using sulfate soap, the main component of which is lignin. Sulfate soap is accumulated as a waste of pulp and paper production and requires mandatory disposal. This approach allows to significantly reduce the working pressure in the equipment where the pellets are formed, and to involve in the production of low-grade wood waste. In the process of extrusion method of obtaining granules, to improve their quality, we used a lignin binder. Thus, it is proved that one of the ways to reduce the pollution of the river system with wood waste can be the creation of the production of fuel pellets and briquettes - a valuable energy product.

As a result of research, two types of environmental threats to surface waters of the region were identified: microbiological pollution of streams and watercourses and pollution of the hydrosphere by effluents of processing enterprises, which are a common industry in the study region. A number of engineering and technical solutions to increase the level of ecological safety of the mountain ecosystem are proposed.

Popovich V.B.

MICROBIOME OF THE COLON CAVITY OF THE ADULT POPULATION IN BUKOVYNA REGION

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The colon is the main reservoir of the symbiotic human microbiota. About 60% of symbiotic microorganisms of the human body persist in the distal parts of the intestine. The colon microbiome completes the fermentation of undigested food residues, participates in the process of peristalsis, secretion of biologically active substances, food absorption and protection of the mucous membrane against pathogenic microbiota, forming its colonization resistance.

The understanding of the complexity of the polytaxonomic structure of the intestinal microbiome has greatly expanded in recent decades after the development and implementation of highly productive bacteriological, molecular and metagenomic research methods. Due to their use in 2011 by a group of scientists from the European Laboratory of Molecular Biology, the intestinal microbiome is classified into three main variants or enterotypes, which are determined by the dominant bacteria in the microbiota. Each enterotype appeared to have not only its own genus of bacteria (*Bacteroides, Prevotella, Ruminococcus*), but also differs in the ratio of individual representatives of this taxon.

Study of taxonomic composition, population level and microecological indicators of "host-microbiome" ecosystems, by the index of permanence, frequency of occurrence, Margalef indices of species richness, Whittaker species diversity, Simson, Berger-Polydaker and Parker indices of species dominance found that leading microorganisms in the Bukovynan region are bacteria of the genus *Bacteroides*, which were found in all subjects not only among healthy people, but also in patients with various diseases of the intestines and other organs.

Bacteria of the genus *Bacteroides* in all healthy people were found in a high population level (from 8.97 ± 0.47 to 9.98 ± 0.81 lg CFU/g), which confirms their dominant role in the microbiome in taxonomic composition, as well as the coefficient of quantitative dominance both in healthy and sick. *Bacteroides* in the intestine have a high coefficient of quantitative dominance, a coefficient of significance and one of the key taxa involved in the self-regulation of the intestinal microbiome. It should be noted that this enterotype among the inhabitants of Bukovyna region was formed due to a specific diet. The latter includes foods rich in animal fats.

Rotar D.V.

SENSITIVITY OF *P. FREUDENREICHII* TO SUBSTANCES FOR THE SORTING OF FABRICS IN THE TEXTILE INDUSTRY

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The human skin is in constant direct contact with the environment, including exogenous microflora. The concentration and species composition of the skin microflora depend on the content