

Contents

Vol. 42, No. 2, 2016

A simultaneous English language translation of this journal is available from Allerton Press, Inc.
Distributed worldwide by Springer. *Russian Agricultural Sciences* ISSN 1068-3674.

Plant Growing

- Use of Introgressive Hybridization in Selection of Spring Bread Wheat
I. A. Belan 117
- Foliar Application of Nutrients for Spring Barley Cultivation in Arid Conditions of Middle Volga
V. V. Gluhovtsev, N. V. Sanina, and A. A. Apalikov 121
- Biochemical Composition of the Aboveground Sweet Sorghum Biomass under the Dry Weather Conditions of the Volga Region
V. I. Zhuzhukin and A. Yu. Garshin 124
- Deviation of the Effective Heat Sum from the Normal Annual Value as an Assessment of Climatic Conditions of the Vegetation Period in the Apple
S. A. Rodikov 127
- Impact of Calcium Chloride Concentrations and Storage Duration on Quality Attributes of Peach (*Prunus persica*)
Mati Ur Rahman, Muhammad Sajid, Abdur Rab, Shahzad Ali, Muhammad Owais Shahid, Aftab Alam, Muhammad Israr, and Irshad Ahmad 130
- Identification of Heterotic Crosses Based on the Combining Ability of Novel Genotypes in Opium Poppy (*Papaver somniferum* L.)
S. Shukla, K. N. Maurya, B. K. Mishra, and A. Rastogi 137
-

Plant Protection

- Likely Threat of the Spread of Race UG99 of *Puccinia graminis* f. sp. *tritici* on Wheat in Southeastern Russia
S. N. Sibikeev, T. S. Markelova, E. A. Baukenova, and A. E. Druzhin 145
-

Agrochemistry. Soil Science

- Changes in the Content of Humus in Gray Forest Soils under Long-Term Fertilization
V. V. Okorkov, L. A. Okorkova, and O. A. Fenova 149
- Assessment and Forecast of Soil Formation under Irrigation in the Steppe Zone of Ukraine
F. N. Lisetskii and V. I. Pichura 155
-

Melioration

- Eco-Meliorative Monitoring and Evaluation of the State of Irrigated Lands in the Influence Zone of the System of Samur-Absheron Channel in Connection with Its Reconstruction
E. Pashaev 160
-

Modeling

- Modeling of the Expected Yield in the Steppe District of the Cis-Ural Region Taking into Account the Lag Variables and Changes of the Distance from the Mass Center of the Solar System to the Earth
V. E. Tikhonov and A. A. Neverov 163

Mathematical Modeling of Long-Term Changes in the Productivity
of Winter Wheat in Sheltered and Open Areas

Yu. I. Vasiliev, S. Yu. Turko, and N. N. Ovechko

167

Animal Husbandry

Monitoring of Immune System Status in Dairy and Beef Bull Sires

I. Yu. Ezdakova, M. A. Eremina, and E. V. Popova

171

Dairy Cattle Assessment Using Specialization Indices and Productive Performance Typicality

M. B. Ulimbashev, Zh. T. Alagirova, and A. S. Guazova

174

Associativity of Selected Traits in Aginskaya Semicourse Wool Sheep

T. N. Khamiruev

178

Veterinary

Biological Toxicants of Alimentary Origin

S. V. Shabunin, V. I. Belyaev, L. I. Efanova, and Yu. N. Alekhin

181

Experimental Assessment of Immunobiological Activity
of the Roncoleukine Immunomodulatory Agent

O. I. Mamykova

184

Effect of Aqueous Lyosol of Turpentine Oil on Erythrocyte Distribution
by Osmotic Resistance

Ya. Ya. Tynio, V. E. Novikov, and G. V. Morozova

188

Storage and Processing of Agricultural Products

Study of Electrization of Powder Skim Milk during Milk Particle Movement

V. D. Kharitonov, N. S. Nikolayev, and M. Ya. Burlev

191

Mechanization

Application of IFHAN-118 Volatile Inhibitor to Protect Agricultural Equipment
against Atmospheric Corrosion

*V. I. Vigdorovich, L. G. Knyazeva, A. N. Zazulya, E. G. Kuznetsova,
N. N. Andreev, A. A. Uryadnikov, and A. V. Dorokhov*

196
