## **CONTENTS**

ENVIRONMENTAL SAFETY	9
Bondar O.I., Mashkov O.A., Mukhina K.E. Systemic approach to elimination of threats of environmental disasters as a result of military action.	9
Stepova O., Kornishina A., Tristan A. Analysis of atmospheric air pollution from vehicle transport (on the example of the Shevchenkiv district of Poltava)	18
BIOLOGICAL SAFETY	26
Valerko R., Herasimchuk L., Matviychuk O., Zabrodska J. Study of the physiological perfectness of drinking bottle water provided in the commercial network of the city of Zhytomyr.	26
Voitsitskiy V., Khyzhnyak S., Korniyenko V., Midyk S., Ladohubets E., Duchenko E., Harkusha I. Atomic spectrometry – priority method for determination of heavy metals in the environment and agricultural products	32
ENVIRONMENTAL MONITORING	36
Romaniuk O., Oshchapovskyi I., Shevchyk L. Monitoring of gas pollution in the territory of the city of Boryslava	36
Skuibida O. The state, problems and prospects of atmospheric air monitoring of Zaporizhzhia zone and agglomeration	43
Shevchenko R. Geoinformation management of the monitoring of complex technological systems using UAV-cartography in the conditions of the state of War.	48
ECOLOGY OF CONSTRUCTION	55
Kovalenko Yu., Diadin D., Yarchuk D. Assessment of the energy and environmental efficiency of building insulation measures considering the climate conditions.	
ECOLOGY OF WATER RESOURCES.	64
<b>Bezsonnyi V., Plyatsuk L., Tretyakov O.</b> Means of mathematical forecasting of assessment of ecological condition of surface water objects.	64
<b>Levoniuk S.M.</b> Hydrogeochemical features of changes in the f content in the groundwater chemical composition of buchak-kaniv aquifer to increase the ecological safety of population drinking water supply	69
Mikhaylyuk V. Classification and properties of ekranosems of the city of Odessa.	73
Monastyrska S., Hoivanovych N., Klymyshyn O. Hydrobiological analysis condition of the Stryi River waters within the Carpathian Foothills.	77
Rudyk-Leuska N., Leuskyi M., Yevtushenko M., Leuskyi M., Khyzhnyak M., Makarenko A. Phytoplankton and water quality of the Kakhovka reservoir in the summer period.	83
Strokal V., Kovpak A. Military conflicts and water: consequences and risks.	
Yatsiuk M., Shcherbak V., Semeniuk N., Poliatykina O., Leshchuk V., Korotetskiy V. Natural-artificial bio-reclamation complex as a new area in biological reclamation of various water bodies of Ukraine.	103
ECOLOGY OF LAND RESOURCES	116
Butsyak A., Butsyak V. Obtaining and using of vermicompost (biohumus) with the purpose of improving the nutrient regime of the soil.	116
Pichura V., Potravka L., Dudiak N., Rutta O. Modeling of water deflation destruction of steppe soils of Ukraine	121
Romanchuk L., Kravchuk T., Mozharivska I. The influence of the agroecological elements of the cultivation technology on the microelements content in amaranth green mass.	130
Sopov D.S. Geohistorical analysis of ecological problems of land resources of Luhansk region (Ukraine): pre-war retrospective.	134
Sopov D., Kyrpychova I., Berezenko K., Karpenko T., Dankeyeva O. Erosion processes on sloping lands of Luhansk region (Ukraine): environmental consequences.	139
<b>Tkachuk O.</b> Prerequisites for the transition of agriculture in Ukraine to ecologically balanced principles.	144

ECOLOGY AND PRODUCTION	150
<b>Barbashev S., Burban N.</b> Application of the radiation capacity model of the landscape and its components for the assessment of the radiation risk of external irradiation of humans and biota and the determination of environmentally safe emissions of NPP.	150
<b>Kulikova D.V.</b> Development of a resource-saving technology for integrated processing of highly mineralized mine water in the enterprises of the Kryvyi Rih iron ore basin	
Semak U., Mylenka M. Morphological dendroindication of the level of technogenic transformation of ecotopes of ash and slag dumps of Burshtyn TPP.	163
<b>Ulytskyi O., Buhlak O., Horobei M., Savluchynskyi O.</b> Determination of priority environmental risk factors for the environment and public health on the example of coal mine No. 5/6 of the «Myrnogradvugillia» substation	168
PRESERVATION OF BIOLOGICAL AND LANDSCAPE DIVERSITY	180
Boyko L., Yukhymenko Yu., Danylchuk N. Principles of creation of dendrocompositions and criteria for their use in urban areas.	180
Glibovytska N.I. Bio-indication perspective of <i>Chelidonium majus</i> L. in the conditions of the urban territory	186
Zubrovska O. Features of the introduction of species of the genus Sedum L. in the conditions of the Steppe of Ukraine	191
Ivanets O. Faunal characteristics and taxonomic structure of groups of copepods ( <i>Crustacea</i> : <i>Copepoda</i> ) of the Hlynna Navariya reservoir.	197
Kotyuk L., Ivashchenko I. Summer savory (Satureja hortensis) in the botanical garden of Polissia National University.	201
<b>Krasovsky V., Chernyak T., Fedko R.</b> Biological and ecological consequences of the introduction of the subtropical fruit crops in the forest-steppe of Ukraine.	. 207
Lagutenko O., Nasteka T., Shevchenko V., Kryvoshapka V., Dutova H. Comprehensive assessment of drought resistance of gooseberry varieties in the conditions of the northern forest steppe of Ukraine.	213
Lykholat Y., Drehval O., Didur O., Khromykh N., Sklyar T., Davydov V., Lykholat T. Endophytic isolates of micromycetes from <i>Chaenomeles thibetica</i> fruits and their fungistatic activity.	. 218
Melnyk-Shamrai V., Shamrai V. Assessment of the environmental state of pine plantations of the zone of unconditional settlement in wet subors of Ukrainian Polissia.	224
Roman L. Unorganized ecotourism of the Carpathians: environmental problems.	. 233
Khomiak I., Onyshchuk I., Vasylenko O., Harbar D., Kotsiuba I. Natural and anthropogenic dynamics association plant communities <i>Geranio-Trifolietum alpestris</i> on the territory of the Ukrainian Polissya.	. 238
Shynder O. Findings of alien plants in the Western and Northern regions of Ukraine.	243
CLIMATE CHANGE	. 249
Polevoy A., Bozhko L., Barsukova E. Agroclimatic aspects of sunflower productivity in Odesa region in conditions of climate warming.	. 249
WASTE MANAGEMENT.	. 255
Herasymchuk L., Valerko R., Yasinskuy V., Pitsil A., Solovyova O. State control in the field of waste management in the territory of Zhytomyr region.	. 255
Dementieieva Ya. Reaction of birds to changes in the environmental management of waste.	260
Zalenska E., Voitenko L., Kopilevich V., One OV. An attemptof contaminated drilling waste remediation by biocomposting.	264
<b>Korol K., Shuplat T.</b> Bioindication of man-made edaphotopes of landfills of the Pre-Carpathian Geobotanical District using representatives of the brassicaceae family.	272
UKRAINIAN NATURE RESERVE FUND.	. 281
Martynenko V. Assessment of the distribution of the apical bark beetle (Ips acuminatos) in the pine stands of the Drevlyansky nature reserve.	. 281

ENVIRONMENTAL EDUCATION	285
Bondarenko L.I., Voloshyna N.O., Lazebna O.M., Bilianska M.M. Mobile learning implementation in the process of ecologists training.	285
AUTHORS' CREDENTIALS	291