

SAPROPEL - THE PERSPECTIVE RAW MATERIAL FOR MEDICINES AND COSMETICS

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Sapropel – substance of biological origin, that is formed under water, on the bottom of freshwaters from residues of planktons and bentons organisms, involving bacterial processes that occur in the surface layers of sediments at low oxygen access. Sapropel consist of silt solution, skeleton and colloidal complex. Silt solution consist from water and substances dissolved in it – mineral salts, low molecular weight organic compounds, vitamins, ferments. Skeleton of the sapropel represents the remains of plants and animals, colloidal complex – complicated organic substances, which is providing jelly-like consistency for sapropel.

Sapropel unique naturally occurring substance that finds its use as a source of organic minerals in traditional mud therapy, cosmetology and agriculture.

Given the wide range of pharmacological properties of sapropel – antimicrobial, anti-inflammatory, antioxidant, detoxic effects there is creation of medical and cosmetic products based on native raw materials and extractions from sapropel.

We was investigated chemical composition of sapropel from Pribich lake Shatsky district of Volyn region. Was indicated the presence of a wide range of amino acids, fatty and organic acids, microelements. Was getting aqueous, spirituous and oily extracts of sapropel. Was defined anti-inflammatory, reparative and antimicrobial activity of developed extracts. Was defined humidity, fractional composition, technological properties of native materials (bulk, volume, specific weight, porosity), was investigated dependent technological properties from humidity. Was soundly expediency of using native sapropel in cosmetics.

For the results of physico-chemical, structure-mechanical and microbiology researches was developed the composition of cosmetics masks for different types of skin. The using of the gelling agent was soundly for increasing adhesion to skin surface.

Research shows that in addition to the cost, an important factor for Ukrainian consumers is the naturalness of cosmetics. The demand for cosmetic products based on natural ingredients is growing every day. More and more consumers want to use quality products, which include natural ingredients and no synthetic substances.

There is no cosmetic or drugs on sapropel, so it is very actual topic.