

- 
- ASSESSING THE NITROGEN NUTRITIONAL STATUS OF YOUNG NON-BEARING 'ROCHA' PEAR TREES GROWN IN A MEDITERRANEAN REGION BY USING A CHLOROPHYLL METER**  
□ Cláudia B. Neto, Corina Carranca, Josué Clemente, and Amarílis de Varennes **627**
- EFFECTS OF ROOT ZONE PH AND NUTRIENT CONCENTRATION ON THE GROWTH AND NUTRIENT UPTAKE OF TOMATO SEEDLINGS** □ Yun-Im Kang, Jin-Myeon Park, Seung-Heui Kim, Nam-Jun Kang, Kyoung-Sub Park, Si-Young Lee, and Byoung Ryong Jeong **640**
- THE PATH OF CARBON IN PHOTOSYNTHESIS. XXVII. SUGAR-CONJUGATED PLANT GROWTH REGULATORS ENHANCE GENERAL PRODUCTIVITY** □ Arthur M. Nonomura, Andrew A. Benson, and Karl Y. Biel **653**
- EXPLOITATION OF GENETIC VARIABILITY AMONG WHEAT GENOTYPES FOR TOLERANCE TO PHOSPHORUS DEFICIENCY STRESS** □ Muhammad Yaseen and Sukhdev S. Malhi **665**
- GROWTH AND YIELD RESPONSES OF PLANTAIN GENOTYPES AS INFLUENCED BY ORGANIC AND INORGANIC FERTILIZERS**  
□ O. O. Ndukwe, C. O. Muoneke, K. P. Baiyeri, and A. Tenkouano **700**
- INTERACTION BETWEEN WATER ALKALINITY AND NUTRIENT SOLUTION PH ON THE VEGETATIVE GROWTH, CHLOROPHYLL FLUORESCENCE AND LEAF MAGNESIUM, IRON, MANGANESE, AND ZINC CONCENTRATIONS IN LETTUCE** □ Hamid R. Roosta **717**
- WHEAT RESPONSE TO FARM YARD MANURE AND NITROGEN FERTILIZATION UNDER MOISTURE STRESS CONDITIONS**  
□ Amanullah Jan, Amanullah, and Maimoona Noor **732**
- INFLUENCE OF ARBUSCULAR MYCORRHIZAL FUNGI AND AMMONIUM:NITRATE RATIOS ON GROWTH AND PUNGENCY OF SPRING ONION PLANTS** □ Hong Shen, Hongjun Yang, and Tao Guo **743**

*Contents*

<b>DRY MATTER PRODUCTION AND LEAF ELEMENTAL CONCENTRATIONS OF RAMBUTAN GROWN ON AN ACID ULTISOL</b> □ Ricardo Goenaga	<b>753</b>
<b>DEVELOPMENT OF A SOIL N TEST FOR FERTILIZER REQUIREMENTS FOR WHEAT</b> □ M. Miransari and A. F. Mackenzie	<b>762</b>
<b>CONTENTS</b>	<b>Volume 34, Number 6 2011</b>
<hr/>	
<b>COMPARATIVE EFFICACY OF UREA FERTILIZATION VIA SUPERGRANULES VERSUS PRILLS ON NITROGEN DISTRIBUTION, YIELD RESPONSE AND NITROGEN USE EFFICIENCY OF SPRING WHEAT</b> □ M. I. Khalil, U. Schmidhalter, R. Gutser, and H. Heuwinkel	<b>779</b>
<b>PREFERENTIAL AMMONIUM UPTAKE DURING GROWTH CYCLE AND IDENTIFICATION OF AMMONIUM TRANSPORTER GENES IN YOUNG PEAR TREES</b> □ Mariana Mota, Cláudia B. Neto, António A. Monteiro, and Cristina M. Oliveira	<b>798</b>
<b>PHOSPHATE DEFICIENCY AFFECTS ACID PHOSPHATASE ACTIVITY AND GROWTH OF TWO WHEAT VARIETIES</b> □ Iwona Cierieszko, Agnieszka Szczygła, and Ewa Żebrowska	<b>815</b>
<b>STUDY ON THE EFFECTS OF NITROGEN DEFICIENCY ON GRAIN IRON AND ZINC CONCENTRATIONS OF LANDRACE AND BRED WHEAT VARIETIES IN CHINA</b> □ Ning Hou, Bin Li, and Yiping Tong	<b>830</b>
<b>BORON UPTAKE AND DISTRIBUTION IN FIELD GROWN CITRUS TREES</b> □ Rodrigo Marcelli Boaretto, José Antônio Quaggio, Dirceu Mattos, Jr., Takashi Muraoka, and Antonio Enedi Boaretto	<b>839</b>
<b>SOIL LIMING AND MINERAL FERTILIZATION FOR ROOT NODULATION AND GROWTH OF FABA BEANS IN AN ACID SOIL IN TUNISIA</b> □ Sarra Ouertatani, Kamel Regaya, John Ryan, and Azaiez Gharbi	<b>850</b>
<b>WINTER CROPS AS BIOASSAYS OF SOIL NITROGEN-SUPPLYING CAPACITY</b> □ Ernest L. Clawson, H. J. Mascagni, Jr., Gary A. Breitenbeck, Donald J. Boquet, Jose F. Liscano, and Kevin S. McCarter	<b>861</b>
<b>NURSERY RESPONSE OF ACACIA KOA SEEDLINGS TO CONTAINER SIZE, IRRIGATION METHOD, AND FERTILIZATION RATE</b> □ R. Kasten Dumroese, Anthony S. Davis, and Douglass F. Jacobs	<b>877</b>

Contents

<b>RELATIVE RESPONSE OF FORAGE AND SEED YIELD OF ALFALFA TO SULFUR, PHOSPHORUS, AND POTASSIUM FERTILIZATION</b> □ S. S. Malhi	<b>888</b>
<b>GROWTH OF PRIMULA PLANT IN COIR DUST AND PEAT-BASED GROWING MEDIA</b> □ S. Bagci, G. Cayci, and C. Kütük	<b>909</b>
<b>MODULATION OF NITROGEN-UTILIZATION EFFICIENCY IN WHEAT GENOTYPES DIFFERING IN NITRATE REDUCTASE ACTIVITY</b> □ Anjana, Shahid Umar, Yash P. Abrol, and Muhammad Iqbal	<b>920</b>
<b>CONTENTS</b>	<b>Volume 34, Number 7 2011</b>
<hr/>	
<b>EFFECTS OF WATER SALINITY ON GROWTH INDICES AND PHYSIOLOGICAL PARAMETERS IN SOME PISTACHIO ROOTSTOCKS</b> □ H. R. Karimi, A. Ebadi, Z. Zamani, and R. Fatahi	<b>935</b>
<b>NUTRIENT BIOAVAILABILITY IN SALT AFFECTED SOILS</b> □ N. K. Fageria, H. R. Gheyi, and A. Moreira	<b>945</b>
<b>EFFICIENCY OF USING COMMERCIAL FERTILIZERS FOR <i>GLADIOLUS</i> GROWTH IN NUTRIENT FILM TECHNIQUE</b> □ Walid Nosir	<b>963</b>
<b>RESPONSE OF MAIZE GENOTYPES TO SEVERAL MYCORRHIZAL INOCULUMS IN TERMS OF PLANT GROWTH, NUTRIENT UPTAKE AND SPORE PRODUCTION</b> □ Ibrahim Ortas and Çağdas Akpinar	<b>970</b>
<b>NITRATE UPTAKE KINETICS AND METABOLIC PARAMETERS IN TWO RICE VARIETIES GROWN IN HIGH AND LOW NITRATE</b> □ Leandro Azevedo Santos, Walterliny Almeida Santos, Marcus Vinícius Loss Sperandio, Carlos Alberto Bucher, Sonia Regina de Souza, and Manlio Silvestre Fernandes	<b>988</b>
<b>SULFUR APPLICATION EFFECTS ON SOIL PROPERTIES IN A CALCAREOUS SOIL AND ON SUGARCANE GROWTH AND YIELD</b> □ Bob Wiedenfeld	<b>1003</b>
<b>RELATIVE SUSCEPTIBILITY OF SOME <i>PRUNUS</i> ROOTSTOCKS IN HYDROPONICS TO IRON DEFICIENCY</b> □ Anna Assimakopoulou, Constantin D. Holevas, and Konstantinos Fasseas	<b>1014</b>
<b>WHEAT YIELD AND PHOSPHORUS FERTILIZER EFFICIENCY AS INFLUENCED BY PRE-INCUBATED USE OF SINGLE SUPERPHOSPHATE AND POULTRY LITTER AND ITS TIME OF APPLICATION</b> □ Shermeen Tahir, S. M. Alam, and Zulfiqar Ahmad	<b>1034</b>

Contents

<b>EXOGENOUS APPLICATION OF POTASSIUM DIHYDROGEN PHOSPHATE CAN ALLEVIATE THE ADVERSE EFFECTS OF SALT STRESS ON SUNFLOWER</b> □ Muhammad Saeed Akram and Muhammad Ashraf	<b>1041</b>
<b>EFFECTS OF A MULTISTRAIN BIOFERTILIZER AND PHOSPHORUS RATES ON NUTRITION AND GRAIN YIELD OF PADDY RICE ON A SANDY SOIL IN SOUTHERN VIETNAM</b> □ Phan Thi Cong, Tran Dang Dung, Nguyen Thanh Hien, Abu T. M. A. Choudhury, Michael T. Rose, Mihály L. Kecskés, Rosalind Deaker, and Ivan R. Kennedy	<b>1058</b>
<b>GENETIC ANALYSIS OF CHLORIDE CONCENTRATION IN ORIENTAL TOBACCO GENOTYPES</b> □ R. Darvishzadeh and R. Alavi	<b>1070</b>
<b>NUTRIENT DISORDER SYMPTOMOLOGY AND FOLIAR CONCENTRATIONS OF <i>CLERODENDRUM THOMSONIAE</i></b> □ Karen I. Davis, Carl E. Niedziela, Jr., Muchha R. Reddy, Brian E. Whipker, and Jonathan M. Frantz	<b>1079</b>
<b>CONTENTS</b>	<b>Volume 34, Number 8</b> <b>2011</b>
<b>LOWLAND RICE GENOTYPES EVALUATION FOR PHOSPHORUS USE EFFICIENCY IN TROPICAL LOWLAND</b> □ N. K. Fageria, A. B. Santos, and A. B. Heinemann	<b>1087</b>
<b>EXPLOITATION OF PHOSPHORUS PATCHES WITH DIFFERENT PHOSPHORUS ENRICHMENT BY THREE ARBUSCULAR MYCORRHIZAL FUNGI</b> □ Zhaoyong Shi, Fayuan Wang, Chong Zhang, and Zhongbao Yang	<b>1096</b>
<b>EFFECT OF LIMING ON THE NUTRITIONAL CONDITIONS AND YIELD OF ALFALFA GROWN IN TROPICAL CONDITIONS</b> □ A. Moreira, N. K. Fageria, and A. Garcia y Garcia	<b>1107</b>
<b>ROOT EXUDATION AND ZINC UPTAKE BY BARLEY GENOTYPES DIFFERING IN ZN EFFICIENCY</b> □ MirHasan Rasouli-Sadaghiani, Behzad Sadeghzadeh, Ebrahim Sepehr, and Zed Rengel	<b>1120</b>
<b>NUTRIENT UPTAKE, SOIL AND PLANT NUTRIENT CONTENTS, AND YIELD COMPONENTS OF WHEAT PLANTS UNDER DIFFERENT PLANTING SYSTEMS AND VARIOUS IRRIGATION FREQUENCIES</b> □ M. R. Pahlavan-Rad, S. A. R. Movahedi-Naeini, and Mohammad Pessarakli	<b>1133</b>

*Contents*

- ZINC, MANGANESE AND PHOSPHORUS INTERRELATIONSHIPS AND THEIR EFFECTS ON IRON AND COPPER IN CHELATOR-BUFFERED SOLUTION GROWN RUSSET BURBANK POTATO** □ Steven A. Barben, Bryan G. Hopkins, Von D. Jolley, Bruce L. Webb, Brandt A. Nichols, and Emily A. Buxton **1144**
- SEED YIELD AND YIELD COMPONENTS RESPONSE OF RAPE (*B. NAPUS*) VERSUS MUSTARD (*B. JUNCEA*) TO SULFUR AND POTASSIUM FERTILIZER APPLICATION IN NORTHWEST PAKISTAN** □ Amanullah, Muhammad Hassan, and Sukhdev S. Malhi **1164**
- PHENOLOGY AND SEED QUALITY RESPONSE OF RAPE (*B. NAPUS*) VERSUS MUSTARD (*B. JUNCEA*) TO SULFUR AND POTASSIUM FERTILIZATION IN NORTHWEST PAKISTAN** □ Amanullah, Muhammad Hassan, and Sukhdev S. Malhi **1175**
- FOLIAR SPRAY EXPERIMENTS IDENTIFY NO BORON DEFICIENCY BUT MOLYBDENUM AND MANGANESE DEFICIENCY FOR CANOLA GRAIN PRODUCTION ON ACIDIFIED SANDY GRAVEL SOILS IN SOUTHWESTERN AUSTRALIA** □ R. F. Brennan and M. D. A. Bolland **1186**
- FIELD AND LABORATORY STUDIES COMPARING NUTRISPHERE-NITROGEN UREA WITH UREA IN NORTH DAKOTA, ARKANSAS, AND MISSISSIPPI** □ David Franzen, R. Jay Goos, Richard J. Norman, Timothy W. Walker, Trenton L. Roberts, Nathan A. Slaton, Gregory Endres, Roger Ashley, James Staricka, and John Lukach **1198**
- INFLUENCE OF DIFFERENT RATES OF PHOSPHORUS ON GROWTH, YIELD AND PHOSPHORUS USE EFFICIENCY IN TWO WHEAT CULTIVARS** □ M. Akhtar, Shermeen Tahir, M. Y. Ashraf, J. Akhter, and S. M. Alam **1223**
- DETECTION OF SALT TOXICITY AND NITROGEN DEFICIENCY IN *CUCUMIS SATIVUS* L. USING SPECTRORADIOMETRY AND COLOR INFRARED IMAGERY** □ Shireen Yousef, Kenneth R. Summy, and Christopher R. Little **1236**