

## Editorial

The region of north-eastern Poland is only slightly affected by human activity (it is considered for the ‘Green Lungs of Poland’), therefore it deserves not only protection, but also the special attention of specialists who study the conditions and changes of various natural ecosystems. There are natural and landscape objects unique in Europe, such as the Białowieża Primeval Forest (with the Białowieża National Park), the Narew Valley (with the Narew National Park), and the Knyszyn Forest Landscape Park (Supraśl River Valley) and numerous nature reserves, ecological and nature monuments.

Environmental pollutants come from both natural and anthropogenic sources. In view of intensive human activity, natural sources are usually of little importance. On the other hand, anthropogenic sources are the ones the most dangerous. They are mainly related to transport, air pollution, urban and industrial sewage discharge, runoff from agricultural and intensively fertilized areas. Air pollution, emitted by motor vehicles, is the largest component of air pollution recorded as a result of human activity and poses a threat to human health and natural resources. Along with the intensive development of urban agglomerations, and thus the increase in the number of motor vehicles, the amount of toxic pollutants in the urban environment increases. In the article ‘Assessment of PAH content in soil and aboveground parts of *Lolium perenne* L. next to the communication arteries of the urban agglomeration’ authors stated that a car traffic in the city of Białystok may be a significant source of PAHs, especially benzo(a)pyrene, considered the most carcinogenic. The discharge of municipal wastewater directly to river systems is also a significant environmental problem. However, in the work ‘Heavy metals and Polycyclic Aromatic Hydrocarbons in leachates from Autothermal Thermophilic Aerobic Digestion as a potential threat to the environment in north-eastern Poland’, authors attempted to analyse the leachate due to the pres-

ence of heavy metals and PAHs from ATSO installations and their negative environmental impact.

Especially valued in the region of north-eastern Poland are river valleys distinguished by a high degree of naturalness and great landscape values, as well as the presence of many rare species of plants and animals, and a variety of geomorphological forms. These areas are also characterized by an extraordinary cultural wealth, creating a coherent, but also unique shape of the region. The next article ‘Identification of pollution sources in the Narew River catchment area using multivariate statistical methods’ focuses on the identification of pollution sources in the Narew River catchment area which is one of the largest rivers in Poland. Next, in the work ‘Plant communities in drainage ditches – condition, characteristics and environmental functions’, authors conducted research on plant communities in ditches in the post-bog meadow habitat on the Supraśl Dolna valley facility in 2010–2020. Species diversity did not change significantly during this period, while changes in the coverage and viability of individual species were found.

The specificity of production in the region of north-eastern Poland is determined by the typically agricultural character, approximately 86% of the area is arable land. A special type of waste are organic residues of plant and animal origin, generated in food production and agricultural activities. In the article ‘Assessment of the possibility of using waste from agri-food processing for fertilization purposes’, authors presented a very important problem of assessing the fertilizing properties of agri-food processing waste.

The information presented in the papers may contribute to broadening the knowledge and better management of this region in the future. A kind of uniqueness of the studied area and regional policy should be directed to the sustainable development of industry, taking into account the preservation of the uniqueness of the natural environment.

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