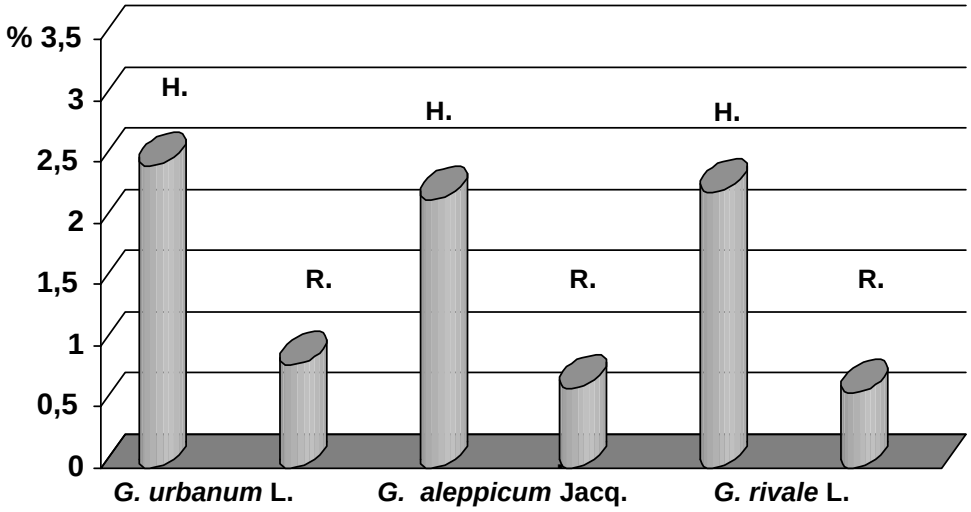
Results and discussion. The results of quantitative determination of flavonoids in the vegetative organs of the studied *Geum* L. genus species are presented in fig. 1.



Notes: H. – herb, R. – rhizome with roots.

Fig. 1. Quantitative determination no flavonoids sumin the plants of *Geum* L. genus.

Conclusions. The obtained data show that the biggest sum of flavonoids has the following herbs: *G. urbanum* L.,*G. aleppicum* Jacq. And *G. rivale* L. – 2,47%, 2,19% and 2,25% respectively. Thus our results indicate the availability of a subsequent advanced pharmacognosical and pharmacological study of *Geum* L. genus plants herb.

MORPHOLOGICAL AND ANATOMICAL STUDY OF SEA BUCKTHORN PLANT MATERIAL

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Introduction. Sea buckthorn (Hippophae rhamnoides, Elaeagnaceae) is well- known and widely used medical plant. Various organs of this plant are used in traditional and folk medicine. It`s fruits have been using for ages, but also since recently leaves have attracted attention of scientists. This herbal drug is harvested in summer and autumn moreover, it is used for gastrointestinal upsets, atherosclerosis, hypertension and as an antiviral agent.

Aim. In this regard, it is relevant to study the morphological and anatomical features of a sea buckthorn's leaf to identify plant materials.

Methods and materials. Object of research: sea buckthorn's leaves and sucker (Elaeagnus commutata) leaves, harvested in the flowering phase of the plant in the botanical garden of NUPH. Macroscopic study of herbal drugs was carried out visually according to the requirements of the State Pharmacopoeia of Ukraine. To identify the anatomical and diagnostic features, micropreparations were prepared according to State Pharmacopoeia of Ukraine and from fixed (70% ethanol-glycerin) samples. Sections from samples of the test materials were performed by hand with a safety razor blade and, after appropriating treatment, were enclosed in glycerol-gelatin. In the study of dried leaves, micropreparations were prepared using chloral hydrate and a 3% sodium hydroxide solution for enlightenment. Microchemical

reactions were carried out according to the method of A.A. Dolgova and E.Ya. Ladygina. The study of the preparations was carried out using the Cranum microscope (Austria) and camera Canon A720.

Results and discussion. The main diagnostic morphological signs of a sea buckthorn leaf were established as follow: the shape of the leaf blade is lanceolate, rarely pointed-elliptical or linear or linear-lanceolate, at the base it is wide-wedge-shaped, petiolate, short-leaved, size 3-7 cm long, 0.5-1.7 cm wide. Margins are whole, rarely with margins slightly loosened. The color of upper surface of the leaf is grayish-green, the lower is silver-white. The main anatomical signs of the leaf were determined as follow: the shape of the cells of the upper and lower epidermis, the structure of the stomata apparatus (anomocytic type (4-8 cells), the structure of the vein, the presence of specific stellate hairs on the epidermis. Palisade and spongy tissue, angular collenchyma are noted in the transverse section, closed collateral, thin-walled, on a crossed section of a lunar shape.

Conclusions. All of the listed morphological and anatomical features of the sea buckthorn leaf make it possible to distinguish it from the leaf-leaved sucker (as a possible impurity). The established features can be used in the development of methods of standartization for a sea buckthorn leaf.

SALVIA OFFICINALIS EXTRACTS EFFECT ON DYSBIOTIC GUT MICROFLORA

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Introduction. Salvia officinalis is famous of its antimicrobial, anti-inflammatory, antidiarrheal and other effects. It grows on the territory of Ukraine, so raw materials are affordable and cost-effective. Scientists around the world are actively studying the properties of this plant and its fractions, which indicates the prospects of this plant for creating new medicines based on it. The problem of dysbiosis, although debatable, is still relevant. Intestinal dysbiosis affects the quality of life, general well-being, performance, mood. The main directions in the correction of dysbiosis is the elimination of the etiological factor, diet, pharmacotherapy (bacteriophages, antibiotics, probiotics). Plant extracts are better perceived by the body than synthetic substances, as they are composed of natural components.

Aim. To determine the effects of medicinal sage in the treatment of dysbiosis in rats.

Materials and methods. For the experiment they took white outbred rats weighing 200-250 gr. Dysbiosis was modeled in 2 stages: first, immunosuppression was performed, then a microbial suspension was administered intragastrically. After that, 2 different sage extracts were treated for 5 days. The results were evaluated microbiologically before and after treatment. The reference drug was rifaximin.

Results. As a result of the study, it was found that both extracts restore the developed disorders of microbiocenosis. A small number of samples of extract № 1 indicated an increase in C. albicans after treatment. From literary sources it is known that alpha and beta thujone, which are part of the extracts, have an antimicrobial effect. Moreover, by suppressing conditionally pathogenic and pathogenic microflora, the extracts contribute to the restoration of indigenous microflora (bifido and lactobacilli). The comparison drug eliminated the signs of dysbiosis, but bifido and lactobacilli also decreased, C. albicans remained at the same elevated level.

Conclusion. Salvia officinalis is a promising plant for science. This is evidenced by many scientific publications and its properties. In an experiment on laboratory rats, we found that extracts of medicinal sage can inhibit conditionally pathogenic and pathogenic intestinal microflora, and help restore normal microflora. Extracts of Salvia officinalis are promising substances for the creation of medicines on their basis.