



ISSN 2312-3370 (Print)
ISSN 2312-3389 (Online)

Agricultural Science Practice^{and}

Farming Agriculture,
Agronomic Chemistry

Plant Growing, Feed Industry

Animal Husbandry, Veterinary Medicine

Genetics, Selection, Biotechnology

Mechanization, Electrification

Ecology of Agriculture, Radiology,
Amelioration

Storage and Processing
of Agricultural Products

Agricultural Economics

2
2017

www.agrisp.com;
e-mail: editor@agrisp.com

Agricultural Science and Practice Editorial Board

ISSN 2312-3370 (Print), ISSN 2312-3389 (Online)

Editor-in-Chief

Yaroslav M. Gadzalo

Academician of NAAS, President of National Academy of Agrarian Sciences of Ukraine

Mykhaylo I. Bashchenko

First Deputy Editor-in-Chief, First Vice-President of NAAS, Academician of NAAS, Doctor of Science in Agriculture

Address for correspondence:

Agricultural Science and Practice Editorial Board, Vasylykivska Str. 37, Kyiv, 03022 Ukraine

Phone / Fax +380 44 2574081

e-mail: editor@agrisp.com

www.agrisp.com

Assistant Editors

Liliya Pylypenko

Deputy Chief Editor, Doctor of Science in Biology,
Corresponding Member of the NAAS,
Deputy Academician-Secretary of NAAS

Volodymyr Velychko

Deputy Chief Editor, Doctor of Science in Agriculture,
Corresponding Member of the NAAS,
Director of the Agrarian Science Publishing House (NAAS Press)

EDITORIAL BOARD

Valeriy Adamchuk

National Scientific Center "Institute of
Mechanization and Electrification in Agriculture",
Kyiv, Ukraine

Sviatoslav Baliuk

National Scientific Center "Institute of Soil Science
and Agronomic Chemistry named after O.N.
Sokolovskiy", Kharkiv, Ukraine

Anush Balyan

National Academy of Agrarian Sciences,
Kyiv, Ukraine

Stanko Boboš

Univerzitet u Novom Sadu, Poljoprivredni
fakultet, Serbia

Vladymyr Bulgakov

National Scientific Center "Institute
of Mechanization and Electrification
in Agriculture", Kyiv, Ukraine

Valentina Dzitsiuk

Institute of Animal Breeding and Genetics
of M.V. Zubets NAAS Ukraine,
Chubynske-Kyiv

Borys Dziubetskiy

Institute of grain crops NAAS, Dnipro, Ukraine

Boris Faybishenko

University of California, Lawrence Berkeley
National Laboratory, Earth
and Environmental Sciences Area, Energy
Geosciences Divisionin, USA

Viktor Fayt

Plant Breeding and Genetics Institute,
National Center of Seed and Cultivar
Investigation NAAS, Odessa, Ukraine

Anton Gerilovych

National Scientific Center "Institute for
Experimental and Clinical Veterinary Medicine",
Kharkiv, Ukraine

Ildus Ibatullin

National Academy of Agrarian Sciences,
Kyiv, Ukraine

Svitlana Kalensky

National University of Life and Environmental
Sciences of Ukraine, Kyiv

Petro Kovalenko

Institute of Watering and Amelioration NAAS,
Kyiv, Ukraine

Oleksandr Kutsan

National Scientific Center
"Institute for Experimental and Clinical
Veterinary Medicine", Kharkiv, Ukraine

Vitaliy Lapa

Institute for Soil Science and Agrochemistry,
Republic of Belarus

Yuriy Lupenko

National Scientific Center "Institute of Agrarian
Economics", Kyiv, Ukraine

Vitaliy Medvedev

National Scientific Center "Institute of Soil
Science and Agronomic Chemistry named
after O.N. Sokolovskiy", Kharkiv, Ukraine

Lidiya Moklyachuk

Institute of Agroecology and Environmental
NAAS, Kyiv, Ukraine

Volodymyr Morgun

Institute of Plant Physiology and Genetics NAS
of Ukraine, Kyiv, Ukraine

János Nagy

University of Debrecen, Hungary

Krzysztof Niemczuk

National Veterinary Research Institute
in Pulawy, Poland

Ladislav Nozdrovicky

Faculty of Engineering Slovak University
of Agriculture in Nitra, Slovak republic

Volodymyr Patyka

Institute of Microbiology and Virology named
after D. K. Zabolotnyi NAS of Ukraine, Kyiv

Borys Prister

Institute of Nuclear Power Security NAS
of Ukraine, Kyiv

Mykola Royik

Institute of Bioenergy Crops and Sugar Beets
NAAS, Kyiv, Ukraine

Tatyana Satarova

Institute of grain crops NAAS, Dnipro,
Ukraine

Viktor Schwartzau

Institute of Plant Physiology and Genetics NAS
of Ukraine, Kyiv, Ukraine

Dragan Škorić

Serbian Academy of Sciences and Arta,
Republic of Serbia

Volodymyr Snitynskiy

Lviv National Agrarian University, Ukraine

Oleksiy Sozinov

National Academy of Agrarian Sciences, Kyiv,
Ukraine

Borys Stegnyy

National Scientific Center "Institute for
Experimental and Clinical Veterinary Medicine",
Kharkiv, Ukraine

Oleksandr Tarariko

Institute of Agroecology and Environmental
Management NAAS, Kyiv, Ukraine

Vasyl Vlizlo

Institute of Animal Biology NAAS, Lviv, Ukraine

Anatoliy Zaryshniak

National Academy of Agrarian Sciences,
Kyiv, Ukraine

Valeriy Zhuk

National Academy of Agrarian Sciences,
Kyiv, Ukraine

Ostap Zhukorskiy

National Academy of Agrarian Sciences, Kyiv,
Ukraine

State Registration Certificate KB No 20442-10242P, issued on Dec 20, 2013

Gone to bed: November 21, 2017 Publisher's signature: 8.0. Print run – 150 copies. Recommended for publication by the Publishing Steering Committee of the Presidium of the National Academy of Sciences of Ukraine (minutes No. 11, dated November 20, 2017). Printed by TOV Barmy, LLC Frunze Str., 86, Kyiv, 04080, Ukraine Tel. 239 19 77