

ISSN 2411-0388

**NATIONAL ACADEMY OF AGRARIAN  
SCIENCES OF UKRAINE**

**NATIONAL SCIENTIFIC CENTER  
'INSTITUTE OF EXPERIMENTAL  
AND CLINICAL VETERINARY MEDICINE'**

**JOURNAL FOR  
VETERINARY MEDICINE,  
BIOTECHNOLOGY  
AND BIOSAFETY**

**Volume 1  
Issue 4**

**KHARKIV  
2015**

---

---

**EDITORS-IN-CHIEF:**

**Stegniy B. T.**, Dr. Sci. (Vet. Med.), Prof., Academician of NAAS (Ukraine)

**Gerilovych A. P.**, Dr. Sci. (Vet. Med.), Prof. (Ukraine)

**EDITORIAL COUNCIL:**

**Bashchenko M. I.**, Dr. Sci. (Agr.), Prof., Academician of NAAS (Ukraine)

**Bobos S.**, Dr. Sci. (Vet. Med.), Prof. (Republic of Serbia)

**Breslavets V. O.**, Dr. Sci. (Agr.), Prof. (Ukraine)

**Dugan O. M.**, Dr. Sci. (Biol.), Prof. (Ukraine)

**Fedota O. M.**, Dr. Sci. (Biol.), Prof. (Ukraine)

**Hunger-Glaser I.**, Dr. Sci. (Biol.) (Switzerland)

**Kolybo D. V.**, Dr. Sci. (Biol.) (Ukraine)

**Kozeretska I. A.**, Dr. Sci. (Biol.) (Ukraine)

**Krasochko P. A.**, Dr. Sci. (Vet. Med., Biol.), Prof. (Republic of Belarus)

**Kuzmak J.**, Dr. Sci. (Vet. Med.), Prof. (Republic of Poland)

**Liu Y. S.**, Dr. Sci. (Biol.), Prof. (Republic of China)

**Lymanska O. Yu.**, Dr. Sci. (Biol.) (Ukraine)

**Mandygra M. S.**, Dr. Sci. (Vet. Med.), Prof., Corresponding member of NAAS (Ukraine)

**Nemchuk K.**, Dr. Sci. (Vet. Med.), Prof. (Republic of Poland)

**Potkonjak A.**, Dr. Sci. (Vet. Med.) (Republic of Serbia)

**Ruban S. Yu.**, Dr. Sci. (Agr.), Prof., Corresponding member of NAAS (Ukraine)

**Shalcross J.**, Dr. Sci. (Med) (United Kingdom)

**Sheely H.**, Dr. Sci. (Biol.) (United Kingdom)

**Stegniy M. Yu.**, Cand. Sci. (Biol.), Assoc. Prof. (Ukraine)

**Ushkalov V. O.**, Dr. Sci. (Vet. Med.), Prof., Corresponding member of NAAS (Ukraine)

**Vilcek S.**, Dr. Sci. (Vet. Med.), Prof. (Slovak Republic)

**Vlizlo V. V.**, Dr. Sci. (Vet. Med.), Prof., Academician of NAAS (Ukraine)

**Zavgorodniy A. I.**, Dr. Sci. (Vet. Med.), Prof., Corresponding member of NAAS (Ukraine)

**Zhegunov G. F.**, Dr. Sci. (Biol.), Prof. (Ukraine)

**EDITORS:**

**Buzun A. I.**, Cand. Sci. (Vet. Med.), Assoc. Prof. (Ukraine)

**Kovalenko L. V.**, Cand. Sci. (Biol.) (Ukraine)

**Bolotin V. I.**, Cand. Sci. (Vet. Med.) (Ukraine)

**Goraichuk I. V.**, Cand. Sci. (Biol.) (Ukraine)

**Responsible Secretary: Unkovska O. M.**, Cand. Sci. (Agr.) (Ukraine)

**Technical editors: Shvydchenko A. M., Vovk D. V.**

**Materials approved for publication and to spread via the Internet by the Scientific Council of the National Scientific Center 'Institute of Experimental and Clinical Veterinary Medicine' (protocol № 14 of 09.12.2015)**

**The full text of articles available at [jymbbs.kharkov.ua](http://jymbbs.kharkov.ua). JVMBBS covered in the abstract and citation databases Google Scholar ([scholar.google.com](http://scholar.google.com)) and RISC ([elibrary.ru](http://elibrary.ru))**

**Cover photographs by NSC 'IECVM', 2015 © All rights reserved**

---

---

**Editorial Board Address:**

NSC 'Institute of Experimental and Clinical Veterinary Medicine'

83 Pushkinskaya St., Kharkiv, Ukraine, 61023

tel. +38 (057) 707-20-53, 704-10-90

E-mail: [nsc.iecvm.kharkov@gmail.com](mailto:nsc.iecvm.kharkov@gmail.com), [inform@vet.kharkov.ua](mailto:inform@vet.kharkov.ua)