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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 All-ukrainian 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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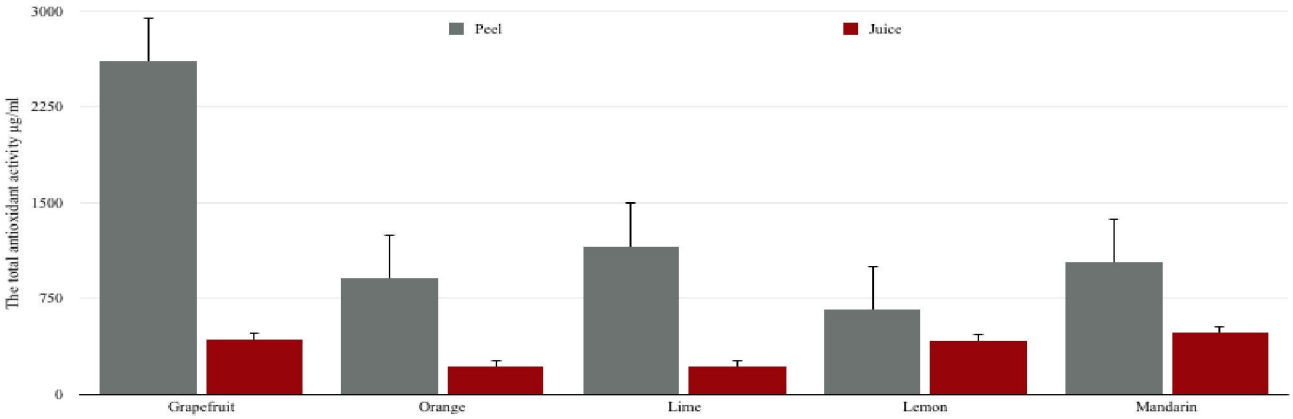

Fig. 3. The total antioxidant activity of 5 different citrus species extracts

ANALYSIS OF BIOLOGICALLY ACTIVE SUBSTANCES IN ARUGULA OIL

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Introduction. The history of herbal medicines is very old. There are many medical herbs and spices that play an important role in everyday use. There is a significant prospect that the vegetable raw material has a higher impact of biologically active substances, which role is valuable in pharmacy. Plants and plant extracts have formed an important part of modern medicine, due to their chemical and medicinal content found in the natural system. Their secondary metabolites - a large reservoir of structural fragments, which work together, reveal a wide range of biological activity. One of the most promising vegetable crops in this referral is Arugula. The question of healthy nutrition is a concern of every modern person. As it is known, nutrition - is one of the most active and important environmental factor, which has a variety of effects on the human body, ensuring its growth, development, preservation of work capacity and optimal life expectancy.

Aim. Study of the species of Arugula and the study of the quantitative content of grass pigments and medicinal substances in oil Eruca sativa Mill, the effect of all nutrients on the human body in general. Possible prospects for creating new drugs from Erucae sativae.

Materials and methods. Analysis of scientific publications, training manuals, Internet resourses and electronic journals. The use of these species in the food industry and the healing properties of the plant were researched .

Results and discussion. Eruca sativa is an annual herb, a salad that has a spicy taste. The use of brooches improves metabolic processes, improves digestion, strengthens the nervous system. Eruca sativa is indicated by stress and depression, increases hemoglobin levels, removes excess cholesterol, is recommended for anemia. Regular consumption of this beneficial herb is useful for patients with diabetes mellitus. Rukola has a diuretic and disinfectant effect, facilitates the state of gout, inflammatory processes in the kidneys and urinary tract. Improves skin, nail and hair condition. Rukola oil is used to strengthen hair follicles and prevents hair loss. Possesses strong anti-ulcer qualities. It fights with defeat of the walls of the stomach, greatly reduces the size of existing ulcers, prevents the development of new foci of the disease.

However, there are some restrictions on the consumption of brooms. This plant is capable to provoke an allergy to some people, because it includes a high level phytoncides. Rukola can have an adverse effect on people with kidney and liver disease, as well as gastritis (high levels of acidity) It is undesirable to include a cleft in the diet of women during the period of pregnancy, due to that fact that the plant is able to adversely affect the development of the future baby, for example, the an allergic reaction. Although is it is free to say that arugula has a lot of vitamins and trace elements, consumption during pregnancy is beneficial, while lactation increases breast milk production.

A research of assess antibacterial activity, as well as phytochemical analysis of oil and seeds of arugula was conducted. The seed contains essential oil, which is released after previous fermentation (more than 1%). The main ingredient is mustard oil. The seeds also contain 25-34% semi-evaporative oil, which contains 20-45% lead acid (20-44%), linoleic acid (12-24.9%), linolenic acid (up to 17%), and oleic acid (up to 18%). In the supramental part there are alkaloids (0.07%), flavonoids: glycosides of camptophenol, quercetin, isomarnetin. The seeds contain a small amount of valuable substances - cardenolids, responsible for the work of the heart muscle.

Conclusions. We analyzed the scientific publications on the use of these species in the food industry, and we also did our own research on the healing properties of the plant. In nowadays life while health problems are faced the creation of new drugs containing Erucae sativae is a great prospect. This plant can be used as an alternative to the medical treatment of peptic ulcer and gastritis - the constant use of this herb helps to seal the walls of the stomach and scarring wounds. Other studies have shown that Eruca sativa is a rich source of secondary phyto-compounds that have a significant antioxidant potential. This work also makes a significant contribution to supporting the statement on the use of arugula in traditional medicine. Studies also show that Eruca sativa seeds seed oil has the most promising antimicrobial activity against gram-negative and gram-positive bacteria resistant to antibiotics. The antimicrobial potential verifies the authenticity of the use of oils in traditionaa; medicine for the treatment of skin infection, fever, urinary incontinence. Antibacterial activity is fully justified by the presence of biologically active isothiocyanates, as well as the main component - free erucic acid.

RESEARCH OF ANATOMIKAL FEATURES OF THE VEGETATIVE ORGANS OF LENTIL (*LENS CULINARIS*)

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Introduction. Searching for plant sources of biological active substances and developing medicines on it basis is one of pharmaceutical science task. Herbal medicines are important in the therapy of many diseases. Nowadays we have real problem with rational useage of cultivated plants, which is related with the realization of new approaches in plant-based medicines developing and implantation of modern physicochemical methods of standardization. Lentil is one of this plants, which is cultivated in many Ukraine's regions.

The lentil (*Lens culinaris*) is annual bushy herb of the legume family. It normally varies from 15 to 75 cm in height. Plant's stem is erect, ribbed, slightly branching. Leaves are alternate, short-petioled, even-pinnately compound, ending with a simple or branching tendril. Flowers are small, 1-4 of them collected in drooping racemes. Fruit - bean, rhomboid, about 1 cm long. The seeds are flattened, globose.

Aim. To study anatomical features of lentil's vegetative organs and to define diagnostic anatomical features of this herbal raw material.

Materials and methods. Lentil herb was collected in 2016 in the Pervomaisky district of the Kharkiv region. Specimens were prepeared from fresh, dry and fixed by ethanol-water-glycerol mixture (1:1:1) plant material. Chloral hydrate and 3% aqueous sodium hydroxide solution were used as a clearing solutions. Specimens were prepeared and investigated according to generally accepted techniques using the "Granum" light microscope at × 40-, × 100-, × 400-fold magnification.

Results and discussion. As a result of anatomical study of lentil herb was established, that the type of anatomical structure of the stem varies from bundle type the in the top to the transitional in the middle part and to the non-bundle in the lower zone. The epidermis of the stem is represented by prosenchymal cells. Cuticle is longitudinally wrinkled (barely noticeable). Stomata are protruding, have anisocytic type, but tetracytic type is also rarely occured. On the epidermis there are two types of hairs: simple and glandular. Simple ones are two-cell, with short basal and long terminal cells. The glandular trichomes have a single-celled foot and a four-celled head. The number of cells in the head may vary from three to four. From two to four layers of lamellar collenchyma lie under the epidermis on the edges of stem. Beneath