ISSN 2663-1156 (Print) ISSN 2663-1164 (Online)

Theoretical and Applied Veterinary Medicine

Volume 7(1), 2019

Theoretical and Applied Veterinary Medicine

Aims and scope. Journal of *Theoretical and Applied Veterinary Medicine* publishes peer-reviewed original studies, article reviews and clinical cases in the field of veterinary medicine and animal husbandry. The purpose of the journal is to familiarize the readers with the achievements of science in the field of Veterinary Medicine (pathology, oncology and morphology of animals, internal diseases of animals, infective and invasive pathology, veterinary surgery and obstetrics, physiology and biochemistry of animals), Veterinary Hygiene, Sanitation and Expertise, Veterinary Aspects of Technology Production and Processing of Animal Husbandry Products.

Founder - Dnipro State Agrarian and Economic University.

EDITORIAL BOARD

Editor-in-Chief:

Prof. P. M. Gavrilin, D.Sc., Department of Normal and Pathological Anatomy of Agricultural Animals, Dnipro State Agrarian and Economic University, Dnipro, Ukraine

Deputy Editors:

Prof. *Muhammed Enes Altug*, D.Sc., Department of Surgery, Hatay Mustafa Kemal University, Antakya, Turkey

Senior Scientist Veerasamy Sejian, MVSc, PhD, National Institute of Animal Nutrition and Physiology, Bangalore, India

Executive Editor

As. Prof. *M. A. Lieshchova*, PhD., Department of Normal and Pathological Anatomy of Agricultural Animals, Dnipro State Agrarian and Economics University, Dnipro, Ukraine

Editorial board

Prof. Mohamed A. M. Alsafy, BVSC, MVSD, PhD, Department of Anatomy and Embryology, Alexandria University, Alexandria, Egypt

Prof. Amir Amniattalab, DVM, PhD., Department of Pathology, Islamic Azad University, Urmia Branch, Iran

Prof. V. S. Bomko, D.Sc., Department of Technology of Feed, Feed Additives and Feeding of Animals, Bila Tserkva National Agrarian University, Bila Tserkva, Ukraine

Prof. O. M. Chernenko, D.Sc., Department of Technology of Feeding and Breeding Animals, Dnipro State Agrarian and Economic University, Dnipro, Ukraine

Prof. L. S. Dyachenko, D.Sc., Department of Technology of Feed, Feed Additives and Feeding of Animals, Bila Tserkva National Agrarian University, Bila Tserkva, Ukraine

As. Prof. O. G. Gavrilina, PhD., Department of Parasitology, Veterinary and Sanitary Expertise, Dnipro State Agrarian and Economic University, Dnipro, Ukraine

Prof. V. A. Gryshchenko, D.Sc., Department of Biochemistry named after Academician M.F. Guly, National University of Life and Environmental Sciences of Ukraine, Kyiv, Ukraine

Literary Editors: M. P. Honcharenko

Prof. V. O. Yevstafyeva, D.Sc., Department of Parasitology, Veterinary and Sanitary Expertise, Poltava State Agrarian Academy, Poltava, Ukraine

As. Prof. V. G. Yefimov, PhD., Department of Physiology and Biochemistry of Animals, Dnipro State Agrarian and Economic University, Dnipro, Ukraine

Prof. O. T. Kutsan, D.Sc., NAASU Corresponding Member, Head of the Department for Toxicology, Safety and Quality of Agricultural Products, National scientific center "Institute of Experimental and Clinical Veterinary Medicine", Kharkiv, Ukraine

Prof. D. M. Masiuk, PhD, SRC for Biosafety and Environmental Control of AIC, Dnipro State Agrarian and Economic University, Dnipro, Ukraine

As. Prof. *R. V. Milostiviy*, PhD, Department of Agricultural Products Processing Technologies, Dnipro State Agrarian and Economic University, Dnipro, Ukraine

As. Prof. R. O. Novitskiy, PhD, Department of Water Bioresource and Aguaculture, Dnipro State Agrarian and Economic University, Dnipro, Ukraine

As. Prof. *L. V. Pirova*, PhD., Department of Technology of Milk and Meat Production, Bila Tserkva National Agrarian University, Bila Tserkva, Ukraine

As. Prof. Carlos C. Pérez-Marín, PhD, Master, Department of Animal Medicine and Surgery, University of Córdoba, Spain

As. Prof. *Murat Sevik*, DVM, PhD, Department of Virology, Hatay Mustafa Kemal University, Antakya, Turkey

Prof. *T. L. Syvyk*, D.Sc., Department of Technology of Milk and Meat Production, Bila Tserkva National Agrarian University, Bila Tserkva, Ukraine

As. Prof. *Alexandru-Flaviu Tabaran*, DVM, PhD, Department of pathology, diagnostic destruction, criminology and oncology, University of Agricultural Sciences and Veterinary Medicine Cluj Napoca, Romania

As. Prof. *Marian Aurel Taulescu*, DVM, PhD, Department of Pathology, Diagnostic Destruction, Criminology and Oncology, University of Agricultural Sciences and Veterinary Medicine, Cluj Napoca, Romania

Cover Design, Text Layout: M. A. Lieshchova, V. O. Oleksenko

Approved by the Scientific Council of Dnipro State Agrarian and Economic University. **Certificate of state registration** – KB 23411-1325 1P from 08.06.2018 year.

Adress of the Editorial Office: Dnipro State Agrarian and Economic University, Serhii Efremov Str., 25, Dnipro, 49000, Ukraine. Phone: + 38-(067)-256-24-86 + 38-(056)-744-53-03 E-mail: bulletin.biosafety@gmail.com Web: https://bulletin-biosafety.com

Copyright © 2019 by the Dnipro State Agrarian and Economic University