## **CONTENTS**

ENVIRONMENTAL MONITORING.	7
Bondar O., Shevchenko R., Krasnolutsky O., Ivanenko I., Movchan M. Monitoring levels of recreation load on natural habitats of the city of Kyiv and features of their environmental mapping using the Solomyan Landscape Park as an example)	7
Kahukina A., Patseva I. Examination of carbon monoxide, nitrogen dioxide, and ammonia levels in Zhytomyr's atmospheric environment according to Ecocity public air monitoring data	23
Monastyrska S., Hoivanovych N. Monitoring of the ecological state of small rivers of Stryi region	32
Tkachuk O., Vergelis V. System of environmental monitoring surface water of ponds	39
<b>Fedyk Ya., Chepurnyi I.</b> Geoinformation Technologies for Modeling Surface Runoff Processes in Watersheds: a Case Study of the Ivano-Frankivsk Region	44
ECOLOGY OF WATER RESOURCES	51
Vovkunovich M. Hydroecological state of the Borzhava River.	51
Makhinko R. Comprehensive measures for the rehabilitation of water bodies in Zhytomyr Polissya after the chornobyl disaster.	57
Mudrak O., Klochaniuk V. The ecological state of the Zhar river basin in the context of the sustainable development strategy of the Podilya region.	64
<b>Tkachuk O., Mazur O.</b> Justification of the surface water monitoring system by the Basin management of water resources R. Southern Bug.	70
Shestopalov O., Sakun A., Lizantan P., Kanunnikova N., Gaiduchek O., Tomashevsky R., Vorobyov B.  Analysis of water quality indicators: contemporary aspects and challenges	76
ECOLOGY OF AGRICULTURAL PRODUCTION	83
Valerko R., Sikach T., Ivashkina O., Alpatova O. Use of biological products and plant growth regulators to reduce the accumulation of heavy metals in corn grain.	83
Lemeha N. Using degraded land for growing energy crops in the lviv region.	87
Patseva I., Herasymchuk L., Valerko R., Sikach T., Ivashkina O. Concentration of heavy metals in the phytomass of cereal crops.	91
Kharytonov M., Babenko M., Lemishko S., Martynova N. Assessment of the efficiency of agro-ecological measures for accelerating of the biological reclamation of technosols.	95
Yurchenko T., Pykalo S., Kharchenko M. Combination ability of winter bread wheat varieties of different ecological and geographical origin according to drought resistance.	101
ECOLOGY AND PRODUCTION	105
Markina L., Vlasenko O., Todchuk D., Kovtunov O., Onopchuk I. Management of climate impact processes of waste-to-energy technologies using the example of thermal destruction.	105
Kharytonov M., Rula I., Martynova N., Zolotovska O., Bereznyak O. The peculiarities of the thermolysis processes of coal fly ash and sewage sludge mixed with biomass of energy crops.	113
ENVIRONMENTAL IMPLICATION OF MILITARY ACTIONS	121
Larkov S., Vasylyshyn Yu., Shevchenko O., Marinoshenko O., Piskun O. Assessment of the landmine detection possibility based on its thermal tracks.	121
Romanenko M., Krysinska D., Tymchenko I. Analytical research of the methods of calculating environmental damage from military actions.	127

139
139
144
150
150
162
178
188
188
196
196
. 204
211
216
221
228
. 235
241
. 246
. 254