## MINISTRY OF PUBLIC HEALTH OF UKRAINE NATIONAL UNIVERSITY OF PHARMACY

# TOPICAL ISSUES OF NEW DRUGS DEVELOPMENT

Abstracts of XXV International Scientific
And Practical Conference
Of Young Scientists And Student

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Book of Abstracts includes materials of Scientific and Practical Conference of Young Scientists and Students "Topical issues of new drugs development". Materials are groupped according to the main directions of scientific, research and educational work of the National University of Pharmacy. Teoretical and practical aspects of the synthesis of biologically active compounds and development of medicinal substances on their basis; standardization of drugs, pharmaceutical and chemical-technological analysis, the study of raw materials and herbal remedies development, modern drug technology and extemporal recipe; biotechnology in pharmacy, modern advances in pharmaceutical microbiology and immunology, clinical trials of new drugs, pharmaceutical care for prescription and OTC-drugs, evidence-based medicine, modern pharmacotherapy, socio-economic studies in pharmacy, marketing management and pharmacoeconomics during the development, implementation and use of drugs, quality management in development, production and traffi cking of drugs; information technologies in pharmacy and medicine; basics of pedagogy and psychology; social science; philology are presented. Also in book there are published material ob Allukrainian contest of student scientific work on speciality "Pharmacy, Industrial Pharmacy".

For a wide audience of scientists and pharmaceutaical and medicinal employees.

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in the territory of Central Kazakhstan was carried out. There are significant differences between the two chemotypes of *T. serpyllum* grass by the amount and component composition of the essential oil, as well as by the quantitative content of flavonoids, phenol carboxylic acids, tannins, triterpene compounds, watersoluble polysaccharides, pectic substances, amino acids and organic acids.

#### LICHENS ARE SOURCES OF BIOLOGICAL ACTIVE COMPOUNDS

Pinkevych V. O.

Scientific supervisors: assoc. prof. Kyslychenko O.A., assoc. prof. Novosel O. M. National University of Pharmacy, Kharkiv, Ukraine cnc@nuph.edu.ua

**Introduction.** Lichens are peculiar and relatively poorly understood group of symbiotic organisms which consisting of a fungus and algae. Lichen compounds have the different biological activity, therefore lichens widely applied in medicine and are part of different pharmaceutical drugs. So, on the pharmaceutical market of Ukraine are registered and are successfully used drugs based on extract of thallus of island moss, such as «Herbion syrup of Island moss», pastilles «Isla mint» and «Isla moss».

In Ukraine there are more than one and a half thousand species of lichens, but their potential as sources of biological active substances for today is insufficient.

**Aim.** The aim of work is rationale for the application of lichens as the sources of biological active compounds for creating effective domestic medicines based on lichen raw materials.

Materials and methods. Information retrieval was conducted with the help of scientometric databases.

Results and discussion. In the world there are about 25 000 species of lichens, which are different from each other by the size, form, coloring and features of growth. They grow in all geographical zones and on the different areas. By the type of thallus, lichens are subdivided on leafy, bushy and scaling, or cortical. Thallus of lichens represents a bunch of intertwined fungus hyphes, between which groups of or singly located cells of green algae, and in some – cyanobacteria. In lichens detected different groups of biological active substances, big part of which are specific and not contained in others living organisms (for example, lichen acids). This stipulates their wide use in official and traditional medicine for treatment of diseases of gastrointestinal tract, respiratory system, infectious and viral diseases, as immunomodulating, antioxidant, antiproliferative, antiinflammatory, painkillers, antipyretic, antineoplastic, hepatoprotective and detoxification agents. Besides that, lichens are used as dyes, for the production of litmus and in the perfume industries.

Conclusions. Lichen substances have a wide spectrum of medicinal properties, but their therapeutic potential has not been sufficiently studied. On pharmaceutical market of Ukraine drugs, based on lichen substances, are presented exclusively by foreign representatives. That's why promising and relevant is the study of domestic species of lichens as sources of biological active compounds with purpose of further use in medicine and pharmacies. Using of these substances will expand the range of pharmaceuticals of natural origin, which effectively influencing on human health.

### DEVELOPMENT OF COMPOSITION FOR HARD CAPSULES OF ANTIINFLAMMATORY ACTION FOR JOINTS TREATMENT

Pisarenko O. S.

Scientific supervisor: assoc. prof. Slipchenko G. D. National University of Pharmacy, Kharkiv, Ukraine galinaslipchenko@ukr.net

**Introduction.** One of the tasks of domestic pharmacy is the expansion of the range of medicinal products and improvement of therapeutic properties of existing ones. Causes of bones and joints diseases are numerous. They are the lack of proper physical load on the muscular apparatus of the joint, sedentary lifestyle, metabolic disorders, which lead to changes in the composition and properties of synovial fluid, as well as injuries, disorders in the functioning of the immune system and various infections.

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