

# BIOTECHNOLOGY IN ANIMAL HUSBANDRY

## CONTENTS

### Review papers

*M.M. Petrović, S. Aleksić, M. P. Petrović, M. Petrović, V. Pantelić, Ž. Novaković, D. Ružić-Muslić*

POTENTIALS OF SERBIAN LIVESTOCK PRODUCTION - OUTLOOK AND FUTURE..... 1

### Original scientific paper

*N. Mlačo, A. Katica, B. Čengić, V. Šakić*

RESULTS OF APPLYING GONADORELIN FERTAGYL ON THE PROGESTERONE CONCENTRATIONS IN THE BLOOD SERUM AND COW CONCEPTION..... 19

*R. Đoković, V. Kurčubić, Z. Ilić, M. D. Petrović, J. Stojković, B. Milošević, M. Cincović*

METABOLIC STATUS IN SIMMENTAL DAIRY COWS DURING TRANSITION PERIOD..... 29

*V. Kurčubić, R. Đoković, D. Vidanović, M. Šekler, K. Matović, Z. Ilić, J. Stojković*

BOVINE RESPIRATORY DISEASE COMPLEX (BRDC): VIRAL AND BACTERIAL PATHOGENS IN SERBIA..... 37

*D. Kučević, M. Plavšić, S. Trivunović, M. Radinović, V. Bogdanović*

INFLUENCE OF MICROCLIMATIC CONDITIONS ON THE DAILY PRODUCTION OF DAIRY COWS..... 45

*A. Selim, W. Gaede*

EVALUATION OF REVERSE TRANSCRIPTION-PCR PROTOCOLS BASED ON THE FUSION GENE FOR DIAGNOSIS OF BOVINE RESPIRATORY SYNCYTIAL VIRUS INFECTIONS..... 53

*A. Yakubu*

PRINCIPAL COMPONENT ANALYSIS OF THE CONFORMATION TRAITS OF YANKASA SHEEP..... 65

*Č. Radović, M. Petrović, B. Živković, D. Radojković, N. Parunović, N. Brkić, N. Delić*

HERITABILITY, PHENOTYPIC AND GENETIC CORRELATIONS OF THE GROWTH INTENSITY AND MEAT YIELD OF PIGS..... 75

*V. Djermanović, S. Mitrović, V. Djekić*

ROOSTER BODY WEIGHT INFLUENCE ON THE REPRODUCTIVE PERFORMANCE OF THE BROILER PARENTS..... 83

*V. E. Aya, B. A. Ayanwale, A. T. Ijaiya, A. Aremu*

PERFORMANCE AND NUTRIENT DIGESTIBILITY IN BROILER CHICKS AS INFLUENCED BY MULTI-ENZYME ADDITION TO STARTER DIETS CONTAINING PALM KERNEL MEAL..... 93

*B. Dinić, N. Đorđević, D. Terzić, M. Blagojević, G. Jevtić*

THE EFFECT OF CARBOHYDRATE ADDITIVE AND INOCULATION ON QUALITY OF RED CLOVER SILAGE..... 105

*G. Jevtić, B. Anđelković, Z. Lugić, N. Nedić, K. Matović*

COLONY STRENGTH IN THE SPRING INSPECTION AND ITS IMPACT ON THE AMOUNT OF FORAGED POLLEN AT THE TIME OF RED CLOVER POLLINATION..... 115

*B. Churkova*

INFLUENCE OF SOME BIO-PRODUCTS ON THE BIOLOGICAL AND PRODUCTIVE CHARACTERISTICS OF BIRD'S FOOT TREFOIL GROWN FOR FORAGE..... 123

**VOL 29, 1**

Founder and publisher  
**INSTITUTE FOR  
ANIMAL HUSBANDRY**  
11080 Belgrade-Zemun  
**Belgrade 2013**

<i>O. P.Can, S. Şahin, M. Erşan, F. Harun</i>	
SIVAS KOFTE AND EXAMINATION OF MICROBIOLOGICAL QUALITY....	133
<i>M. Bojanić Rašović, N. Nikolić, A. Martinović, V. Katić, R. Rašović, M. Walcer, K. Domig</i>	
CORRELATION BETWEEN PROTEIN TO FAT RATIO OF MILK AND CHEMICAL PARAMETERS AND THE YIELD OF SEMI-HARD CHEESE.....	145
<b>Communication</b>	
<i>D. Vranić, D. Trbović, J. Djinović-Stojanović, Ž. M. Baltić, M. Milijašević, S. Lilić, A. Spirić</i>	
THE INFLUENCE OF NUTRITION ON RAINBOW TROUT ( <i>ONCORHYNCHUS MYKISS</i> ) MEAT QUALITY.....	161
<i>S. Anđelović, S. Maksimović, D. Savić, Z. Tomic, D. Delić</i>	
THE EFFECT OF THE FIRST FERTILE FLOOR ON QUALITATIVE – QUANTITATIVE PROPERTIES OF SOYBEAN SEED.....	173

Journal for the Improvement of Animal Husbandry

**UDC636**

**Print ISSN 1450-9156**  
**Online ISSN 2217-7140**

# **BIOTECHNOLOGY IN ANIMAL HUSBANDRY**

Belgrade - Zemun 2013

### **Editorial Council**

Prof. Dr Milica Petrović, president  
Prof. Dr Lidija Perić, full prof.  
Prof. Dr Vojislav Pavlović, full prof.  
Dr. Zoran Lugić, science advisor

### **Editor's Office**

Prof. Dr. Martin Wähler, Germany  
Dr. Branislav Živković, Serbia  
Dr. Marin Todorov, Bulgaria  
Dr. Milan M. Petrović, Serbia  
Prof. Dr. Kazutaka Umetsu, Japan  
Prof. Dr. Dragan Glamočić, Serbia  
Prof. Dr. Vigilijus Jukna, Lithuania  
Dr. Elena Kistanova, Bulgaria

Dr Miroslav Blagojević  
Dr Branka Vidić, science advisor

Prof. Dr. Wladyslaw Migdal, Poland  
Prof. Dr. Colin Whitehead, United Kingdom  
Dr. Branislav Bobček, Slovak Republic  
Prof. Dr. Sandra Edwards, United Kingdom  
Dr. Vojislav Mihailović, Serbia  
Prof. Dr. Giacomo Biagi, Italy  
Prof. Dr. Stelios Deligeorgis, Greece  
Prof. Dr. Hasan Ulker, Turkey  
Dr. Catalin Dragomir, Romania

### **On behalf of publisher**

Miloš Lukić, PhD, Research Fellow, Director of the Institute for Animal Husbandry, Belgrade-Zemun, Serbia

### **Editor in Chief**

Zlatica Pavlovski, PhD, Science Advisor, Institute for Animal Husbandry, Belgrade-Zemun, Serbia

### **Deputy Editor in Chief**

Zorica Tomić, PhD, Science Advisor, Institute for Animal Husbandry, Belgrade-Zemun, Serbia

### **Editor**

Miloš Lukić, Ph.D, Research Fellow, Institute for Animal Husbandry, Belgrade-Zemun, Serbia

### **Section Editors**

#### **Genetics and breeding**

Milan P. Petrović, Ph.D, science advisor

#### **Reproduction and management**

Miroslav Žujović, Ph.D, science advisor

#### **Nutrition and physiology of domestic animals**

Dragana Ružić-Muslić, Ph.D, senior research fellow

#### **Language editor**

Olga Devečerski, grad. prof.

#### **Food safety, technology and quality of animal products**

Stevica Aleksić, Ph.D, science advisor

#### **Sustainability of feed production and ecology**

Zorica Bijelić, Ph.D, research fellow

#### **Alternative production in livestock**

Zdenka Škrbić, Ph.D, senior research fellow

### **Address of the Editor's office**

Institute for Animal Husbandry, Autoput 16, P. Box 23, 11080 Belgrade-Zemun, Republic of Serbia  
Tel. 381 11 2691 611, 2670 121; Fax 381 11 2670 164; e-mail: biotechnology.izs@gmail.com; www.istocar.bg.ac.rs

Biotechnology in Animal Husbandry is covered by Agricultural Information Services (AGRIS) -Bibliographic coverage of abstracts; Electronic Journal Access Project by Colorado Altiance Research Libraries -Colorado, Denver; USA; Matica Srpska Library -Referral Center; National Library of Serbia; University Library "Svetozar Markovic", Belgrade, Serbia; EBSCO, USA; DOAJ and European Libraries

**According to CEON bibliometrical analysis citation in SCI index 212, in ISI 9, impact factor (2 and 5) of journal in 2012: 0,667 and 0,467, - M24 category**

Annual subscription: for individuals -500 RSD, for organizations 1200 RSD, -foreign subscriptions 20 EUR. Bank account Institut za stočarstvo, Beograd-Zemun 105-1073-11 Aik banka Niš Filijala Beograd.

Journal is published in four issues annually, circulation 100 copies.

The publication of this journal is sponsored by the Ministry of Education and Science of the Republic of Serbia.

Printed: "Mladost birošped", Novi Beograd, St. Bulevar AVNOJ-a 12, tel. 381 11 2601-506