

CONTENTS

Volume 41 Number 5 2018

Articles

- Nutrients balance for improvement of phytoremediation ability of teak seedlings (*Tectona grandis*)
Sara Yavari, Amirhossein Malakahmad, Nasiman B. Sapari, and Saba Yavari 545
- Leaf structure and chemical compositions are correlated with cotton boron efficiency
Wu Xiuwen, Dong Xiaochang, Lu Xiaopei, Muhammad Riaz, and Jiang Cuncang 552
- Germination and growth response of flax (*Linum usitatissimum*) to salinity stress by different salt types and concentrations
Mohammad Moghaddam, Khyrollah Babaei, and Elham Saeedi Pooya 563
- ACC deaminase-producing bacteria mediated drought and salt tolerance in *Capsicum annuum*
Ann Maxton, Poonam Singh, and Sam A. Masih 574
- NPK could alleviate the adverse effects of simulated acid rain in sunflower (*Helianthus annuus* L.)
Noreen Khalid, Ali Noman, Muhammad Aqeel, Naila Hadayat, and Sumreen Anjum 584
- Leaf morphology explains the disparity between annual bluegrass and creeping bentgrass growth under foliar fertilization
Kelly O'Connor, François Hébert, Jacqueline E. Powers, Katerina S. Jordan, and Eric Michael Lyons 596
- Improvement of "Kinnow" mandarin fruit productivity and quality by urea, boron and zinc foliar spray
Rashid S. Al-Obeed, Mahmoud Abdel-Aziz Ahmed, Hassan A. Kassem, and Adel M. Al-Saif 609
- The potential contribution of siderophore producing bacteria on growth and Fe ion concentration of sunflower (*Helianthus annuus* L.) under water stress
Ahmad Ali Pourbabaee, Farzaneh shoaibi, Somayeh Emami, and Hossein Ali Alikhani 619
- Use of an N-tester chlorophyll meter to tune a late third nitrogen application to wheat under humid Mediterranean conditions
M. Arritokieta Ortuzar-Iragorri, Ana Aizpurua, Ander Castellón, Asier Alonso, José M. Estavillo, and Gerardo Besga 627
- Effect of nitrogen, phosphorus and potassium fertilizer on growth and seed germination of *Capsella bursa-pastoris* (L.) Medikus
Wenjie Yang 636
- Elevated CO₂ may reduce arsenic accumulation in diverse ecotypes of *Arabidopsis thaliana*
V. Fernandez, J. Y. Barnaby, M. Tomecek, E. E. Codling, and L. H. Ziska 645
- Sugar beet yield response to different levels of saline irrigation water and leaching in an arid region
Mohammad Feizi, Jaber Fallahzade, and Pegah Noorshargh 654
- Coronatine effects on yield, nutrient uptake, and physio-biochemical attributes of soybean roots
Xuefeng Shen, Yong Chen, Jianmin Li, and Liusheng Duan 664

Volume 41 Number 6 2018

Articles

- Response of potato cv. Kufri Sadabahar to zinc sulfate application under tarai region of Uttarakhand
Kailash Sati, Manoj Raghav, Pooja Pandey, Lavlesh Yadav, and Umesh Chandra Sati 673
- Phytosiderophore release in relation to multiple micronutrient metal deficiency in wheat
Rinki Khobra and Bhupinder Singh 679
- Effect of AM fungi and phosphorus fertilization on P-use efficiency, nutrient acquisition and root morphology in pea (*Pisum sativum* L.) in an acid Alfisol
Arti Yadav, V. K. Suri, Anil Kumar, and Anil K. Choudhary 689
- Nitrogen application and sowing date affect okra pod and seed characteristics
Ghadir Mohammadi, Ebrahim M. Khah, Demosthenis Chachalis, and Spyridon A. Petropoulos 702
- Effects of seaweed and different farm manures on growth and yield of organic carrots
Semih Kiraci 716
- Interaction between diazotrophic bacteria and N-fertilizer doses on sugarcane crop
Rodrigo Oliver and Marcelo de Almeida Silva 722
- Yield enhancement and phosphorus economy in lentil (*Lens culinaris* Medikus) with integrated use of phosphorus, *Rhizobium* and plant growth promoting rhizobacteria
Narinder Singh, Guriqbal Singh, Navneet Aggarwal, and Veena Khanna 737
- Effect of foliar boron application on boron, chlorophyll, phenol, sugars and hormones concentration of olive (*Olea europaea* L.) buds, leaves, and fruits
E. S. Hegazi, R. A. El-Motaium, T. A. Yehia, and M. E. Hashim 749
- Using composted wheat residue as a growth medium in culture of tomato
F. Ghoreishy, A. Mohammadi Ghehsareh, and J. Fallahzade 766
- Interaction of biological nitrogen fixation with sowing nitrogen fertilization on common bean in the two seasons of cultivation in Brazil
Rodrigo Luiz Neves Barros, Leandro Barbosa de Oliveira, Welliton Barros Magalhães, Leonardo Oliveira Médici, and Carlos Pimentel 774
- Evaluation of multi-nutrient extractants for determination of available P, K, and micronutrient cations in soil
Sanjay K. Sharma, Ankita Sharma, Surinder Rana, and Naveen Kumar 782
- Influence of cadmium and phosphorus enhance absorption and membrane damage in wheat seedlings grown in nutrient medium
Ram Kumar, Rajeev Gopal, and Y. K. Sharma 793

Volume 41 Number 7 2018

Articles

- Nitrogen rate applied affects dry matter translocation and performance attributes of wheat under deficit irrigation
Javad Hamzei 807

Effect of salt stress on Growth and Ion accumulation of alfalfa (<i>Medicago sativa</i> L.) cultivars <i>Ensiye Ashrafi, Jamshid Razmjoo, and Morteza Zahedi</i>	818
How well do fertilizer enhancers work? <i>Timothy Allen Jenkins, Parmjit Randhawa, and Vesna Jenkins</i>	832
The role of organic acids on the uptake and relationship of phosphorus and zinc in corn (<i>Zea mays</i> L.) by application of ³² P and ⁶⁵ Zn radioisotopes <i>Sareh Nezami, Mohammad Jafar Malakouti, Ali Bahrami Samani, and Mohammad Ghannadi Maragheh</i>	846
Effect of nitrogen and potassium fertilization on mineral and amino acid content of colored flesh potato cultivar Blue Congo <i>Bożena Bogucka and Tońska Elżbieta</i>	856
Effect of application of exogenous nitric oxide at different critical growth stages in alleviating Fe deficiency chlorosis of peanut growing in calcareous soil <i>Yuanjie Dong, Weifeng Chen, Yuping Zhuge, Yiling Song, Guoqing Hu, Yongshan Wan, Fengzhen Liu, and Xuhua Li</i>	867
Evaluation of bermuda and paspalum grass types for urban landscapes under saline water irrigation <i>Issa Yar Mohammad Karimi, Shyam S. Kurup, Mohammed Abdul Mohsen Ali Salem, Abdul Jaleel Cheruth, Fayas Thayale Purayil, Sreeramanan Subramaniam, and Mohammad Pessarakli</i>	888
High soil Mn and Al, as well as low leaf P concentration, may explain for low natural rubber productivity on a tropical acid soil in Vietnam <i>Binh Thanh Nguyen, Thanh Kim Do, Thanh Van Tran, Mui Kim Dang, Curtis J. Dell, Phuc Vinh Luu, and Quyen Thi Kim Vo</i>	903
Effect of single and combined applications of zinc with iron and boron on the contents of "Deveci" pear trees <i>Serhat Gürel and Haluk Başar</i>	915
Sugarcane by-products used as soil amendments on a sandy soil: Effects on sugarcane crop nutrition and yield <i>Susanna Gomez Orndorff, Timothy Albert Lang, Jehangir Hoshang Bhadha, James Mabry McCray, and Samira Hassan Daroub</i>	928

Volume 41 Number 8 2018

Articles

Boron-induced improvement in physiological, biochemical and growth attributes in sunflower (<i>Helianthus annuus</i> L.) exposed to terminal drought stress <i>Muhammad Asif Shehzad, Muhammad Maqsood, Fahim Nawaz, Tasawer Abbas, and Sanaullah Yasin</i>	943
Dynamics of macronutrients in olive leaves <i>Karima Bouhafaf, Lhoussaine Moughli, Rachid Bouabid, Ahmed Douaïk, and Youness Taarabt</i>	956
Boron increases pollen quality, pollination, and fertility of different genetic lines of pepper <i>Patricia Peñaloza and Patricio Toloza</i>	969

Influence of soil applied boron on yield of berseem (<i>Trifolium alexandrium</i> L.) and soil boron fractions in calcareous soils <i>Gurmeet Singh Sidhu and Dinesh Kumar</i>	980
Sufficiency ranges for lemon balm and nutrient removals in aboveground phytomass <i>M. Ângelo Rodrigues, Isabel Q. Ferreira, Sandra Afonso, and Margarida Arrobas</i>	996
Application of molybdenum fertilizer enhanced quality and production of alfalfa in northern China under non-irrigated conditions <i>Xiaotao Mao, Qingfeng Li, Lifei Ren, Wenming Bai, and Wen-Hao Zhang</i>	1009
System of rice intensification in promising rice hybrids in north-western Himalayas: crop and water productivity, quality, and economic profitability <i>Anil K. Choudhary and Vinod K. Suri</i>	1020
Plant growth promoting potential of psychrotolerant <i>Dyadobacter</i> sp. for pulses and finger millet and impact of inoculation on soil chemical properties and diazotrophic abundance <i>Saurabh Kumar, Deep Chandra Suyal, Mamta Bhoriyal, and Reeta Goel</i>	1035
Increasing saffron (<i>Crocus sativus</i> L.) corm size through the mycorrhizal inoculation, humic acid application and irrigation managements <i>Mahsa Aghavani Shajari, Parviz Rezvani Moghaddam, Reza Ghorbani, and Alireza Koocheki</i>	1047
Salinity effects on nitrogen metabolism in plants – focusing on the activities of nitrogen metabolizing enzymes: A review <i>Muhammad Ashraf, Sher Muhammad Shahzad, Muhammad Imtiaz, and Muhammad Shahid Rizwan</i>	1065