europass

Mariia Kucheruk

Date of birth: 05/11/1981 | **Place of birth:** Kiev , Ukraine | **Nationality:** Ukrainian | **Email address:** kucheruk.m

https://orcid.org/0000-0002-8048-533X | **Website:** https://www.webofscience.com/wos/author/record/AAE-4724-2

https://scholar.google.ru/citations?hl=ru&pli=1&user=WTPUGYYAAAAJ | **Website:**

https://www.scopus.com/authid/detail.uri?authorId=57218678277 | **Website:**

https://pdatu.edu.ua/pro-universytet/kafedra-hihiieny-tvaryn-ta-veterynarnoho-zabezpechennia-kinolohichnoi-sluzh ukrainy.html

Address: Ukraine (Home)

ABOUT ME

Doctor of Veterinary Sciences, Professor.
Expert in organic livestock and poultry production, animal welfare and veterinary biosecurity.
Certified Agricultural Advisor in Organic Production and Veterinary Medicine.

EDUCATION AND TRAINING

06/09/2016 – 01/08/2021 Kiev , Ukraine
DOKTOR OF VETERINARY SCIENCE Nubip

Level in EQF EQF level 8

01/09/2006 – 31/08/2009 Kiev, Ukraine
CANDIDATE OF VETERINARY SCIENCES (PHD EQUIVALENT) National University of Life and Environmental Sciences of Ukraine (NUBiP of Ukraine)

Website https://nubip.edu.ua/ | **Field of study** Veterinary | **Level in EQF** EQF level 8

01/09/1999 – 25/05/2005 Kiev, Ukraine
MASTER OF VETERINARY MEDICINE National University of Life and Environmental Sciences of Ukraine (NUBiP of Ukraine)

Website https://nubip.edu.ua/ | **Field of study** Veterinary | **Level in EQF** EQF level 7

CONTINUOUS PROFESSIONAL DEVELOPMENT IN VETERINARY MEDICINE AND ORGANIC PRODUCTION Various national and international institutions

Field of study Veterinary

WORK EXPERIENCE

PROFESSOR – PODILLIA STATE UNIVERSITY – 01/09/2024 – Current – KAMIANETS-PODILSKYI , UKRAINE

Academic title: Professor, Doktor of Veterinary Sci.

- Training in animal hygiene, animal welfare, and so on.
- conducting advanced training courses for veterinarians, including organic animal husbandry;
- development and implementation of educational programs and educational programs;
- scientific studies in the field of veterinary hygiene and organic animal husbandry;
- management and mentoring of undergraduate and graduate students;
- participation in quality assurance and accreditation processes in higher education.

- Expert consulting on organic animal husbandry and veterinary biosafety;
- participation in international scientific conferences and professional events.

HEAD OF EDUCATIONAL AND SCIENTIFIC CONSULTING CENTER – PODILLIA STATE UNIVERSITY – 11/05/2025 – Current – KAMIANETS-PODILSKYI,, UKRAINE

Academic title: Professor, Doktor of Veterinary Sci.

Head of the Educational and Scientific Consulting Center for Organic Production;

coordination of applied scientific research involving doctoral and postgraduate researchers;
organization and supervision of research projects commissioned by farmers and agricultural enterprises;
scientific consulting for farmers in organic livestock production and veterinary biosecurity;
integration of research, education and practical advisory services within the university framework.

AGRICULTURAL ADVISOR (ORGANIC PRODUCTION AND VETERINARY MEDICINE) – CERTIFIED AGRICULTURAL ADVISORY ACTIVITY (UKRAINE), INDEPENDENT PROFESSIONAL ACTIVITY – 01/06/2019 – Current – UKRAINE

Website: https://greenas.org/advisors/ | **Link** : https://organicstandard.ua/services/handbooks-and-catalogs/consultants-guide

- Certified agricultural advisory services in organic production, veterinary medicine, and sustainable use of natural resources;
- Advising farmers on organic livestock and poultry farming;
- Advisory support on animal welfare, biosecurity, and compliance with organic standards;

Professional guidance based on certified advisory status (Certificate No. 664, issued 27 June 2019).

AGRICULTURAL ADVISOR (ORGANIC LIVESTOCK AND POULTRY PRODUCTION) – SELF-EMPLOYED / PROFESSIONAL ADVISORY SERVICES – 01/09/2017 – Current – UKRAINE

- Certified agricultural advisory services in organic livestock and poultry production;
- veterinary and sanitary support of organic farms;
- development of organic feeding programs and housing recommendations for poultry and livestock;
- advisory support on animal welfare, ethology and prevention of animal suffering;
- design of biosecurity and hygiene measures adapted to organic production systems;
- development and implementation of alternative (non-antibiotic) preventive strategies;
- correction of gastrointestinal microbiota and digestive processes in poultry and livestock;
- on-farm assessments and problem-solving for organic agricultural enterprises;
- preparation of technical documentation and advisory reports for farmers;
- conducting applied scientific research commissioned by farms, involving students and doctoral researchers;
- training of farmers, managers and farm personnel in organic production and animal welfare.

HEAD OF THE DEPARTMENT OF VETERINARY HYGIENE – NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE (NUBIP OF UKRAINE) – 21/02/2020 – 12/08/2023 – KIEV, UKRAINE

Head of the Department of Veterinary Hygiene;

- academic and administrative management of the department;
- coordination of teaching, research and methodological activities;
- development and implementation of educational programs in veterinary hygiene, animal welfare and biosecurity;
- supervision of academic staff, doctoral and postgraduate researchers;
- organization and coordination of scientific research projects;
- quality assurance in higher education and participation in accreditation processes;
- integration of scientific research, teaching and practical veterinary applications.

HIGHER EDUCATION LECTURER / ACADEMIC STAFF – NATIONAL UNIVERSITY OF LIFE AND ENVIRONMENTAL SCIENCES OF UKRAINE (NUBIP OF UKRAINE) – 01/09/2009 – 12/08/2023 – KIEV, UKRAINE

- Teaching veterinary hygiene, animal welfare, ethology and veterinary sanitation;
- delivery of lectures, seminars and practical classes for veterinary students;
- development of teaching materials and academic courses;
- supervision of student research projects and theses;
- scientific research in animal hygiene, organic livestock and poultry production;
- participation in academic committees and quality assurance activities.

CONFERENCES AND SEMINARS

Participant and speaker at international and national scientific conferences and seminars in veterinary medicine, organic livestock and poultry production, animal welfare and biosecurity.

Participant with poster presentations and active participation in international scientific congresses and conferences in veterinary medicine, animal hygiene, organic livestock production and climate change adaptation.

Selected conferences:

– XIXth International Congress of the International Society for Animal Hygiene (ISAH),
Wroclaw, Poland, 7–13 September 2019.
Poster presentation.

– XXth International Congress of the International Society for Animal Hygiene (ISAH),
Free University of Berlin, Berlin, Germany, 5–8 October 2022.
Poster presentation.

– International Scientific and Practical Conference
“Climate Change and Its Impact on Livestock and Veterinary Medicine:
Scientific Approaches and Innovative Solutions”,
Kamianets-Podilskyi, Ukraine, 2024.

– International Conference
“Future in the Results of Modern Scientific Research”,
Karlsruhe, Germany, 2024.

– International Scientific and Practical Conference
“Biosecurity, Animal Protection and Animal Welfare”,
Kyiv, Ukraine, 2024.

– International Conference
“Teaching and Research in a Contemporary University:
Challenges, Solutions and Perspectives”,
University of Bialystok, Poland, 2022.

– Organic Innovation Days 2025,
Brussels, Belgium, 3–5 November 2025.
European-level event on organic and agroecological agriculture,
organised by TP Organics under the auspices of IFOAM – Organics International.

PUBLICATIONS

2022

Comparative Analysis of the Use for Prophylactic Purposes of an Antibiotic and Colloidal Solution of Silver Nanoparticles to Broiler Chickens

Write This article presents the results of a comparative analysis of the use of antibiotics and a colloidal solution of silver nanoparticles for prophylactic purposes in broiler chickens. Ukrainian and EU legislation on organic poultry farming imposes a number of restrictions and prohibitions, particularly the use of prophylactic antibiotics. However, there are still no recommendations for the use of approved veterinary drugs. Silver has long been known for its antimicrobial properties; however, excess silver in the body can also lead to diseases such as argyria. To better understand the mechanism of action of the silver nanoparticle solution, its effect on the hematological parameters of broiler chickens, their productivity, and the quality and safety of the resulting products is determined. These parameters are analyzed in comparison with similar parameters in the control group and the group of chickens receiving the antibiotic Levofloxacin for prophylactic purposes. The study results demonstrate that the use of a colloidal solution of silver nanoparticles is cost-effective and increases the live weight of broiler chickens. Accordingly, the profitability of chicken meat production on a poultry farm increases with the use of the aforementioned nutraceutical. The use of a silver nanoparticle solution does not lead to its accumulation in the animal's tissues and organs. Consuming a colloidal silver nanoparticle solution has a positive effect on the physiological condition of chickens, promotes the survival of the birds, and optimizes the sanitary and hygienic conditions of poultry housing. Economic analysis and broiler chicken productivity indicators show that the use of a 1% colloidal silver nanoparticle solution is beneficial for broiler chickens, and the costs of its purchase and use are offset by a significant increase in live weight, reduced feed conversion, and increased disease resistance and safety.here the description...

Kucheruk, M.D., Zasiekin, D.A., Dymko, R.O. Comparative Analysis of the Use for Prophylactic Purposes of an Antibiotic and Colloidal Solution of Silver Nanoparticles to Broiler Chickens Nanosistemi, Nanomateriali, Nanotehnologii 2022, 20(2),C.591–606

Authors: Kucheruk, M.D., Zasiekin, D.A., Dymko, R.O. | **Journal Name**: Nanosistemi, Nanomateriali, Nanotehnologii | **Volume, Issue and Pages**: 20(2), C. 591–606

Link https://doi.org/10.15407/nnn.20.02.591

2023

Effect of probiotic drugs and their metabolites on the microflora of digestive canal of broiler chickens

Write here the descriptiThe relevance of the study is conditioned by the growing demand of the population for safe and organic poultry products. Various microbiological preparations are used as therapeutic and preventive means and alternatives to the use of antibiotics in organic poultry farming. The purpose of the study is to determine the effect of preparations of probiotic microorganisms and their metabolites on the optimal composition of the microflora of the digestive canal, the general condition, and the liveability of broiler chickens. The effect of various types of drugs on broiler chickens was investigated: the probiotic LactoPharm LP12, the postbiotic Bacteriosan, and a bacteriocin nisin solution. The qualitative and quantitative composition of the microflora of the digestive canal of broiler chickens was determined by the method of bacteriological cultures. The disc diffusion method, using commercial discs with a minimum inhibitory concentration, revealed sensitivity to antibiotics. The effective effect of the new postbiotic Bacteriosan on the intestines of poultry was confirmed – no coagulase-positive Staphylococcus aureus was isolated on the 30th day of the experiment, and the lowest titre of Escherichia coli was recorded on days 30, 60, and 81 of the experiment. In terms of the content of lactic acid bacteria in the intestines of broiler chickens, the highest concentration was found in the experimental groups that used the probiotic LactoPharm LP12 and the experimental postbiotic by 21% and 32%, respectively, compared to control group. Treatment of bedding material with prophylactic drugs in poultry houses of experimental groups contributed to air sanitation and a decrease in the microbial background of the room compared to the control. The lowest mortality rate of chickens (-12%) was observed when using probiotics and postbiotics, due to the positive effect on the microbiocenosis of the digestive canal. When using an aqueous solution of nisin, the mortality rate was 14%. Thus, the use of the postbiotic Bacteriosan at a dose of 5 mL/kg of feed and the probiotic LactoPharm LP12 at a dose of 1 g/L of drinking water for seven days with a weekly break

during the entire period of poultry rearing was experimentally substantiated, which will allow for effective prevention of infectious diseases and increase the liveability of broiler chickenson...

Daskalova, A., Kucheruk, K., Zasekin, D., & Hryb, J. (2023). Effect of probiotic drugs and their metabolites on the microflora of digestive canal of broiler chickens. Ukrainian Journal of Veterinary Sciences, 14(3), 46-64.

Authors: Aleksandra Daskalova, Mariia Kucheruk, Dmytro Zasekin, Julia Hryb | **Journal Name**: Ukrainian Journal of Veterinary Sciences | **Volume, Issue and Pages**: 14(3), 46-64.

Link https://doi.org/10.31548/veterinary3.2023.46

Effect of the biosapin probiotic and the biolide disinfectant on the microclimate of poultry houses

Currently, in the field of poultry farming, the issue of using disinfectants for surface treatment of poultry houses, incubators and hatching eggs is particularly acute. Preparations must be both effective for the destruction of pathogenic microorganisms resistant to antibacterial substances, and safe for the environment, productive poultry and poultry goods. The purpose of this study was to test the Biosapin probiotic and the Biolide disinfectant in industrial conditions of a poultry house and incubator room. These preparations were used by aerosol spraying in the incubator and output cabinet, as well as in the poultry house in the presence of poultry. They were tested both individually and in combination, compared to the control group, where no preparations were used. The parameters of the microclimate of the premises were determined: temperature – with a weekly thermograph M-21, relative humidity – with an Augusta psychrometer and hygrograph M-16, speed of air movement – with an ASO-13 vane anemometer, illumination – with a luxmeter, concentration of carbon dioxide, ammonia, hydrogen sulphide – using gas analyser UG-2, dust pollution – according to weight method, microbial pollution – according to sedimentation method. For the first time, a production test of the use of the Biosapin probiotic and the Biolide preparation in the complex was carried out. The obtained research results indicate an improvement in the microclimate of poultry houses. It was found that when spraying a disinfectant, microbial contamination in poultry premises decreases by 48.1% ($P<0.001$), and when spraying a probiotic – by 62.4% ($P<0.001$), while with a complex alternating action of both drugs – by 84.1% ($P<0.01$). At the same time, the bird's body is sanitised and enriched with probiotics. The positive effect of drugs on the microclimate in both the incubator room and the output hall sections has been experimentally confirmed. In particular, the concentration of ammonia decreases by 7.6% ($P<0.01$), 12.3, 27.8% ($P<0.001$) and hydrogen sulphide – by 16.6% ($P<0.001$), 18.5 and 34% ($P<0.001$). At the same time, the carbon dioxide content also decreases by 2.8, 3.3, and 5.0 times, respectively. Spraying the Biosapin probiotic and the Biolide disinfectant both separately and in combination stimulate embryogenesis, contribute to the production of more fertilised hatching eggs and the hatching of conditioned young chickens. Thus, the breeding rate of young animals increased by 5.5% ($P<0.01$), by 7.0% ($P<0.01$) and by 11.0% ($P<0.01$). The use of the preparations under study lies in the optimisation of the microclimate in poultry premises through such indicators as relative humidity, concentration of harmful gases (ammonia, hydrogen sulphide, carbon dioxide), dust, and microbial air pollution

Chechet, O., Kovalenko, V., & Kucheruk, K. (2022). Effect of the Biosapin probiotic and the biolide disinfectant on the microclimate of poultry houses. Ukrainian Journal of Veterinary Sciences, 13(1), 44-51.

Authors: Chechet, O., Kovalenko, V., & Kucheruk, K. | **Journal Name**: Ukrainian Journal of Veterinary Sciences | **Volume, Issue and Pages**: V. 13(1), p. 44-51.

Link https://doi.org/10.31548/ujvs.13(1).2022.44-51

2024

Preclinical trials of the prophylactic precaution postbiotic

Write here tThe article describes the laboratory and preclinical studies of the microbiological drug developed by us. Its antibacterial properties were determined at different concentrations of the bacteriocin nisin. Various concentrations of such strains of microorganisms were used as test cultures in laboratory studies of antimicrobial activity Escherichia coli, Bacillus cereus, Staphylococcus aureus, Listeria ivanovii, Yersinia enterocolitica.The mechanism of biological action of bacteriocins is primarily related to disruption of the cytoplasmic membranes of microorganisms sensitive to them. Unlike antibiotics, which act rather selectively, bacteriocins also affect antibiotic-resistant strains of microorganisms, are completely broken down and excreted from the body. Bacteriocin nisin is produced by a strain of microorganisms Lactococcus lactis, has antibacterial properties against a wide range of pathogenic microorganisms, is used as a preservative in the food industry. When used internally, lactic acid has an anti-fermenting, antiseptic, and irritating effect. Suppresses the growth and development of conditionally pathogenic and putrefactive microflora of the gastrointestinal tract, stimulates the process of restoration of intestinal villi, which increases the surface area for absorption of nutrients. The test of the second experimental sample on mice showed that the drug did not cause local irritation, skin resorptive and sensitizing effects, did not cause clinical changes and disorders in the work of organ systems of mice. The developed and tested drug is promising for the correction of the endomicroflora of the alimentary canal of animals, including for organic farming, the most promising, in our opinion, are the drugs of microbiological originhe description...

Kucheruk M. D., Tokarchuk T. S, Trach V. V. Preclinical trials of a prophylactic postbiotic preparation. Podolskyi visnyk: agriculture, technology, economics Issue 3 (44) 2024 Veterinary sciences P.107-115

Authors: Kucheruk M. D., Tokarchuk T. S, Trach V. V. | **Journal Name**: Podilian Bulletin: agriculture, engineering, economics | **Volume, Issue and Pages**: Issue 3 (44) 2024 Veterynary sciences p.107-115

Link https://doi.org/10.37406/2706-9052-2024-3.17

2025

Manual "Organic Agriculture" (3rd edition, revised and supplemented)

Посібник «Органічне сільське господарство» (3-тє видання, перероблене та доповнене)/ М. Биков, В. Воронцов, М. Кучерук та інші.– Київ: НУБіП України, 2025. – 288 с.

Authors: M. Bykov, V. Vorontsov, M. Kucheruk and others | **Publisher**: Kyiv: NUBiP of Ukraine, 2025

Link https://bit.ly/organic_v3

NETWORKS AND MEMBERSHIPS

01/02/2018 – CURRENT Kiev
Associate member of the NGO "Biodynamic Association of Ukraine"

Link https://biodynamics.org.ua/

14/08/2025 – CURRENT Ukraine
Advisor to the agricultural advisory service of the NGO "Green Agro Solutions"

Link https://greenas.org/advisors/

16/10/2020 – CURRENT Ukraine
Expert in accreditation of educational programs of the National Academy of Sciences of Ukraine

Link https://naqa.gov.ua/

2021 – CURRENT
Expert in accreditation of bodies for certification of products, processes and services (DSTU EN ISO/IEC 17065)

Link https://naau.org.ua/userfiles/files/ІН-08_03_01_ред_12_Інструкція про сферу акредитації ОС_ІО.pdf

2023 – CURRENT
Member of the editorial board of the journal and "Podilskyi Visnyk"

Link https://journals.pdu.khmelnitskiy.ua/index.php/podilian_bulletin/home

2020 – 2023
Member of the academic council, extended dean's office, educational and methodological commission, working group on the development of the Faculty of Veterinary Medicine of NUBiP of Ukraine

2021 – 2023
Member of the project group of the OPP OS "Master" "Veterinary Hygiene, Sanitation and Expertise" of NUBiP,

2017 – 2024
Vice-President and Chairman of the Scientific Advisory Board of the Public Union of Producers of organic certified products "Organic Ukraine"

Link https://organicukraine.org.ua/en

PROJECTS

13/02/2025 – 21/02/2025
International scientific and pedagogical internship at the international consulting company GOPA AFC GmbH, Bonn, Germany.

Write here the dTopic: "Agribusiness consulting in the field of veterinary hygiene and organic agriculture".

The internship focused on consulting approaches in organic agriculture and veterinary hygiene,
integration of veterinary biosecurity and animal welfare into agribusiness advisory services,
and analysis of European practices in organic farming and agri-consulting.escription...

CERTIFICATIONS

Vinnytsia National Agrarian University , 27/06/2019
Certified Agricultural Advisor in Organic Production, Veterinary Medicine and Sustainable Natural Resource Management. Certificate No. 664

Write here the Educational and Research Center for Professional Training and Advisory Services

Mode of learning: Hybrid

LANGUAGE SKILLS

Mother tongue(s): **UKRAINIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
GERMAN	B2	B2	B2	B2	B2
ENGLISH	B2	B2	B1	B1	B1
RUSSIAN	C2	C2	C2	C2	C2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

work with veterinarians | manage the health and welfare of livestock | conduct veterinary consultation | veterinary terminology | teach veterinary science