

CONTENTS

AGRICULTURAL EXTENSION AND EDUCATION

Determinants of Participation in Watershed Development Projects in Khorasan, Iran.

A. Nasrabadi, E. Karami, and M. Ahmadvand

1085

AGRICULTURAL MACHINERY

Application of Machine Vision in Modeling of Grape Drying Process.

N. Behroozi Khazaei, T. Tavakoli Hashjin, Hassan Ghassemian, M. H. Khoshtaghaza, and A. Banakar

1095

AGRONOMY

Carbohydrates and Sucrose Metabolizing Enzymes in the Leaves of *Vigna mungo* Genotypes as Influenced by Elevated CO₂ Concentration.

S. K. Yadav, V. Singh, N. Jyothi Lakshmi, M. Vanaja, M. Maheswari, Y. K. Tiwari, A. Patil, E. Nagendram, and B. Venkateswarlu

1107

ANIMAL SCIENCE

An Evaluation of Live Weight, Carcass and Hide Characteristics in Dromedary vs. Bactrian×Dromedary Crossbred Camels.

M. Salehi, A. Mirhadi, F. Ghafouri-Kesbi, M. Asadi Fozzi, and A. Babak

1121

Estimation of the Genetic Parameters for Survival Rate in Lori-Bakhtiari Lambs Using Linear and Weibull Proportional Hazard Models.

M. Vatankhah

1133

Novel SNPs of the *ABCG2* Gene and Their Associations with Milk Production Traits in Iranian Holstein Bulls.

S. A. Mousavizadeh, A. Salehi, M. Aminafshar, M. B. Sayyadnejad, and M. H. Nazemshirazi

1145

Polymorphism of *IGF-I* and *ADRB3* Genes and Their Association with Growth Traits in the Iranian Baluchi Sheep.

A. Gholibeikifard, M. Aminafshar, and M. Hosseinpour Mashhadi

1153

FOOD SCIENCE

Effects of Fat Replacers and Stabilizers on Rheological, Physicochemical and Sensory Properties of Reduced-fat Ice Cream.

E. Mahdian, and R. Karazhian

1163

The Effect of Particle Size and Level of Rice Bran on the Batter and Sponge Cake Properties.

M. Majzoobi, S. Sharifi, B. Imani, and A. Farahnaky

1175

The Effect of Refining Process on the Conjugated Dienes in Soybean Oil.

Z. Bachari-Saleh, H. Ezzatpanah, M. Aminafshar, and H. Safafar

1185

HORTICULTURAL SCIENCE

Inter Simple Sequence Repeat Markers Associated with Flowering Time Duration in the Chilean Strawberry (*Fragaria chiloensis*).

B. Carrasco, J. B. Retamales, K. Quiroz, M. Garriga, P. D. S. Caligari, and R. García-Gonzales

1195

Continued from front cover:

HORTICULTURAL SCIENCE

In Vitro Establishment and Clonal Propagation of Sebri Pear Cultivar.

S. Karimpour, G. H. Davarynejad, A. Bagheri, and A. Tehranifar

1209

Postharvest Application of Chitosan and Low Temperature Storage Affect Respiration Rate and Quality of Plum Fruits.

E. Bal

1219

IRRIGATION AND DRAINAGE

Analytical Solution to One-dimensional Advection-diffusion Equation with Several Point Sources through Arbitrary Time-dependent Emission Rate Patterns.

M. Mazaheri, J. M. V. Samani, and H. M. V. Samani

1231

Impact of Deficit Irrigation on Soil Salinity and Cucumber Yield under Greenhouse Condition in an Arid Environment.

A. M. Alomran, I. I. Louki, A. A. Aly, and M. E. Nadeem

1247

Multipurpose Reservoir Operating Policies: A Fully Fuzzy Linear Programming Approach.

R. U. Kamodkar, and D. G. Regulwar

1261

PLANT BREEDING

Heritability Estimates of Agronomic Traits and Essential Oil Content in Iranian Fennels.

A. Izadi-Darbandi, K. Bahmani, H. A. Ramshini, and N. Moradi

1275

PLANT PATHOLOGY

Presence of Multiple *cry* Genes in *Bacillus thuringiensis* Isolated from Dead Cotton Bollworm *Heliothis armigera*.

S. Khojand, M. Keshavarzi, K. Zargari, H. Abdolahi, and F. Rouzbeh

1285

SOIL SCIENCE

Effect of Manure Management on the Temporal Variations of Dryland Soil Moisture and Water Use Efficiency of Maize.

X. J. Wang, Zh. Jia, L. Y. Liang, and Sh. Zh. Kang

1293