahereh Rohani, and Leila Bahadori 1359