

## CONTENTS

### AGRICULTURAL ECONOMICS

Effects of Declining Energy Subsidies on Value Added in Agricultural Sector.

*M. Azamzadeh Shouraki, S. Khalilian, and S. A. Mortazavi*

423

### AGRICULTURAL ENTOMOLOGY

Comparison of Energy Reserves in Prediapause and Diapausing Adult Sunn Pest, *Eurygaster integriceps* Puton (Hemiptera: Scutelleridae).

*A. Amiri, and A. R. Bandani*

435

### AGRICULTURAL EXTENSION AND EDUCATION

Investigation of Major Challenges of Rural Development in Iran Utilizing Delphi Technique.

*R. Namdar, and H. Sadighi*

445

### AGRICULTURAL MACHINERY

Mathematical Modeling of Green Pepper Drying in Microwave-convective Dryer.

*H. Darvishi, M. H. Khoshtaghaza, G. Najafi, and F. Nargesi*

457

Optimization of Independent Parameters for Chickpea Threshing Using Response Surface Method (RSM).

*K. Salari, R. Amiri Chayjan, J. Khazaei, and J. Amiri Parian*

467

### AGRONOMY

Dry Matter Partitioning, Growth Analysis and Water Use Efficiency Response of Oats (*Avena sativa* L.) to Excessive Nitrogen and Phosphorus Application

*Jr. Amanullah, and B. A. Stewart*

479

Effect of Mixed Cropping of an Early- and a Middle-ripening Wheat Cultivar on Mitigation of Competition during Post-anthesis Moisture Stress.

*A. Haghshenas, Y. Emam, H. Ghadiri, S. A. Kazemeini, and A. A. Kamgar-Haghghi*

491

Effects of Sowing Date and Irrigation Treatment on Safflower Seed Quality.

*M. Mirshekari, N. Majnounhosseini, R. Amiri, A. Moslehi, and O. R. Zandvakili*

505

### ANIMAL SCIENCE

Comparison of the Susceptibility of Six Male Broiler Hybrids to Ascites by Using Hematological and Pathological Parameters.

*M. Azizian, S. Rahimi, M. A. Kamali, M. A. Karimi Torshizi, and M. R. Zobdeh*

517

### FOOD SCIENCE

Effect of Initial Quality and Compositional Parameters on Total Polar Compounds Formation during Continuous Heating of Olive Oil.

*R. Farhoosh, M. H. Haddad Khodaparast, A. Sharif, and S. Alavi Rafiee*

527

**FOOD SCIENCE**

- Effect of Instant Tea Powder with High Ester-catechins Content on Shelf Life Extension of Sponge Cake.  
*L. Y. Wu, H. Xiao, W. J. Zhao, H. Shang, M. Z. Zhang, Y. D. Lin, P. Sun, G. P. Ge, and J. K. Lin* 537

- Influence of Hydrocolloids on Dough Properties and Quality of Barbari: An Iranian Leavened Flat Bread.  
*M. Ghanbari, and J. Farmani* 545

- Physical and Chemical Degradation of B-aflatoxins during the Roasting and Dutching of Cocoa Liquor.  
*A. Méndez-Albores, A. Z. Campos-Aguilar, E. Moreno-Martínez, and A. Vázquez-Durán* 557

**IRRIGATION AND DRAINAGE**

- Numerical Simulation and Experimental Study on a New Type of Variable-rate Fluidic Sprinkler.  
*J. P. Liu, S. Q. Yuan, H. Li, and X. Y. Zhu* 569

**PLANT BREEDING**

- Abscisic Acid Improves Chilling-Induced Oxidative Stress in *Trichosanthes kirilowii* Maxim Seedlings.  
*G. H. Yao, P. P. Gao, Y. P. Wang, L. H. Wang, G. D. Xu, and P. Liu* 583

- Effects of Drought Stress on the Lipid Peroxidation and Antioxidant Enzyme Activities in Two Canola (*Brassica napus* L.) Cultivars.

*M. Mirzaee, A. Moieni, and F. Ghanati*

593

**PLANT PATHOLOGY**

- Characterization of *Diplodia seriata* and *Neofusicoccum parvum* Associated with Grapevine Decline in Iran.  
*H. Mohammadi, D. Gramaje, Z. Banihashemi, and J. Armengol* 603

- Efficacy of *Pasteuria penetrans* and Various Oil Seed Cakes in Management of *Meloidogyne incognita* in Chilli pepper (*Capsicum annuum* L.).

*K. K. Chaudhary, and R. K. Kaul*

617

**SOIL SCIENCE**

- Composted Olive Mill By-products: Compost Characterization and Application on Olive Orchards.  
*P. Toscano, T. Casacchia, M. Diacono, and F. Montemurro* 627

- Potential Role of Organic Matters and Phosphate Solubilizing Bacteria (PSB) on the Growth and Productivity of Fenugreek.  
*R. Rizvi, I. Mahmood, and S. A. Tiyagi* 639