For spectrophotometric determination, elution with 70% alcohol was performed. The optical density of solutions was measured on a spectrophotometer SF-46 with 70% alcohol as a standard. The UV spectral characteristic of eleuteroside B showed that the maximum absorption was at a wavelength of 282 nm. The quantitative content of Eleutheroside B in the liquid extract of "Viola" was 0.022%, and «Lubnyfarm» – 0.021%.

Conclusions. According to the results of the chromatographic study, the most expressed concentration of active substances was found in the liquid extract of producers "Lubnifarm" and "Ternofarm", and the least – in the liquid extract of "Viola". But the quantitative content of Eleutheroside B determined by spectrophotometric method was a bit higher in the extract of "Viola" than in "Lubnifarm".

MORPHOLOGICAL AND ANATOMICAL FEATURES OF THE *RHODODENDRON LUTEUM* (L.) SWEET LEAVES

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Introduction. The *Rhododendron* L. genus is the largest in the *Ericaceae* family, its species and varieties are known as decorative and medicinal for about two centuries. Due to the diverse composition of biologically active substances accumulated in all organs, rhododendrons are used in folk medicine as antifungal, bactericidal, anti-inflammatory, tonic, diuretic, cardiotonic and other means.

In the natural conditions of Ukraine, only two species of rhododendron grow: in the highlands of the Carpathians, a rare species, listed in the Red Book of Ukraine *Rhododendron kotschyi* Simonk., and a relic of the tertiary flora of Ukrainian Polissya – *Rhododendron luteum* (L.) Sweet. (*R. flavum, R. polessicum*). Available literary sources relate to research on the chemical composition, cultivation of this species, and publications about the morphological and anatomical structure of the leaves are absent.

Aim. The aim was to establish specific morphological and anatomical sign leaves of *Rhododendron luteum* (L.) Sweet. as promising domestic medicinal plant material.

Materials and methods. Yellow rhododendron leaves were collected during mass flowering of plants in botanical gardens of Kharkiv National Pedagogical University. G.S. Skovoroda and Kharkiv State University named V.N. Karazin. To determine the macroscopic and microscopic characters were used fresh, dried and fixed with ethanol – glycerol – water (1: 1: 1) leaves. Anatomical features were studied on transverse sections, preparations from the surface of different parts of the leaf blade. We used known methods and microscope «bio LOMO". Objects were considered at an increase of 80, 100, 300 times. Diagnostic features were fixed with a Nikon Coolpix digital camera. The photos were processed in Adobe Photoshop CS5. The work also used: magnifying glass and binocular microscope MBS-9.

Results and discussion. Species morphological signs of *Rhododendron luteum* (L.) Sweet are as follows: short-cut leaves, 4,5-12,0 cm long, 1,5-8,0 cm wide. The blade is elongated, lanceolate, elliptical or obovate-egg-shaped. The top is acute or acuminate; the base is wedge-shaped and dentate edge. Both sides of the young leaf are green, softly pubescent with reddish hairs. The old leaves are yellow, orange, pubescent or naked. The anatomical diagnostic features of the leaves include the following. The leaf blade is dorsoventral, pubescent on the edge and on both sides' simple and glandular trichomes. Upper epidermis has no stomas, basic cells with slightly winding, thin side walls and a thick layer of cuticle. There are multicellular elongated cover hairs; the secretory function is performed by glandular trichomes and big emergences with a head and a multicellular pedestal that accumulates a yellowish-brunette secretion. The body of emergents expanded downwards, it is formed by many narrow, elongated, living cells, which are placed in several longitudinal rows; the head is oval-cylindrical, multicellular, with a dark secret. Body of hairs has of three varieties: dominated by 1-2-cell acute, thin and long, slightly curved live hairs with 8-10-cell basic rosette. The edges of the blade are thick, and the upper side of the ones is rarely are pubescent by bunches or separated elongated conical emergents. There are similar in structure to the glandular, but without a head, with a sharp tip. The basis of trichomes forms a multicellular support. Base cells of the

lower epidermis are smaller and slightly sinuous. Trichomes are located loosely, stomas are numerous, paracytic type. Subsidiary cells of stomas contain colored contents.

The petiole leaf on the cross section is round-triangular. The conductive function is provided by a large central collateral boat shape bundle with a sclerenchyma sheath and vascular xylem. There are two small additional bundles. The epidermal cells of petiole are elongated. The stomas and trichomes do not differ from those that have a leafy blade. The subepidermal angle collenchyma is 2-3 layers of the adaxial side and about 6-9 layers – from the abaxial. Parenchymal cells are round, sometimes separated by cavities, increasing as the leaf ages. Most of the cells of the base tissue contain large druses, secretory cells with orange contents.

Conclusions. Macro- and microscopic examination of the rhododendron yellow leaves at different stages of its development allows distinguishing the diagnostic features of the species that will be used in the identification and standardization of leaves as perspective medicinal raw materials.

PERSPECTIVES OF USE OF MEDICINAL PLANTS: RABBINS, DANDIDAS, IMMORTALS, NARROWNER, LEAVES OF BIRCH IN MEDICINE AND PHARMACY

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This article examines medicinal plants widely used in the modern world, since nowadays plants are one of the most important sources of medicinal products used in various areas of medical practice. This is explained by the fact that herbal preparations have a wide range of pharmacological activity and, as a rule, do not cause side effects with rational application.

Rowan is recommended for atherosclerosis, it has a diuretic and hemostatic properties. The juice is used for hemorrhoids, gastritis with low acidity. The phytoncides of mountain ash are destructive for Staphylococcus aureus, Salmonella, mold fungus. Sorbic acid distinguished from rowan has bactericidal properties and is used in the conservation of juices and vegetables.

Fruits contain carotenoids (up to 20 mg%), ascorbic acid (up to 200 mg%), vitamins P, B2, E, sugar-sorbose, alcohol-sorbitol, sorbic acid; flavonoids: anthocyanins, leucoanthocyanidins; tripine compounds (Ursolic acid); organic acids (3.9%); a small amount of essential oil; seeds contain fatty oil, glycoside amygdalin, phospholipids

It is also applied as a multivitamin (a significant amount of carotene) in the herbal collections. The fruits of mountain ash can be considered in the future as a raw material for the production of an oil extract of carotinoids of mountain ash. Used in homeopathy and dietary supplements.

Rosehip is an excellent medicine.

Rosehip is an excellent medicine. Rosehip fruits contain ascorbic acid (from 0.2-1% in low-toxicity species and up to 4-5% in high-vitamin ones); carotenoids (in-carotene, etc.) up to 10 mg%; tocopherols (vitamin E); flavonoids (flavonols - rutin, kaempferol, catechins, leucoanthocyanidins, anthocyanins); hydrolysed and condensed tannins, organic acids-citric and malic (2-4%); fatty oil; pectin substances (up to 14%); sugar (up to 24%); about 0.9% free amino acids (mostly aspartic).

Rosehip is also used to relieve inflammation, is a good diuretic and choleric agent, improves the function of the gastrointestinal tract. Rosehip strengthens the immune system, activates the hematopoiesis and metabolism. Strengthens physical performance and stimulates mental activity. It is used for the preparation of carotenoid-rich medications of "dogrose oil" and "Carotolin", applied as an early antioxidant, and in addition, rosehip is used to obtain the preparation "Holosas" containing organic acids, used as a choleric agent. It is part of a number of dietary supplements.

The immortelle has not a particularly attractive appearance in comparison with other coastal plants. He is also called cumin, dried flower and gold. Despite its appearance, this herb has unique healing properties.

The chemical composition of the immortelle sand is very rich. Inflorescences contain flavonoids (6.5%): flavanone naringenin and its stereoisomer helichryside, flavone apigenin and its 7-glycoside, flavonol kaempferol and its 3-glycosides, etc .; derivatives of phthalic anhydride (phthalides); coumarin